

# Loss and Damage in Informal Urban Settlements

**Resumé and Handout for  
Misereor Partner Organisations**



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Climate change is already resulting in more intense and frequent disaster events. These events are either so-called sudden onset events that occur within hours or days, such as flash floods, heavy rainfalls or storms or slow-onset processes such as drought and rainfall variability that are not visually striking and have an immediate disruptive effect. Their gradual progression can obscure immediate impacts, which makes it difficult to measure or even perceive changes (Singh et al. 2021). Both types of events can result in disastrous consequences for the affected people, their belongings, and the environment.

**C**urrent action to adjust to climate change impacts (adaptation) and limit further emissions (mitigation) is not enough to tackle the speed and scale of climate impacts. As a result, losses and damages<sup>1</sup> from disaster events are a reality for which one must be prepared. They can be described as “the adverse effects of climate change that are not or cannot be avoided by mitigation and adaptation efforts” (van der Geest and Warner 2020).

Consequently, a key issue at UN climate negotiations is how to support countries and affected places to cope with these losses and damages. The term ‘loss and damage’ was used for the first time in 2007 at UNFCCC negotiations and has been debated ever since. In 2015, an article on loss and damage was included in the Paris Agreement (Article 8). However, no mention was made of the financial resources required in this context. At COP26 the Santiago Network on Loss and Damage (SNLD) was introduced with the aim of providing technical assistance to developing countries to support them deal with loss and damage. One year later, at COP27, loss and damage funding arrangements were on the formal agenda for the first time and a Loss and Damage Fund was established. At COP28, further details about the fund were agreed upon and countries pledged to fill it with almost \$700 million. The World Bank was selected as its first host organisation, while the SNLD is hosted by the UN Office of Disaster Risk Reduction and UN Office for Project Services.

While significant progress has been made, much remains to be done. This includes ensuring that the fund continues to be filled, but also that it can actually provide support at the required speed and scale. To this end, institutional arrangements have to be developed that meet the needs of the countries concerned. That sounds easier than it actually is, as there are a number of challenges to overcome. Loss and damage is a reality, but there is still no universally agreed definition. Depending on factors like the location, culture, geography, or group affected, the exact loss and damage can vary greatly.

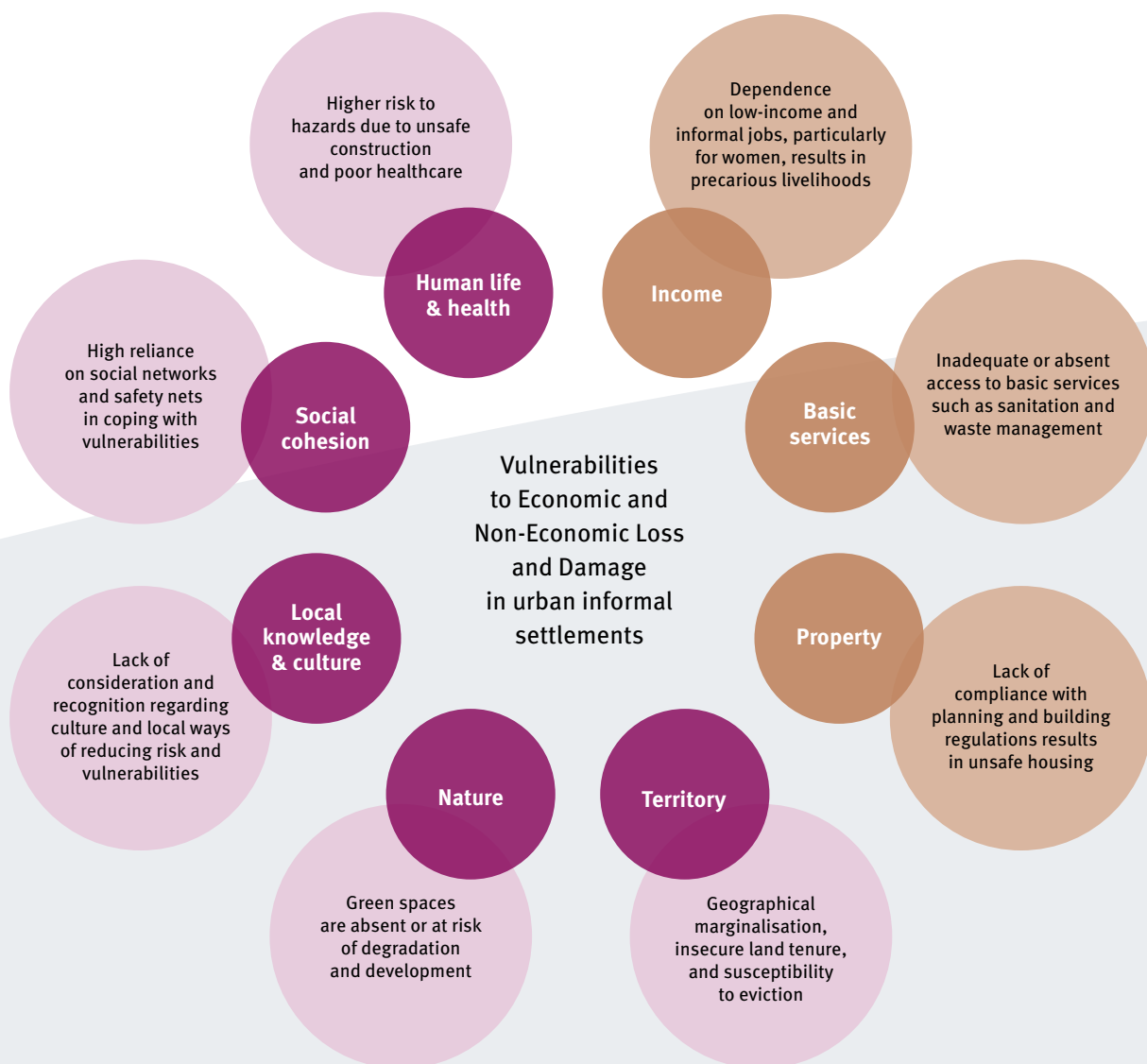
A distinction is usually made between so-called economic and non-economic losses and damages. Economic losses and damages can be understood as the impact on items that are commonly traded on markets, such as houses, crops or roads. Non-economic losses and damages can be defined as the impact on items that are not commonly traded on markets, such as cultural heritage or psychological health (UNFCCC 2013).

