



**PRUV Policy Recommendations:
Urban Resilience and Legal Frameworks**

Deliverable 3.3





Overview of PRUV project

The challenge posed by urban vulnerability is immense and is being compounded by rapid unplanned urbanisation, climate breakdown and resource pressures. While the realisation that there is a fundamental shift in the landscape of crises to cities is no longer contested, aid actors are nonetheless grappling with the complexities of adapting their approaches to the urban context. The **Preparedness and Resilience to address Urban Vulnerability (PRUV)** project aims to inform the pressing need to reshape how humanitarian action and development aid is undertaken in urban areas to address the challenge posed by urban vulnerability.

Assembled within the PRUV Consortium is a mix of universities, NGOs and private sector companies that transcend disciplines and sectors to help frame a new resilience and preparedness paradigm to respond to urban challenges.¹ It seeks to combine existing best practice with innovative thinking and technology to challenge current state of the art thinking in order to arrive at a novel approach with affected urban populations at the centre.

By combining perspectives from a range of disciplines (sociology, political science, cultural studies, law and public health) in an holistic manner, considerable purchase is added to the research around preparedness and resilience, which, while not new within the aid sector more generally, has not been focussed sufficiently on the urban context to date. The opportunities to carry out the research in test-bed sites across a range of global regions (Bogota, Nairobi and Jakarta) adds to the potentially broad utility and transferability of the findings globally.

The programme is divided into five thematic work packages (WPs):

- WP1 – Social Capital and Urban Resilience
- WP 2 – A Protection Approach to Urban Resilience
- WP3 - Urban Resilience and Legal Frameworks
- WP4 – A Human Security Approach to Urban Resilience

¹ The members of the PRUV consortium are University College Dublin (UCD: Co-ordinator), Concern Worldwide (CWW), University of Deusto (UD), Ruhr University Bochum (RUB), University of Groningen (RUG), Gadjah Mada University (UGM), University of Nairobi, Future Analytics Consulting (FAC: Urban planning consultancy based in Dublin, Ireland), Plan International

- Yayasan Cipta (Public Health NGO based in Jakarta, Indonesia)
- Jesuit Refugee Service (JRS)



- WP5–Developing Resilience in Urban Areas using Public Health Preparedness

These policy recommendations relate to work package 3 concerning urban resilience and legal frameworks and centre around urban cultural heritage and tenure security.

1. Focus of the Legal Work Package

Legal frameworks, operating at the municipal, national, regional and international level, possess the capacity to strengthen the protection of individuals and groups exposed to urban vulnerability. Work package III – urban resilience and legal frameworks – primarily focuses on linking traditional public international law to the more recent phenomenon of urbanisation by *inter alia* analysing how (international) legal frameworks are applied in the context of urban vulnerability and vis-à-vis resilience.

In a first step, we identified three international legal frameworks of importance in the context of urban vulnerability: international human rights law, international humanitarian law, and the international rules applicable to the protection of persons in the event of disasters.

Subsequently, we attended to the relationship between the different international legal frameworks in the context of human-made and natural disasters. Within the scope of a peer-reviewed journal article, we critically discussed the (potential) application of international humanitarian law and international human rights law to urban violence and (armed) conflict.² Foundational research into the impact of international humanitarian law on public international law was continued in a peer-reviewed research paper, focusing specifically on international humanitarian law's principle of humanity in the context of natural disasters.³

Structuring our research around the protection of individuals and (vulnerable) groups, on the one hand, and the state's obligations towards these individuals and groups, on the other, we drafted legal briefs. These reviewed challenges in the implementation of specific human rights guarantees,

² R. McDermott / C. Lülf / L. Hofmann / P. Gibbons, International Law Applicable to Urban Conflict and Disaster, in: Disaster Prevention and Management: An International Journal (DPM) Vol. 26, Issue 4 (2017), 553–564.

