

Capacity Skills & Gap Analysis on Disaster Risk Reduction in Nairobi County

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Glossary of Terms

Terms	Definitions
Disaster	Disruption in services and functions of human and ecological systems due to interacting socioecological conditions beyond their coping capacity, and hence necessitating urgent emergency response.
Risk	The potential for adverse consequences on lives, livelihoods, health and wellbeing, socio- economic and cultural assets and investments, infrastructures, services (including ecosystem services), ecosystems, and species that arise from the potential climatic or non-climatic impacts as well as those relating to human responses to natural or human- induced changes.
Disaster Risk	The potential or likelihood for the disruption in services and functions of human and ecological systems due to interacting socioecological conditions beyond their coping capacity, and hence necessitating urgent emergency response.
Disaster Risk Reduction & Management	Plans, actions, strategies, or policies aimed at minimizing the likelihood and/or magnitude of adverse potential impacts, assessed or perceived disaster risks, and understanding the disaster risks and enhance perpetual improvement in disaster risk preparedness, response, and recovery practices for socioecological wellbeing. It also involves risk assessment, risk perception, and risk transfer.
Capacity	An array of multiple strengths, attributes, capabilities, and resources at the disposal of an individual, institution (including community, society, and/or organization), or system, with the potential use for disaster risk reduction and management
Capacity Development	A process that leads to the realization of sustainable development through identifying and enhances the existing capacity of human and/or ecological systems and includes building new capacity.
Capacity Development for Disaster Risk Reduction	Acquiring, strengthening adapting, and periodically maintaining the cap(abilities) of sociological systems including the individuals, organizations societies use their cap(abilities) are in order to build their resilience to disaster risks through reduction of their vulnerabilities to, and/or avoid and/or limit the potential adverse impacts of hazards





INTRODUCTION

There have been global concerns over the deceleration of efforts and hesitancy of 'whole of society' to address systemic nature of disasters and their consequences on the realization of the Sendai Framework for Disaster Risk Reduction, the global Sustainable Development Goals (SDGs), and health and wellbeing for human and ecological systems. As a foundation, the Hyogo Framework for Action 2005-2015 appreciated the link disaster risk reduction development has with development agenda whereas the Sendai Framework for Disaster Risk Reduction [1] is anchored on the need to build capacity of countries regardless of their development status [2]. Attempts to generate a more holistically consistent and transparent use and application of the concept of risk in assessment models have continuously open up more spaces for decisionmakers to communicate and manage risks [3]. Not much clarity exists on the approach to adopt and the forms of skills and/or training that are meant boost the capacity of countries, especially those whose priorities are still on poverty alleviation. Until recently, as part of the stakeholders in the DRR, the external scientific researchers, the principal investigators (PIs) who in some cases, are not attuned with the characteristic profile of disaster risk 'hotspot,' and the practitioners have always assumed the full knowledge of the capacity needs of the glocal communities [2]. This, in the view of this report, is an imposition and insensitive of their power agency since it does not recognize the local capabilities and capacities in DRR. The identification of capacity needs and skills ought to acquire a trans-level approach in order to ensure 'leave no perspective behind.' For example, In Sri Lanka, much of the emphasis has been on community-based planning and response, building awareness, managing water resource, psychological initiatives, first aid, and disaster drills [2]. The various institutional and policy settings are required to foreground the assessment of gaps that potentially hamper the adequate risk articulation and risk management in practice.

