

From resilience toward urban well-being: contributions to addressing climate change in Recife

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Thematic Area: Integrated Planning

Faced with a climate scenario in full transformation, several organizations and governments have made efforts to guarantee conditions of survival and well-being for the population. Mitigation and adaptation measures have been designed mainly for cities, territories that emerged with the prospect of providing a better quality of life and security for people and which today house approximately 55% of the global population (Nações Unidas, 2019), and are therefore considered not only the areas of greatest risk, but also where the main transformations can take place.

Although many guidelines focus on technological development and on requalification of built infrastructure with the purpose of guaranteeing the provision of goods and services and increasing mitigation and adaptation capacity, the achievement of these objectives also involves social and political issues (Meerow & Newell, 2019), mainly those with focus on vulnerability reduction. For achieving these goals, it is necessary to guarantee not only the provision of minimum conditions of habitability, but also equitable access to opportunities and services that stimulate human development and the observation of local contexts and processes (Ziervogel, et al., 2017). All these issues are directly connected to governance and decision-making models, mainly to the processes of development and implementation of plans and projects, which should also accompany the changes taking place on the planet.

Currently, in Recife, a coastal capital in the northeast of Brazil, 61% of homes are located in areas called Social Interest Communities - CIS. These communities have as their main characteristic a precarious provision of infrastructure and services, and despite housing about 53% of the municipal population, they

occupy only 32% of the urbanized territory (Engeconsult, 2014). Despite the context presented above and the disparities identified in the intra-municipal territory, the Urban Well-being Index - IBEU suggests that the city has an average level of well-being.

In addition to other conditions, such as geographic characteristics, this socio-spatial context significantly contributes to placing Recife in the 16th position in the global ranking of cities most vulnerable to the effects of climate change (IPCC, 2014). Faced with this emergency, the city has been drawing up, since 2014, plans and policies for climate mitigation and adaptation. One of the most recent documents is the Local Climate Action Plan - PLAC, which elaboration was supported by ICLEI - Local Governments for Sustainability, a non-governmental organization that supports local governments with the objective of strengthening global sustainability. Composed of 4 dimensions, the Plan focuses on goals and actions to strengthen and minimize the impacts on the climate caused by the Energy, Sanitation and Mobility Systems, in addition, intends to increasing urban resilience (ICLEI América do Sul & Prefeitura do Recife, 2020).

As in other global guidelines, such as the Sustainable Development Goals (ONU Brasil, 2015), the terms sustainability, resilience, well-being and climate justice permeate the entire document. However, there is no mention in the list of goals, objectives and actions of the PLAC, to any social aspect or even to the intention of addressing the inequalities that permeate the city.

Understood as the result of the provision, by the state, of minimum and universal rights that generate opportunities to choose, the eudaimonic aspect of well-being has been the most used to support climate adaptation and mitigation plans that include human development and equity in their objectives. This alignment is due to the understanding that well-being is directly linked to access to basic conditions of survival and social relationships (Lamb & Steinberger, 2017). According to this perspective of well-being, it is valid to say that the built infrastructure and the provision of basic services have great relevance in the reach of the state, since they collaborate for the habitability and execution of the daily dynamics in a satisfactory way. However, it is also valid to consider that the non-observance of the social dimension allows the maintenance of the *status quo*, diluting obstacles and hindering the achievement of more complete results (Meerow & Newell, 2019). This understanding is justified, among other reasons, by the unpredictability and intensity of the expected climatic events, which tend to generate tension and

aggressions beyond the limits commonly supported (Filho, Azeiteiro, & Alves, 2016), requiring human beings to be resourceful to deal with these events and to develop and manage solutions that suit to your own interests (MacKinnon & Derickson, 2012).

The central question that guides this research is, therefore, “How can Recife contribute to the well-being of its inhabitants in a context of climate change?”. Among the objectives outlined to answer this question are: analyzing the plans aimed at urban resilience, mitigation and climate adaptation in Recife from the perspective of well-being; assess the extent to which local plans can contribute to achieving this condition and identify possible obstacles and guidelines for the establishment of actions, policies or interventions aligned with this demand.