³ H.-J. Heintze, Humanisierung des Völkerrechts – Ausstrahlkraft des Humanitären Völkerrechts auf das Allgemeine Völkerrecht [The Humanisation of International Law – International Humanitarian Law's Impact on Public International Law], in: Journal of International Law of Peace and Armed Conflict (JILPAC), Vol. 2, Issue 1-2 (2019), 7–21.



the working of regional human rights mechanisms, and the application of concepts in the context of urban vulnerability. The right to liberty and security of persons; housing, land and property rights in Colombia, Indonesia and Kenya; the Inter-American Human Rights System and regional mechanisms on the African continent are only a few examples of such briefs. Going beyond the protection of individuals and groups in the urban context, our research, moreover, focused on the protection of cultural heritage vis-à-vis the challenge of progressive urbanisation as well as tenure security in urban settings.

2. Urbanisation, Cultural Heritage and Resilience

Cognisant that progressive urbanisation not only entails population growth but also results in the spatial expansion of cities and therefore impacts the city itself, including cultural heritage, our research continues to examine (1) the legal protection of cultural heritage located or finding expression in cities and (2) the relationship between such heritage and the concept of resilience. This tier of our research is located in international legal frameworks, particularly in the area of international cultural heritage law and international human rights law.

What we found

The relationship between urban vulnerability and cultural heritage has gained momentum in scholarship as well as in legal frameworks. Article 11 (4) of the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, establishing the List of World Heritage in Danger, identifies challenges relating to urbanisation. The “Operational Guidelines” to the Convention elaborate on these. Along the same lines, the “Operational Directives” to the 2003 UNESCO Convention on the Safeguarding of Intangible Cultural Heritage emphasise the concept of community resilience. The UNESCO’s Recommendation on the Historic Urban Landscape (2011), a soft law instrument, directly responds to vulnerability of cultural heritage in the historic urban sphere.

Scholarship has primarily conceived of the relationship between cultural heritage and urban resilience in the context of disaster risk reduction. At the international level, this is similarly reflected





in UNESCO policies. Finding that resilience has only recently entered the field of international cultural heritage protection, scholarship was quick to recognise that cultural heritage can serve as a contributor to resilience in disaster risk reduction. More recently, scholarship has sought to challenge the static view of cultural heritage by seeking to reconcile it with a more dynamic understanding of the transformative capacities of the concept of resilience.⁴ Our research into the protection of cultural heritage vis-à-vis urban vulnerability is ongoing.

What we should do in the future

As an exacerbation of urban vulnerabilities can result in interferences with human rights, it is important to contemplate how legal frameworks operating at the municipal, national, regional and international level can respond to these challenges.

- **Future research:** Beyond confining the relationship between cultural heritage and resilience to the framework of disaster risk reduction, future research is required on (1) the complexities of reconciling the conservation of cultural heritage and the transformation of urban spaces and (2) the protection of cultural heritage from a human rights lens in *inter alia* the urban sphere.
- Moreover, **future research** into vulnerable groups in urban settings is necessary. One such group is disenfranchised adolescents and youth.

The international human rights system offers a number of possibilities to address the protection of individuals and groups vis-à-vis urban vulnerability. Recommendations are addressed to (1) states, (2) human rights treaty bodies and (3) charter-based bodies. Along the same lines, regional human rights systems often offer similar mechanisms, allowing individuals (and groups) to bring complaints and monitoring the implementation of human rights.

- **States:** At the international level, the protection of vulnerable groups in urban settings needs to be addressed in greater detail in the state reports to the treaty bodies. Along the same lines, the Universal Periodic Review (UPR) offers the opportunity for states to focus on

⁴ C. Holtdorf, Embracing Change: How Cultural Resilience is Increased through Cultural Heritage, in: World Archaeology Vol. 50, No. 4, 639–650.



urban challenges to human rights implementation in greater detail.

At the local level, the relationship between international and national legal instruments and local / traditional instruments needs to be addressed. The perceived primacy of the law might not be applicable in settings where traditional instruments play a greater role.

