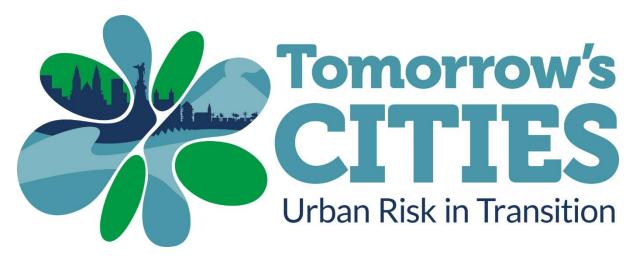
# Review and Learning Workshops - The Quito Hub 04-11 September 2020

Synthesis and Actionable Learning Report - October 2020

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DRR (Disaster Risk Reduction)			
EPN (Escuela Politecnica Nacional)			
GCRF (Global Challenges Research Fund)			
MEL (Monitoring, Evaluation and Learning)			
TOC (Theory of Change)			

#### Summary

The two Review and Learning Workshops of the Quito Hub took place on the 4<sup>th</sup> and 11<sup>th</sup> September 2020. These workshops aimed at analysing and discussing the challenges and opportunities of our work until now, and at learning relevant lessons to guide our future work.

During Workshop 1, the Quito Hub members presented their research progress across themes and subthemes. They revealed the interdisciplinary and collaborative nature of this research, the connections established between the humanities, social, and physical sciences, and the strong interactions and linkages between the Quito Hub members from Ecuador and the UK. The workshop was designed in terms of interdisciplinary themes (these did not follow the research work packages/themes of the Quito Hub) and the main highlights and research outputs that were presented are listed below:

- Theme 1: Hazards: historical records and impacts. Development of a historical timeline of natural hazards in Quito from 1540, with insights also from social and cultural perspectives; Analysis of the urban growth in Quito (1960-2015), showing connections with natural hazards and land use change;
- Theme 2: Theory and practice in urban planning. Mapping of institutional stakeholders for Disaster Risk Reduction (DRR) in Quito and of their planning tools, policies, and actions; Literature review for the three case studies in Quito (Laderas de San Francisco, Atucucho, and San Luis de Miravalle) with insights on their socio-demographic characteristics, social organization, and problems in relation to land use and DRR;
- Theme 3: The experience and understanding of risk at different levels in a COVID-19 framework. Reflection on ethical dilemmas of conducting research in areas affected by the pandemic, and on the suitability of our research methods; Development of a collaboration between the historians' team and the City of Quito Museums to conduct creative activities with schools and citizens to discuss and enhance DRR issues in Quito.
- Theme 4: New approaches to risk reduction. Efforts to create an innovative Quito Hub Risk Lab for activating urban governance mechanisms between government and non-government actors around DRR; Ongoing work to build a digital platform for sharing material and knowledge around DRR in Quito, and engaging citizens and users in related discussions and reflections.

Workshop 2 aimed at discussing three important topics for the Quito Hub, including our impact agenda in relation to the Theory of Change (TOC), the role of interdisciplinarity in our work, and the equitable partnerships within and outside the Quito Hub. Different relevant points for the Quito Hub emerged from the discussion, such as: the importance of reflexivity; the ethical dilemma and the political nature of our research; the importance of co-produced knowledge; the challenges and opportunities of interdisciplinarity; the impacts of Covid-19 pandemic on our work and research participants; the opportunities of the TOC to guide our research; the role of curiosity and openness; the challenges of formal and informal communication; the role of hierarchies and power in our interactions; the need to make visible the hidden work; and the need to talk about gender.

From these points, we have identified different forms of actionable learning that can support to Quito Hub moving forward its research agenda.

- 1. *Reflexivity*. We will continue following a reflexive process and creating collective moments like these workshops, for the whole Quito Hub or in subgroups.
- 2. The political nature of ethics and positionality. We will organize specific activities to discuss ethics and positionality of our work. In terms of *Working with the Municipality of Quito*, we will discuss the involvement of similar actors with other project's hubs, as they might experience the same situation. We will also draft a letter of intent with the Municipality to define its level of participation into our activities and the related use of data.
- 3. *Knowledge co-production*. We will continue to create space for dialogue to co-produce knowledge through an interactive feedback process with research participants and stakeholders.
- 4. *Interdisciplinarity*. We will create a structured process to identify areas and subthemes where interdisciplinarity is still challenging, and moments or activities where the Quito Hub members (or disciplines) felt excluded or marginalized. From this, we will create a space for designing theoretical and empirical trajectories towards interdisciplinarity.
- 5. *Moving forward after the impacts of the pandemic*. We will continue to build formal and informal relationships based on empathy and care about other members of the Quito Hub and research participants.
- 6. *Impact and TOC*. We will finalize and update our TOC by receiving feedback from the Quito Hub and research participants. We will also narrow reflections about TOC at the subtheme level.
- 7. *Curiosity and openness*. We will continue to operationalize and put in practice these aspects into our work.
- 8. *Communication means*. We will continue ensuring all communication forms are bilingual and inclusive, and recognize informal communication means as part of our communication strategy. We will also review the use of the Quito Hub newsletter.
- 9. *Hierarchies and power*. We will ensure that no one across the Quito Hub feels marginalized or subaltern. Meanwhile, we will clarify individual roles and responsibilities, and continue to use our different experience and responsibilities as a form of mentorship and mutual learning.
- 10. *Hidden work*. We will ensure that everyone is happy with the quality and quantity of the time and the work spent for the project, and in case they are unhappy, to understand the reasons and to find a solution.
- 11. *Gender*. We will ensure there is always a balanced representation from different genders into each activity. Meanwhile, we will develop a specific research focus, with activities targeting gender dimensions, and organise some training activities to discuss gender bias with support of the central hub.

#### Resumen en Español

Los dos Talleres de Revisión y Aprendizaje del Quito Hub se llevaron a cabo los días 4 y 11 de septiembre de 2020. Estos talleres tenían como objetivo analizar y discutir los desafíos y oportunidades de nuestro trabajo hasta ahora, y aprender lecciones relevantes para orientar nuestro trabajo futuro.

Durante el Taller 1, los miembros del Quito Hub presentaron el progreso de su investigación a través de temas y subtemas. Los mismos que revelaron la naturaleza interdisciplinaria y colaborativa de esta investigación, las conexiones establecidas entre las ciencias humanas, sociales y físicas, así como las fuertes interacciones y vínculos entre los miembros del Quito Hub de Ecuador y el Reino Unido. El taller fue diseñado de acuerdo a los temas interdisciplinarios (estos no siguieron los paquetes de trabajo de investigación / temas del Quito Hub) y los principales aspectos destacados y resultados de la investigación que se presentaron se enumeran a continuación:

- *Tema 1: Amenazas: registros e impactos históricos*. Desarrollo de una cronología histórica de los peligros naturales en Quito desde 1540, con conocimientos también desde las perspectivas sociales y culturales; Análisis del crecimiento urbano en Quito (1960-2015), mostrando conexiones con amenazas naturales y cambio de uso del suelo;
- Tema 2: Teoría y práctica en planificación urbana. Mapeo de actores institucionales para la Reducción del Riesgo de Desastres (RRD) en Quito y de sus herramientas de planificación, políticas y acciones; Revisión de la literatura para los tres estudios de caso en Quito (Laderas de San Francisco, Atucucho y San Luis de Miravalle) con conocimientos sobre sus características sociodemográficas, organización social y problemáticas en relación con el uso de la tierra y la RRD;
- Tema 3: La experiencia y comprensión del riesgo en diferentes niveles en el marco de COVID-19. Reflexión sobre los dilemas éticos respecto a realizar investigaciones en las áreas afectadas por la pandemia y sobre la idoneidad de nuestros métodos de investigación; Desarrollo de una colaboración entre el equipo de historiadores y los Museos de la Ciudad de Quito para realizar actividades creativas con escuelas y ciudadanos para discutir y mejorar los temas de RRD en Quito.
- Tema 4: Nuevos enfoques para la reducción de riesgos. Esfuerzos para crear un innovador Laboratorio de Riesgos del Centro de Quito para activar mecanismos de gobernanza urbana entre actores gubernamentales y no gubernamentales en torno a la RRD; Trabajo en curso para construir una plataforma digital para compartir material y conocimiento sobre RRD en Quito, e involucrar a ciudadanos y usuarios en discusiones y reflexiones relacionadas.

