



IMPACT CASE STUDY

OCTOBER 2021

# Influencing policy: a pathway to sustainable cities

‘It is very encouraging to see PEAK researchers so engaged with external stakeholders. We are already seeing examples of early policy impact at city, country and even the global level with, I’m sure, much more to come.’ Michael Keith, Principal Investigator, PEAK Urban

Achieving sustainable cities requires a step change in the capacity of urban actors to anticipate and plan for the challenges and opportunities of the future.

PEAK Urban’s vision is that such a step change leads to future policy, practice, and investment decisions which enhance the development of ‘inclusive, safe, resilient, and sustainable cities’ (SDG11). To contribute towards this outcome, our Theory of Change commits to **share research** with external stakeholders and **engage with decision makers** around the implications of research.

Policy engagement and influencing have therefore been built into the PEAK programme from the outset. Researchers have shared accessible, multidisciplinary research outputs with non-specialist audiences; built relationships with external stakeholders at all stages of the research process; and contributed to policy planning processes at local, national, and regional levels.

The emphasis on policy engagement has already demonstrated some early impacts which point to more inclusive and equitable development.

1. In Colombia, PEAK researchers at EAFIT University, Medellin, influenced thinking on how utility subsidies are awarded to consumers, to ensure these reach people on the lowest incomes.
2. At local level in Colombia, low-income resident women of the municipality of Itagüí, together with researchers from the Universities of Oxford and EAFIT, influenced the district plan to better reflect local needs.
3. In India, The Indian Institute for Human Settlement (IIHS) has contributed to post-COVID economic planning by sharing urban research and analysis with India’s Finance Commission.

PEAK Urban Theory of Change Pathway to impact – Research into Use.

**Output 1:** Findings of PEAK Urban research are shared with and accessible to non-specialist audiences.

**Output 2:** Relevant stakeholders are meaningfully engaged in PEAK Urban research.

**Outcome:** Policy, practice, and investment decisions contribute to strengthening the capacities of cities to deal with 21st century development challenges.



# 1. Influencing social policy to reduce inequality in Colombia

**The Research in Spatial Economics group (RISE) at EAFIT University, has influenced thinking on the socioeconomic stratification system used to calculate subsidies for utility consumers**

In countries with high levels of inequality, cross-subsidies on utilities (where high-income households are charged more to subsidise those on low-incomes) have become important policy tools to reduce inequality. Accurate identification of people's ability to pay for services such as water and energy is therefore crucial.

## The current model

The current method of social stratification in Colombia, used for over 30 years, is based on the external appearance of a house and its immediate neighbourhood. The system is low-cost and easy to implement but does not reflect the reduction in poverty of households over time and results in many anomalies.

Richer households may receive subsidies they do not need: for example, a person with a good job, education, and income who has chosen to live in a poorer neighbourhood may receive a subsidy. A proportion of low-income households are also denied subsidies: for example, a couple living in a middle-class neighbourhood who lose their income due to ill-health or unemployment but do not receive a subsidy because of the classification of the area.

The current social categorisation model also causes other problems. Elements of the model are used to calculate certain health, housing, and education benefits – compounding errors, and increasing inequality; and the system has encouraged segregation and stigmatisation of those living in certain areas and

created tension between local and central government over funding gaps caused by poorly targeted subsidies.

## A multi-dimensional alternative

Since 2017, economics researchers in the RISE group at EAFIT University Medellín, have argued that rather than relying on characteristics such as the external appearance of houses or neighbourhoods, any model to calculate subsidies should take account of additional factors such as wealth, income, and number of people in the household.

A paper published by Quiñones et al in 'Cities' (Sept 2021)<sup>1</sup> demonstrates how the current system misallocates subsidies and does not adequately reflect individual's socioeconomic progress over time. It recommends using a multi-dimensional model which would utilise the wider range of administrative databases now available to government (taxes, health records, educational enrolment etc.) and the big data manipulation techniques required to analyse them. The model would ensure that those on higher incomes pay more, achieving tax progressivity and reflecting changes in income/wealth over time.

Simulations in the research based on a multi-dimensional index showed significant improvements in identifying those who should receive utility subsidies in Bogotá, especially for water and sewage<sup>2</sup>.

