



Quito Impact Story

Art, Memory, and Science for Urban Transformation



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Thank you for your continued commitment to our shared mission.

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DOI:



**Tomorrow's
CITIES**
Urban Risk in Transition

Summary

In Quito, the Tomorrow's Cities project has strengthened disaster resilience by involving communities, advancing scientific innovation, and influencing policy.

Quito, Ecuador's capital, faces considerable disaster risks due to its proximity to active volcanoes and seismic faults, compounded by rapid and largely unregulated urban expansion. Informal settlements, particularly in high-risk areas, have placed vulnerable populations closer to natural hazards such as earthquakes, volcanic eruptions, landslides, and floods. In response to these challenges, the Tomorrow's Cities project introduced several initiatives aimed at enhancing disaster resilience through community engagement, scientific innovation, and policy reforms.

One of the project's notable achievements was fostering a science-based dialogue between local authorities and communities. This collaboration encouraged proactive involvement in disaster risk management. In Santa Rosa de Pomasqui, a small informal settlement on the outskirts of Quito, the project worked closely with residents and local authorities. Together, they applied the TCDSE framework to develop an urban plan reflecting the community's future vision while assessing the risks posed by debris flows and landslides from rainfall and earthquakes. This process has led to the development of a disaster risk management plan, a crucial step for the community's formal recognition and compliance with legal safety standards. Through the project, over 80 community

members and 40 public servants received training in disaster risk reduction, significantly bolstering local capacity to manage future threats. Access to updated social and physical vulnerability data, along with advanced hazard models, has also improved decision-making processes within the community.

The project also led to tangible impacts. For example, in 2022, following the identification of loose material in a ravine near Santa Rosa de Pomasqui, Quito's municipal government swiftly undertook clearing and maintenance efforts to mitigate the risk of mudflows. The action was largely driven by community-led risk assessments facilitated by Tomorrow's Cities, which effectively mobilised municipal resources to protect vulnerable populations.



▲ Quito's historical centre

▼ Cotopaxi volcano



Another significant outcome of Tomorrow's Cities was its influence on policy. The project contributed to the development of the Green and Blue Ordinance, spearheaded by the Secretariat of Environment for Quito Municipality. This ordinance integrates disaster risk reduction and ecosystem preservation with sustainable urban planning. It focuses on managing natural areas and water systems, directly addressing the challenges posed by Quito's rapid urbanisation in disaster-prone zones. The ordinance, adopted in 2023, was a direct result of the interdisciplinary research and participatory approaches encouraged by the project, helping to embed disaster risk management into local governance.

Public engagement and education were also critical components of the project's success. By installing seismic sensors and meteorological stations in schools, museums, and neighbourhoods through participatory methods, the project generated greater public curiosity about natural hazards and enhanced involvement in disaster risk reduction.

The digital platform Reducir Riesgos en Quito reached over 4,000 users, engaging secondary school students and educators in learning about disaster risks and urban resilience.

Moreover, the project's use of museum exhibitions that combined scientific and historical data with interactive artistic approaches created new avenues for public dialogue, raising awareness of the link between urbanisation and disaster risk.

Looking ahead, Quito is committed to building upon the processes developed by the Tomorrow's Cities initiative. Plans are underway to establish an Interdisciplinary Centre for Disaster Risk Reduction in partnership with local and international research institutions. This centre will focus on integrating scientific research, community participation, and policy development to embed a culture of disaster risk management within Quito's urban planning and governance, thereby enhancing the city's resilience to future hazards.



▲ Panoramic view of one of the study areas, San Luis de Miravalle, south-east of Quito.

Introduction

In Quito's vulnerable landscape, the Tomorrow's Cities project has united communities and policymakers to address disaster risk and shape safer urban development strategies.

San Francisco de Quito, Ecuador's capital and largest city, sits near the subduction zone where the Nazca Plate is being forced beneath the South American Plate. As a result, the city, which sprawls along a valley, is surrounded by seven active volcanoes. Among these, the most notable are Pichincha, a stratovolcano that last erupted in 1999, covering the capital in ash, and Cotopaxi, whose frequent eruptions pose a significant threat, especially from lahars - massive mudflows caused by melting ice and snow from its glacier-covered summit.

The city is also prone to significant earthquakes, with the most recent major tremor occurring in 2016. Furthermore, landslides and floods, often caused by intense rainy seasons, frequently affect the informal settlements that have sprung up on Quito's hillsides.

Despite Quito's high disaster risk profile, the city's growth over the past 50 years has been largely organic, even with formal urban planning efforts in place. Much of the rapid expansion of the population and built environment has taken place in areas with limited municipal oversight, leading to informal neighbourhoods that are particularly vulnerable to natural hazards.

In response to these challenges, Ecuador introduced a new legal framework in 2008 that mandates long-term risk management planning. This framework requires a coordinated approach across all levels of society—from national government to individual households—with local governments responsible for implementing the strategies.