Like the other regions of the world, the continent of Africa has her disasters stem from faces the natural and human-made multi-hazard including droughts, floods, fire, cyclones, epidemics, environmental degradation as well as technological hazards [4]. Despite the laying down of the Program of Action by the Tunis Declaration on Accelerating the Implementation of the Sendai Framework and the Africa Regional Strategy for Disaster Risk Reduction, there is a lot of opacity on the extent of Africa's capacity to improve knowledge management for DRR, institutional risk governance, and risk response management. The current efforts of the regional Economic Communities are focused on offering capacity building support to member states in the form of regional expertise and strategies as well access to international resources[4]. Disaster risk financing (DFR) is one of the proactive mechanisms that is commonly adopted by some African countries such as Uganda and Kenya [5] in disaster risk reduction. Kenya, for example, had adopted cash transfers in disaster response, a practice which may be ineffective in developing the capacity of urban residents to respond to risks. Instead, developing the capacity of financial





institutions to accumulate reserves and precautionary savings and risk transfer enabled by indexbased insurance may be appropriate in the DRR [5].

The risks that are posed by multi-hazards to the human and ecological societies are more pronounced than we can determined. This is due their interlinked, cascading, time and scale-variation characteristics. Similarly, the exposure to such risks of socio-ecological environment usually lead to disproportionate impacts with adaptive capacity of such systems playing a key role in determining the resiliency levels. The capacity of human and ecological systems to characterize, quantify, respond, and management such risks is influenced by a myriad of factors. For example, the Global Assessment Report on Drought Risk Reduction (GAR) [4] identifies issues such as governance, tools and approaches used, as well as the coping level at the time of disaster strike. The report prescribes new ways of dealing with disaster risks since the traditional and conventional approaches seem inconsequential in addressing systematic nature of disaster risks. Specifically, mechanisms that aim to build social, financial, institutional, and scientific capacity to appreciate the interconnectedness of disaster risks, innovatively design risk reduction models, and develop capacity to adapt to the risk transiency and dynamism are urgently required.

Contextualizing and Evolution of Capacity Development in the Disaster Risk Reduction and Management

In the 1990s, the United Nations General Assembly, in a declaration of the International Decade for Natural Disaster Reduction (IDNDR), called for the development of capacity in developing countries to minimize the damages brought by natural hazards. In this case, capacity was generalized and considered a priority only for certain segments of the world. A decade later, the Hyogo Framework for Action built on the principle in the IDNDR and introduced the concept of risk as a driving focus. As an improvement in clarity of scale and level, much of the premium was placed upon the transfer of technical and professional capitals as well as enhancing of the local capacities *in situ*. Fast-forward, the Sendai Framework for Disaster Risk Reduction, as is currently in force, allows for the *'whole of government*, the *'whole of actors'* in capacity development. The peculiarity of this framework is its binding nature with the Sustainable Development Goals that were consensually legitimized by 190 global leaders.

Capacity development is both an action for DRR and climate change adaptation. However, there is a lacuna in knowledge regarding the operationalization of bottom-up or grassroot approaches to DRR capacity. Wenger's model for social learning as applied by [6] in upending assumptions held on bottom-up approaches to DRR involves understanding community of practice (CoPs), boundary systems as well as identities that are influenced by community participation. In the first case, it's vital to consider the enterprise, mutuality, and repertoire in building and developing DRR capacity at the urban 'informal' level.





Assessment Objective

This report focuses on Nairobi County as the cosmopolitan capital city of Kenya which is increasingly gaining attention in regards to urban disaster risks. The objective of this report is to develop a DRR capacity gap analysis for Nairobi County. The following questions spiked the analysis: What are the various institutions or organizations working on DRR in Nairobi, their role as well as level of operation? What is their level of understanding of disaster risks? As a key component of capacity extent, what skills exist in those institutions in offering synergies to the DRR process? What are some of the skill gaps and needs for those institutions or organizations? The framing of this question was made in survey questionnaire as indicated later in the methods section. How can the various skills and capacity building actions be tailored for the different groups in Nairobi County? Responses to these questions will be crucial in

Analysis Approach

Document Desktop Review

This report follows a series of tomorrow's cities risk hub multi-hazard monthly convenings that has brought together different representatives both in Kenya and the United Kingdom. A team from Nairobi Risk hub and ARIN reviewed literature materials relevant to Nairobi County that is the current focus of the DRR project. The process built on the previous workshop that served to identify the areas susceptible to dynamic flood and fire risks. In the period of September 08 – September 20, 2021, a total of N materials was reviewed based on the certain inclusion and exclusion criteria. Key among the inclusion criteria was the focus on documents that highlighted the capacity gaps and/or needs and/or skills in the DRR process. In the subsequent stages, we shall hold dialogues with key institutions and sectors relevant to Nairobi County in order to: provide brief on the analysis background and purpose; gain clarity on the institutional operations within the county especially in Mukuru community; offer insights on what was expected from the data collection process with specific emphasis on the capacity gaps. Prior to the information gathering, the Nairobi Risk Hub team had the privilege to visit the Mukuru community and conduct mapping of the zones within the Special Planning Area (SPA).

Community Study

The field study as was designed, took the form of in-person data gathering with the use of online questionnaire on a KoboTool box platform. The team visited mapped zones between September 13 -September 20, 2021, located within Mukuru community. They include *Gatoto, Rurie, Simbacool, Bantu, Maendeleo, Metameta, Egesa, Riverside, Feed the Children, Reuben Mpya, Kosovo, Wesinya, Mombasa, Gateway, Diamond I & II, and Viwandan*i. These areas had varying exposures although to almost dissimilar risks. Households exhibiting exceptionally low capacity despite high disaster risks, were noted for further engagement.





Survey methodology

This capacity gap analysis report adopted certain tools including community and county hall dialogues with trans-sectoral groups, scenathons, focus group discussions, and key informant conversations with Mukuru community governance, Nairobi county sector and agency officials. In the case of communities, recurrent dialogues will follow with carefully selected community and household representatives with the following aims: i) Peer learning on the fundamentals issues around DRR; ii) build on the existing DRR knowledge to steer action.

During the visit to the community, the team conducted transect walks within the Mukuru SPA in order to evaluate risk spots or potentially perceived so, vulnerability fodders, observable of potential disaster impacts, and extent of adaptive and/or risk response capacities. A team of trained personnel drawn from within and outside Mukuru community administered conversational and interactive on/offline survey questionnaires to randomly selected households. The following questions were related to the community capacity to respond to and cope with disaster risks in their urban community:

- 1. If you experienced flood or fire now, how would you recover from the losses & damages?
- 2. What skills do you possess in dealing with the various disasters when they occur?
- 3. What are some of the skills you require to be able to prepare better for disaster risks?
- 4. In the last 5 years, have you attended/participated in any session on: a) how to best prepare for a disaster? B) first aid process? c) disaster or evacuation drill? d) community or volunteering activity related to disaster preparedness or prevention?
- 5. If yes, what was the nature of the training or activity, organized by who and for whom?

The team also mapped the community-based organizations (CBOs) operating in Mukuru community. This was done with the help of community members residing in the area.

Disaster Risk Governance and Institutional Framework in Nairobi County

The Constitution of Kenya 2010 is majorly a devolution-driven document that is anchored on the people's legitimacy in institutional and systemic governance frameworks. In the context of disaster risks, devolution has the potential to enhance their governance through deliberate inclusion of communities highly exposed and are at-high risk in the DRR planning [7]. The Nairobi City, with the complementary metropolitan services arm (NMS) in place (albeit contested), should offer DRR leadership blueprint for other cities in Africa. The city has a DRR plan integrated in its County Integrated Development Plan (CIDP) and has its policy makers showing commitment to meaningful partnerships with other DRR stakeholders such as the Africa Center for Technologies Studies (ACTS). These milestones are notwithstanding the bottlenecks in implementing the DRR policies key among them weak coordination structures, low capacity of disaster risk personnel, and poor involvement of the urban vulnerable persons [7].





This segment looks at the status of institutional morphology and governance including the crucial yet neglected 'informal' ones in the DRR. It goes further to analyze the capacities of institutions (both at the county and community levels) and communities by evaluating their understanding, skills, gaps, and/or needs in Nairobi County. Fundamentally, it prescribes plausible actions related to the identified skills, gaps, and/or needs that are specific for various groups or stakeholders to reduce or deal with disaster risk in the Nairobi's Mukuru settlement. In essence, this process forms an integral component of the urban forum and plugs into the Nairobi Risk Academy for a resilient, disaster-proof and sustainable city.

With an additional threat from climate change, how government and society (especially the 'peripheral' ones) institutions are structured and governed can reflect their capacity to deal with intersecting natural and human-induced disaster risks. This report focuses on the capacity at the individual, organizational/institutional (this includes the community), and system lenses [8] In the first case, individual's own knowledge, skills, practice, and even attitude are considered. Explicitly, disaster risk awareness and understanding as well their technical capacity to critically detect, anticipate, evaluate, and respond to one or more disaster risks is analyzed in this report. Although this cuts across the research, policy, and practice arms of DRR to inform a stakeholder collective agency, the focus would be placed on the capacity of a stakeholders to recognize their own specific and individual agencies in the DRR.

In the DRR dialogue, the capacity of an organization or institution as envisioned by Baser and Morgan (2008), is critical in the forms of action on and commitment to DRR, meeting their and global development goals, their adaptability in various scenarios, striking partnerships with other stakeholders, and achieving DRR strategy coherence [8], [9]. The ever-shifting capacity needs of communities at disaster risk implies that institutions have to iteratively review their practices to allow for innovative approaches to DRR. Institutional as stakeholder engagements through convening multiple and constructive dialogues on best and innovative capacity building practices are therefore paramount in the DRR process. The Nairobi City's financing model for DRR (including external sourcing), technical capacity, and other resources are some of the indicators for institutional capacity [7]. These are evaluated based on the analysis of city staffing and expertise capacity for DRR, and budgetary allocation, use, ring fencing, and extent of diversion.

The last and equally important aspect of capacity in the DRR space is the context in which the knowledge prosumerism, skills development, and dialogues on disaster risks occur. Identified as system capacity, this report analyzes the environments and whether they impede or enhance the capacity of individuals, communities, organizations, and governments to address disaster risk in Nairobi County. We critically evaluate the nature of DRR research, policy, and practice pathways or platforms for collaboration. Summarily, we analyze the socioecological environment upon which the DRR process takes place. The matrix table in the next page illustrates the various forms and dimensions of capacity relevant to Nairobi County, different institutions and their levels of





engagement, skills and capacity gaps and/or needs, and the prescribed capacity or skill-based actions for specific groups or institutions.

Capacity Needs and Skills Gap Analysis

The capacity of individuals, institutions, and systems to reduce vulnerability to disaster risks through transitioning from disaster response and recovery towards disaster risk resilience, preparedness, and preparedness, as defined by UNDRR, is hindered by a myriad of factors. As [10] argues it out, the epistemological, strategic, and institutional gaps exist in the quest towards disaster risk resilience. Specifically, the inability to agree on what disaster risk knowledge is and its application, institutional absence to facilitate the knowledge uptake as well as the incoherency of DRR visions ought to be addressed in order for urban disaster risks resilience to be a reality. The improper application of asymmetric agencies and powers of individuals, institutions, and/or systems in disaster risk resilience in the urban settings such as Nairobi is classified here as a capacity gap.





. Table 1: Capacity Needs and Skills Gaps

Category of Capacity Groups (individuals, institutions, and systems	Major level/role in DRR	Skills/Capacity Gaps in DRR	Skills/Capacity Dimensions Need	Specific capacity development actions
Community Groups/Associations , Nyumba Kumi entities, Youth & Women Groups/Chamas, Religious Centers,	 DRR practice - Improving disaster risk perception and awareness Possess traditional ingenuity skills and capabilities relevant to DRR 	 Identification of DRR needs between CoPs and the scientific community Strategic gap i.e. lack of harmonized visions around DRR in the city Community/info rmal risk governance or coping mechanism i.e. largely top-down (government- /humanitarian dependent) Proper technical and strategic/social skills lacking 	 Risk Culture/Perception shift Social structural and collective competences/mutuali ty Infrastructural capacity dimension i.e. risks response mechanisms/early warning systems Capacity to manage both probabilistic and deterministic disaster risk information. Capacity to synchronize/maximize risk perceptions with or to ensure risk preparedness 	 Strengthen grassroot risk governance and institutional systems. Support technology adoption or uptake for DRR at the community level Innovative volunteerism in the DRR & CCA actions Negotiate safer spaces for effective implementation of DRR programs Enhance capacity through expansion of DRR activism space





The academia and	 Mediators of disaster risk 	 Political and social capacities i.e. place authority on their power Epistemology gap undated 	 Scientific and technological 	 Ensure an integrated risk
	 science for policy Evidence-informed knowledge and policy research. Practice through the principle of knowledge prosumerism i.e. putting DRR science into practice Linking DRR to practice and policy i.e. DRRM training for students; knowledge assessments on DRR. 	 gap – updated risk knowledge repository/mana gement system Communication and partnership gap (between scientific disciplines – placing more emphasis on natural sciences in hazard analysis; between science and policy; between science & urban residents) Few DRR discourse outlets in the city Lack of platforms and opportunities to 	 capacities i.e. emerging digital infrastructures; Capacity on DRR information management systems; DRR Resilience building at the urban grassroot level Understanding the urban culture and epistemology Methodological and tools needs for disaster risk assessments Capacity to embrace the social vulnerability and resilience paradigm 	 knowledge repository for early risk warning and risk communication; Leverage the indigenous knowledge to support DRR process; Offer evidence to inform disaster risk financing Improve understanding of the institutional and cultural nuances – key in creating DRR knowledge for sustainable and wholesome policies





		initiate DRR dialogues and exchange best DRR practices		
State actors: Office of Local Administration (Chief, ward administrator, ward representative), Sub-county offices	 DRR Policy legislation and implementation Support integration of DRR CoPs; 	 Funding, staffing, and resource capacity gaps to link DRR science with practice through policy Uptake into policy of innovative DRR knowledge from science and community Policy evaluation gaps for DRR research entries Integration of DRR schemes across disaster risk spheres (cross-domains and cross-or multi-sectoral) Inadequate disaster risk experts in the city governance 	 Risk assessment and/or management protocols/applications i.e. EIAs/SIAs, housing procedures; infrastructure; financial resources 	 Create more intra-and inter stakeholders' platforms for consensus building i.e. harmonizing divergent stakeholders' agenda and priorities





State Agencies: County Fire Service, National Policy Service (NPS)	 DRR practice through response DRR policy enforcement 	 Strategic gaps Absence of contingency plans in their visions; coordination mechanism; Response/logisti cal capacity 	 Disaster risk preparedness and response (DRPR) mechanisms 	 Increase operational capacity by installing more logistical centers in the communities; Expand facilities, equipment, and personnel; train more youth and women groups in the hotspot areas
County Administration: (Offices of the Governor, County Commissioner, County Assembly)	 Preparedness through legislation and policy formulation; Practice through disaster response 	 Governance and institutional gaps; Technical and technological skills i.e. no risk identification and assessment through risk mapping especially in the sector of urban renewal, housing and project management. 	 Processes that aid skills and capacity development Risk governance and institutional skills; vision and mission dimension need to capture DRR agenda 	 Leverage technology to enhance early warning systems; Build staff capacity in the social and environmental safeguards through provision of resources, skills, and relevant policy materials Make funds available for disaster risk reduction processes especially financing for early detection of disaster risks as well informal risk governance schemes Ensure all county sectors carry out risk analysis and mapping





National Government: All Ministries, Parliament, Judiciary, Parastatals	 Research, policy, and practice 	 Strategic gap i.e. sectoral dissonance Epistemological gap i.e. little or no focus on dynamic risks related to urban environment; Expert-based risk legislation i.e. absence of policy or legislation regulating urban population influx and settlement; Devolving capacity functions with no funds; Mainstreaming capacity i.e. weak or no disaster risk curriculum 	 Aligning vision and mission with DRR and Management; Resource mobilization for DRR Structures that enable effective application of knowledge systems in policy 	 Allocate resources to DRPR research, training, and learning; Mainstream DRR into all sector protocols; Accelerate implementation through coordination of gov't arms; Open more spaces for private sector involvement;
The Kenya Private Sector Alliance (KEPSA) i.e. Emergency Medical & Counselling Units,	 DRR Research Policy influencing; Practice through response 		Competent human resources; Information need	Help strengthen the PPPs to support capacity development for DRR; Support the DRR data dissemination; Support the DRR financing





DRR Consultancy				
firms				
The National Civil and Professional Societies i.e. Public litigants, Urban Planners	Research; policy influencing; practice		Culture, Structure, competences	
The Media i.e. Mainstream and Digital Journalisms	Information dissemination		Human resources i.e. limited Knowledge and skills on DRR; Infrastructure	
International Agencies: UN Resident Coordinators; Humanitarian Response & Multilateral Donor Agencies I.e. Charity organizations, Red Cross Society, World Bank,	 Disaster risk education and cross-sectoral training i.e. assess disaster scale; Assess country level and sub-country level Disaster preparedness and response mechanisms DRR policy influencers DRR practice i.e. integrate DRR into SDGs and CCA; DRR e- learning pathway 	 Inadequate disaster risk response capacity; logistics and emergency supplies; Weak partnerships and collaborations at the city levels Incoherency of actions i.e. duplication among partners 	Technical skills; knowledge resources; financial crowdsourcing	Enhance sustainable capacity to prepare for and respond to disaster risks and not to disasters; Bridge the gap between development, DRR, and humanitarian actions; Sustainable management of funds meant for capacity development processes; Steer collaboration between sectors and agencies for and the local urban communities





 DRR capacity development schemes i.e. support efforts for M & E as well as domestication of Sendai Monitoring Framework 	
Framework (SFM);	





Challenges faced by individuals, institutions, and systems in the DRR

While this is a barrier in many countries around the world, Nairobi City is faced with issues of infinitesimal access to data, its integration as well as availability for use across the DRR phases. There's the tendency to pursue disaster science that only responds to disaster occurrence and not disaster risks (cite scientific cap, Elsevier 2e017). In the current situation, the problem is made worse by the inability of aid and relief organizations (including Red cross Society), non-governmental organizations (NGOs), and even the private sector to leverage the alternative and emerging data platforms or sources in complementing the conventional or traditional sources of data. A possible explanation, as provided by (scientific cap), is the restricted DRR data (when available) under certain polices, often unlocked upon offering incentives. The resulting consequence is the creation of DRR data silos that affects the functioning of the decision-support urban forum in Nairobi.

Challenges of integrating disaster risk science into policy for timely and effective DRR mainly due to institutional fragility precipitated by lack of new functional institutions as well pro-DRR changes to the already established ones in the city. Often, there usually exist competing interests in the science and policy domains as stakeholders scramble for the attention of the policymakers, degenerating into others casting aspersions on the evidence validity. Instead, academic and research institutions appear to be generating evidence that is not taken up by those at the heart of disaster risk decision making. And when involved, it is at the will of the policymakers and not vice-versa.

Efforts to enhance access to DRR funding, education, training, information, equipment and supplies have no yielded increased preparedness for response and recovery partly due to the absence of robust individual, institutional, and/or systemic capacities. From a broader risk-lens, there has been lack of consideration of building and/or developing capacities towards the identification, reducing, and managing other facets of risks including pandemic and climate risks [11]. Specifically, the scientific capacity to quantify disaster risk is still at considerably low levels. The divide charactering the DRR space in the forms of uneven distribution of scientific capabilities, resources to act, and expertise hamper the capacity of Nairobi City stakeholders in the DRR.

While social learning framework can be applied in the design and implementation of capacity development at the individual and institutional levels, the drivers and key processes at the systemic level remain uncertain [6]. Systems that meaningfully engage the neglected urban risk-averse 'informal' residents in the risk-informed decision-support environments (DSEs) are conspicuously missing or less enhanced [7].





Key Lessons for Disaster Risk Reduction Policy Action

Accelerate science-technology-policy DRR capacity framework: Build and develop the capacity of academic and scientific bodies to generate policy-specific knowledge outputs whose understanding transcends scientific communities into the community of end users. This could be done through the use of emerging digital infrastructure to enhance DRR and future sustainable development holds a lot of potential for DRR actors. The Sendai Framework for Disaster Risk Reduction, in its science domain, also identifies technology measures as critical in lowering risk through aiding in reducing hazard exposure and vulnerability to disasters. As has been applied elsewhere, Nairobi City stakeholders ought to take advantage of the software and data analysis tool that are increasingly becoming available through open-source initiatives, attributed to the global calls to democratize DRR information platforms. Similarly, opportunities for accelerating action exist as a result of proliferation of cloud computing technologies and programmes such as CASEarth that support the integration of diverse data sources thus enabling the DRR data-driven policy and decision-support systems (DSE). This data, however, is as useful as the process of accessing it. There has to be policies in place to favor disaster risk shareability with noncommercial entities within the Nairobi Urban Forum for decision-supporting. Furthermore, there is a need to strengthen the city or county data-collection systems in order to help stakeholders' transition from management-oriented policy systems to the information-based decision-support systems.

Fundamental in the DRR process is the capacity of city stakeholders to identify data gaps within the DRR policy-aiding City Knowledge-and Information -Management Systems or Platforms. In the case of Nairobi City, the capacity of individuals, organizations, and systems to fuse both the Earth observation infrastructural technologies with the social techniques such as citizen science is necessary. Natural and social data made easily accessible to all stakeholders particularly those that are mostly affected by the disasters...local and scientific knowledge. The Cape Town Action for Sustainable Development Data identifies statistical-capacity development as one of the areas for action. The capacity to co-generate the disaster risk evidence and strengthening of the transdisciplinary DRR mechanisms is of high priority not only for the Nairobi Risk Academy but also the linkage of DRR science-policy interface for DRR, climate action, and sustainable development. Therefore, in order for this co-generated evidence on disaster risks to be standardized for credibility, veracity, and proper use, adequate training of stakeholders (including potential end users) is paramount.

Nurture functional collaborations and human personnel development activities that would help break the discord between discourse and capacity in engendering disaster resilience. Such collaborations are key in uptake of DRR scientifically-advanced and community techniques. Partnerships that bridge the digital divide are urgent, especially within the global city consortia both within the Global South and within city fora in the Global North. For example, a partnership between Nairobi City and the local academia may be useful in bolstering the MCAs and city staffing's DRR technical skills, knowledge, and its link to other development programs.





Reinvigorate the urban understanding of ways of adequately designing and implementing the capacity development programs at the individual, institutional, and systemic levels. This is cognizant of the changing city regimes and poor political will in the uptake of DRR capacity programs. Deliberate opening up of more social learning spaces would create a safe environment for massaging the political will. This would improve the 'informal' risk governance that will capacitate the urban communities to easily link their DRR knowledge with DDR practice and/or resilience. Closely linked with the 'informal' risk governance is the emphasis on the community ownership of the DRR initiatives through the fusion of all knowledge and social learning systems[6]. A multi-level multi-hazard coordination mechanism is therefore imperative.





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