## Policy engagement

A partnership with UN Habitat, underpinned by a formal Memorandum of Understanding, allowed the researchers to develop and share their ideas more widely at an Expert Group meeting in Bogotá in October 2018, which included representatives of Colombia's planning department.

As a result of this engagement and several follow-up conversations, government planners committed in their [National Development Plan 2018-22](#) – approved by Congress and therefore legally binding – to review

1. A targeting policy for tackling inequality in the developing world: Lessons learned from the system of cross-subsidies to fund utilities in Colombia; <https://doi.org/10.1016/J.CITIES.2021.103306>; Quiñones, Mauricio, Martínez, Lina M, Duque, Juan C, Mejía, Oscar

2. As above

the model for calculating subsidies and develop a more progressive system<sup>3</sup>. A further high-level meeting in Medellin in August 2019 allowed the team to share and build support for their approach.

### Potential impact

“The government’s current proposal is to use a database of low-income households to calculate subsidies as well as a database holding detailed land data on formal and informal properties,” explains lead researcher Mauricio Quiñones.

“This would be a step forward, but ideally the government should utilise multiple sources of information, including tax receipts and formal employment records, which would allow payment for utilities to follow people or households rather than buildings, and would reflect changes over time. Unfortunately, this would require new legislation and, despite the benefits of enabling fairer subsidies and generating additional tax revenue, there is not yet the political will to go this far. At the same time, whilst the government started talking to a wider group of experts on this issue, we note that the final group is all from Bogota, which reflects the centralisation of decision making in Colombia, and the difficulty of influencing inclusive, people centred policy.”

Quiñones concludes: “The government has one year left to review the model and publish new proposals under its development plan. We will have to wait to see what happens, but it is encouraging that at least there is a realisation that the existing model is inadequate and an intention to make it more progressive.”<sup>4</sup>

### Project contributors

- Mauricio Quiñones, Research in Spatial Economics (RISE - Group), Dept. Mathematical Sciences, EAFIT University
- Juan Carlos Duque, Research in Spatial Economics (RISE - Group), Dept. Mathematical Sciences, EAFIT University

#### Additional information

A targeting policy for tackling inequality in the developing world: Lessons learned from the system of cross-subsidies to fund utilities in Colombia; <https://doi.org/10.1016/J.CITIES.2021.103306>; Quiñones, Mauricio, Martínez, Lina M, Duque, Juan C, Mejía, Oscar [The stratification system to funding utilities in Colombia and its limits to contribute to the reduction in inequality](#). Peak Urban Vision No5, October 2020



## 2. Towards people-centred local development

### A project working with low-income women in Itagüí, Colombia, has influenced the local development plan to better reflect the needs of residents

Issues such as air pollution, safe and reliable transport, and access to green spaces and nutritious food are crucial to the health and well-being of low-income residents in Itagüí, Colombia – particularly the women who are often responsible for domestic work and family care. Unfortunately, residents are often excluded from policy processes and development plans do not take account of their views, needs, or experience.

### Research in collaboration with marginalised communities

The Peak Urban team wanted to co-create their research with those most affected by the issues in the Itagüí municipality, which is close to Medellin and often overlooked in favour of its larger neighbour in terms of research and development.

In early 2020, the team therefore convened a group of 40 low-income women to co-create and conduct research. The group’s name, Dimú (dialogue with entrepreneurial women), reflects their view of themselves as entrepreneurs sustaining their families, whether through formal businesses or not.

The Peak Urban team also engaged with representatives from national, municipal, and local government, including advisors from the mayors’ office, ensuring that decision makers were part of the conversation about the research from the start.

The original plan had been to convene face-to-face workshops to explore research questions. When this became impossible because of the COVID-19 pandemic, a new opportunity emerged to respond to the Local Development Plan.

3. Goal 4 – Improving identification of subsidies beneficiaries and Goal 7 – Redesigning the policy instruments for identifying and assigning subsidies water and sewerage subsidies – Colombia National Development Plan  
4. As of June 2021. Quote from Evaluation meeting by Zoom on 25/06/2021.