The Tomorrow's Cities project in Quito aimed to mediate relationships between communities and local government, fostering a more collaborative approach to risk-sensitive urban planning. By empowering communities to engage in these processes, the project helped improve both local capacity and governance mechanisms, ensuring that disaster risk management is a shared responsibility.




Surrounded by active volcanoes and prone to earthquakes, Quito's organic growth has left informal settlements highly exposed to natural hazards and its most vulnerable communities at risk.


Elisa Sevilla Perez, Professor of History,
Universidad San Francisco de Quito,
Quito Hub Lead


Quito




 **4213 sq. km**
urban area in 2022

 **7.1% / year**
urban expansion since 2000

 **420 informal**
settlements in the city

 **2 679 722**
population in 2022

 **3.8%**
annual growth since 2000

 **25%**
below poverty line



Our objectives in facilitating change in Quito include conducting a city-wide analysis of decision-making, knowledge barriers, urbanisation dynamics, and the relationship between risk and poverty.

Elisa Sevilla Perez, Professor of History,
Universidad San Francisco de Quito,
Quito Hub Lead

 Tomorrow's Cities fieldwork

Challenges

1

Hazard Profile

Quito faces significant volcanic, seismic, and environmental risks. The city is vulnerable to eruptions from nearby volcanoes like Cotopaxi, which erupted in 2015, and Pichincha, which last erupted in 1999. Seismic activity is also a major concern; while the most recent major earthquake occurred in the Manabí Province in 2016, causing over 600 casualties, moderate earthquakes from nearby sources, such as the Quito fault system, could have a more direct economic impact and disrupt the city further. Moreover, Quito experiences frequent landslides and floods, such as those in 2008, 2020, and 2022 in La Gasca, triggered by heavy rainfall and causing various damages and impacts.



▲ Eruption of the Cotopaxi Volcano

2

Rapid Urbanisation

Rapid urbanisation and non-compliant housing are significant issues in Quito, with a recent study revealing that 65% of the city's housing fails to meet the required urban planning or building regulations. Land speculation has fuelled this unchecked expansion, particularly in the northern and southern parts of the city. As a result, informal settlements have sprung up, often on precarious and hazardous terrain, including steep slopes and areas near deep rivers or ravines, posing safety risks to residents.

3

Socio-Economic Vulnerability

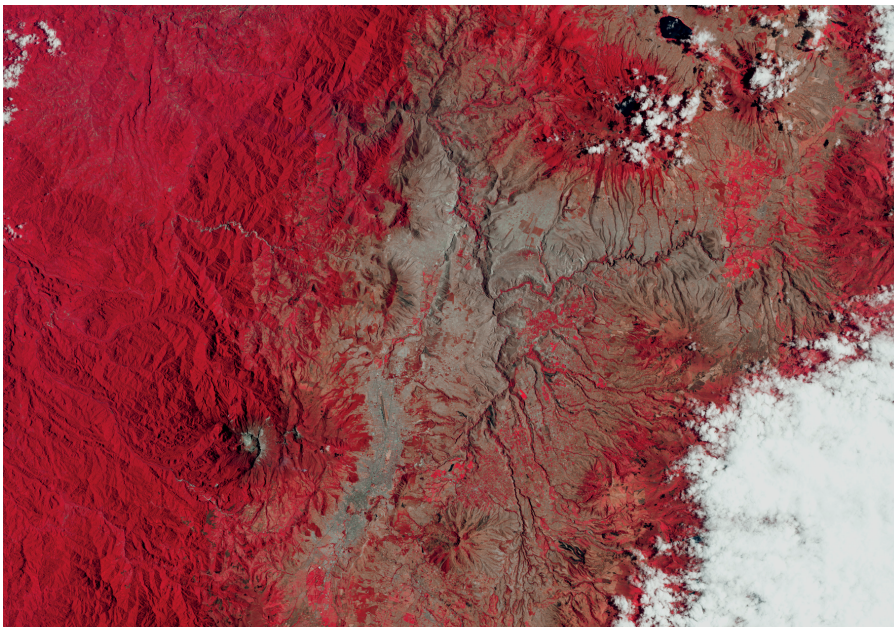
Residents of informal areas in Quito face severe socio-economic challenges. Poverty restricts their ability to invest in safer housing or take protective measures against environmental risks, leaving them highly exposed to hazards. Additionally, these informal neighbourhoods often lack essential services, such as sewage systems, proper roads, schools, and healthcare facilities, further compounding their vulnerability.

4

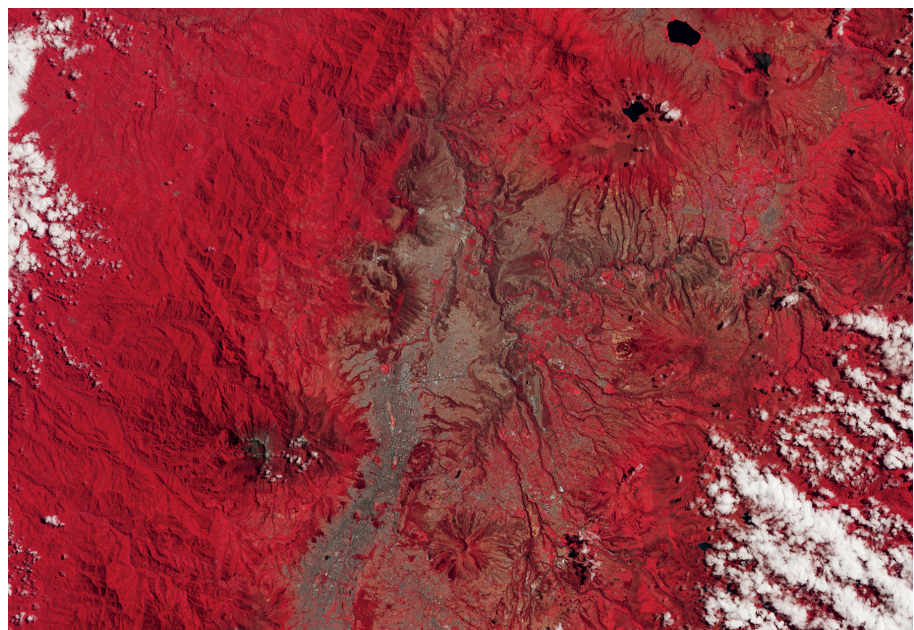
Governance

While Quito has made progress in urban planning through initiatives like the 2008 Constitution and other land-use regulations, the city still lacks a comprehensive risk management plan. This shortcoming hinders efforts to address risks uniformly across the city, particularly in vulnerable informal areas.

Communication and coordination issues between municipal and zonal authorities, as well as between these authorities and local communities, exacerbate the problem. Despite having access to the necessary tools and data, local institutions struggle to implement effective risk management due to these persistent disconnects.



Pichincha Volcano in 1986
Source: NASA



Pichincha Volcano in 2019
Source: NASA



Opportunities

Quito had great potential for progress, with much of the legislation already in place. The main challenge was improving communication and encouraging evidence-based, participatory decision-making to effectively address risks and build a more resilient city.

1

Multi-hazard Risk Characterisation

Through the Tomorrow's Cities Decision Support Environment (TCDSE) project, local research teams had valuable opportunities to deepen their understanding of landslide and mudslide risks, significantly contributing to the city's multihazard risk profile. This enhancement improves long-term risk assessments and preparedness efforts.

2

Community Empowerment

By involving at-risk communities in risk identification, learning activities, and urban planning, Tomorrow's Cities could foster natural-hazard risk awareness and influence citizens to take action towards risk reduction.

3

Improving Community-Institutional Relations

By identifying issues with communication and coordination among institutions, the project aimed to bridge gaps between these institutions and the communities they serve. This had the objective of enhancing collaboration and building stronger relationships between communities and local institutions.

4

Influencing Policy and Governance

The project sought to improve city-wide decision-making by addressing knowledge gaps and capacity limitations within public institutions. It promoted better use of hazard-related data and enhanced coordination among government offices, including national, municipal, and local levels, as well as civil society groups like the Architects College and National Risk Managers Association.



▲ Several views of Santa Rosa de Pomasquí

Santa Rosa de Pomasquí

The small yet vulnerable community of Santa Rosa de Pomasqui faces a blend of socio-economic challenges and environmental risks. With its location on a seismically active fault line and steep volcanic slopes, this rapidly expanding settlement is particularly susceptible to natural hazards.

Santa Rosa de Pomasqui, spanning just under 5 km², is one of Quito's fastest-growing informal settlements.

Geographical Challenges

The community sits on precarious terrain, with gradients ranging from 50-70%, making it prone to frequent landslides and erosion during the rainy season. Its proximity to the Quito fault and the Catequilla segment, part of a highly active seismic zone, adds another layer of danger. Earthquakes could easily destabilize the already fragile volcanic slopes, increasing the risk of catastrophic mudflows and landslides.



Socio-Economic Challenges and Informal Growth

Rapid urbanisation, driven by high poverty levels and a lack of affordable housing options, has led to unplanned expansions. Despite its informal status, Santa Rosa de Pomasqui has access to basic services such as water, electricity, and waste management, and is in the process of formal regularisation. However, the lack of consistent risk management infrastructure maintenance remains a critical issue.