- **Human Rights Treaty Bodies:** Cognisant that international law tends not to explicitly distinguish between urban and rural areas, guidelines on reporting for the treaty bodies already require states to provide information, explicitly distinguishing between rural and urban spaces, in relation to a number of rights. It is important that this continues and is extended to human rights guarantees of particular risk of vulnerability in urban settings. Along the same lines, concluding observations should address human rights challenges pertaining to urbanisation and mega-cities in greater detail.
- **Charter-based Bodies:** Besides the Universal Periodic Review, the special procedure offers the opportunity to e.g. establish a working group on urban vulnerability and human rights or to address urban vulnerability more strongly within the framework of established Special Rapporteurs and Independent Experts. The mandate of the “Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context” constitutes one such example. One of the most recent thematic reports of the Special Rapporteur in the field of cultural rights, for example, focuses on cultural rights and public spaces (A/74/255). Her report highlights the issue of urbanisation vis-à-vis cultural rights.

3. Tenure security, quality of housing and vulnerability of housing to fire and flooding in Nairobi, Kenya

As urbanisation proceeds apace, particularly in sub-Saharan Africa, the exposure and vulnerability of households and communities living in informal settlements to hazards such as fire and flooding is increasing. However, the social and institutional drivers of both vulnerability and resilience to hazards in such settings has been under-explored within scholarship to date. Scholarship suggests that tenure security has a protective effect with respect to hazards. However, this assertion has not been adequately tested within urban informal settings.



A comparative case study of two localities in Nairobi, Kibera and Kawangware, was undertaken to explore how tenure security influences quality of housing and exposure to hazards such as fire and floods. The two cases chosen reflected a high level of variation in terms of tenure security. In undertaking the comparative case study a convergent parallel mixed methods design (Bryman 639) was adopted, whereby data collected from a survey and from interviews and focus group discussions were combined in order to triangulate and render findings more comprehensive, as well as to offset the weakness of one set of methods with the other. Survey data were drawn from a household survey conducted in the localities. The survey used a stratified random sampling technique using a probability proportionate to estimated size (PPES). In addition to survey data, legal and policy analysis was conducted to measure the indicators related to the legal dimension. A range of focus group discussions and in-depth interviews were also undertaken to complement the other methods. Participants within the focus group discussions and interviews were stratified on the basis of gender and age (18-24 years old in one category and >24 years in another category).

A number of bivariate statistical tests were undertaken between the quantitative variables relating to tenure security on the one hand and quality of housing on the other. Chi-square tests of independence were performed to examine the relation between the indicators of tenure security and quality of housing across Kawangware and Kibera. On the basis of the mixed methods approach outlined above, the quantitative data analysis was complemented by thematic analysis of the qualitative data gleaned from focus group discussions and in-depth interviews.

What we found

While generally ignored by authorities, informal settlements are host to over 60% of urban residents in Nairobi while only comprising 5% of the residential area. The high density of people living in these areas has an implication for the vulnerability of dwellings to fire and flooding. Scholarship identifies that tenure security is an important factor in determining quality of housing as well as the vulnerability of dwellings to such hazards.

Tenure security

The survey data confirm that most households in Kibera are renters. In Kibera 91.1 per cent are renters, 8.1 per cent own and less than 1 per cent are free-holders. It was also clear from the interviews and focus group discussions that most residents rent their structures. The complexity of



tenure within Kibera is highlighted by the participants within the interviews and focus group discussions. In some cases residents, particularly those who rent their dwellings, are unaware of the tenure status of residents in their localities, who owns the land on which housing is built and who has access to title deeds. However, the importance of title deeds to define ownership kept recurring in discussion over tenure. Ownership of particular properties is not clear in many cases because of the lack of title deeds. The average length of settlement of households in Kibera is 8.38 years (N = 360, SD = 6.96)

From the survey data it is clear that most households in Kawangware are renters. The percentage of renters in Kawangware is 98.1 per cent, 1.6 per cent own their own homes and 0.3 per cent are free-holders. It was also clear from the interviews and focus group discussions that most residents rent their structures. However, in contrast to Kibera the qualitative data confirmed that title deeds are more readily available and that tracing ownership is less contested and more easily identifiable than in Kibera. There are also group projects to obtain title deeds. Owners can rely on title deeds. The preference for ownership over renting was emphasised by the participants. As in Kibera there was a strong gender dimension to ownership in Kawangware according to the qualitative data. Unlike in Kibera this is also reflected in the survey data. There is a statistically significant relationship between gender of the head of household and whether the dwelling is owned or rented in Kawangware. The average length of settlement of households in Kawangware is 4.43 (N = 375, SD = 5.00).