El Taller 2 tuvo como objetivo discutir tres temas importantes para el Quito Hub, incluida nuestra agenda de impacto en relación con la Teoría del Cambio (TOC), el papel de la interdisciplinariedad en nuestro trabajo y las alianzas equitativas dentro y fuera del Quito Hub. De esta discusión surgieron diferentes puntos relevantes para el Quito Hub, tales como: la importancia de la reflexividad; el dilema ético y la naturaleza política de nuestra investigación; la importancia de la coproducción del conocimiento; los desafíos y oportunidades de la interdisciplinariedad; los impactos de la pandemia de Covid-19 en nuestro trabajo y los participantes de la investigación; las oportunidades del TOC para guiar nuestra investigación; el papel de la curiosidad y la apertura; los desafíos de la comunicación formal e informal; el papel de las jerarquías y el poder en nuestras interacciones; la necesidad de visibilizar el trabajo oculto; y la necesidad de hablar de género.

A partir de estos puntos, hemos identificado diferentes formas de aprendizaje que puede ser puesto en marcha y que pueden ayudar al Quito Hub a avanzar en su agenda de investigación.

- 1. *Reflexividad*. Continuaremos siguiendo un proceso reflexivo y creando momentos colectivos como estos talleres, para todo el Quito Hub o en subgrupos.
- 2. La naturaleza política de la ética y la posicionalidad. Organizaremos actividades específicas para discutir la ética y posicionalidad de nuestro trabajo. En términos de trabajo con el Municipio de Quito, discutiremos la participación de actores similares con los ejes de otros proyectos, ya que podrían experimentar la misma situación. También redactaremos una carta de intención con la Municipalidad para definir su nivel de participación en nuestras actividades y el uso relacionado de los datos.
- 3. Coproducción de conocimiento. Continuaremos creando espacios de diálogo para la coproducción de conocimiento a través de un proceso de retroalimentación interactivo con los participantes de la investigación y las partes interesadas.
- 4. Interdisciplinariedad. Crearemos un proceso estructurado para identificar áreas y subtemas donde la interdisciplinariedad sigue siendo un desafío, y momentos o actividades donde los miembros (o disciplinas) del Quito Hub se sintieron excluidos o marginados. A partir de esto, crearemos un espacio para diseñar trayectorias teóricas y empíricas hacia la interdisciplinariedad.
- 5. Avanzar después de los impactos de la pandemia. Continuaremos construyendo relaciones formales e informales basadas en la empatía y el cuidado por otros miembros del Quito Hub y participantes de la investigación.
- 6. *Impacto y TOC*. Finalizaremos y actualizaremos nuestro TOC al recibir comentarios del Quito Hub y los participantes de la investigación. También limitaremos las reflexiones sobre TOC a nivel de subtemas.
- 7. *Curiosidad y apertura*. Seguiremos operacionalizando y poniendo en práctica estos aspectos en nuestro trabajo.
- 8. *Medios de comunicación*. Continuaremos asegurándonos de que todas las formas de comunicación sean bilingües e inclusivas, y reconoceremos los medios de comunicación informales como parte de nuestra estrategia de comunicación. También revisaremos el uso del boletín de Quito Hub.
- 9. *Jerarquías y poder*. Nos aseguraremos de que nadie en Quito Hub se sienta marginado o subalterno. Mientras tanto, aclararemos los roles y responsabilidades individuales, y continuaremos usando nuestras diferentes experiencias y responsabilidades como una forma de tutoría y aprendizaje mutuo.
- 10. *Trabajo oculto*. Nos aseguraremos de que todos estén contentos con la calidad y cantidad del tiempo y el trabajo dedicado al proyecto y, en caso de que no estén contentos, de comprender las razones y encontrar una solución.
- 11. *Género*. Nos aseguraremos de que siempre haya una representación equilibrada de diferentes géneros en cada actividad. Mientras tanto, desarrollaremos un enfoque de investigación específico, con actividades dirigidas a las dimensiones de género, y organizaremos algunas actividades de capacitación para discutir el sesgo de género con el apoyo del eje central.

#### Introduction

In the Tomorrow's Cities project, the Review and Learning Workshops aimed at reflecting on successes and failures of the research teams in order to learn lessons to improve future performance. Workshops are modelled against the After Action Review (AAR), a common learning tool in complex programmes that does consist of a process not just for reporting and accountability, but also for explicit learning. AAR workshops represent a chance for research teams to come together and start a reflexive journey around theories and practices. These workshops create a moment for teams to step back, reflect and explicitly discuss outcomes and learning of the achievements, as well as a way to celebrate successes. They are an opportunity to discuss what worked well and what did not in respect of the initial plans, as well as why and how this has happened. They also represent an opportunity to consolidate the academic and strategic identity of the Quito Hub. The outcome of an AAR is 'actionable learning', that is the learning the teams can use in their decision-making to move forward and implement or adapt activities in order to stay focused on the project's objectives. AAR is also an opportunity for teams to harness learning around a specific topic. For this first round of Review and Learning Workshops in the second half of the year 2020, we have identified "equitable partnerships" as a specific area to harness learning for, to generate team's own definition, and identify elements against which teams can assess the functioning of their partnerships.

#### Review and Learning Workshops in the Quito Hub

With the Review and Learning Workshops, the Quito Hub aimed at moving forward the reflexive path we are in since the start of the project. We wanted to reflect on what we have done until now, including the tremendous efforts during the pandemic, to learn lessons and improve performance for future Quito Hub's activities. Beyond the simple reporting and accountability, the two workshops have been organized as a reflexive process on individual and collective practices in the Quito Hub and as an explicit learning process towards a multihazard, interdisciplinary and impact-oriented risk preventive action at case study and city levels. Workshop 1 on 4<sup>th</sup> September aimed at learning and reflecting about the new knowledge generated in these months through our ongoing research process and formal and informal discussions in the Quito Hub and with research participants and stakeholders. Workshop 2 on 11th September aimed at reflecting on how we aim at producing impacts within an interdisciplinary project such as Tomorrow's Cities, and how we do so through equitable partnerships. Therefore, we reflected and discussed on the TOC that guides our pathways towards impact, on our interdisciplinary efforts, and on the meaning and practice of equitable partnerships in the Quito Hub. Both workshops have been conducted in a highly reflexive environment. All Quito Hub members have been genuinely open to learn from each other and to discuss together the successes and challenges of the past and the paths that we will make in the future. All the learning from these sessions will represent inputs for future actions.

#### Monitoring, Evaluation and Learning subtheme in the Quito Hub

The two workshops are part of the Monitoring, Evaluation and Learning (MEL) process of the Quito Hub. MEL is a process aiming at applying the knowledge gained in the project to improve its performance and facilitate the achievement of its expected goals. In the Quito Hub,

the MEL process aims at monitoring and evaluating the progress of the project's activities in respect to the multi-hazards, interdisciplinary and impact-oriented goals we have set in these months. From this, there is a learning component to be used to improve the quality and the effectiveness of our work. MEL will always use a reflexive approach in order to collectively reflect on what we do in the project, the challenges we have to face, the opportunities that open up and how can we use them, as well as the way we can learn from the past and improve our present and future actions. Importantly, in the Quito Hub MEL has been conceptualized not just as a process of reporting and accountability, but also as a research process. Whether and how all the members of the team internalise and operationalise it remains a challenge for us. In this way, monitoring, evaluation and learning aspects also become aspects to be investigated as research object. The following members are part of the MEL team: Marina Apgar (IDS), Teresa Armijos (UEA), Giuseppe Forino (UEA), Marco Cordova (FLACSO), Jenni Barclay (UEA) and Adriana Mejia (FLACSO), with the support of Mieke Snijder (IDS).

