Technology that Transformed Urban Planning in São Paulo: HABISP

Ranked among the world's largest – and wealthiest – cities, São Paulo has faced a housing crisis for decades. With 26 per cent of its 11 million residents living in precarious and informal settlements, the city's major challenges include slum upgrading, reducing vulnerability to natural hazards, regularising land tenure and providing decent accommodation to every *paulistano*.

In 2001, the City of São Paulo Department of Housing and Urban Development (SEHAB) embarked on a new and comprehensive urban development strategy that would benefit the city's poorest residents.

In 2004, SEHAB was in the midst of implementing the *Bairro Legal* Technical Assistance Project in São Paulo, with the support of the Cities Alliance, when it embarked on its next major project: an initiative to develop strategies for sustainable planning, financing and implementing the housing policy. This initiative, which was also supported by the Cities Alliance, included a housing information system, later named HABISP.

HABISP was envisaged as a housing information and mapping system, part of a larger project to add strategic direction to São Paulo's Municipal Housing Policy. It was planned as a complete dataset containing information about residents of public housing and precarious settlements of various kinds – favelas, informal land subdivisions, slum tenements and hazardous areas. Its purpose was to provide a comprehensive view of all settlements in São Paulo and identify the most vulnerable population groups in order to prioritise interventions on an equitable basis.

The Making of HABISP

In 2005, SEHAB contracted an information technology (IT) team to build HABISP as a user-friendly system that municipal technical staff could access and input data themselves, on a daily basis, if required.

Project: Strategies for the Sustainable Planning, Financing and Implementation of Low-Income Housing and Urban Development Policy

Partners: Cities Alliance, the World Bank, City of São Paulo Department of Housing and Urban Development (SEHAB)

Duration: 2004 - 2008

Cities Alliance Financing: USD 450,000

As a first step, over 2,000 field inspections were conducted to update SEHAB's existing housing records. The process included updating data fields, defining boundary and property record information, and then entering the information into the system. All data, including satellite images, was geo-referenced to cartographic and photographic databases. In addition, data related to the network of existing water and sewer mains was obtained from the Basic Sanitation Company of São Paulo (SABESP). By cross-referencing this sewer information with geo-referenced data, it became possible to identify the extent to which these services were installed in each settlement. The prioritisation process was not purely mechanical; SEHAB staff could pre-assign weights according to what they considered to be priorities, based on a system of indicators to rank the settlements.

The rich mass of data produced a comprehensive picture of the different types of settlements in São Paulo, their precariousness and upgrading needs. By 2008, SEHAB had a reliable online housing information system that was easily accessible to the public.

Technology that is Truly Transformative

With HABISP, São Paulo's decision makers now have access to updated and comprehensive information on housing and other socio-economic conditions of the urban

poor. Previous record-keeping instruments used by SEHAB had produced considerable amounts of data that was fragmented and stored in multiple databases. HABISP – an easy-to-use information system based on standardised indicators – makes it easier to analyse and compare different urban programmes. Municipal staff are able to constantly monitor and review their working methods and make judicious decisions about activities based on the latest statistics.

Tereza Herling, who coordinated the project for the Cities Alliance and now coordinates the Municipal Housing Plan (2009-2024) at SEHAB, says, "While the technical staff at SEHAB had considerable experience, they lacked crucial information about the city, which hampered their decision making. HABISP enabled them to better understand the city and its problems, prioritise interventions and make rational decisions."

HABISP has also facilitated targeted investment into São Paulo's urban development programmes. Specific details about the demand for housing have played a critical role in the development of the Municipal Housing Plan. With HABISP, city authorities and technical staff are able to define priorities for intervention, assist in urban policy development and integrate plans with other federal and state government agencies. This has also reduced the duplication of social programmes, promoting efficiency and coordination among different actors involved in the public housing sector. These factors have contributed to increased public funding for upgrading efforts in São Paulo; by 2011, it was USD 2.1 billion.

Online access to information has also enabled various city stakeholders to become actively involved in the conception, implementation and fulfillment of municipal interventions. The HABISP website is an important information source for residents on the policies and plans under development. It also helps track project progress and budgetary executions online, leading to transparency and accountability. Online access has also facilitated theoretical studies and contributions to the formulation of the city's housing policy by academic researchers.

Lessons Learned from the HABISP Success Story

HABISP's use of scientific data for strategic urban

planning is truly innovative. Another Brazilian city, São Bernardo do Campo, has developed its own management system along the lines of HABISP. In 2008, São Paulo, with the support of SEHAB and the Cities Alliance, organised a successful south-south knowledge exchange on slum upgrading for representatives of six large cities including Cairo, Manila, Lagos, Ekurhuleni and Mumbai. However, dissemination efforts need to be strengthened further for HABISP to gain prominence in global urban planning discourse and practice.

A word of caution: Cities that plan to build their own information and management system for planning purposes must be aware that it requires significant investment in terms of human, technological and financial capacity building. As one of the wealthiest cities in the region, São Paulo is able to invest substantial resources in HABISP. Many cities in partner countries, however, have limited resources which must be taken into account. Also, replicating HABISP in the exact form used by São Paulo is not recommended. It is essential that cities first assess their capacity and invest in building their own unique information system based on their specific needs and institutional knowledge.

As a result of the Cities Alliance's stable and consistent engagement with SEHAB and different city administrations since 2001, HABISP remains one of São Paulo's primary urban planning tools[*]. Efforts to engage successive political administrations must continue in order to sustain the momentum generated by HABISP-led strategic planning in Brazil's largest city.

---

[*] For a more detailed description of this project, please read the Cities Alliance publication Social Housing in São Paulo: Challenges and New Management Tools and the HABISP website: www.habisp.inf.br

HABISP contributes to the long-term objectives of the Cities Alliance by:

- Using scientific data for objective and rational decision-making and strategic urban planning

- Making housing information publicly accessible

- Facilitating targeted investments in priority projects