Because of its ambition to make local development more inclusive, and its previous engagement with Dimú, the Mayor's office was keen to get feedback from the group on the proposals. Social distancing made traditional methods of consultation impossible, and virtual workshops were not feasible because of poor internet access, but the PEAK Urban team developed novel ways to enable the women to share their views.

The team developed a detailed questionnaire on transport alternatives, mental health, mobilities of care, and access to health services, and asked their co-researchers to complete it. They also analysed the Development Plan in detail and produced Youtube videos, summarising the proposals and their implications on [health](#), [environment](#), and [mobility](#). They then invited the women to watch the videos and to share their views by email, WhatsApp, voice message, or in writing. Twenty out of the 40 women provided feedback.

### Policy engagement and influencing

Feedback from Dimú was collated into a [policy brief](#) and submitted to the Mayor's office. The final Development Plan, published in June 2020, reflected key points raised by the group including pledges to invest in pedestrian walkways in the neighbourhood, recover the local environmental leaders programme, support development of farmers' markets, and recognise that participatory processes should engage rather than 'educate' citizens.

"Some of these elements were already in the Plan in some way," explains lead researcher Juan Pablo Orjuela. "But they didn't reflect the needs of low-income residents or build on local experience. Proposals to improve waste management, for instance, missed the fact that bins with lids would make the most difference to householders! Local leadership schemes and farmers' markets, which the planners had previously been unaware of, also offered strong practice to build on."

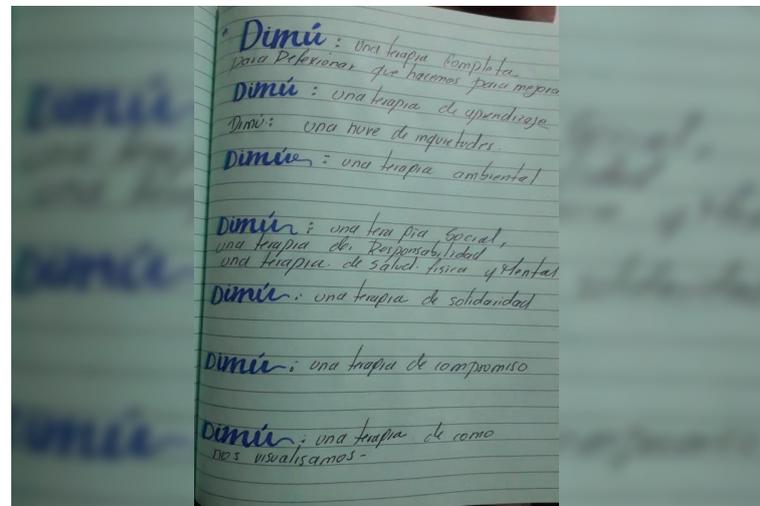
### Towards more inclusive development

"It was wonderful that the Mayor's office were so responsive to Dimú's feedback and revised the Plan to reflect it," continues Orjuela. "Most importantly, it has strengthened the relationship between the community and the municipal authorities, which should lead to more inclusive development in the future."

*"Normally we are not considered in programmes like these... but in this project, we have been at the centre*

*right from the start. If I hadn't been part of this project, I would have never shown so much interest in topics such as air pollution, or health. Thank you for the confidence and assuredness you've created in me." Member of Dimú*

The research group is now working on the impacts that COVID-19 lockdown measures have had on access to well-being spaces and transport for care (such as for shopping or to care for relatives), and on a novel way of measuring accessibility to healthy living.



**Translation:** Dimú - a complete therapy to reflect on what we can do to improve; a learning therapy; a cloud of inquisitiveness; an environmental therapy; a solidarity therapy; a commitment therapy; a therapy on how we visualise ourselves.

#### Further information

See PEAK Urban blog:  
<https://www.peak-urban.org/blog/whats-name-belonging>

#### Project contributors

- Dr Juan Pablo Orjuela, post-doctoral researcher, PEAK Urban Project, Oxford
- Professor Tim Schwanen, Director of the Transport Studies Unit, PEAK Urban Co-investigator, Oxford
- Diego Giraldo, MSc student at EAFIT, Medellín - Colombia
- Natalia Morales, environmental technical trainee, SENA, Colombia



### 3. Influencing economic planning for post-COVID recovery in India

#### **The Indian Institute for Human Settlement (IIHS) has contributed to post-COVID economic planning by sharing urban research and analysis with India's Finance Commission**

Whilst India has experienced rapid economic growth over the last years, development is often uneven and inequitable. Many communities are being left behind, whilst rapid, unsustainable urbanisation is putting pressure on scarce resources and fragile environments. The COVID pandemic has also taken a toll by exacerbating inequalities and creating barriers to trade, movement, and communication.