#### **Participants**

Forty participants attended the two workshops, including co-investigators, post-doctoral researchers and researchers from both Quito and UK. Participants are from the Quito Hub or work at cross-city level across two or more of the four Tomorrow's Cities Hubs. Charles Tenui from the Nairobi Hub was invited to provide the perspective from another hub. 38 people participated into Workshop 1, while 36 participated into Workshop 2. In terms of sex, 18 women and 20 men participated into Workshop 1, while 19 women and 17 men participated into Workshop 2. Below, Table 1 reports the number of participants according to their status per Tomorrow's Cities database (Co-investigators, Post-doctoral Researchers, Researchers), their main hub (Quito, cross-city, others) and their institutional affiliation (Quito, UK, others).

Workshop n.	1	2
Participants	38	36
Co-investigators	19	17
From Quito Hub	11	10
Cross-city	7	6
Other Hubs	1	1
Affiliation (Ecuador)	5	4
Affiliation (UK)	13	12
Affiliation (other)	1	1
Post-Doctoral Researchers	6	7
From Quito Hub	4	4
Cross-city	2	3
Affiliation (Ecuador)	1	1
Affiliation (UK)	5	6
Researchers	13	12
From Quito Hub	13	12
Cross-city	-	-
Affiliation (Ecuador)	12	11
Affiliation (UK)	1	1

## 4<sup>th</sup> September 2020 - Workshop 1 on our new knowledge and next steps (see Agenda into ANNEX 1)

The critical purpose of this workshop was to celebrate the progress that we had made with research. Until now, our full cohort meetings had reflected on methods and anticipated research. In this instance, we wanted to foreground what we had achieved. We also wished to use this as a vehicle for Early Career researchers to practice presentation and to share their research. Predominantly presentations came from this group and our more experienced investigators made up the group on the reflective panels. These focussed on questions relevant to the integration of our research with the MEL and TOC. These developed themes further explored in Workshop 2.

In the next sections, we will summarise the presentations by several members of the Quito Hub about their research and achievements during the past year. We want to recognize the hard work that each one did during these difficult months and the interactions across all of the teams and members, which demonstrates that we are a strong interdisciplinary team (see Annex 3).

### Introduction to our research agenda and how this is reflected in the presentations and discussions.

Jenni introduced the workshop by inviting all participants to celebrate and reflect together about the knowledge we have created with our research, the impacts that we have generated, and the learning that can be actioned based on the research outputs. She explained that the aim of the workshops was to celebrate our research and its related new knowledge together, as well as reflect together on them. She recognised the tremendous efforts everyone has done during the pandemic to make sure that we continue in conducting interdisciplinary and international research.

#### THEME 1: Hazards: historical records and impacts (Je-S THEME 1.1. and 2.1)

Maria Antonieta Vásquez: The new historical timeline of hazards (WP1.1 Forensic Analysis of risk creation, propagation and relation to urban growth).

Maria Antonieta presented her research on multi-hazard historical timeline of Quito from 1540, based on historical archives in Quito, and scientific catalogues from Escuela Politécnica Nacional (EPN). The research is interdisciplinary as it is complemented by work from EPN colleagues (including Francisco, Camilo and Maryssa) and historians (Malena). It also includes several elements of interest for interdisciplinarity, including risk perceptions, emotions, and religious aspects (e.g., religious images related to earthquakes such as the Holy Mary or San Geronimo). Maria Antonieta's work demonstrates that social and physical aspects of hazards coexisted in Quito across centuries. She is part of the team of historians led by Elisa Sevilla.

### **Francisco (Pancho) Vásconez:** Recent geological history and changing ice cap of Cayambe (WP2.1 Improving Hazard Knowledge)

Pancho presented his research on the evolution of the volcano in Cayambe in the last 400000 years. This research aims at improving the geological map and the knowledge of erupting

activity. He is also working with archaeologists to collect pottery material locally to understand lahars' age. All these information can be used to decrease vulnerability of the built environment in Cayambe, by e.g. improving roof and building materials. Pancho works with Daniel and Jerry in the hazards team.

### Camilo Zapata: Detailed data obtained in the Quito case studies (WP2.1 Improving Hazard Knowledge)

Camilo is working on landslides and on slope stability modelling, with the final goal of decreasing vulnerability of the built environment. Camilo is also analysing archival data on the last 120 years of hydro-meteorological events in Ecuador, to be later incorporated in urban growth analysis by Scott. Camilo's research also includes working with the local communities in the case studies and support with the hazard assessment. These months have been difficult for doing his fieldwork and maintaining regular contact with communities due to pandemic-related social distancing, however he started fieldwork in August and said: "It is important for us to regain contact with communities because some of these relationships were lost due to COVID-19. Last week we went back to do some mapping of the area with the drone with the communities". Camilo is collaborating with other researchers, including Maryssa, Juan Gabriel and his mentors and supervisors are Eliana and Liz from the hazards team.

**Scott Watson**: Mapping change across the city: insights from above (WP1.1 Forensic Analysis of risk creation, propagation and relation to urban growth/WP2.1 Improving Hazard Knowledge)

Scott is conducting a range of researches related to the urban growth in Quito. He is conducting Earth observations, generating DEM, and analysing the urban growth in Quito from 1960 to 2015. In addition, Scott is investigating the intersection between urban growth, natural hazards, and land use change, as well as analysing the potential for green spaces to provide multi-hazard resilience under the form of shelter and safe spaces, to increase slope stability, and to improve local ecological characteristics. Scott is collaborating with the city-wide theme researchers, including the historians doing the forensic analysis. He works with Susi Ebmeier on the remote sensing team.

### THEME 1 DISCUSSION PANEL: 'Our forensic analysis: detailed foci and integration'. Chair: Elisa Sevilla. Panelists: Arry Fraser, Eliana Jimenez and Liz Holcombe.

The presentations relating to Theme 1 showed the deep connections between disciplines already taking place in the Quito research, including historical, geophysical, and mapping analysis. The discussion demonstrated the positive side of historical and physical data converging in the creation of interdisciplinary datasets, and the huge potential to work across geophysical and social domains and with the communities. On the other side, the discussion also revealed the challenges of integrating qualitative and quantitative data and of how this combination can produce useful information when focusing on a specific event or place. On this regard, Jenni used the metaphor of "triple threat" -that is used by actors when they can act, dance, and sing, and therefore makes them powerful communicators- to describe the triple threat of epistemologies from humanities, social and natural sciences to tackle disaster.

In terms of integration, Cassandra proposed the digital platform as a way for bringing together different forms of data. Indeed, she said "the digital platform can be a good way to present information across disciplines and to build a narrative that is also emotional, so you can have interactions of users with this rich data".

The research discussed in this theme results from the work conducted by a mix of experienced and early career researchers across UK and Quito institutions. It represents a great opportunity for all, and in particular for early career researchers, to work in an interdisciplinary team. All of us are learning a lot about methodologies and their application in Quito. We are understanding the complexity of risk in an interdisciplinary way, and building related knowledge together with community actors and institution such as the Municipality and the Colegio de los Ingenieros. As Eliana noted, "this is an enriching space for all". This makes clear that the subtheme 2.1 on everyday hazards needs to engage with social scientists to think about risk in a more systemic way.

THEME 2: Theory and practice in urban planning (Je-S Theme 1.2 and 1.3 and 2.3)

Jonathan Menoscal, Eva Filippi, and Maryssa Cupuerán: Governing, planning and managing risk-informed urban development. (WP1.2.a Urban Risk Labs: identifying and removing barriers to disaster ready sustainable growth)

Jonathan and Eva synthesized the work they are doing on institutions, urban governance and urban development, to be connected with the work in the case studies towards understanding the materialization of institutional processes in the everyday life of the communities. They selected the questions that guide their research by recognizing the value of every researcher and actor, as well as by reflecting on the relationships established with research participants, on the real research problems to be investigated, and the impacts expected for the project. As Jonathan said, this allows us to adopt a "transversal perspective" with "different analytical frameworks", including urban governance on the one side, and urban political economy in relation to urban morphology on the other side.

This research has been done by collecting secondary sources and mapping the most important actors. This mapping was different from their initial expectations, therefore they had to reformulate methods through a series of activities and interviews with institutional actors. Their research aims at creating a space for articulation for all actors involved into Disaster Risk Reduction (DRR). The research identified 40 policy and planning tools across 24 organizations, and is currently investigating what these organizations are doing and how the project can intervene in these organizations in order to produce impacts. The research provides preliminary findings that demonstrate both changes and continuity into urban planning, and related processes of decentralization of DRR. The research also demonstrated that changes within organizations in the last years led to a restriction of the role of the State and of interactions across national and local levels. The research also found informal planning in Quito that includes examples of exception state with potential connections with clientelist practices or electoral strategies. This leads to problematize the commonly adopted binary reflection (e.g., bottom up- top down; formal-informal), as the reality is usually more complicated. The research also found that inaction is a powerful tool for planning that therefore positions itself outside decision-making strategies. The research also revealed that during the pandemic

resources for local governments decreased, limiting space for new investments and reinforcing business-as-usual approaches. Jonathan and Eva work in the group investigating institutions, together with Marco, Maud, Arry, Emily, among the others. Eva also works with Ryerson and the participatory group in exploring vulnerabilities and capacities.

Maryssa Cupuerán: Unpacking the complexity and diversity of urban risk at neighbourhood level in Quito (WP2.3 Analysis of community capacities and vulnerabilities)

Maryssa and Elisa P. did a literature review about the 3 case studies we will be working on, their socioeconomic characteristics and social interactions. Laderas de San Francisco is in parish called Calderon. Atucucho is located near the Pichincha volcano, while San Luis de Miravalle is in the South West of Quito. Laderas was established in 1995 through land acquisition by land traffickers, and has the large quantity of informal housing in Quito. A square meter costs 89 dollars, that compared with other areas of the city is very cheap. Population in the neighbourhood usually resettled from other cities and places across Ecuador. More than 50% of the people work outside the neighbourhood. The Municipality classified the neighbourhood as a non-mitigable risk area, given investment in risk mitigation infrastructure would cost over 2 million dollars that the Municipality does not want to invest. Atucucho was established in 1998, and people built houses in an informal way. There are mingas (communal work parties) and most of the work is informal. There are stigma and social exclusion around Atucucho, as the neighbourhood is known for its security issues. In the neighbourhood, there are over 30 organizations that we can work with. Finally, San Luis de Miravalle has been founded in the 1970s. Also in this case, we have found *mingas* and informal work. The area is located far from health and education infrastructure. San Luis was regulated in the 2019 and has access to aqueducts. Maryssa mainly works in the groups of participatory action research and vulnerabilities and capacities together with Jenni, Teresa, Giuseppe, Elisa P., and others.

THEME 2 DISCUSSION PANEL: 'Where next? Integrating top down and bottom up'. Chair: Marco Cordova. Panelists: Mark Pelling, Emily Wilkinson and Charles Tonui (ACTS, Nairobi)

According to Marco, the discussion highlighted the gaps between theory and practice of planning. On the one side, planning has an anticipatory nature that runs the risk of overvaluing the goals of territorial planning. On the other side, planning has a systemic nature that includes social, environmental, sustainability features. Therefore, it is necessary to reflect on the next steps of the project in order to integrate top-down and bottom-up planning and to include DRR into this planning. Mark pointed out that we need to reflect about our role against the stories narrated by research participants. In this way, this poses several questions about the supposed neutrality of our work. By using Mark's words, "Where do we sit as researchers? Are we fostering powers? Are we resisting these powers? We must make a decision and we are not passive actors. Where do we also sit in the future? Are we friends of policy makers, business, communities?". These reflections offer opportunity and need for the Quito Hub to navigate throughout these questions, and to expose ourselves to the challenges of positionality in an innovative way.

In the same vein, Emily suggested to find our space for manoeuvring into these questions, but also recognized that our expected changes could not happen when we think they should. In her

own words, "the research in the Hub can be influential in the future and this might not be the right moment to influence change, so we might need to think a little bit around this".

Charles brought the experience of interconnections between the Nairobi Hub and its external actors. When you engage with actors, you need to know at which level they understand DRR and which are their cross-interactions. Therefore, the Nairobi Hub is mobilizing different expertise across the Hub and local communities to facilitate biweekly workshops that explain DRR to the public and the city sector and explore interconnections across actors to open up a conversation between them.

THEME 3: The experience and understanding of risk at different levels in a COVID-19 framework (Je-S theme 1.1. 2.3 2.4 and 1.4)

**Elisa Puga**: What we have learned from community interactions during COVID-19 (an anthropological framework) (WP2.4.a Development and trial of participatory networks with novel methods)

Social organization is the only resource the communities have for coping with everyday challenges, and is related to the social networks with internal and external actors. Communities also know which their rights are and what they should receive from institutions. These are important aspects to be considered when we plan to use digital means as part of our research methodology to enter into this social organization. We need to monitor availability and knowledge of technology (mobile phones, access to the internet) by the people. We also need to make digital methodologies inclusive, and we should ensure these methodologies are flexible and adaptable to the communication means existing within the communities. During the pandemic, one community asked for support to provide basic provisions and this posed several key ethical dilemmas. In Elisa's words, arising questions are: "How to be researchers when people are looking for help? Which is our role in internal conflicts in the communities? How can we mediate between institutions and communities?". Elisa does not have an answer for these dilemmas but she recognizes they will be part of our research experience. Therefore, the "ethical dilemma is the difficulty in being neutral, but in case we should be neutral, it is important to have a channel for listening and ensuring emotional support". Elisa mainly works with Alfredo, Teresa, Jenni, Maryssa, and Giuseppe, among the others, in the group of participatory action research and the vulnerabilities and capacities.

Juan Gabriel Barrios: Adapting physical vulnerability mapping for multihazards and our case study areas (WP1.4 Barriers to socially effective knowledge)

Juan Gabriel's work is at early stages but in progress. It is focusing on adopting a multi-hazard vulnerability mapping. Juan Gabriel is assessing different methods, including using ortophotos. Juan Gabriel works with hazard analysis group and in particularly with Daniel, Tiziana, and Camilo.

Malena Bedoya: Public history and building interactions with museum communities (WP1.1 Forensic Analysis of risk creation, propagation and relation to urban growth)

Malena presented the interactions between the historian and the museum to develop a strategy for engaging more people in Quito in knowledge co-production. During the pandemic, historians have actively used social networks to continue planning our work with "vulnerable"

groups and interactions with communities and schools and formal and informal education". In this way, historians are also working to "co-produce educational strategies for the digital platform", including activities with teachers and within communities to mediate on controversial topics such as religion, as well as activities in curatorship and historical research. Malena works with Elisa Sevilla and Maria Antonieta and is leading the work with the museums, as well as with the digital platform group and the group of forensic analysis focusing on urban growth.

### **Giuseppe Forino**: Our interactions during the pandemic: the process of knowledge production (MEL)

Giuseppe reflected on interactions that occurred within the Quito Hub during the pandemic and that through an exercise of co-produced knowledge led to build our theoretical and analytical research framework. He illustrated the main characteristics of these interactions that occurred through the discussion groups and the seminar series, and through formal and informal meetings in the Quito Hub. Giuseppe described this process of knowledge co-production as a "slow scholarship" process that has developed in a coherent way across these months to discuss most urgent methodological and empirical topics for the Quito Hub. This process led the Quito Hub understanding risk as a socially and politically constructed phenomenon, and recognizing the invaluable contribution of local knowledge by research participants in exploring and understanding risk. Research should use different research methods from different disciplines. In this way, we understood that there is no a better or worse method than others, but a method that fits the research question and context. We also understood that spatial and temporal scales are important to understand risk. Bottom-up and top-down scales intersect and interact, as well as risk has usually longer temporal scales than we think. We also understood that impacts cannot be predetermined but need to be decided together with research participants. This knowledge co-production also benefited from internal interactions in the Quito Hub. We understood the need to embrace our cultural, academic and personal diversity, and recognized the fact that our knowledge is limited. In this way, we are making a continuous reflexive effort to reflect on our own knowledge and practice, and from this to build our theoretical and empirical research framework. Giuseppe works with Jenni, Teresa, Maryssa, and Elisa P. on the development and implementation of participatory research. He is part of the MEL team with Teresa, Marina, Marco, and Adriana.

