

FOR RESILIENCE OF POPULATIONS AND TERRITORIES



Between 2000 and 2030, the urban surface area will double, increasing from 400 000 km² to 1,2 million km² (Karen C. Seto, Burak Güneralp and Lucy R. Hutyra, *Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools*, 2012). Cities and territories are today faced with an increasing number of multiform crises: natural and technological disasters, economic and social crises, armed conflicts, shortages of natural resources... The disruptions can affect the functioning of cities and territories in all their aspects: population (health, well being, food supply), infrastructures and networks (destruction or degradation of services, adaptation of informal services), ecosystems (rarefaction of resources, pollution)... Exposure to the risks will be increased by the impact of climate change, which will aggravate pre-existing risks (coastal areas, flood-risk areas, or those subject to landslides), and create new ones (climate refugees). Other factors can amplify the vulnerability of populations, notably political, institutional or security crises, economic problems, the growth of social and spatial inequalities.

Severe shocks, as well as gradual changes, highlight vulnerabilities and weaknesses. The notion of resilience refers to the capacity of populations, local authorities and all actors to anticipate and prevent risks, to adapt and to recover when shocks do occur, by identifying opportunities to adapt the modes of development, while preserving what makes sense locally. When shocks occur, the resilience of a territory is measured by its capacity to move towards a new dynamic equilibrium that is built collectively, re-establishing its technical functionalities while preserving and rebuilding its ecosystem, by renewing social equilibrium.

FRENCH ORIENTATIONS FOR URBAN RESILIENCE

Resilience can contribute to strengthening social cohesion and solidarity towards the most vulnerable, and to the responsibility of our current societies towards future generations. Thus, local authorities could:

Orientation 1:

Involve the populations, ensure social cohesion

Populations, as the beneficiaries of public policies implemented in the territory, can be active players in collective resilience. Many examples demonstrate that citizen initiatives are based on autonomy, altruism and

exchange. This observation should not, however, justify an abandonment by national or local authorities.

More particularly, at times of uncertainty or shocks, the population must be a priority for the emergency services (information, alerts), but also a vector of mutual assistance. The circulation of information, for example through social networks and collaborative platforms, is crucial in order to know the situation on the field and set up appropriate responses. Beyond the period of immediate crisis, local authorities must extend this solidarity in time, in order to mobilize the existing dynamics and mechanisms (inter-municipal bodies, solidarity networks, opinion-makers and non-institutional leaders), pooling actions and building relationships of trust. An example is provided by Haiti, where setting up water committees to deliver a service that was managed by the community led to a greater legibility of the public service, and more resilient communities that reacted better after the 2010 earthquake.

In the longer term, local authorities must base their actions on knowledge of the territories, culture, social interactions or learning. Involving populations around the local authorities contributes to social cohesion and the social organisation of the city, thus going beyond community dynamics or solutions based on technological innovations alone. In particular, the mechanisms for consultation must provide for particular measures towards the most deprived populations, complementing traditional tools with innovating practices.

Orientation 2: **(Re)building a common memory**

Maintaining a memory and building a culture of risks and hazards among all actors in the territory is indispensable to improving the perception of shocks and their impacts and thus initiate a dynamic of resilience. For example, memorials or urban infrastructures that include educational or recreational functions can be built. Apart from creating a sense of common identity among the inhabitants, mobilising the knowledge of populations make it possible to introduce changes in practices or even citizen engagement. Building this memory of risk is done by involving communities at every stage of the process, from the identification through to the implementation of the actions. For example, a collective construction of the risk can take the form of participatory

cartography of the risks, or the setting up of focus groups with grassroots community organisations and the « elders » of a given territory.

Orientation 3: **Building the capacities of the actors and reducing inequalities**

Building the capacities of populations - both effective and potential - through local action is essential to foster citizen engagement and developing behaviours adapted to the context.

Cooperation between local, national and international actors, public and private, the use of scientific expertise and the involvement of citizens are at the heart of any strategy for resilience. Urban resilience rests on a cross-cutting approach and requires a variety of skills, including urban planning, architecture, the social sciences, history, geography and ecology, as well as the communities' expertise of the territory. Exchanges and the joint building of knowledge and decisions are bearers of innovation.

Orientation 4: **Linking up the different levels**

Beyond the local level, coordinating actions implies ensuring that national politics are linked up and that there is a clear allocation of responsibilities between the different levels. Measures to improve resilience require technical capacities (production of data, crisis management mechanisms, management of urban services) and the financial means to implement strategies for urban resilience.

These provisions are all the more important in contexts where the process of transfer of powers to local authorities is limited and where authorities are exposed to risks.

The regulatory framework contributes to limiting the population's exposure to risks: building standards, land use, zoning, framing the land market, protection of local heritage, measures to incentivise lasting constructions. Enforcing regulations for new projects is a challenge for the local authorities, which must also avoid over-standardising their responses, to the detriment of innovation and the contextualisation of

projects. It is therefore vital to involve the communities as a local driver to facilitate the implementation of the various tools.