However, while there is a growing body of research on how losses and damages are experienced, there is less evidence on how best to address them and what institutional arrangements are needed to ensure that those most affected by climate change receive adequate support. Dwellers of informal urban settlements, for example, belong to the group most affected.

<sup>1</sup> *Losses and damages refer to impacts in a given location, while the term “Loss and Damage” refers to global policy and the respective Fund*

## Impacts on urban areas and informal urban settlements and need for action

More than half of the global population resides in urban areas, and by 2050 this figure will rise to 70 per cent. Almost 1.1 billion people currently live in informal settlements and an estimated 2.8 billion people are affected by some form of housing inadequacy (UN Habitat 2023). Many – if not most – of them are ill prepared for climate change and the associated disaster events. Consequently, they are facing loss and damage, as shown in *Figure 1*.



- Economic Loss and Damage
- Non-Economic Loss and Damage

**Figure 1:** Examples of economic and non-economic Loss and Damage and vulnerabilities specific to urban informal settlements (Mirwald et al. 2023)

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**T**he lack of preparedness and the high exposure and vulnerability of people living in informal settlements (Satterthwaite et al. 2020) exacerbate disaster impacts. There is also a high risk of cascading effects in the event of disasters, which means that people remain trapped in a cycle of poverty and marginalisation. Unresolved conflicts that are the result of inadequate or absent policies and frameworks on land tenure and property rights exacerbate existing vulnerabilities and limit adaptive capacity. When a disaster occurs, these dwellers, who are already in an extremely fragile situation, face additional difficulties due to the lack of own resources and a delayed post-disaster response. They are frequently excluded from aid distribution and post-disaster reconstruction programmes which increases their vulnerability to future disasters.

These challenges will keep growing. Over the next 30 years, an additional two billion people are expected to live in such settlements – some 183,000 people daily (UN 2023).

The overwhelming share of these settlements will be in cities in low- and middle-income countries, mostly in Asia and sub-Saharan Africa, partly due to migration and conflict. This means that the lion's share of the burden lies with cities and countries that are already struggling with major challenges, including climate related disasters.

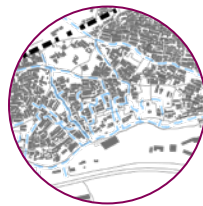
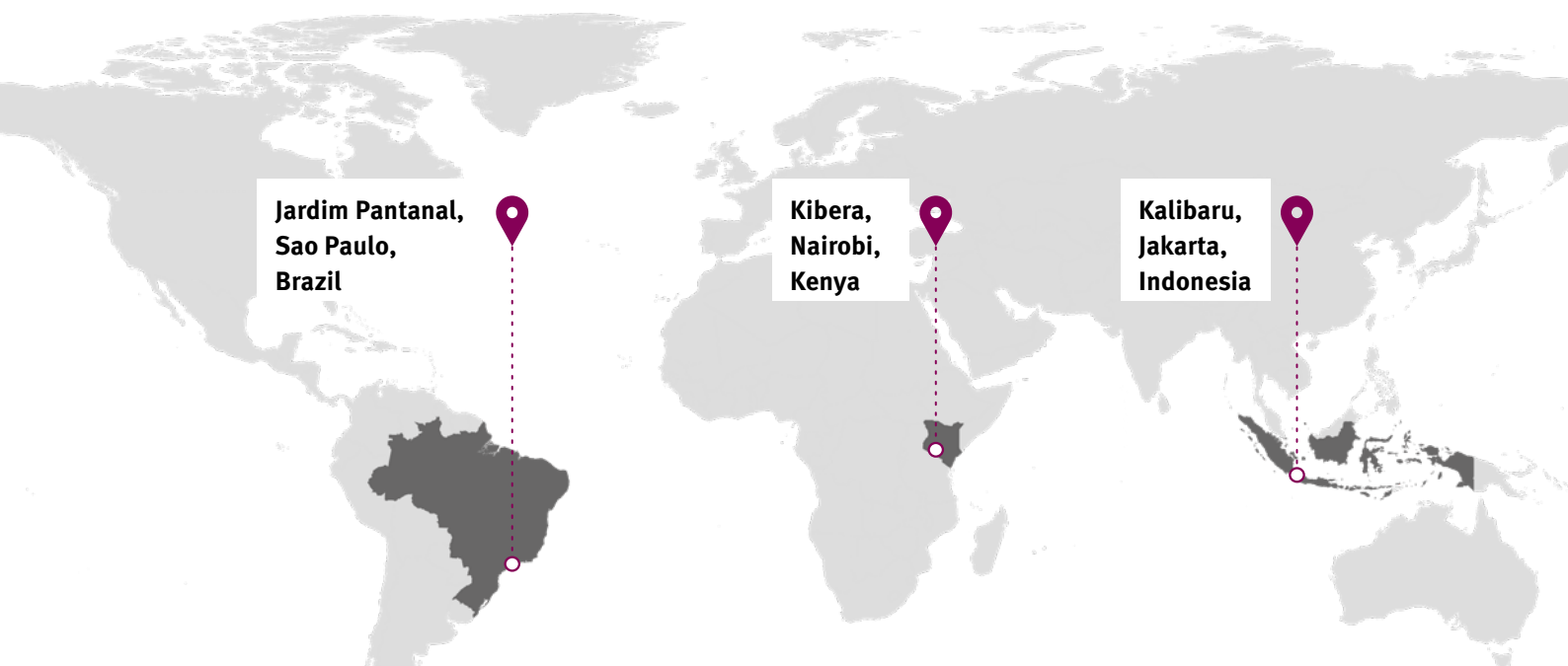
Access to financial instruments for Loss and Damage can help to reduce the burden on dwellers of informal urban settlements. This requires cooperation between actors of different scales and backgrounds, including governments, civil society organisations (CSO) and local communities. The following questions must be answered in order to develop a meaningful and targeted action plan:

### What particular losses and damages do informal urban settlements face?

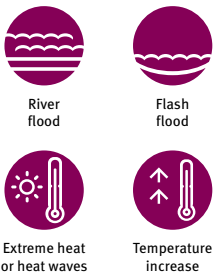
A study commissioned by Misereor e.V. explored the experiences and needs related to urban informality using evidence from informal urban settlements in three cities: Nairobi, São Paulo and Jakarta (Mirwald et al., forthcoming). In each city, multiple hazards - mainly floods, droughts and heatwaves - cause a variety of economic and non-economic losses and damages (*Figure 2*).



View into the side street of an informal settlement in Jakarta, Indonesia, Photo: Flitner/Misereor



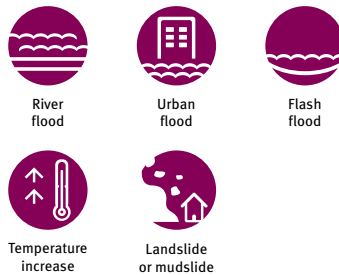
**Jardim Pantanal**  
Hazards



*“Before, it used to rain a lot all month long, so that a community would be flooded for two or three days. Now it’s different, it rains for 20 minutes, so hard that it scares us, haunts us, and ends up causing a lot of disruption.”*

*(NGO Representative in Sao Paulo)*

**Kibera**  
Hazards



*“Last year, we had floods around Kibera where people lost their livelihoods, people lost their homes, people lost even their lives. So that is very common in this informal settlement.”*

*(NGO representative, Nairobi)*

**Kalibaru**  
Hazards



*“During tidal events, the houses were gone. Because houses got destroyed, the government started the damming program. [...] Alhamdulillah, it helped, it helped the people here. Basically, once a year there is always an abrasion event. And after that, people rebuild.”*

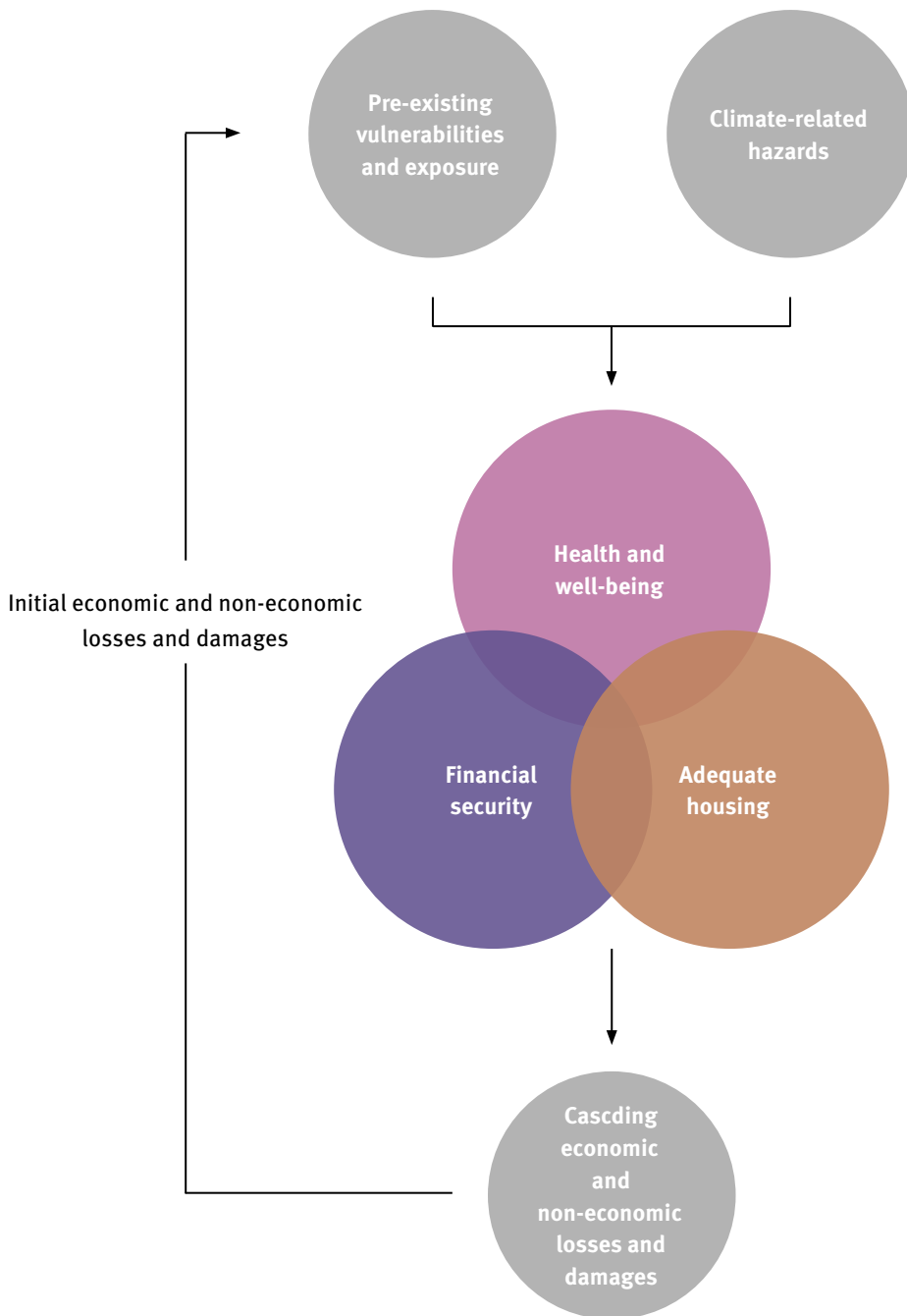
*(Pump House Worker, Kalibaru)*

**Figure 2: Hazards and their impacts on three informal settlements in Nairobi, São Paulo and Jakarta**

© Schneide/Misereor post UNU-EHS Maps elaborated with information from ArcGIS 2023 and Open Street Map 2024

**T**

he greatest losses and damages relate to adequate housing, health, well-being and financial security - three areas that informal dwellers are already struggling with without the presence of climate-related hazards. Losses and damages in these three areas can cascade into further losses and damages, such as loss of property, impairment of social cohesion and others. Any losses and damages can exacerbate pre-existing vulnerabilities in urban informal settlements and make people more vulnerable to future impacts (**Figure 3**).



**Figure 3:** Schematic representation of how pre-existing vulnerabilities, exposure and climate-related hazards cause initial and cascading losses and damages in urban informal settlements

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**H**omes that are not built to withstand floods or landslides can be completely destroyed. This also leads to the loss of personal possessions that are worth more than their market value. The loss of housing can also lead to homelessness or displacement, both of which often have further negative impacts on people's livelihoods. Existing health risks are often exacerbated. After floods, for example, already inadequate sanitation facilities can no longer be used, and heat leads to an increase in diseases. The latter can also lead to people no longer being able to work. People also face significant mental health problems when they are confronted with losses in their lives. In addition to the direct financial impact, such as the loss of produce that people can sell, the aforementioned loss and damage also leads to financial insecurity: houses have to be repaired and healthcare costs increase.

Since the right to adequate housing, sanitation, health and an adequate standard of living is recognised in several human rights treaties (UN General Assembly 1966, 1948), loss and damage to adequate housing, health, well-being and financial security can potentially be classified as human rights violation.

### How to assess loss and damage and what role can CSOs play?

People need to know what they lost to claim their rights. Similarly, governments at all levels and other actors (such as humanitarian or CSOs) need accurate data in order to respond effectively to loss and damage and set the right priorities. Furthermore, if they have the adequate data, these actors can claim their rights, and apply for additional (financial) support from different levels of government or at international level. In short, you cannot address, claim and finance what you do not measure. It is therefore extremely important to consider informal settlements and the loss and damage they suffer in assessments. This can be done either by adapting existing approaches or by developing new approaches adapted to the particular patterns of losses and damages in these contexts. The assessment of losses and damages and associated costs is a field that is still under development.

Many informal settlements and their dwellers are ill-prepared for climate-related hazards: View on an informal settlement in Nairobi, Photo: Harms/Misereor





**A** particular challenge is the assessment of NELD which can hardly be measured in terms and usually is the most common assessment method. For informal urban settlements, it is crucial to find a suitable arrangement for the assessment of non-economic losses and damages. Many of the dwellers' possessions may not have a high monetary value (e.g. due to the poor quality of their housing) but have a high intrinsic value because they are part of their livelihood. If NELDs are excluded from the discussion of Loss and Damage, there is the risk that many impacts will be ignored, especially in the Global South, where economic losses from disasters are traditionally lower but losses of health and lives much higher (UN 2021).

There are no official Loss and Damage assessment methodologies. In humanitarian aid and disaster management, methodologies such as the Damage and Loss Assessment methodology, which was developed by the Economic Commission for Latin America and the Caribbean (ECLAC), and the Human Recovery Needs Assessment (HRNA), are used. Building on this, international organisations have established the Post-Disaster Needs Assessment and Recovery Framework (PDNA/RF). Together they form an approach to harmonise the assessment, analysis and prioritisation of damage, loss and needs by a range of stakeholders (United Nations agencies and programmes, the World Bank, donors, non-governmental organisations) in support of the national government. In an effort to bring to-

gether many separate databases and sources of information, the United Nations Office for Disaster Risk Reduction (UNDRR) is creating a new disaster losses and damages tracking system. This system will replace the previous Disaster Information Management System DesInventar (UNDRR 2023).

A particular challenge with informal urban settlements is that losses and damages can go unnoticed due to a critical lack of data. Informal urban settlements are often not considered in formal censuses. As a result, disaster impacts are insufficiently documented, which makes access to financial or other support more difficult. Although community-based assessments are already conducted in many places – often with the support of CSOs – (see **Figure 4**), they are generally not recognised by governments. Consequently, data gaps remain unaddressed even though potential and, in some cases, actual data are available.



An inside look in an informal settlement in São Paulo, Brazil, Photo: Kopp/Misereor



## Approaches identified

### Community-based approaches

- Settlement profile
- Community-based hazard map
- Infrastructure mapping
- Map of historical sites
- Enumeration or survey of dwellers
- Affective map
- Collecting information from the elderly and traditional leaders

### Expert-led (incl. by CSOs and NGOs)

- Topographic survey
- 3D model
- Map of risk-prone areas
- Comparative study before and after project implementation
- Documentation of disasters on social media
- Documentation of people who receive aid after a disaster
- Collection of health data in medical camps
- Impact assessment
- Registration for assistance
- Partnership with academia to develop local studies and legal guidance for dwellers, regarding property and land tenure

### Government-led

- Municipal cadaster and statistics
- Maps and statistics provided by national agencies
- Law enabling citizens to request existing data from the government
- Demographic sampling and health survey
- Impact assessment
- Post-disaster impact assessment
- Law enabling

## Data and assessment challenge

Locally relevant data

Data generated and used by authorities

**Figure 4:** Aggregated list of assessment practices observed in the case studies of Jakarta, Nairobi and São Paulo

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**L**osses and damages in informal urban settlements are often related to the causes of vulnerability of people living in urban informality. Mapping the cascading effects in informal urban settlements can provide insights into the interlinkages between existing vulnerabilities, informality and the everyday construction of risk. Such assessments should not only include local but also translocal consequences of loss and damage, for example in the rural places of origin of the urban settlers. That would exceed the capacities of local governments and communities, but could be supported by CSOs.

### What should the funding mechanisms look like to ensure the fairest, quickest and most appropriate support?

There is currently no funding that explicitly addresses losses and damages caused by climate change. Nevertheless, funding to avert, minimise and address Loss and Damage does not involve completely new activities. Instead, it must fill gaps in the existing funding landscape. This landscape is composed of (but is not limited to) general development, climate change mitigation and adaptation, humanitarian assistance, emergency planning and response, health, recovery and reconstruction, migration and relocation and the upgrading and formalisation of informal settlements. In addition, there are a variety of regional, national and local funding sources that are relevant to the many aspects of loss and damage.

Local research in Nairobi, São Paulo and Jakarta revealed that there are several financing options in each of the three cities. However, they usually have some weaknesses or room for improvement. Sources range from national to local governments, CSOs, philanthropy and the private sector, with financing and disbursement modalities varying widely. In all three cases, national and subnational governments are already investing significant budgets in climate and disaster action, but nowhere are public investments high enough to finance all needed actions.

The existing funding comes with a number of obstacles and disadvantages. Key barriers identified are listed in **Box 1**.

## **Funding Obstacles**

Local research in Nairobi, São Paulo and Jakarta as well as interviews with international experts yielded a total of 8 key obstacles inhibiting access to funding:

### **Accessibility of funds**

1. The eligibility criteria for receiving a certain support might disadvantage people living or working in informality.
2. Direct funding opportunities for CSOs are scarce, hence they are struggling to take anticipatory or responsive action.
3. CSOs and CBOs often do not have the necessary information or meet the requirements to apply for funding, including due to bureaucratic processes.

### **Funding design**

4. Existing funding does not necessarily meet local needs, but is rather geared to donor priorities and preferences.
5. Transparency and accountability need to be ensured to use funds for the intended purposes without overburdening reporting.
6. Donors and (local) governments often do not know where to channel funding (so-called-money-out problems), as centralised knowledge of established and trusted CSOs are widely lacking.
7. Money-out problems are amplified by the absence of formalisation of community support structures or insufficient levels of community organisation.
8. Trusting relationships between CSOs and local governments are often lacking, hindering CSOs from influencing planning and spending.

**Box 1**



Learning from the above, three different pathways have been identified to bring Loss and Damage finance to the local level, including the potential role of CSOs in each:

### **1. Scaling up existing social protection approaches**

Social protection consists of policies and programmes designed to reduce poverty and vulnerability, such as social insurance, social assistance, and labour and economic inclusion programmes (World Bank 2024). They provide a safeguard against individual risks (such as illness) and collective risks, including natural hazard-induced disasters and climate events. Many countries already have social security systems in place that can be scaled up and improved, while other countries should be supported in sustainably setting up such structures (Aleksandrova and Costella 2021). These systems can be used to disburse emergency assistance through additional funding and thus be scaled up in times of disaster or other emergencies, known as adaptive or shock-responsive social protection systems. CBOs can support data collection and help identify disbursement systems. They can support the design and trial implementation of new measures at local level.

### **2. Recognising the important role of local organisations**

Collaboration with the local population, including the most vulnerable, is key for implementing culturally sensitive and context-specific programmes with a lasting impact. Communities are often the first if not the only responders after disasters. Despite their crucial role, local communities and CSOs have severe problems accessing funding directly. Governments and donors should recognise the crucial role CSOs have in filling a governance void in informal urban settlements and enable them to play an active role. Donors need to adjust the way they provide funding and offer funding schemes that are easier to access and which consider the circumstances of small CSOs and informal communities. Not all communities have the necessary strong organisations in place. They will have to develop solid structures of participation and community organisation – with the help of CSO - to overcome short-term responses.

### **3. Multi-level governance and coordination**

Addressing complex challenges like climate change involves multiple stakeholders and levels. Consequently, it requires adequate coordination and governance including government and non-government actors. Multi-level governance facilitates the sharing of responsibilities and resources across different levels, enabling comprehensive, integrated solutions. It constitutes a prerequisite for loss and damage funding to effectively reach the local level. In informal settlements, CBOs and CSOs are often closer to informal dwellers than the municipal government and should therefore be involved. CSOs are in a unique position to advocate for communities and CBOs.



Residents of informal settlements are particularly vulnerable to the impact of the climate crisis, as here in Mathare Valley in Nairobi, Kenya, Photo: Schirmel/Misereor

## How can existing measures and responses be meaningfully integrated into long-term solutions?

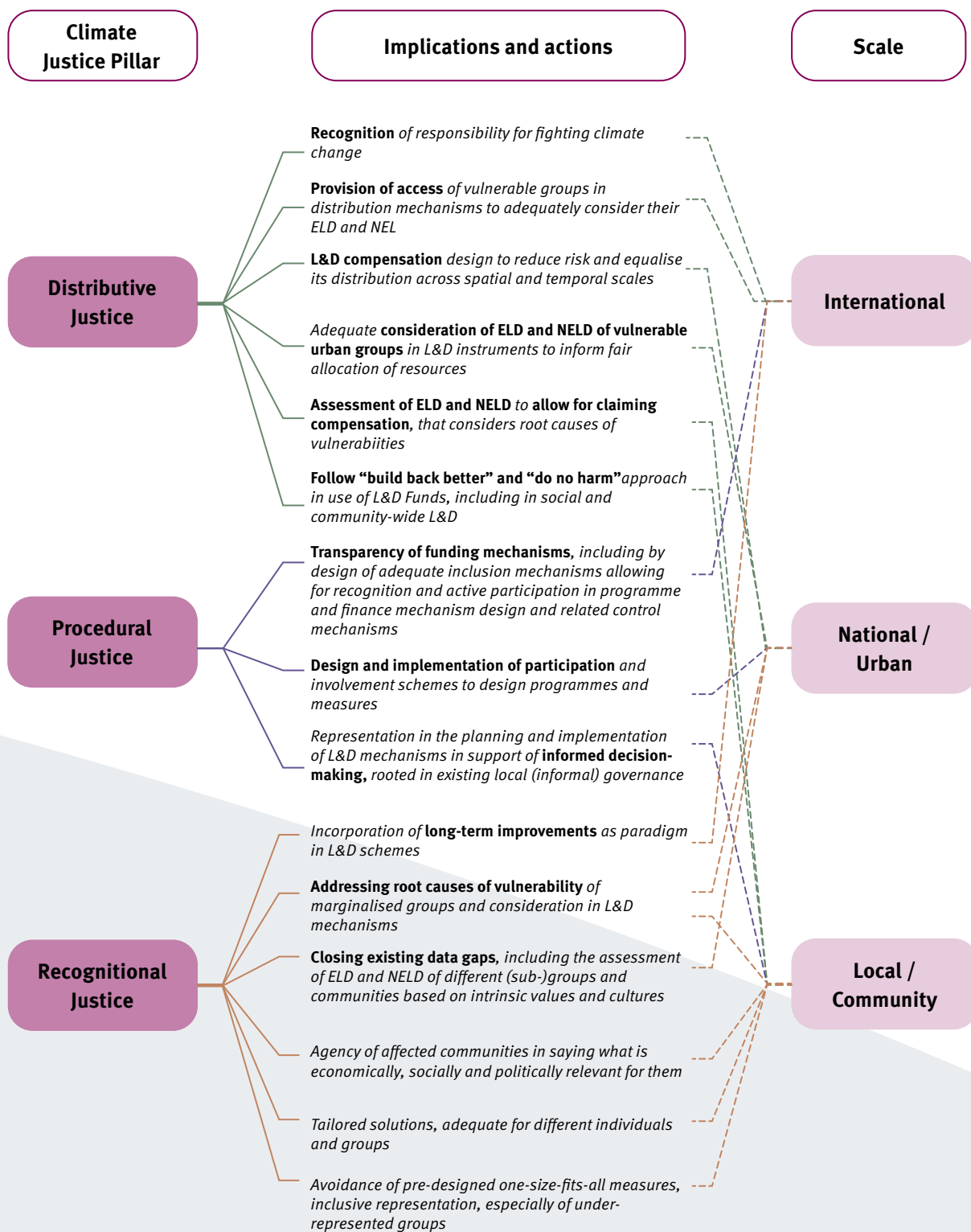
We already know multiple measures and solutions to build resilience and improve livelihoods in informal urban settlements. Valuable lessons can be learnt from existing approaches and instruments, for example in the area of social protection and urban planning. Robust social protection systems can for instance avoid duplication of beneficiary registries and thereby facilitate disaster relief as well as actions to avert, minimise and address loss and damage. At the same time, there also are approaches that have not proved successful. These include, among others, relocation, which is justifiably viewed critically. It is however crucial to realise that there is no single definition as to what constitutes an informal settlement. Consequently, cultural, social and geographical aspects must be taken into account when developing actions. CSOs can provide important guidance based on their experience gained in working in informal urban settlements.

Communities might also learn from other commonly marginalised groups as to how they organise themselves when engaging with policy-makers or donors. For example, Indigenous groups have developed “community protocols” to define consultation and decision-making processes prior to the implementation process.

Underlying paradigms such as the right to the city or climate justice have great potential to serve as safeguards for the development of an appropriate mechanism to address loss and damage in informal urban settlements. *Figure 5* depicts the different pillars of climate justice and how they correspond to designing action on different scales. Distributive justice addresses the equitable distribution of both costs and benefits. Procedural justice pertains to the fairness, accountability, and transparency of decision-making processes in climate change initiatives. Recognitional justice centres on acknowledging the socio-economic and political disparities that exacerbate vulnerability and marginalisation within affected communities, while at the same time underscoring the equality of human rights.



## Putting a climate justice perspective on L&D access for marginalised urban communities and implications for local to international scale



**Figure 5: Putting a climate justice perspective on loss and damage access for marginalised urban communities and implications for the local to the international scale**

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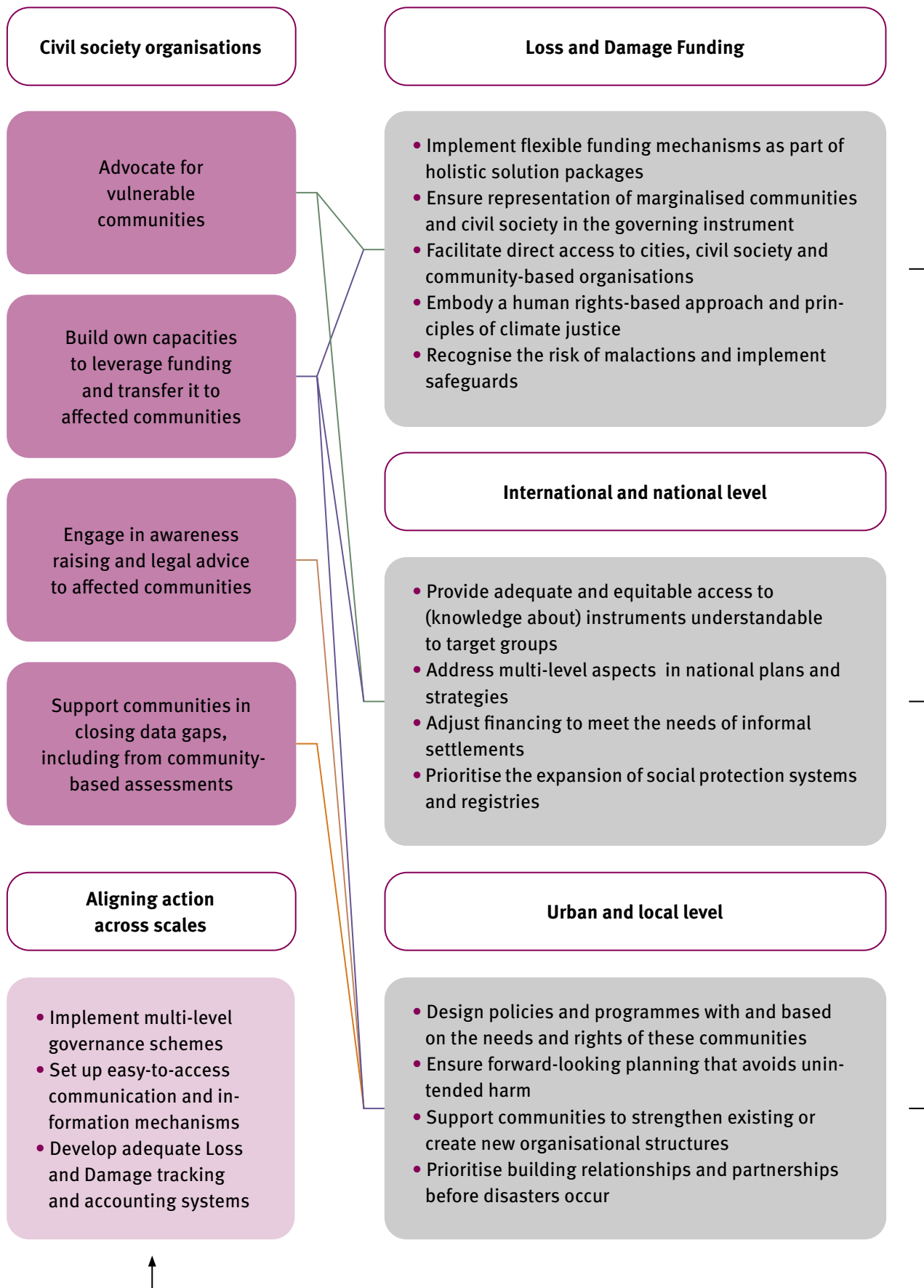
## What is the way forward and which role can CSOs play?

Informal settlement dwellers must be given the opportunity to live a decent life without facing unbearable disasters and climate impacts. Action to avert, minimise and address Loss and Damage can become a powerful instrument for this. However, certain rules must be observed to ensure that a promising approach does not end in perpetuating existing vulnerabilities. This risk is very real, and now is the time to design and take appropriate measures. This requires cooperation at eye level, between all scales and across all stakeholder groups.

### Particular recommendations to CSO are:

- 1.** Currently, shortages as to adequately consider Loss and Damage do not only exist between the national and urban levels, but also between the urban and the localised levels of informal urban settlements. CSOs have the potential to bridge these gaps and act as “honest brokers” and advocate for vulnerable communities, including by fostering international cooperation to strengthen local CSOs institutionally and also beyond project cycles.
- 2.** Affected communities might not understand themselves as impacted by climate-induced disasters and hence do not recognise or claim their entitlement to support. CSOs can support them by engaging in awareness raising and legal advice to affected communities. They are also in an adequate position to support capacity development and to empower communities to become their own advocates.
- 3.** CSOs should build their own capacities to leverage funding, including by forming alliances. Capacity building initiatives, focused on areas such as formalisation, financial management, and proposal writing, can empower CSOs to access funding opportunities. Peer learning is a particularly effective approach to capacity building, providing CSOs with practical knowledge and skills in an accessible and collaborative manner.
- 4.** CSOs should support communities in closing data gaps and have continuous datasets, particularly from cascading impacts of disasters in informal contexts. Data generated, including community-led assessments in collaboration with CSOs, civil society and academia, can be used to improve disaster preparedness, to advocate and to build relationships with city authorities and other actors.

Consequently, we have formulated a total of 20 recommendations, including to CSOs, presented in **Figure 6**.



**Figure 6:** Recommendations for mainstreaming action to avert, minimise and address loss and damage, indicating the particular potentials and actions of CSOs

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