# THEME 3 DISCUSSION PANEL: 'Knowledge circulation as process to benefit the most vulnerable to risk' Chair: Teresa Armijos. Panelists: Alfredo Santillan, Ryerson Christie, Amy Donovan.

From the presentations, Alfredo highlighted the fact that reflexivity is part of the everyday work of the Quito Hub. Reflexivity allows "revising our path and collecting experiences of walking together", and "is a constant process of revising our path and collecting experiences of walking together". The pandemic months have been useful to promote reflexivity across the Quito Hub and therefore to improve our research approach. Indeed, across these months, reflexivity has been part of the Quito Hub activities "and I think that the challenges posed by the pandemic were fruitful in this sense. This forced break was a time for introspection, and discussion groups and seminars had this goal to listen to and know each other. This has

improved us as persons and researchers, so we are now a community of self-learning". Reflexivity, in this way, has also been helpful to reflect around ethics and our interactions with the community. This led to a deep and reach discussion about risk as social construction. This is seen in the fact that "each activity of the project is done with respect for the sensitivity of the people by assuming that all research decisions have concrete effects on the life of the people". In addition, we interrogate ourselves about which kind of knowledge we want, for whom and for which purpose. We recognize that knowledge needs to be generated just by interaction and empathic relationships with people. As Ryerson pointed out, knowledge is political, and is the "production of a politically charged space where produced data are political".

In the same way, Alfredo and Arry underlined that the Quito Hub is doing interdisciplinarity, both theoretically and in the practice in the case studies. Teresa argued that we are doing participatory research as an epistemological approach, and this is expression of the political nature of our work. We all recognize the challenges of doing this, but we knew since the beginning that an impact-oriented project like this would present challenges that we need to navigate through. The question is how to do it.

#### THEME 4 – NEW APPROACHES TO RISK REDUCTION (first thoughts for Je-S Theme 3)

John McCloskey: The new Tomorrow's Cities Risk Group – opportunities for Quito (WP3.1a. New pathway design for multi-hazard risk analysis for better decision-making at city level)

As we are forced into this pandemic situation, we are reorganizing our approach to risk across the cities' hubs. This is an open and inclusive process, which is still at the beginning. We have a group where every city is represented and which is producing an open conversation around the directions we should take. There are three main features: governance and risk construction; innovation, understanding and quantifying modelling risk; bringing this integration of these ideas to the people who are designing and implementing urban development. This will reframe the work by Risk Nexus.

#### Marco Cordova: The Quito Hub Risk Lab (WP3.2 Integrating the Top-down with the bottom-up)

The Quito Hub Risk Lab considers DRR as participatory and interdisciplinary research, action, and governance (interactions, rules and norms). On the one side, the Lab is an exercise of innovation to build an analytical and action framework to activate DRR more broadly. On the other side, it is a process of articulation for government and non-government actors to internalize DRR by creating a change into politics and planning for sustainable development and institutions. As Marco argued, "the Lab also results from the project's aims of institutionalization of medium and long terms activities and interactions across actors, giving continuity to this integration of DRR into everyday life of Quito. The Lab is also an impact of the project as it aims at creating a risk culture". Marco leads the group focusing on institutional challenges for DRR, including Maud, Emily, Arry, Jonathan, among the others.

### **Sindicato Audiovisual/Karina Barragán/Paul Narvaez**: Introducing the Digital Platform (WP3.2 Integrating the Top-down with the Bottom-up)

Paul Narvaez is working with Cassandra and Karina to build the digital platform. Paul realized that disasters are political events, and therefore they are considering disasters as such into the platform. In the digital platform there are several questions posed to users to create the main

features for the tomorrow Quito, also by using pictures, testimonies, newspapers, and podcasts. Accordingly, the platform uses the narrative of Quito as a city highly subjected to volcanic risk to inform users about its main hazards. Among the others, they are doing two projects with students and professors into public schools, aiming at bringing physically students into the museum, to gain a knowledge that then they can share and discuss with communities and families in experiential terms. They do this as they consider that "rocks can talk to us to understand both risk and our resilience".

Karina adds that translating all the material from the physical exhibition to the digital platform was very difficult during pandemic. The effectiveness of the digital platform will increase when we have clear which are the interactions with all research stakeholders and also with the project website. We are also reflecting on the kind of language to be used, to be user-friendly and inclusive for all potential users.

### THEME 4 DISCUSSION PANEL. Developing Quito Hub's Plan for defining risk. Chair: Jerry Phillips. Panelists: John McCloskey, Marco Cordova, Kari Barragán and Joel Gill

Karina suggested we interrogate how risk is perceived in Quito. In terms of communication, this means creating a space where people based on our inputs can generate their own knowledge and reflections, a political space where people can become aware of a political topic such as risk. Therefore, questions arise on how to reach the most vulnerable people, as most of them do not have Internet or digital equipment. In this way, we need to reflect on other tools to reach these vulnerable groups. This is why students can play the strategic role of ambassadors into their communities, and spread information about what they have learned into their communities.

Joel Gill focused on the multi-hazard learning in the Quito Hub. By illustrating scenarios and stories presented during the discussion groups in May and June 2020, the engagement with the Quito Hub allowed exploring the complexity of the hazard domain and its relationships with other risk components. Joel also underlined that "in terms of ethics, using multi-hazard scenario to understand and reduce risk is a great opportunity to have a comprehensive work and to allow to select an option that decrease risk on one side but does not increase on the other side".

### Closing remarks and commentary on relevance to MEL: Marina Apgar and Daniel Andrade.

Marina: "There is a lot to celebrate. We tend to ask ourselves what we have done, achieved and learnt and we have listened to rich reflections on practice, findings, as well as on collective reflexivity. This is what moments like these are for, and also indicates where we have to go. Reflexivity allowed us to reflect on who we are and navigate politics and ethics, and this requires a robust conversation. This links also to something not explicitly coming out, that is the question of gender and related inequalities. We should reflect collectively on this". Ethics also emerged as a very important topic, and there is need to reflect on how this type of project navigates throughout ethics and positionality. There is also need to discuss about our TOC and its assumptions around how change happens.

#### Synthesis of Workshop 1

During Workshop 1, several members of the Quito Hub have presented their research and their findings from different subthemes. From these presentations and the discussions that followed, we have realized that the Quito Hub is inclined to work in an interdisciplinary way, with tight connections between humanities, physical, and social sciences. These connections have the potential to support and promote interdisciplinary research, and to facilitate the work together with local stakeholders from communities and institutions. However, we need to continue doing efforts to promote interdisciplinarity into our practice. During the discussion, we have also realized that in the past months we have started an individual and collective process of reflexivity. This allowed us to reflect on our work, and on the challenges and opportunities that are offered. We have also realized that our work has implications for the communities and the institutions that we work with. Therefore, a continuous reflexive process is useful to reflect on the political implication of our past, current, and future work in the Quito Hub, both at individual and collective level.

## 11<sup>th</sup> September - Workshop 2 on our TOC, Interdisciplinarity and Equitable Partnerships (see Agenda into ANNEX 2)

#### Connections with Workshop 1

Jenni introduced a Mentimeter exercise as a way to connect personal feeling from Workshop 1 into Workshop 2. The exercise firstly asked each participant to use three words to describe own feeling after Workshop 1. The word cloud below collects and graphically represents the responses by participants, and shows the enthusiasm, the motivation, and the excitement about working together and discovering each other's work and progress towards the project's objectives.



Figure 1: The Mentimeter word cloud made by the three words selected by participants into Workshop 2 to describe their feelings after Workshop 1.