#### **The Finance Commission**

India's Finance Commission is a constitutional body formed to 'evaluate the state of finances of the Union and State Governments, recommend the sharing of taxes between them, and lay down the principles determining the distribution of these taxes among States'. It is appointed every five years by the President of India. The First Finance Commission was constituted in 1952, and there have been 15 Commissions since then. The XV Finance Commission was constituted in October 2017 and was tasked with developing recommendations for the 2021-26 period. This report was unique because in addition to its mandate of recommendations on centre-state financial relations, it was tasked with planning a post-pandemic economic recovery.

#### **Sharing urban research with the Commission**

The Chair of the XV Finance Commission requested IIHS give specific inputs on the role Indian urbanisation could play in assisting this recovery. The process constituted several initial and interim meetings between Aromar Revi, Director of IIHS, and the Chair of the Commission - followed by presentation of a

final report. The report drew on a range of researchers and practitioners at IIHS, several of whom are also part of PEAK Urban. These included Aromar Revi, Shriya Anand, Sudeshna Mitra, Neha Sami, Pooja Rao, and Teja Malladi.

The report addressed two key issues in the wake of the COVID-19 pandemic. First, the potential of new greenfield towns and cities to contribute to economic recovery. Second, a package of strategic measures and priorities at national, state, and regional level to support urbanisation and accelerate post-COVID economic recovery.

The IIHS team's report included recommendations on priority areas for financial allocations, supported by detailed data and mapping-led analysis. The report highlighted pathways to economic recovery, which accounted for environmental and spatial precarity, the critical role of small-scale enterprise development in urban areas, as well as critical aspects of large-scale land consolidations.

This report will inform countrywide interventions. It drew significantly from IIHS's PEAK Urban research, including both high-level findings and methodological contributions. Key recommendations from the report focused on prioritising prudent investments that address inequality between and within states and strengthen regional linkages.

The IIHS report found that appropriate spatial (for example, prioritising the 100-largest cities) and sectoral (such as a focusing on Micro, Small, and Medium Enterprises and on Climate Resilient Infrastructure) investments and incentives are needed to address divergence and inequality between states and within each state, between smaller and Class I towns (between 0.1 million and 1 million population) and million+ cities in order to enable spatial balance, urban-rural linkages, and regional convergence.

The report also recommended leveraging India's strategic rail, road and port infrastructure and economic corridors. It outlined the benefits of further strengthening linkages between states and across regions. Ultimately, the recommendations aim to contribute to improved economic development and more rapid post-COVID economic recovery.

#### **Potential policy impact**

Informing the recommendations of the Finance Commission is important since those recommendations will guide the Indian government's decision making and the investment of billions of Rupees in economic reform and recovery policies, with the potential to benefit 1.3 billion people and help protect the planet.

**Further information**

- The Potential of Urbanisation to Accelerate Post-COVID Economic Recovery: Report to the XV Finance Commission. Watch a video summary by Aromar Revi [HERE](#). Download the final report from the IIHS website [HERE](#).

**Project contributors**

- Aromar Revi, Director, IIHS
- Mainak Ray, Senior Lead (Practice)
- Neha Sami, Associate Dean (School of the Environment & Sustainability) | Lead (Academics & Research)
- Shriya Anand, Lead (Academics & Research)
- Sudeshna Mitra, Lead (Academics & Research)
- Teja Malladi, External Consultant (IIHS)

**Analytical support**

- Pushkara S V, Pooja Rao, Dhananjayan M, Lokesh B S

**Editorial & Production**

- Rekha Raghunathan, Kaavya Pradeep Kumar, Shruti Chandrashekar

**Design & Layout**

- Vikrant M S

## Value for money

**Sharing research and engaging with decision makers to influence policy, practice, and investment for more inclusive and sustainable cities.**

### Economy test

PEAK Urban policy influencing was economic in that it developed out of, and ran alongside, the research programme, rather than being a standalone or post-research activity. It will also lead to better development planning, which will lead to more effective and cost-effective services and economic strategies, with less spent on mitigating the effects of poor decision making.