Rethinking the regulatory framework to build an effective strategy for resilience enables a bridge to be built between a regulatory cornerstone that applies across all territories and « made-to-measure » adaptations that take local specificities into account.

This integrated approach places the city within the context of a wider territory, by creating or recreating links with the periphery and rural areas. Linkage between the levels helps to contextualise the actions, as well as to integrate them into a broader strategy, at the regional or national level, in order to put forward a more harmonious and balanced way for the territory to function.

Orientation 5:

Planning to anticipate urban changes

As part of a process of strategic urban planning, the relevant authorities integrate the constraints linked to the risks and hazards upstream of the process. Thus they change their approach to risk in order to take it into account.

The challenge resides in the capacity to integrate reconstruction and rehabilitation or adaptation into the reflection in a prospective and collective manner, even before the occurrence of a shock or disaster. The aim for the local authorities is to put in place actions that support the capacity of the actors and the territory to bounce back: resistance and reconstruction, but also adaptation and innovation.

Developing data management mechanisms

Anticipation requires the use of centralised data management and early warning systems, as well as the use of dynamic simulation exercises. Having access to such tools enables a deeper knowledge of the territory and helps in planning and decision-making. Various scenarios have to be envisaged (normal period, crisis period, post-crisis). Alongside this, scientific and technical capacities need to be increased. Finally, prospective exercises are indispensable for projecting the territory into different strategies.

New technologies, notably those relating to geographical information systems, provide the tools necessary for experimenting with a systemic approach and its implementation.

Integrated planning, the backbone of the resilient city

Planning enables adaptive solutions to be put in place over the long term: integrating nature and local agricultural production into the city, preserving culture, new modes of organisation and construction of the urban environment, protection of at-risk areas and *in situ* rehabilitation, even in some cases the displacement and rehousing of population in cases where all other solutions, including those involving large-scale investment have been considered. The challenge of preserving nature in cities can, aside from the positive environmental impacts (better water infiltration and lowering of flood risks, preservation of biodiversity), improve the inhabitants' well-being in terms of health, reduction of heat islands and generating social links. An integrated approach to urban development must also link up the actions undertaken in emergency situations with those undertaken to develop the territory. In emergency situations, local authorities should maintain flexible and adaptive planning of actions, in order not to exacerbate tensions, whether pre-existing ones or those potentially generated by decisions and measures relating solely to the emergency situation.

Investing in resilient infrastructure

The urban system includes a physical dimension (infrastructure and equipments) and a spatial dimension (roadways, various networks, planning). Shocks can produce chain reactions, whereby damage or destruction of public spaces (infrastructure, community facilities) impact on the wellbeing of populations, the social fabric, economic activities. Going beyond a sectorial view of crises, the urban resilience approach takes into account all sectors. Investing in infrastructure that reduces risks (storm drains or water retention basins to reduce flood risks, for example) can minimise the impact of shocks, but also ensure the continuity of urban services, whatever the context.

Integrated precarious neighbourhoods in urban planning

The inhabitants of informal settlements can make up half or even more of the urban population in some cities in the Global South. Often exposed to climate hazards (flooding, earthquakes, landslides, drought, etc.). Their vulnerability is further increased by the precarious nature of the construction, difficulties in accessing basic services and insecurity of tenure.

An approach for the resilience of precarious settlements must go hand in hand with one that integrates those neighbourhoods and their inhabitants into the city. It involves addressing their accessibility (roads, transport, for example), access to services (water and sanitation, education, etc.), improvements to construction, and the preservation and management of natural resources (preserving permeable areas, developing vegetation). An important aspect relates to the social resilience observed in those settlements: mobilising various networks (neighbours, families, groups), traditional building techniques and economic activities. Action to increase resilience of precarious settlements in the social and economic fields, and that of land tenure. Improvements which must be perceptible in the short term, in order to foster the engagement of the populations concerned and to ensure that their real needs are being met. By integrating those neighbourhoods into urban planning, the local authorities will strengthen their resilience in the longer term. Further issues, in terms of rules that are adapted to the various types of informal land-use, of support and awareness raising for the population can be added those operational schemes.

Orientation 6:

Providing support for urban resilience policies

In order to encourage investment for greater urban resilience, partners need to coordinate their actions around urban policies developed by the local authorities.

In order to reduce reliance on *ex post* interventions and humanitarian assistance in emergency and reconstruction situations, donors can offer lines of credit for the implementation of measures that reduce risks and vulnerabilities, adapt territories and integrate preventative resilience, or strengthen democratic local governance. More specifically, in terms of climate change, greater international solidarity with the most vulnerable territories and populations is required in order, through subsidies, to fund adaptation measures in the less advanced countries (LACs).

Joint action between peers, particularly through exchanges between local authorities, on common urban challenges is a means of skills transfer. In order to increase the impact of local resilience projects, aid agencies can provide support to local authorities in achieving their missions by building their capacities. By virtue of their experience in accompanying social resilience processes, civil society organisations can provide high-quality technical support. They often have a good understanding of the local contexts, are highly reactive, and can play the role of intermediary to the local or national authorities.