Community Resilience and Local Governance

Despite these risks, the community in Santa Rosa de Pomasqui has shown remarkable organisation and resilience. Many residents engage in small-scale agriculture and local commerce, maintaining strong ties with local authorities in an effort to improve living conditions and mitigate some of the area's risks. The ongoing process of regularisation could provide more robust infrastructure and formalise governance structures, helping the community adapt to its unique challenges.

◀ A street of Santa Rosa de Pomasquí

5

Exhibitions in five different locations across Quito.

+5700

Visitors



▲ Exhibitions in Quito

TCDSE Implementation

As a learning hub for Tomorrow's Cities, Quito embraced a flexible and experimental approach tailored to its specific needs.

Initially, the focus was on engaging local authorities and at-risk communities to enhance disaster risk awareness and strengthen their involvement in urban planning.

After 2021, efforts shifted towards institutionalising and expanding the use of the Tomorrow's Cities Decision Support Environment (TCDSE) for broader application. The project also forged long-term collaborations to ensure sustainable disaster risk management beyond its duration.

Quito's approach was interdisciplinary, drawing on insights from the physical and social sciences, as well as the arts and humanities.

80

community members participated in workshops.

40

Public servants from national and municipal institutions were involved.

25

participants in TCDSE workshops.

+5700

visitors to the exhibitions in 5 museums across Quito.

4000

visitors to the platform "Reducir Riesgos en Quito".

887

followers on social media.

Urban Risk Lab

The Urban Risk Lab served as a forum to unite local community actors in a multi-stakeholder dialogue, fostering collaboration between the public and private sectors and civil society. It promoted the TCDSE and facilitated a participatory process that enabled the co-design of the risk management methodology. This approach helped define objectives and desired outcomes, ensuring that all stakeholders had a role in shaping the risk management strategy. The Lab also supported key components of the TCDSE, including Future Visioning, Urban Scenarios, and the Risk Agreement.



▲ First session of the Urban Risk Lab

Interdisciplinary Participatory Action

This initiative focused on research in the Laderas de San Francisco and San Luis de Miravalle neighbourhoods to improve understanding of disaster risk reduction policies and practices. It aimed to raise awareness and promote learning at both community and city levels.



▲ Activities with the community of Santa Rosa de Pomasquí

Citizen Science

Tomorrow's Cities fostered the exchange of technical knowledge with communities, while integrating local expertise. This approach encouraged active citizen participation in risk management, blending scientific insights with the practical experiences of residents.

Understanding the Territory

A crucial aspect of the citizen science initiative was introducing residents to the geological and climatic characteristics of their environment. Efforts were made to engage locals in understanding soil composition, geological dynamics, and the impact of human activities on the physical landscape. This knowledge empowered them to make informed decisions about construction and urban planning, taking into account the risks posed by natural hazards such as earthquakes and landslides.

Integration of Local Knowledge

The project promoted the integration of residents' knowledge and practices with technical studies. For instance, the community has valuable insights into areas where mudflows have occurred and places with natural water springs or ravines that have been filled in. These local observations were combined with scientific analysis to identify vulnerable areas and propose risk prevention and mitigation measures.



Given that our neighbourhood is on a slope, a zone prone to mass movements, it seems clear that we shouldn't expand much further.

Participant of Tomorrow's Cities workshops.

Concrete Actions

Various neighbourhoods saw the implementation of structural actions based on citizen science, such as:

- Reforestation with native species.
- Construction of small retaining walls to protect homes.
- Water channeling to prevent flooding, and
- Community-led maintenance (*mingas*) of local infrastructure and the cleaning of ravines.

Community-Based Monitoring

Seismic sensors and meteorological stations were installed in various locations around Quito, including the Interactive Museum of Science, the Water Museum, the neighbourhoods of San Luis de Miravalle and Santa Rosa de Pomasqui, and the Juan Montalvo Public School.

Alongside the installation of these devices, workshops were conducted for local residents that covered how the sensors function, the type of data they generate, and how participants could access and utilise this information via web platforms and mobile apps. A local representative in each area was assigned responsibility for the maintenance and upkeep of the equipment and the instruments will remain active for at least two years, with the possibility of extending this period.

The collected data enhances the understanding of current natural hazard behaviour while advancing local scientific research to reduce future risks through targeted policies. These activities empower communities by providing direct access to vital environmental data, which is essential for effective, locally-driven risk management and reduction.

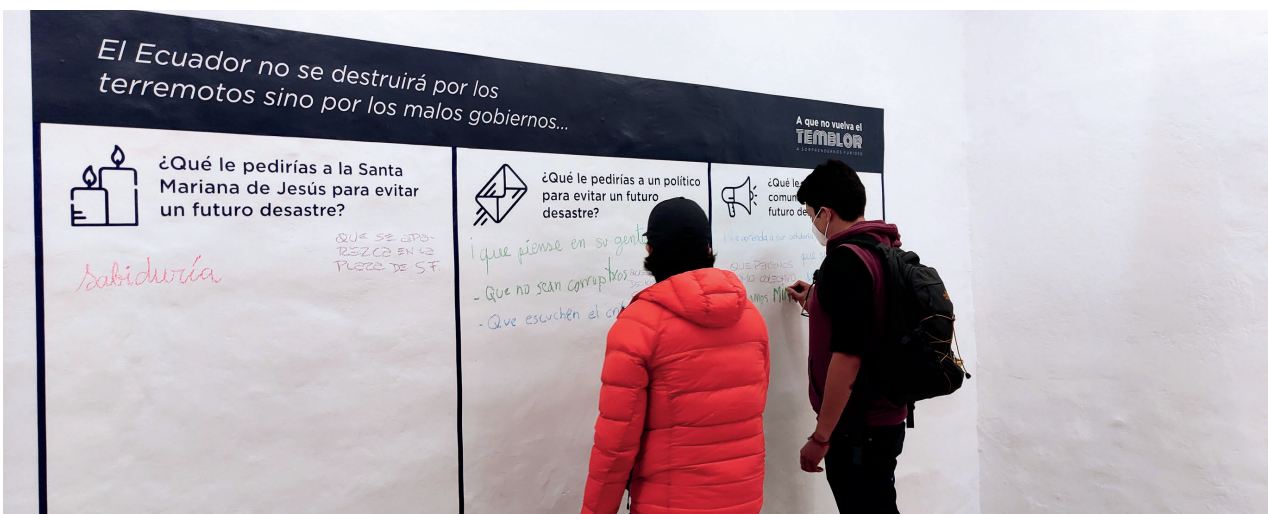
Museum Exhibitions

During the course of Tomorrow's Cities, 5 exhibitions were organised in Museo de la Ciudad, Museo del Carmen Arto, Interactive Science Museum, the YAKU museum of Water, and Ecuador's Museum of Architecture. By incorporating cultural and historical insights, they served as a platform for disseminating scientific information about natural hazards and fostered collaboration between researchers, civil society, and public institutions, creating a space for dialogue and cooperation on risk prevention.



The communication strategies employed in the exhibitions aimed to highlight the connection between urban development and risk accumulation to prompt a discussion about what we can all do to reduce it.

Karina Barragán, Designer
Professor at Universidad de Las Américas



▲ Exhibitions in Quito



▲ This and next page: Exhibitions in Quito ▼

Los caminos del
AGUA
GEOGRAFÍA, NATURALEZA, SOCIEDAD Y ARTE

INAUGURACIÓN

24 de agosto — 15h00
Yaku Parque Museo Agua



Los Barrios hablan
Nos cuidamos en comunidad



EXPOSICIÓN TEMPORAL
en las faldas
QUEBRADAS
de un monte

CICLO DE CHARLAS INTERDISCIPLINARIAS:
"HERRAMIENTAS INTERDISCIPLINARIAS PARA LA REDUCCIÓN DEL RIESGO EN EL QUITO DEL MAÑANA"

en las faldas
QUEBRADAS
de un monte

CICLO DE CHARLAS INTERDISCIPLINARIAS:
"HERRAMIENTAS INTERDISCIPLINARIAS PARA LA REDUCCIÓN DEL RIESGO EN EL QUITO DEL MAÑANA"

HISTORIZAR LOS RIESGOS DE DESASTRES

11:00
22 de ENE
f live

ELISA SEVILLA
ALFONSO ORTIZ

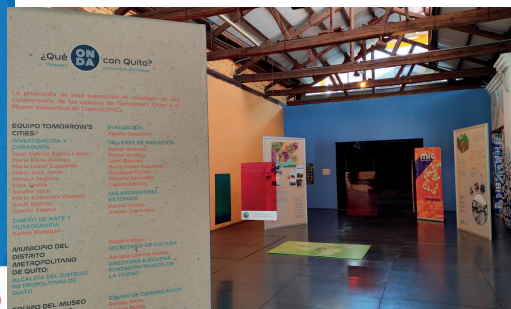
A que no vuelva el
TEMBLOR
A SORPRENDERNOS FURIOSO
MUSEO DEL CARMEN ALTO | 6 | mayo | 2021



Exposición temporal

¿Qué **ONDA** con Quito?
Paisajes profundos del riesgo

Inauguración
Jueves 15 de julio de 2021 / 11:00
f LIVE



Reducir Riesgos Platform



The "Reducir Riesgos en Quito" platform was a digital educational tool developed in response to the COVID-19 pandemic, designed to teach disaster risk concepts through interactive resources such as images, songs, maps, and games.

The platform was created through educational workshops involving 2 high schools, 4 teachers, 150 students, and other users. It became an essential tool for promoting critical thinking and skills related to disaster risk, education, and sustainability. By engaging both students and teachers, the platform encouraged reflection on disaster risk and sustainable city planning.

<https://reducirriesgosquito.com>

Webside landing page 

2
Schools

4
Teachers

150
Students





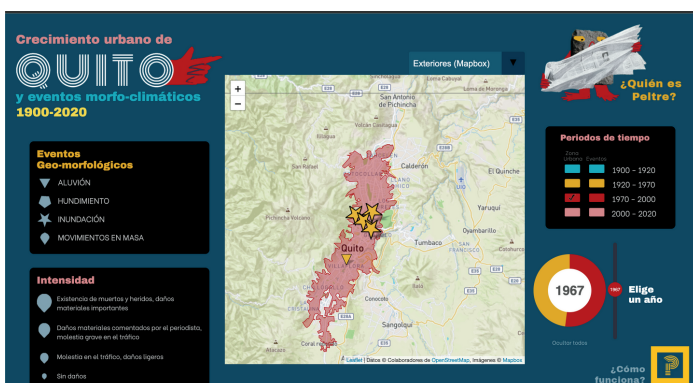
The "Reducir Riesgos en Quito" platform is particularly focused on how urban development interacts with natural hazards. Through multimedia resources like podcasts, interactive maps, and timelines and incorporating interdisciplinary research from fields such as geology, history, civil engineering, and education, the platform presents real examples of multirisk scenarios (earthquakes, volcanic eruptions, floods) to show how risks can be mitigated through better urban planning and preparedness.

It also includes tools like the Peltre Map, which shows historical data on natural events in Quito over the past 120 years, and encourages reflection on how past experiences can inform future risk management.

It serves both as an educational tool for classrooms and as a public resource for raising broader awareness about disaster resilience in Quito.

Reducir riesgos was also present on social media on Instagram and Facebook where it had an audience of nearly 900 followers.

Reducir Riesgos website showing the podcast page (above) and Peltre Map, which shows historical data on natural events in Quito over the past 120 years (below).



21 from 13
 teachers schools
 trained in a 40 hour course for
 using the platform in their class.



HOLI

- Inicio
- Andesita
- Mapa de Peltre
- Línea de tiempo
- Archivo
- Guía Pedagógica
- Ciencia ciudadana
- Laboratorio urbano
- Blog

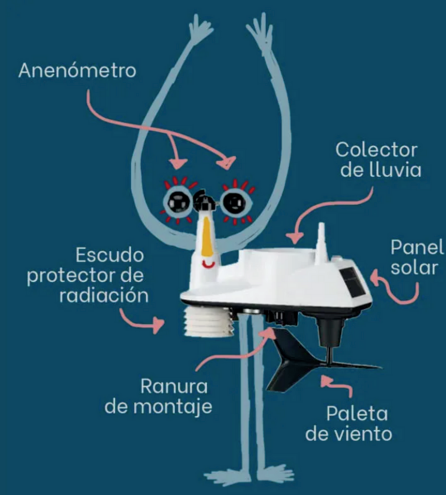


VOLCANES que rodean a Quito

▲ Different pages of the Reducir Riesgos website
▼

MENÚ

- Anemómetro**
Compuesto por las copas de viento y la paleta de viento, las copas miden la velocidad del viento y la paleta o veleta la dirección.
- Panel solar**
- Escudo protector de radiación**
- Ranura de montaje**
- Colector de lluvia - pluviómetro**
- Soporte de desechos**



GUÍA PEDAGÓGICA




la_andesita | Siguiendo | Enviar mensaje

102 publicaciones | 282 seguidores | 53 seguidos

La Andesita Pariente
Un proyecto web educativo y gratuito dedicado a reducir el riesgo de desastres causados por amenazas naturales en la ciudad de Quito.
@reducirriesgosenquito.com

malina.bh, mcamiloz, tatiansc90 y 10 más siguen esta cuenta

Publicaciones: Pausa cómica, ANDESITA, MIS PANAS, TRIVIAS

Publicaciones destacadas:

- ¿SABÍAS QUE... en 1680 el volcán Pichincha fue exorcizado?
- Línea de tiempo 1534 2019
- ¿Chachas que... en 1928 las pulgas dieron mucho miedo por propagar la peste negra?

Stakeholders

The Tomorrow's Cities project engaged a diverse set of stakeholders, each with varying degrees of interest and power in disaster risk management.

Local authorities had both high power and interest, as they were directly responsible for implementing urban policies and managing risks at the community level. National actors held high power but showed less interest, as their focus was on issuing broader policies without the same local engagement. Professional bodies had high interest but limited power, contributing expertise but lacking the authority to influence policy at scale. Initially, the citizens had low power and interest, but the project's workshops and participatory activities increased their engagement, empowering them to influence local risk management practices.

Key Stakeholders

- Community of Santa Rosa de Pomasquí
- Citizen Safety and Risk Management Department
- La Delicia Zonal Administration
- Environment Department
- Territory and Housing Department
- Social Inclusion Department
- Pomasqui Decentralized Government
- Public Water and Sewage Company
- National Secretary of Risk Management and Emergencies
- National Ministry of Housing
- Architects College
- National Risk Managers Association

▼ Stakeholder map



The Tomorrow's Cities project engaged these different actors to ensure a comprehensive and inclusive approach to disaster risk reduction, recognising that effective governance requires collaboration across multiple levels.

Elisa Sevilla Perez, Professor of History, Universidad San Francisco de Quito, Quito Hub Lead

Impact

Work in Quito yielded numerous positive impacts. Notably, the adoption of the 'Green-Blue Ordinance' amplified Tomorrow's Cities' efforts, unlocking new opportunities for risk reduction and public policy implementation.

1

Formalising Santa Rosa de Pomasquí

The Santa Rosa de Pomasqui neighbourhood is currently undergoing the process of formal recognition by the local government. This involves ensuring that the community complies with legal and safety standards. The process is being facilitated through participatory activities developed by Tomorrow's Cities, in which residents collaborate actively with local authorities. In March 2024, the neighbourhood organisation was officially acknowledged by the municipality, marking a significant milestone.

The community is also using data collected from the TCDSE, which highlights disaster risks in the area, to work with the municipality in co-developing a disaster risk management plan for the area. This plan, set to be finalised

in October, is a key requirement for the neighbourhood's formalisation. It ensures the area is well-prepared for potential natural hazards, promoting the safety and long-term sustainability of the community.



▲ Tomorrow's Cities workshop.

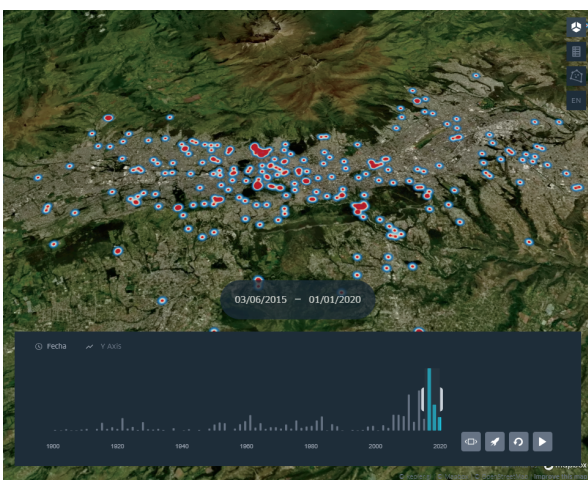
2

New Hazard Modelling Data

Researchers tested advanced hazard modelling for debris flows in the Santa Rosa de Pomasqui neighbourhood using high-resolution Digital Elevation Models, 3D representations of a terrain's surface that capture its elevations and depressions. This approach allowed for fine-scale risk assessments, providing detailed insights into the area's exposure to debris flows. By employing this technology, researchers were able to identify potential hazard zones with greater accuracy. These findings will inform more precise mitigation efforts and improve local risk management strategies.

An interactive online data visualisation tool was also launched. Using data spanning 120 years, between 1900 and 2020, this risk communication tool shows occurrences of landslides, floods, and mudslides, revealing hotspots of events and how these have shifted along the years.

The results of this advanced hazard modelling were **shared during the event "From Data to Action"**, which included participation from key stakeholders such as the Secretariat of the Environment, Citizen Safety and Risk Management Secretariat, and Territory and Habitat Secretariat, alongside associations like the College of Architects, National Risk Management Association, and the Ecuador Urban Planner Network. Additionally, the findings were presented to the general public through various media outlets, including newspapers, TV news, and digital news agencies. This broad dissemination helped raise awareness about the risks in Santa Rosa de Pomasqui and the importance of data-driven disaster management.



▲ Morphoclimatic Events in Quito: 120 Years of History

See the research:
<https://www.usfqdatahub.info>

3

Improved Risk Awareness

The local community now has a deeper understanding of both natural and man-made hazard risks in their region and the importance of implementing mitigation measures. Direct engagement with Tomorrow's Cities researchers, combined with the use of memory, emotion, artistic approaches, citizen science, and the launch of a digital platform, has greatly enhanced the community's awareness of these issues. This approach has empowered individuals to actively participate in risk-sensitive urban planning and contribute to disaster risk reduction efforts, fostering a more resilient and informed community.



I had considered building a second floor, but after visiting the Museo Interactivo de Ciencias and learning about how different types of soil respond to seismic waves, I now believe it's better to stick with just one floor.

Participant of Tomorrow's Cities workshops.

4

Enhanced Local Capacity

20 community members from Santa Rosa were trained in citizen science, enabling them to use sensors, interpret data, and participate in technical activities such as drone flights and soil sample collection. Additionally, capacity building within public institutions involved workshops focused on participatory

methodologies and hazard modelling, equipping public servants with practical skills that enhanced their ability to integrate scientific knowledge into risk reduction strategies and decision-making processes.

5

Influence on Governance and Policy

The Tomorrow's Cities project significantly influenced governance and policy through its interdisciplinary research and participatory methodologies, contributing to the creation of the Green and Blue Ordinance introduced in 2023 by the Secretariat of Environment for Quito Municipality. This ordinance focuses on sustainable urban planning, emphasising the management of natural areas (green) and water systems (blue) to address disaster risks, climate change, and biodiversity conservation.

The project's Urban Lab methodology is being adopted by the Secretariat to facilitate coordinated efforts between citizens and public agencies such as the water and sanitation company, public works, risk management, urban planning, and the environment secretariat. This collaboration ensures that scientific research and community engagement directly shape urban governance and policies aimed at building a more resilient city.

6

Immediate Risk Mitigation

The Tomorrow's Cities report on loose material in the mitigation infrastructure of a ravine in Santa Rosa de Pomasqui led to direct municipal action in 2022. Following the report's findings, the Municipality of Quito



▲ Tomorrow's Cities workshop

promptly cleared and maintained the infrastructure, significantly reducing the risk of mudflows that posed a serious threat to the neighbourhood.



Tomorrow's Cities laid the groundwork to build capacities for risk management and foster an understanding of the interaction between public policy and associated risk, helping us avoid future problems. When its work transitioned from the local level to influencing policy, it coincided with the shift towards the 'Green-Blue Ordinance.' This timing was critical, as the ordinance became a tool to enhance what Tomorrow's Cities had started.

Pablo Zapata
Environment Department
La Delicia Zonal Administration

Future

Tomorrow's Cities leaves a lasting legacy, inspiring public education, interdisciplinary research, and the creation of a new centre dedicated to disaster risk reduction in Ecuador

The Museums Foundation in Quito highlights the lasting impact of the Tomorrow's Cities project by continuing to engage the public on the critical link between disaster risk and urbanisation processes. The Foundation is keen to integrate this topic into its lifelong learning programmes, ensuring that public education on disaster risk and urban planning remains a core part of its mission.

The French Institut de Recherche pour le Développement views the project as a model of effective interdisciplinary and participatory research in disaster risk reduction. The institute is now exploring collaborations with similar teams to replicate this approach in Ecuador.

Researchers from Tomorrow's Cities Quito are also planning to establish an Interdisciplinary Centre for Disaster Risk Reduction in partnership with key institutions such as the Instituto Geofísico de la Escuela Politécnica Nacional (IG-EPN), FLACSO, Universidad San Francisco de Quito, and the University of Bristol. The centre will focus on interdisciplinary risk knowledge, participatory engagement with at-risk communities, and communication and education on disaster prevention. The team has already begun

applying for funding to support these efforts and ensure the continuation of their work.



▲ Tomorrow's Cities workshop



Currently, with the new authorities in place, I've taken it upon myself, as the neighborhood spokesperson, to establish direct communication between municipal entities, the parish, and our community. This ensures that we can work together effectively and carry out organised, safe planning that involves the neighbourhood every step of the way. I could say that we, as the labour force, will be actively involved in everything that is done, alongside the participation of the entire community.

Jessenia Vásquez
President of Santa Rosa de Pomasquí

In Short

Tomorrow's Cities transformed Quito's disaster risk management by blending science, art, and community engagement, empowering citizens to shape resilient urban futures.

Tomorrow's Cities made a significant impact on Quito's disaster risk management landscape by employing an interdisciplinary approach centred on community engagement and participatory planning. By combining science with the arts and humanities and drawing on memory and emotion to address disaster risk, the project empowered local communities to take an active role in risk-sensitive urban planning, enabling them to shape the future of their neighbourhoods in the face of natural hazards.

One of the project's key innovations was its use of museum exhibitions and public events to raise awareness about the connection between urbanisation and disaster risks. These exhibitions integrated artistic approaches with scientific data, facilitating dialogue among researchers, communities, and public institutions.

The initiative also employed citizen science, with seismic sensors and meteorological stations installed in various locations, allowing the public to collect real-time data, gain a better understanding of local hazards, and actively contribute to disaster risk reduction.

A major achievement of the project was its influence on public policy, particularly in shaping the Green and Blue Ordinance, which incorporated disaster risk reduction into sustainable urban development. By equipping local institutions and citizens with skills in hazard modelling and risk assessment, Tomorrow's Cities bolstered local capacity and institutionalised these practices, ensuring long-term resilience. The project's unique combination of science, community memory, and art not only improved disaster preparedness but also drew international attention as a model for participatory disaster risk management.



One of the biggest challenges for public managers is having enough information to make informed decisions. I believe that, in this case, the space provided by the Tomorrow project has equipped us with several key elements.

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Tomorrow's Cities

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