### Efficiency test

PEAK policy engagement was efficient in that it often built on existing relationships and maximised new opportunities as they arose. By engaging with policy makers at the start of projects, researchers were often trusted collaborators, invited to support subsequent planning processes.

Despite the restrictions imposed under the COVID pandemic, PEAK researchers found new, innovative ways to consult with communities and share information with policy makers.

Unlike expensive consultancy firms, working to tight time restraints, PEAK projects provide recommendations based on an ongoing working relationship with local policymakers and practitioners, helping them to fully understand the issues and restrictions facing them.

### Equity test

PEAK Urban policy engagement enabled marginalised and low-income groups, including women, to reflect their experience, needs, and preferences to policy makers and gain traction in local and national policy processes. By influencing local and national plans, PEAK Urban's work should lead to more inclusive, equitable development, as plans are implemented.

### So what?

A key objective of PEAK is to share research and engage with decision makers. This case-study showcases three early examples where this had a positive influence on policy.

PEAK researchers were able to strengthen the relationship between communities and powerholders, which will enhance the capacity for future sustainable development. The concrete influence on local and national development plans also sets the path for more inclusive, people-centred development in the short- and medium-terms.

Above all, the engagements have the potential to transform policy makers' understanding of the role of research evidence in policy, and equip them with new tools, multidisciplinary approaches, contacts, and networks, to inform future policy development.

## Acknowledgements

### With thanks to:

Juan Carlos Duque, Mauricio Quiñones Domínguez, Juan Orjuela Mendoza, Tim Schwanen, Neha Sami, Aromar Revi, Vikas John, Michael Keith, and Rosaleen Cunningham for their help in the development of this case-study. Written by Louie Fooks; managing editor, Francisco Obando.

This case-study reflects information gathered up to August 2021. For latest updates contact Francisco Obando [francisco.obando@compas.ox.ac](mailto:francisco.obando@compas.ox.ac)

## About us

The PEAK Urban programme aims to aid decision-making on urban futures by:

1. Generating new research grounded in the logic of urban complexity;
2. Fostering the next generation of leaders that draw on different perspectives and backgrounds to address the greatest urban challenges of the 21st century;
3. Growing the capacity of cities to understand and plan their own futures.

In PEAK Urban, cities are recognised as complex, evolving systems that are characterised by their propensity for innovation and change. Big data and mathematical models will be combined with insights from the social sciences and humanities to analyse three key arenas of metropolitan intervention: city morphologies (built forms and infrastructures) and resilience; city flux (mobility and dynamics) and technological change; as well as health and wellbeing.

## Contact

Francisco Obando at [francisco.obando@compas.ox.ac.uk](mailto:francisco.obando@compas.ox.ac.uk) and Michael Keith at [peakurban.director@compas.ox.ac.uk](mailto:peakurban.director@compas.ox.ac.uk)

Published by PEAK Urban  
March 2022

PEAK Urban is managed by the Centre on Migration, Policy and Society (COMPAS)

School of Anthropology and Museum Ethnography,  
University of Oxford,  
8 Banbury Road,  
Oxford, OX2 6QS

+44 (0) 1865 274706  
@PEAK\_Urban  
[www.peak-urban.org](http://www.peak-urban.org)

## Our framework



The PEAK Urban programme uses a framework with four inter-related components to guide its work.

First, the sciences of **Prediction** are employed to understand how cities evolve using data from often unconventional sources.

Second, **Emergence** captures the essence of the outcome from the confluence of dynamics, peoples, interests and tools that characterise cities, which lead to change.

Third, **Adoption** signals to the choices made by states, citizens and companies, given the specificities of their places, their resources and the interplay of urban dynamics, resulting in changing local power and influencing dynamics.

Finally, the **Knowledge** component accounts for the way in which knowledge is exchanged or shared and how it shapes the future of the city.

PEAK Urban is funded by UK Research and Innovation as part of the Global Challenges Research Fund.



UK Research and Innovation



PEAK Urban is a partnership between:

