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From Systemic Risks to Systemic Resilience: Lessons from the COVID-19 Pandemic for Risk Management and Recovery in the SADC



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INTRODUCTION

In our interconnected world, the impacts of climate change, hazards and shocks are increasingly felt across economic sectors and borders, undermining progress towards achieving the Sustainable Development Goals. This calls for a paradigm shift in how we are used to manage risks and recover from disasters – namely from hazard-by-hazard and sectoral approaches to a systems approach that takes a whole-of-society perspective.

This policy brief presents recommendations from the project "Lessons from the COVID-19 pandemic for understanding and managing cascading and systemic risks in the SADC region (CARICO SADC)" funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) in collaboration with the Disaster Risk Reduction unit of the Southern African Development Cooperation (SADC). In this project, the Republics of Malawi and South Africa served as case studies to document country-level examples that show how the pandemic exacerbated risks in specific contexts. In consultation with the SADC DRR Unit, thematic focuses were placed on gender, informality and cross-border collaboration.

Based on stakeholder workshops in Malawi and South Africa, desk study, and a review of COVID-19 response and recovery plans in the Southern African Development Community (SADC) region, this policy brief:

- Highlights how the COVID-19 pandemic has interacted with other hazards and shocks in the SADC region and led to cascading impacts across sectors and borders,
- Emphasises the opportunities that lie in accounting for the systemic nature of risk in risk assessment, management and recovery,
- Provides recommendations for systemic recovery from COVID-19 and concurring hazards in the SADC region.

In doing so, we advocate for enabling inclusive, cross-sectoral and transboundary approaches for risk management and recovery that consider all relevant hazards to strengthen systemic resilience. This encompasses the full spectrum of possible compounding and cascading effects for different social groups and across sectors.

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The impacts of COVID-19 and concurring hazards were felt across sectors and borders, highlighting the systemic nature of risks. To strengthen resilience, risk assessments should not only consider single hazards or sectors, but also their interconnections.

The Challenge:

The effects of the COVID-19 pandemic in the SADC have been felt throughout society far beyond the health sector. This shows that impacts from hazards, shocks and disasters are complex. Interventions in response to the rising infections. such as containment measures, border restrictions and school closures, have led to adverse cascading effects through society and across sectors (e.g. tourism, manufacturing, transport, education, agriculture, informal sector) and borders, impacting those living in vulnerable conditions the hardest. Moreover, COVID-19 did not happen in isolation from other challenges across the SADC, but co-occurred alongside other hazards such as floods, droughts or tropical cyclones and disease outbreaks, which in many instances have led to a double burden for countries in the region.

Recommendation:

Systemic risk assessment approaches are needed to characterise and strengthen understanding of how hazards, risks and impacts are linked across sectors and borders in the SADC. This requires a systems perspective that can map the more complex causal connections between hazards, risks, impacts and responses to them which can also result in cascading effects. Through assessing risks systemically, leverage points open up for strengthening resilience.

The COVID-19 pandemic has reinforced existing inequalities. This underscored the need to consider differential vulnerabilities and gender-related risks in policies and actions.

The Challenge:

Disasters affect people in different ways. Those facing existing inequalities and living in vulnerable conditions are oftentimes disproportionately impacted. Impacts from COVID-19, concurring hazards and interventions in response to them have been amplified for those who are already marginalised based on intersecting factors such as gender identity, age or disabilities. In multiple countries of the SADC, women have experienced increases in care-giving duties, gender-based violence and teenage pregnancies as well as reduced access to sexual and reproductive health services. This has widened gender inequality across the region, creating setbacks in progress towards the SADC protocol on Gender and Development and in realising the Sustainable Development Goals (notably SDG 5 on Gender Equality).

Recommendation:

A disaggregated view on vulnerability is needed in risk management and recovery. To tackle gender inequalities, which were particularly worsened by the COVID-19 pandemic, gender considerations should be mainstreamed into existing and new policies. Capacity building and awareness raising campaigns and programs that start early in school curriculums should be promoted to sensitise citizens, policy makers and governments to the deeply ingrained gender issues that create unequal societies.

¹ https://www.sadc.int/pillars/gender-equality-women-empowerment

The COVID-19 pandemic had wide-ranging effects on the informal sector. More efforts are needed to support the resilience of people dependent on the informal sector.