The exercise also asked each participant to select the key learning taken away from Workshop 1 around working together with other members of the Quito Hub. Most of the participants pointed out that a key learning was interdisciplinarity. A feeling shared across almost all participants is that interdisciplinarity allows learning together, establishing a reflexive dialogue for working collaboratively across disciplines, and innovating and experimenting in methodologies and fieldwork. Some participants also argued interdisciplinarity poses several challenges, but the team is aware of that. Indeed, one participant claimed:

"We are making an effort to work together in an interdisciplinary way and focused on impacts that benefit research participants. We are aware of our limitations and challenges and embrace the challenges of working together in different languages/background."

In terms of challenges for our reflexive approach, we need to ensure that interdisciplinarity does not leave anyone behind. In this way, a participant noted:

"Collaboratively, bridging disciplines, learning together, building relationships... but how do we be even more inclusive? Are there people on the edge we can get more involved in the research activities?"

Also, we need to stress that while interdisciplinarity is a key aspect of the project and of the Quito Hub, single disciplinary contributions are very useful when grounded in the progress of the whole Quito Hub.

The Mentimeter exercise also asked to assign a score (from 1 to 5, 1 = value a lot more, and 5 = value a lot less) to our feelings about the knowledge gained in these months. The bar charts below (Figures 2 to 7) revealed that we know more about the social dimensions of risk (Figure 3) in comparison with the past than about the hazard dimensions of risk (Figure 2) and the physical and infrastructure vulnerability (Figure 4). Meanwhile, we give more value to the contribution by decision-makers and communities in shaping our research and producing knowledge (Figure 5), followed by the contribution by other disciplines (Figure 7) and the interdisciplinary focus of the research (Figure 6).

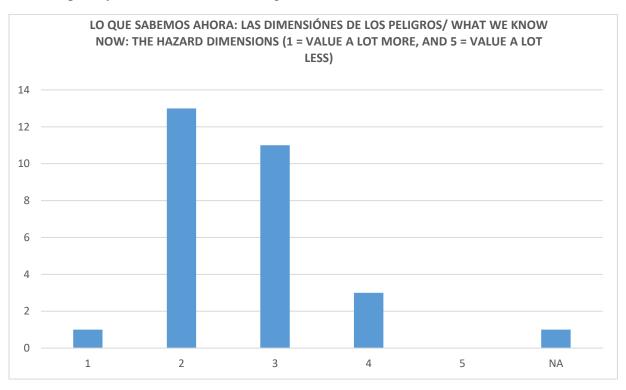


Figure 2: Scores assigned by participants about what they know now on Hazard Dimensions of Risk compared to past months.



Figure 3: Scores assigned by participants about what they know now on Social Dimensions of Risk compared to past months.

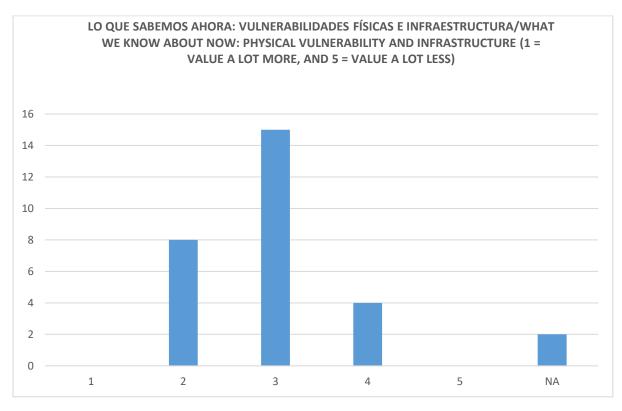


Figure 4: Scores assigned by participants about what they know now on Physical and Infrastructure Vulnerability compared to past months.

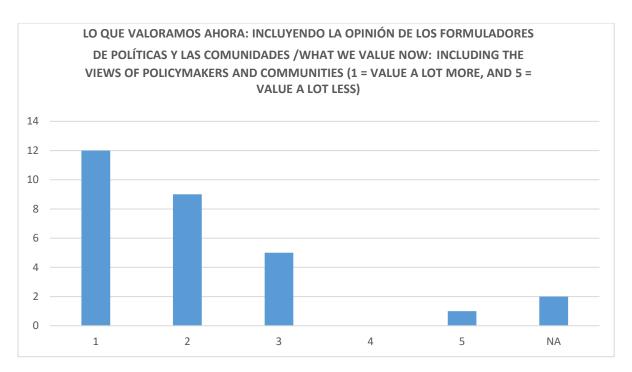


Figure 5: Scores assigned by participants about what they value now on Inclusion of Decision-makers' and Communities' Opinions compared to past months.

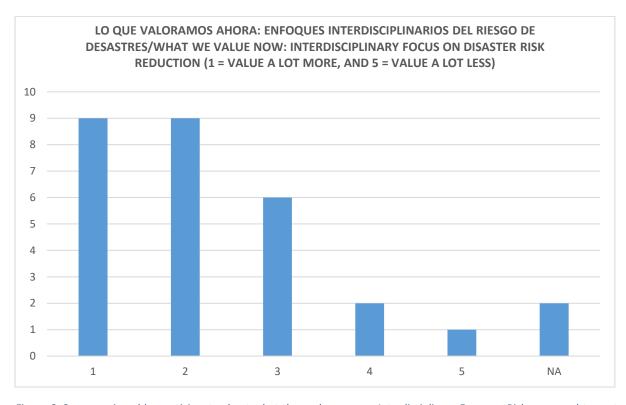


Figure 6: Scores assigned by participants about what they value now on Interdisciplinary Focus on Risk compared to past months.

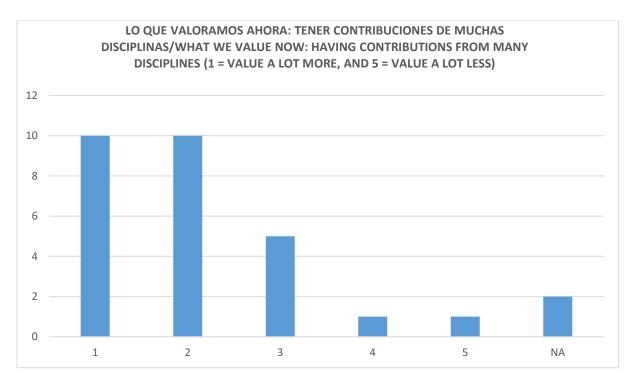


Figure 7: Scores assigned by participants about what they value now on Contribution from Many Disciplines compared to past months.

#### Introduction to the session

Marina: There are a number of reflections about different pieces brought together to create a whole, and about the processes to do this. We are making efforts and doing a journey together made of integration, interconnectedness and collaboration. We reflect on how to work together with different methods and our ambitions. We are also making progress towards interdisciplinarity, but we need to do more. Jenni acknowledges that everyone recognizes we are on a path and that we are not already there.

#### 1. Reflecting on Theory of Change

#### Quito's Theory of Change

Marco introduced the current version of the TOC and its relationships with Monitoring, Evaluation and Learning subtheme in the Quito Hub. According to Marco, it is important to reflect on the TOC as general framework for the project, not just for the methodological possibilities it offers but also for its guidance in structuring our interdisciplinary process. Beyond the MEL team (Marco, Marina, Teresa, Adriana, Giuseppe), all the Quito Hub members are participating in the process to reach the final goal of the project, which is to contribute to a transition towards the promotion and incorporation of urban DRR policies and practices in Quito through a focus on prevention. Our strategy consists of an applied and participatory research towards change. The TOC can be a methodological procedure that structures the research process, but is also a research method and tool that allows developing and measuring our assessment.

TOC is an ensemble of causal mechanisms based on initial inputs from Resource to generate a given Impact through a series of central moments (Interventions, Outputs, and Outcomes). This

implies that, to understand the move from Resource to Impacts, we need to identify a series of assumptions that can validate this process, a series of causal links.

The TOC allows clearly defining and theoretically building our object of study and generating some explanatory variables on which to intervene such as urbanization (sustainable development, history), multiple hazards (physical science) vulnerability (social sciences), governance (political science), participation (citizen science), and representation of DRR (humanities). Between these explanatory variables and the final impact, there is a sort of black box where we do not know yet what will occur. What can help to unpack this black box are our three Impact Pathways.

The TOC moves from Resources to a series of interdisciplinary Interventions with a series of Outputs for communities and institutions. From this, there are some Short Term Outcomes that need to be translated into long term formalization and institutionalization (Long term outcomes) until the final Impact of DRR prevention. This scenario can be understood as a series of causal links that are represented by a series of assumptions, including the capacity to reach local actors, to have knowledge and capacities to produce a change into behaviours first and then in more practical and longer term. The TOC process is itself part of the research process but is also part of the MEL. Monitoring relates to the management aspects of the project. Evaluation relates to the constant feedback by research participants that allows to re-address our research. Then, Learning relates to the reflexive process we enact from our gained knowledge.

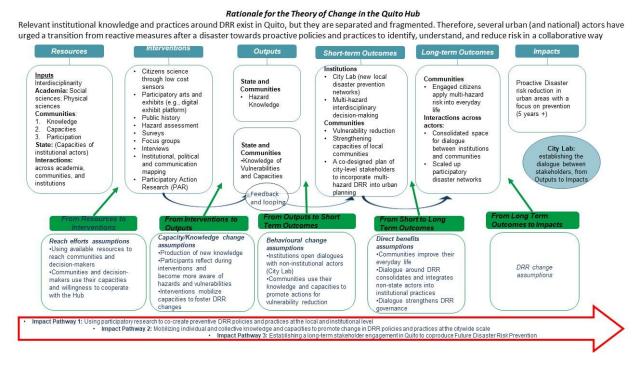


Figure 8: Current version of the Theory of Change.

#### Insights from break out groups on TOC

After Marco's discussion on the current TOC for the Quito Hub, in 4 break out groups participants discussed and reflected about the activities each subtheme is planning and conducting in Quito, the expected impacts in relation to the Impact Pathways, and the

contribution by these activities in fostering change in Quito. A summary of reflections emerged in the break out groups and in its plenary discussion is presented below.

#### Group 1 (Public History, FORIN and Engagement through the visual arts)

Group 1 was mainly composed by Quito Hub members working on public history, including Elisa S., Maria Antonieta, Malena, Karina, members of the Sindicato Audiovisual, plus Marina and Arry. The group mainly discussed on the activities related to art exhibits and the digital platform that will host these activities. A key aspect of their activities is the possibility to work directly with schools and museums in a collaborative way, and to include the capacities of these actors in supporting and promoting change. In terms of impacts, the way they are designing these activities and the engagement of institutions such as museums and schools can support communities in creating their own knowledge about their territory and awareness of their responsibilities. In terms of Impact Pathway 1, the impact of their activities is the active participation of teachers and museums in generating spaces for dialogue and collaboration in the realization of the platform, and creating awareness to prevent disaster risk. In terms of Impact Pathway 2, the work can transfer knowledge to decision-makers for better planning strategies. Meanwhile, for the Impact Pathway 3, the work can contribute to incorporate disaster risk into high school curricula in an interdisciplinary way.

#### Group 2 (Urban risk and Forensic analysis)

Group 2 was mainly composed by members working on institutional subthemes, including Eva, Jonathan, Maud, Alex, Marco, Amy, Emily, Scott, Pedro, and Joel, plus Mieke. The work can contribute to Impact Pathway 1 by helping the Municipality of Quito to include vulnerable groups in the process of validation of different urban planning tools. It can also contribute to this Pathway by identifying the actors involved in the process of urban development and DRR, their challenges and weaknesses at multiple levels, and DRR policy application at community and local level. The work relates to Impact Pathway 2 by investigating the historical development of Quito and its intersection with hazards, the urban development policies and territorial development, and institutional decision-making around a multi-hazard approach. Meanwhile, in relation to Impact Pathways 3, the work concerns long-term perspectives around territorial management, policies, and planning. Institutional work has a political nature but has connection with the real problems of the people, and therefore it has connection with the vulnerability and capacity subtheme. The work can contribute to the processes of change by generating a reflection on how achieving public awareness about risk prevention.

#### Group 3 (Case Studies, Participatory Action Research and Citizen Science)

Group 3 was mainly composed by Quito Hub members working on participatory methods, including Maryssa, Giuseppe, Teresa, Eliana, Marjorie, Valeria, Juan Gabriel, and Alfredo. The group brought the example of citizen science and participatory work as main activities to relate to Impact Pathways. Given the overlapping existing between Impact Pathways and this work, the group considered that the work contribute to all three Impact Pathways. However, reflection is necessary about the actual capacities by all the activities to produce impact. On this regard, Alfredo argued "this is a perspective a little bit optimistic or naïve, because we overvalue the capacity of coproduced knowledge into policy and action. Indeed, more than having knowledge, we need to convert this knowledge into a political capital and capacity. We

are overoptimistic in terms of the capacity of knowledge to be translated into impacts. We have good tools and plans to support the co-production of knowledge with communities, but we are also partner in this project of the municipality, that does not want to be a passive actor. This brings up the issues of autonomy in the research process as well as of ethics". In this way, there is a risk to invalidate the co-production of knowledge if we do not involve the Municipality. The challenges become how we turn the co-produced 'good knowledge' into policy and political decision-making, and which are the entry points to do this.

#### Group 4 (Multi-hazard analysis)

Group 4 was mainly composed by people working on both physical science and communities, including Liz, Daniel, Jenni, Jerry, Elisa P., Ryerson, Pancho, Paul, Luke, Camilo, and Andy. The group mentioned three main activities. Mapping through drones mainly relates to Impact Pathway 1 as it allows interacting with communities as well as in the working group in an interdisciplinary way. Collection of historical information about past hazards has relation with Impact Pathway 2. Information on landslides and soils has relation with Impact Pathway 3. This work can be useful for hazard assessment but also for city engineers and scientists more widely and can open to future collaborations and technical knowledge sharing. However, it also has to create the conditions to put the hazard scientific data and knowledge into a context and a format that are relevant and understandable for the communities.

#### Comments by Marina and Quito Hub members

This discussion highlighted the connections of our work with Impact Pathways both separately and in interconnections with each other. There are several potential next steps. How to bring these interconnections into conversation is a first point. It is also very important to reflect on the challenges posed by Alfredo about the type of stakeholders involved and the necessity to think our impacts in terms of their political potential. Also, there is need to consider how the co-produced knowledge will be used, and by who. On this regard, for example, Marco stressed the need to bring attention at the assumptions we make to move across our theory of change, and asked "how do we position the Hub as a resource?" and "whether are we assuming that the Municipality will use the information we produce?". Eva also noted that the TOC still has a linear form and might not catch the complexity of interactions across different actors, so she wonders if we are thinking at TOC in a too much linear way. Teresa agrees with this, but pointed out that it is also a problem of visualisation, and does not necessarily represent how we are thinking about it.

#### 2. Interdisciplinarity

#### Seminars and Workshops Evaluations

Giuseppe shared first results of the online evaluation forms for the Quito Hub discussion groups and seminars (May-August 2020) administered to participants along these months. In particularly, Giuseppe showed data retrieved from responses to these two questions:

- 1) How effective was the discussion group in stimulating an interdisciplinary conversation?
- 2) How effective was the discussion group in stimulating a conversation across Quito- and UK-based researchers?

For the first question, data reported that an interdisciplinary conversation was stimulated more easily in the Conceptual Jungle and the Methodology discussion groups than in the Public History discussion group and the seminar series. Elisa S. rightly pointed out that the public history discussion group was conceived to be more disciplinary than the others, and this is probably the reason for this data. However, Teresa argued that public history is interdisciplinary anyway, as it is "public", and includes people's stories and engagement with them, while history is the history of everything, including social and physical aspects. Giuseppe also showed some open answers provided by participants. Similarly to previous discussions around interdisciplinarity into Workshop 1, participants claimed that interdisciplinarity is an ongoing process that is under construction and that allows to debate disaster risk from a comprehensive perspective. However, we still need time to reflect on how we can promote interdisciplinarity outside our meetings.