Fires and floods affecting housing in Kibera and Kawangware

Hazards are much more likely to affect Kibera rather than Kawangware. Households in Kibera are almost twice as likely to have experienced fire and flooding in the four week period before the survey was conducted when compared with households in Kawangware. Households in Kibera are also more than six times more likely to report that their dwelling has ever been damaged by fire, a storm or flooding than households in Kawangware.

Quality of housing

In terms of quality of housing, housing in Kibera is more informal than in Kawangware, often characterised by shanties. Participants expressed a mix of views concerning housing in Kibera and Kawangware, even within settlements. There are significant differences in the access to sources of light among surveyed informal settlements. In Kibera most households had access to electricity (96.6% respectively). Connection to electricity in more formal settlements such as Kawangware follows an official costly process which may be unaffordable to slum dwellers in Kibera. Hence, illegal connections

are common in Kibera, which is a cause of many fire incidences in the slums. Not surprisingly, the quality of housing is considered quite poor by residents and there was no significant difference between male and female respondents in this regard. In terms of the self-reported structural integrity of household dwellings, Kibera households are roughly evenly split between those that consider their dwellings to be okay, safe or very safe and those that consider their dwelling to be unsafe or very unsafe. In stark contrast, just less than 25% of households in Kawangware consider their dwelling to be either unsafe or very unsafe.

The approach to plots in Kibera means the sharing of structures by several families. However, the improved security that arises as a result of sharing is also noted:

Kibera resident: *Kibera is made of plots that no one stays alone [sic]. In that way you get to know people in these plots therefore feel safe [sic].*

There is quite a range of views concerning the current quality of housing and whether quality has improved over time in Kibera. Other participants remarked on improvements in quality over recent years with the introduction of metal sheets and stones and in some instances the introduction of flush toilets. While some residents consider the addition of the metal sheets in recent years as an improvement, others note the propensity for it to catch fire:

Interviewer: *Has the quality of these houses improved, remained the same or worsened?*

Kibera resident: *...In case of fire, the house may burn completely due to addition of the metal sheet.*

Where housing has improved, several respondents noted that this can be a means to raise rental costs. Several participants also noted the housing projects that involved the construction of new multi-storey apartments. Other participants identified intense dissatisfaction with the standard of housing. For example, the vulnerability of dwellings to hazards has been noted by residents:

Kibera resident: *Sometimes when it rains, houses get carried away.*

Some residents even identified that housing has worsened in the locality.

A frequent cause of fire is the poor availability of electricity, perhaps a symptom itself of the informality within the locality:



Interviewer: *The other person said that the landlords do not do repair. I have also seen that there are electric wires hanging.*

Kibera resident: *Yes at the storey, when they catch fire, they burn up like paper. And it is also a source of shock.*

These concerns over fire and flooding are borne out by the quantitative data. Hazards are much more likely to affect Kibera rather than Kawangware. Households in Kibera were almost twice as likely to have experienced fire and flooding in the last four weeks when compared with households in Kawangware. Households in Kibera are also more than six times more likely to report that their dwelling has ever been damaged by fire, storm or flooding.

In contrast to Kibera, Kawangware is generally characterized by permanent apartment blocks, although more informal housing that predominates in Kibera can also be found. In Kawangware there was greater reference by participants to the permanent housing that has developed in the community in recent years. The following respondent gives an overview of housing in Kawangware and current trends:

Kawangware resident: *Most people in Kawangware stay in single-roomed houses made from iron sheets and a few made of mud, others timber houses, but most people living in stone houses are likely those with some income. But as mentioned, landlords are now constructing expensive stone houses and Kawangware is changing to a more urban place, thus people are being driven out to other slums like Kibera and Kangemi where they can afford.*

In Kawangware, as in Kibera, quality of housing was closely associated by respondents with rent increases. Participants did not associate improved quality of housing with increased tenure security, especially if living cost is factored into tenure security. Overall, in Kawangware there is a strong sense that development of housing in the locality leads to residents feeling anxious around affordability.

What we can conclude

It is clear from a legal perspective that Kibera is more informal than Kawangware, as demonstrated by the preponderance of free-hold land in Kawangware and the informal nature of the division and



management of plots on formally government-owned land in Kibera. As a result it is clear that the increased likelihood of reporting in Kibera vis-à-vis Kawangware that the structural integrity of the dwelling is either unsafe or very unsafe would tend to support the scholarship that identifies a positive link between the legal understanding of tenure security and quality of housing. Also, the greater informality within Kibera vis-à-vis Kawangware corresponds with the poorer quality of housing to be found in the locality. In terms of tenure type, when excluding free-holder households from the survey sample, approximately 10% of households in Kibera report that they own their own dwelling while the rest of the households rent. In Kawangware ownership levels are much lower, with less than 2% of households reporting that they own their own dwelling and over 98 per cent reporting that they rent. This highlights that levels of ownership and rentership can be independent of tenure security considered more broadly in legal terms. In exploring the relationship between tenure type on the one hand and the quality of housing and its exposure to hazards on the other, the findings show that tenure type is more closely associated with outcome variables associated with self-reporting on the structural integrity of the dwelling and safety in the home. This coheres with the findings from existing research that indicate that renters are less incentivised than owners to invest in their own homes. However, tenure type is not associated with an increased exposure to hazards. This runs counter to literature indicating a “tenure trap” whereby renters are rendered to be more vulnerable than homeowners to hazards.

The literature considers period in locality to be also significant in terms of both factual tenure security and the perception by a household of their tenure security. The average length of settlement of households in Kibera is 8.38 years (N = 360, SD = 6.96) while the average length in Kawangware is 4.43 (N = 375, SD = 5.00). Again, this indicator runs counter to the expectations within the literature that the longer a household spends in a locality the greater the tenure security the household is likely to have. In contrast with tenure type, the period spent in the locality by a household is not associated with outcome variables relating to perceived structural integrity of the dwelling. This runs counter to the expectations within the literature that duration of residence is associated with greater tenure security and improved housing over time. However, the period spent in the locality is closely associated with outcome variables concerning hazards affecting the dwelling with households. While there is a close association, in contrast to the literature, which predicts that as the period in the locality increases and as social attachments develop the less likely that hazards have occurred, the data shows the opposite in both Kibera and Kawangware. This may be



explained by the fact that households living in the locality for a longer period are living in older dwellings.

What we should do in the future

- Future research: As tenure type was associated with perceived lack of structural integrity but not with increased exposure to hazards, further research is required on the precise interplay between tenure type and unsafe housing and exposure to hazards on the other hand. Furthermore, the account of the relationship between tenure type and quality of housing traced should be subject to caution and needs to also recognise that income might be a confounding variable. Renting households tend to have lower incomes than homeownership households. Further research ought to explore this possibility in greater depth.
- The research highlighted the complexity of tenure security: reliance on a single dimension or indicator of tenure security, e.g. tenure type or period in locality, is not sufficient to comprehend tenure security as more broadly experienced within a locality. It is necessary to consider tenure security in terms of its legal dimension, factual dimension as well as in terms of how it is perceived by residents themselves.
- The study also shows that different dimensions of tenure security have implications for different outcomes.
 - Quality of housing does not automatically translate into less exposure to hazards. This further highlights the importance of understanding tenure security in a holistic manner and utilising a broad range of methods based on this broad understanding. In terms of the implications of these findings for the well-being of residents in the informal settlements and in similar circumstances.
 - Improved tenure security is associated with greater structural integrity of the dwelling and a greater sense of safety within the home but is not necessarily linked with fewer hazards affecting the home.
 - However, improved tenure security is likely to result in increased rents and effectively displace households to other, more affordable areas that may be more prone to natural hazards. Previous slum upgrading initiatives, particularly in Kibera, have highlighted the unintended consequences of such initiatives. Current initiatives centre around the development of community land trusts, infrastructure





and service delivery and the creation of social movements of slum dwellers to influence policy. These findings counsel caution in generalising findings from other contexts and highlight the importance of understanding the complexity of tenure security in expanding urban informal settlements.