The envisaged methodology involves (a) understanding the concepts of resilience and well-being and (b) the social and climatic context of Recife; (c) analysis of resilience and/or climate action plans in Recife and (d) in other cities; (e) analysis of indexes that address well-being; (f) the delimitation of the desired human competences and the social and technical aspects necessary to reach them, and (g) the identification of obstacles and guidelines for the implementation of policies and interventions aimed at resilience and effective urban well-being in the context of climate change.

Keywords: urban resilience, well-being, equity, urban sustainability, governance.

References:

- Engeconsult. (2014). *Atlas de Infraestruturas Públicas das Comunidades de Interesse Social*. Sanear, Recife.
- Filho, W. L., Azeiteiro, U. M., & Alves, F. (2016). Climate Change and Health: An overview of the issues and needs. Em W. L. Filho, U. M. Azeiteiro, & F. Alves (Eds.), *Climate Change and Health: Improving Resilience and Reducing Risks* (p. 532). Springer. doi:<https://doi.org/10.1007/978-3-319-24660-4>
- ICLEI América do Sul & Prefeitura do Recife. (2020). *Plano Local de Ação Climática do Recife*. Prefeitura da Cidade do Recife, Secretaria de Meio Ambiente e Sustentabilidade, São Paulo. Acesso em 23

- de Agosto de 2021, disponível em <https://americadosul.iclei.org/documentos/plano-local-de-acao-climatica-do-recife-pe/#:~:text=O%20Plano%20Local%20de%20A%C3%A7%C3%A3o,cidade%20ainda%20mais%20resiliente%20e>
- IPCC. (2014). *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*. Cambridge, UK and New York, USA: Cambridge University Press.
- Lamb, W. F., & Steinberger, J. K. (17 de Agosto de 2017). Human well-being and climate change mitigation. (L. Lebel, & M. Hulme, Eds.) *WIREs Climate Change*, 8(6).
doi:<https://doi.org/10.1002/wcc.485>
- MacKinnon, D., & Derickson, K. D. (8 de Agosto de 2012). From resilience to resourcefulness: A critique of resilience policy and activism. *Progress in Human Geography*, 37(2), pp. 253-270.
doi:<https://doi.org/10.1177/0309132512454775>
- Meerow, S., & Newell, J. P. (2019). Urban resilience for whom, what, when, where, and why? *Urban Geography*, 40(3), pp. 309-329.
- Nações Unidas. (19 de Fevereiro de 2019). *ONU News: Perspectiva Global Reportagens Humanas*. Acesso em 14 de Janeiro de 2022, disponível em ONU prevê que cidades abriguem 70% da população mundial até 2050: <https://news.un.org/pt/story/2019/02/1660701>
- ONU Brasil. (2015). *Transformando Nosso Mundo: A Agenda 2030 para o Desenvolvimento Sustentável*. Organização das Nações Unidas. Acesso em 12 de setembro de 2020, disponível em <https://brasil.un.org/pt-br/91863-agenda-2030-para-o-desenvolvimento-sustentavel>
- Prefeitura da Cidade do Recife; ICLEI - Governos Locais pela Sustentabilidade. (2020). *Plano Local de Ação Climática da Cidade do Recife*. São Paulo. Acesso em 05 de Fevereiro de 2021, disponível em <https://americadosul.iclei.org/wp-content/uploads/sites/78/2020/12/20-recife-acaoclimat-1.pdf>
- Ziervogel, G., Pelling, M., Cartwright, A., Chu, E., Deshpande, T., Harris, L., . . . Zweig, P. (Abril de 2017). Inserting rights and justice into urban resilience: a focus on everyday risk. *Environment & Urbanization*, 19(1), pp. 123-138. doi:10.1177/0956247816686905