The Challenge:

The informal sector represents a significant and diverse segment of the SADC region's economy. The number of people living in informal settlements is growing, in part as a consequence of the hardships imposed by the COVID-19 pandemic. The pandemic has also exposed vulnerabilities in the informal sector across the SADC region. Informal businesses and informal cross-border trade were hit hard by lockdowns and border closures, and this pushed informal workers, who often lack access to social protection, into poverty. In addition, many informal workers had to continue working even during lockdowns which in turn increased their exposure to the virus. These impacts were yet again particularly felt by women, which in multiple countries are predominantly employed in the informal economy.

Recommendation:

Given the size and importance of the informal sector in the SADC region, risk management and recovery policies should consider drivers and root causes of vulnerabilities in the sector. Examples include overcrowded housing or limited WaSH infrastructure in informal settlements. Moreover, policies could leverage the experience of self-organised responses that emerged within the sector during the crisis (e.g. community-based networks that exist in several SADC countries). Social protection programs should be extended to informal workers to reduce risks. This can minimise cascading effects in the broader societal and economic landscape of the SADC, and protect the sector's workers and entrepreneurs from future shocks.

Covid-19 exposed and reinforced existing inequalities in education. Further it revealed skills shortages for managing compounding hazards. A systematic evaluation of education sectors in the SADC is encouraged to i) reduce inequalities and ii) capacitate personnel for disaster risk management.

The Challenge:

In many countries of the SADC children were affected by school closures. Schools in urban areas and socio-economically privileged students pivoted to online learning platforms, while many children in rural areas could not do this. The pandemic vividly showcased the urban-rural divide and inequalities. Across many countries, children dependent on school feeding programs were affected as these stopped. Children benefiting only from extracurricular activities provided at schools were severely affected by stoppage of these. Impacts were not just felt in formal education. Many countries were affected by multiple hazards at the same time, calling for disaster risk management professionals with expertise in managing compounding disasters. During the pandemic, it became apparent that most staff in disaster risk management were not well prepared to respond to multiple disasters. Skills shortages for disaster risk management are of growing concern as, for example, risks linked to climate change are expected to increase in the future.

Recommendation:

Within the recovery plans, options to deal with access to education during disasters must be analysed, especially for rural and underprivileged children. Partnerships with the private sector to facilitate online learning for rural children must be explored as part of disaster preparedness interventions. It is recommended to review educational programs in SADC countries so that disaster risk management is included in the school curriculum at an early stage. It is important that information on disaster management as a career option is disseminated to school leaving children. And capacitation of staff through ongoing professional development programs is imperative for effective risk management and response.

¹ https://www.sadc.int/pillars/gender-equality-women-empowerment



Disasters do not stop at borders. The COVID-19 pandemic posed substantial challenges to cross-border collaboration within the SADC region. Enhanced cross-border collaboration and coordination are needed to manage systemic risks

The Challenge:

While efforts have been made to deepen economic integration within SADC, Covid-19 exposed some fissures in the region. For example, during the peak of the pandemic countries imposed differentiated cross border requirements with others enforcing more days of quarantine than others. Countries in the region also failed to create a synchronised system for cross border movements of essential goods and commodities which caused vulnerabilities. The region lacked a mechanism to facilitate movement of migrant workers across countries. Also, processes for repatriation of deceased persons' bodies were difficult. Despite this, the region enhanced collaboration and sharing of health research and enhanced laboratory systems integration. The pandemic exposed lack of an agreed position on pandemic response, especially as countries procured different types of vaccines based on political and other considerations. Other hazards have also demonstrated the disjointed SADC nature of responses. **Emerging** cross-border challenges will benefit from a strong collaboration between SADC countries: one such example are the Cholera outbreaks in Zambia, Zimbabwe and more recently South Africa.

Recommendation:

A regional coordinating mechanism under the auspices of the SADC DRR Unit to facilitate collaboration effective cross-border understanding and managing the cross-border risks and impacts of climate change, pandemics, disease outbreaks and other hazards is recommended. Given the impacts on supply chains, building resilience in supply chains is another recommended action area. Supply chain mapping to identify critical vulnerabilities, dependencies and bottlenecks can prioritise where resilience strengthening interventions such as diversifying sources of key products and building regional capacities are recommended.

Systemic risks generate setbacks for multiple sectors and groups. Recovery plans and efforts are often organised in siloes. Next to building back better sectorally from disasters, systemic recovery is recommended as a catalyst of positive system change.

The Challenge:

Disasters like COVID-19 are capable of hampering the fulfilment of societal goals across sectors and scales. Systemic recovery plans then become necessary to identify, prioritise and implement interventions for areas, sectors, and groups that have suffered major setbacks. Many SADC countries have developed post-pandemic, state-specific recovery plans. This process was in many cases supported by the United Nations country offices, which provided a generic "COVID-19 socio-economic response plan". To date, there is to our knowledge no aggregate SADC recovery plan that deals with responding to multiple, interconnected risks and hazards confronting the region.

Most of the COVID-19 national recovery plans are focussed on fostering economic growth considering key productive sectors such as agriculture, manufacturing and tourism. Common elements include: a strong interest in improving ease of business for the private sector (also through tax breaks and other financial incentives); the transition from an import-dependent to export-oriented economy; a reform of the fiscal space, which includes in many cases steps towards the formalisation of the informal economy sector.

Despite all these efforts, we identified a number of underrepresented aspects in recovery plans. First, the consideration of interacting hazards and risks varies across existing COVID-19 recovery plans. Other than climate change and droughts, there are only a few mentions of other hazards and shocks in existing plans. Second, mechanisms to support the informal sector are lacking: while expansion of social protection systems has been proposed (see above), clear pathways to deliver under the post-COVID financial constraints are still to emerge. Third, actions for supporting women-led businesses affected by COVID-19 are not well developed. Fourth, it is not always clear how recovery plans align with existing national policy plans and visions: such alignment is important as it ensures that recovery efforts contribute to a shared societal vision.

Recommendation:

A systemic perspective on recovery allows addressing multiple sectors, hazards and risks together. In particular, it is important to expand the scope of recovery interventions from the economic to other dimensions, such as social and environmental. Systemic recovery opens up new opportunities for building back better, towards resilient and sustainable societies. This also includes actions to reduce structural inequalities, for instance enhancing girls' access to education or extending social protection mechanisms to the informal sector. A few countries in the SADC devoted their plans specifically to the recovery of the informal sector, with the aim of identifying entry points for improving the conditions of people whose livelihoods depend on it. Similar efforts on other vulnerable groups (e.g. people with disabilities, disadvantaged rural communities, etc.) would strengthen the systemic potential of recovery efforts. Few recovery plans deal with the environment and, consequently, sustainability: it is recommended to include ecosystems and their interactions with human systems more systematically in recovery plans.

successful implementation of recommendations also depends on a number of enabling factors as well as potential barriers which vary with each national context. In the context of the two case studies, Malawi and South Africa, stakeholders indicated a number of enabling factors for systemic risk management and recovery. Among those, what emerged was the relevance of having strong institutions with clear political mandates, unambiguous responsibilities and capacities in disaster response and risk management. However, barriers also exist that need to be addressed: in particular, the lack of appropriate and dedicated funding dedicated to manage risks (which in some countries is exacerbated by the limited means of their donor-dependent economy) is a serious limiting factor to systemic recovery. As highlighted by stakeholders, institutional arrangements are still deficient, as many sectors and governmental agencies (particularly at the local decision-making scales) lack organisational capacity to implement recovery plans. Another important barrier highlighted by stakeholders is the limited sharing of information (including sector-specific data, e.g. health) across governmental bodies, which hinders effective risk management. underlying issues persist in particular in the irregularities witnessed in the management of public resources, which affect risk management and recovery both by draining resources and in terms of erosion of public trust.



2. Lessons from Malawi

2.1. Key lessons from COVID-19 and concurring hazards for understanding risks

The Republic of Malawi has registered 2,686 deaths and 88,908 confirmed cases of COVID-19 (as of 13/09/2023). While the direct health effects of COVID-19 were less severe in Malawi than many countries, interventions in response to the pandemic had far-reaching and lasting impacts across all sectors. Containment measures, including school closures, social distancing and cross-border travel restrictions were implemented to slow transmission. Impacts of school closures included increased school dropouts, child marriage and pregnancies and child labor. The closure of schools impacted girls more than boys, with fewer returning to full time education. There were also increased cases of gender-based violence and sexual exploitation of women in the country. These cascading effects highlight that impacts are gender-differentiated and reinforced by the underlying root cause of gender inequality.

Due to disruptions in global supply chains and closure of international borders, Malawi's economy, similar to much of the SADC, was impacted as it is highly dependent on imports. Many small and medium sized businesses were affected, which resulted in loss of employment and

income, notability in urban areas and the informal sector. These impacts were exacerbated by the limited availability and reach in social protection. There was a decline in global demand for products the country exports, including tobacco, tea and agricultural products, leading to decreased government revenue and increased borrowing. This has had lasting impacts on recovery and development efforts, as Malawi's economy is small and faces significant fiscal challenges to diversify. The high volatility of Malawi's economy to external shocks, as well as its dependency on products from other countries highlights how the country is exposed to both direct and indirect, cross-border shocks.

This has also become evident in the recurring fuel crises affecting the country since mid-2022 originating from supply chain disruptions. Another key lesson from Malawi relates to the need for strong leadership and political commitment. At the start of the pandemic, electoral political campaigns and politicisation of the disaster and conspiracy theories led to disregard to public containment measures. This changed with the establishment of the presidential task force on COVID-19.



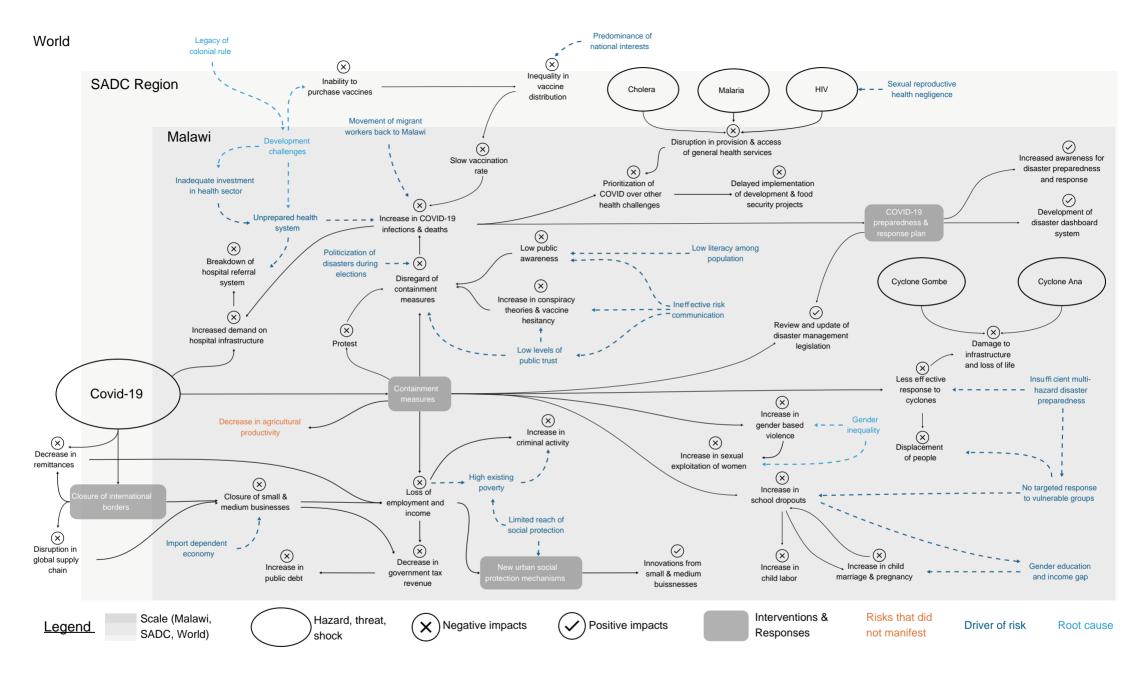


Fig 1. Systemic nature of risks and impacts in Malawi. This conceptual model was co-developed within the CARICO SADC project based on a system mapping exercise with stakeholders in two workshops, and was complemented by desk study and stakeholder consultation. The recommendations in this policy brief were informed from this risk mapping exercise (source: authors).

While no major event led to a declaration of a state of disaster in Malawi during the peak of COVID-19 transmission, concurring hazards have led to a double burden in several localities. For example, COVID-19 restrictions meant that those who were displaced during cyclones Ana and Gombe in early 2022 could not go to evacuation centres for shelter.

Humanitarian agencies were either unable to travel to support in response efforts or they could not access affected people as public gatherings of any form were restricted. COVID-19 also co-occurred with severe outbreaks of cholera in the country, and was prioritised over ongoing

challenges among the population with HIV and Malaria. The pandemic has underscored the need for multi-hazard coordination to prepare for and respond to multiple disasters simultaneously. While grappling with the challenge of recovering from COVID-19, Malawi must aim to also recover from recent disaster events, including Tropical Cyclone Freddy, in a manner that can build systemic resilience.

The following figure summarises the points outlined above and provides an overview of how different hazards, risks and impacts and their underlying risk drivers interact. It also considers risks and impacts linked to policy interventions.

2.2. Key lessons for risk management and recovery

COVID-19 impacted Malawi while it was grappling with recovery efforts from previous disasters associated with tropical cyclones, floods and droughts as well as ongoing challenges with other health epidemics, such as HIV and Malaria. Adopting integrated approaches to assess the impacts of concurring hazards, and taking a systemic perspective in risk assessments (see. Fig. 1) can help prioritise where risk management and recovery efforts need to be targeted. Through this, leverage points can be identified, where interventions can have multiple positive impacts.

Interventions impact people differently based on gender and other identities. Data collection and analysis on disaster impacts, risk management and recovery efforts should include vulnerable groups (e.g. women and gender-diverse people) to better understand the specific impacts, needs and success stories of those being impacted disproportionally. In recovery, targeted gender support mechanisms should be strengthened to

ensure that efforts reach underserved social groups. This starts with prioritising gender equality when allocating resources and increasing social investment into new gender initiatives.

In Malawi, we observed value in fostering and strengthening collaboration on early warning, risk monitoring, reporting and management with neighbouring countries to mitigate cross-border cascading risks.

As seen in the early stages of the pandemic in the country, clear risk communication is important during disasters. This enhances awareness and informs citizens of what they can do as best practice in prevention, response and recovery. Investing in education and public awareness raising through communication campaigns using different channels informs citizens to be better prepared for, cope with and recover from disasters.

3. Lessons from South Africa

3.1. Key lessons from COVID-19 and concurring hazards for understanding risks

COVID-19 caused about 102,595 recorded deaths and approximately 4,072,533 recorded infections in South Africa. The pandemic affected all spheres of life and sectors of South Africa. Underlying, deep seated socio-economic problems of poverty, inequality and unemployment caused the pandemic in a unique way compared to other countries in SADC. The country's connectivity to the region and the world added to it being disproportionately affected by the pandemic. To combat the pandemic, South Africa implemented lockdown measures, including travel restrictions, bans on purchase of certain goods and commodities and mandatory infection containment measures such as mandatory wearing of masks in public places, social distancing, quarantining and isolating travellers and mandatory screening, testing and tracing.

The country also procured vaccines when they became available. Lockdowns and infection control measures had multiple positive and negative, direct and cascading impacts. The positive effects were that response to COVID-19 brought closer collaboration amongst government departments, strengthening the optimisations of health and laboratory systems, enhanced communication and information dissemination, strengthened community networks of solidarity, extended provision of shelter to the homeless, expanded online learning and increased the role of science in policy making.

The country managed to forge partnerships that transferred technologies for manufacturing the COVID-19 vaccine in South Africa. Conversely, the lockdown and infection control measures negatively affected many facets of South African society and reinforced existing or created new vulnerabilities. Many people lost their jobs as companies closed or reduced operations causing less revenue from taxes for the national fiscus. Acts of xenophobia against migrants the national fiscus. Acts of xenophobia against migrants alleged to be taking away jobs from South Africans increased. Many businesses relied on government grants for businesses. Retrenched persons joined the informal sector and made attempts to start small businesses. Inequalities between the rich and the poor widened.

For example, children of the rich were accessing schooling while children of the poor could not.

Children dependent on school feeding programs experienced malnutrition. Gender inequalities were reinforced, while gender-based violence and teenage pregnancies increased. Mental health challenges increased. Many people became dependent on social grants. Households were exposed to food insecurity. Less focus was put on existing epidemics such as HIV and TB. Supplies of South African commodities to markets and imports were disrupted. Social networks were weakened and traditional rituals, especially those associated with burials, stopped. Another notable lesson was that while the country was responding to the pandemic, it also experienced other hazards such as floods, cholera and listeriosis outbreaks, wildfires and drought that required responses. Responses to these were inadequate. For example, the April 2021 floods in Durban caused several deaths and destruction of property and infrastructure.



3.2. Key lessons for risk management and recovery

The country used the Disaster Management Act 57 of 2002 to manage response to COVID-19 and other hazards that simultaneously occurred. However, it became apparent the Act was inadequate to guide responses to concurrent and compounding hazards. Many sectors lacked disaster response plans and focal points as required by the Act. This made coordination of the response challenging across departmental levels. In particular disaster response at municipal level was found weak. While civil society organisations and private sector firms got involved in the response, their role was not clearly defined. Enhanced coordination and skills capacity building for personnel to manage complex and multiple hazards are hence essential.

The pandemic also showed ineffectiveness in South Africa's traditional risk management and recovery approaches, which focus more on response rather than prevention and preparedness. Stepping up efforts to tackle risk

management through enhanced early warning and improved preparedness is considered more cost-effective and prevents or reduces negative impacts before they occur. Risk management can also benefit from exploring the use of new technological tools and data. Flexible disaster funding mechanisms must be operationalised. In addition, innovative approaches that show the systemic nature of risks must be adapted.

South Africa has approached the recovery process through developing the South African Economic Reconstruction and Recovery Plan. The plan emphasises economic growth, building resilient infrastructure in the aftermath of a disaster, providing funding for recovery and rehabilitation towards building back better. For this, creating integrated and coherent planning across spheres of government and the private sector is key. The Plan provides inter alia funding support to businesses, grants to cushion the vulnerable and incentives for job creation.

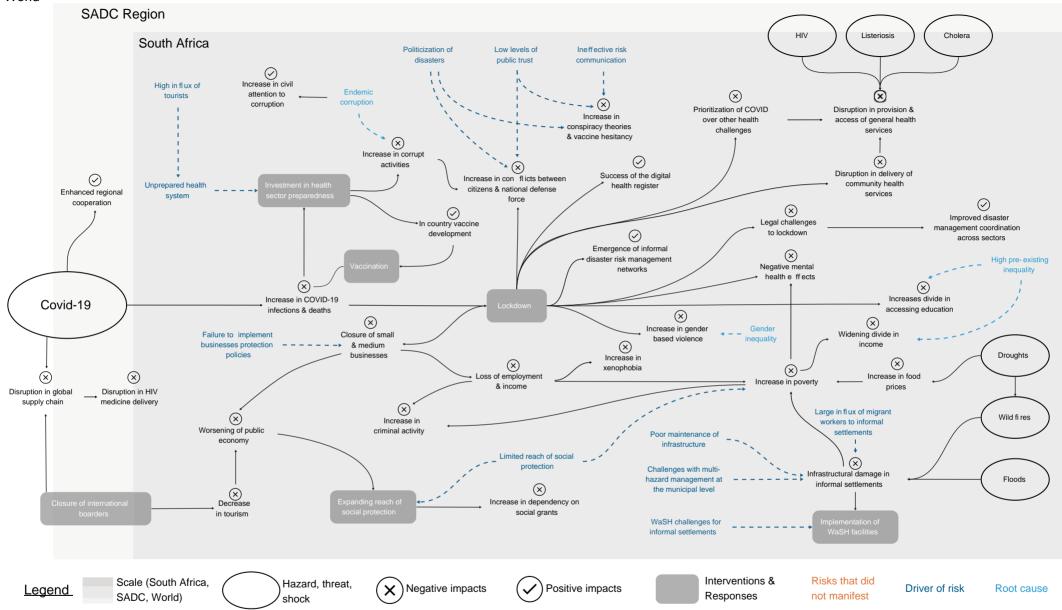


Fig 2. Systemic nature of risks and impacts in South Africa. This conceptual model was co-developed within the CARICO SADC project based on a system mapping exercise with stakeholders in two workshops, and was complemented by desk study and stakeholder consultation (source: authors).

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