For the second question, data reported that it was a little bit easier stimulating conversations between Quito and UK researchers in the Conceptual Jungle and the Methodology discussion groups than in the Public History discussion group and the seminar series. Also in this case, Giuseppe showed some open answers provided by participants. Accordingly, language represented a limitation for this conversation, and the break out group design sometimes did not ensure interdisciplinary and cross-language dialogue, so many groups ended up being UK or Ecuador based on language. In addition, we need to develop better communication channels, both formal and informal.

As Marina pointed out, there is not judgement on participation in all the activities of the Quito Hub, as we know that "time is also a constraint and people here are funded differently, so not all people can always attend to everything and this is for sure challenging in terms of interdisciplinarity".

#### Break out groups and discussion on interdisciplinarity

After this, participants were divided into 8 break out groups, and were asked to reflect together on a moment into past interactions in the project when they felt an important interdisciplinary challenge or opportunity. Below we have reported main stories of interdisciplinary challenges and opportunities emerging from the personal experiences mentioned into break out groups.

#### Stories about interdisciplinarity challenges

Some important stories of challenges for interdisciplinarity are related to gender issues emerging when interacting with research participants and stakeholders. For example, a colleague shared her experience during a meeting with the Municipality, where strict gender roles limited her participation. In this meeting, her voice as female researcher reporting the everyday problems of the community to the Municipality, and the necessity for understanding more about existing risk conditions for the community, was not taken into consideration due to gender unbalances. The Municipality therefore did not listen to her. As the Municipality repeatedly told that communities live in at risk area and should leave the neighbourhood, the communities had no room to mediate and negotiate risk. Similarly, another colleague reported the challenge of gender roles during some interactions with a Councillor of the Municipality and the people of the Laderas de San Francisco neighbourhood.

Interactions with external stakeholders are always a challenge in terms of interdisciplinarity. On this regard, other stories reported the challenges of bringing the community's experiences into the decision making-arena. For example, a colleague mentioned the challenges during the first fieldwork, when he/she experienced the everyday socio-territorial reality of communities at risk and the difficulties of bringing this reality into the institutional arena. Negotiating expectations around disaster risk, in particularly in the same arena with decision-makers and community, is challenging as you must find a way not to affect the participation of communities.

Some colleagues also reported the challenges of language into interdisciplinary meetings. Language refers not just to English or Spanish, but also to differences between disciplinary languages, between policy and academia, as well as between research and evaluation practices (TOC and MEL). In the same way, some colleagues reported the challenges of translating our knowledge -often complex and very specific- in a way that stakeholders can understand and use for their own purposes.

Challenges also arise around different methods across disciplines. For example, a colleague revealed that combining the knowledge on spatial urban development with historical work was challenging. Combining qualitative data (e.g., on community disaster response) with quantitative data (e.g. about size and effects of a hazard) was also challenging. Differences across disciplines also relate to differences in the use of technology. For example, some participants reported the difficulties in the break out groups to have a cross-disciplinary dialogue around different techniques for data collection and analysis. Indeed, mapping and modelling represent always a challenge as there are different projections and data availability, in particularly when measuring data across time (e.g., georeferencing historical maps). Also, another colleague reported that we need to understand more about sensors into citizen science tasks.

#### Stories of opportunities for interdisciplinarity

In an interdisciplinary project like this, working across disciplines is challenging as it forces to be open towards unknown territories, understand different scientific areas, and combine different aspects from diverse disciplines. However, it offers the large opportunity to learn new things and to be open to inputs from different perspectives. Indeed, a colleague told that a project like this sets your mind to work in an interdisciplinary way. Last October, into first team meetings in Quito, maintaining an open and tolerant dialogue about different ways of working from each discipline and between disciplines emerged was challenging, but it was also recognized that both ways can generate knowledge and change.

Another colleague also mentioned that working within the citizen science team represents a great opportunity to combine physical science, social sciences and technology (e.g., the sensors), and to understand the intrinsic interdisciplinary nature of the project.

Another colleague also shared her experience in coordinating cross-city work among the four hubs of the Tomorrow's Cities project. The challenge of bringing together the disciplinary approaches of social and physical sciences became an opportunity when this was done together with the communities. Indeed, when working with research participants, interactions and connections develop in a more natural way. Other colleagues also mentioned the positive interactions created between the team of historians and the physical scientist by EPN. In general, all of us are showing an interest for learning together, and this facilitates interdisciplinary dialogue. See Annex 3 for details about interdisciplinary connections across Quito Hub researchers.

#### 3. Equitable Partnerships

The third theme discussed during the workshop was Equitable Partnerships. This is a key concept for the Global Challenges Research Fund (GCRF) that needs to be discussed in the project as it relates to partnerships with stakeholders but also within the Quito Hub and is an important part of GCRF indicators. However, it has no clear definition yet, and this means we can develop our own definition also based on our MEL. On this regard, Teresa also added that we should find a suitable Spanish translation for equitable partnership in Spanish. The interpreter (Cesar Encalada) translated as *relación equitativa* during his live translation, while other members of the Quito Hub along the discussion also translated as *asociación equitativa*.

#### Break out groups - Question 1: How would you define equitable partnership?

The first question of the break out group exercise was to provide a definition of "equitable partnership". Some of the most significant definitions or descriptions are provided below:

- An equitable partnership is an association where each associated part is aware of its capabilities (what they can do) and of what it can share, without losing sight of the final objective.
- Partnerships between Quito Hub researchers, UK/Ecuador institutions, researchers/communities, researchers and government agencies, and also between different disciplines, need to consider equity around access to opportunity, in order to be able to perform in the best way. It is also important to acknowledge that there are differences by design that need to be balanced out, as well as that funds come from one direction (UK) and that language is challenging.
- Equitable partnership is a continuous relationship that is built horizontally and starts from a reflexive process that allows strengthening skills and abilities but also makes more visible how certain hierarchies have been built and how to build new diverse relationships.
- Synergic work between various groups or individuals within the Quito Hub system (researchers, communities, partners, institutions, etc.) where there are spaces for dialogue and an exercise of dynamic and fluid power between them.

During the feedback from break out groups, further reflections emerged around the definition of "equitable partnership". For example, Eva suggested that partnership is a term related to the private sector and neoliberalism, therefore her group reflected on the opportunity to replace partnership with "relationship". The latter indeed gives an idea of relationships between people rather than of a contract. In this way, "equitable relationships" could better describe the Quito Hub in terms of a continuous process of socialization and relationships (*Sociabilidad equitativa* and *Relacionamiento equitativo*) across each other, as you cannot sign a contract (that is what a partnership can describe) with someone that you do not know. This also implies that to reach

an agreement time is necessary for knowing each other. In addition, equitable partnership should include not just Quito Hub members, but also research participants and stakeholders. Teresa added that the focus on the relational process is an important aspect to take into account for our definition of equitable partnership. In this way, Jonathan described "equitable partnership" as a "synergic work within the system of the Hub" that includes investigators, research participants and stakeholders. Within such system, a relational and dynamic space exists. Notwithstanding calls for equity, the groups also discussed power relationships emerging into this partnership. For example, a Foucouldian discussion about power emerged in the group of Marco. The group recognized that power relations exist inside and outside the project, and surround our work. According to Marco, "there are micro-relations and relations of power that should be recognized. Equitable partnership is the equilibrium between these powerful relationships and our interactions".

#### Break out groups - Question 2: What are the elements that make a partnership equitable?

Break out groups mentioned different elements to create an equitable partnership in the Quito Hub. Below a list of some of the mentioned elements:

- Curiosity and openness to learn
- Equitable access to opportunities
- Horizontal relationships
- Appreciation of, and value assigned to, differences between us
- Empathy
- Humility and mutual respect
- Fluid and effective communications
- Reflexivity and feedback
- Transparent information
- Flexibility in all aspects of the project
- Shared responsibilities, actions and results.

According to Elisa S., "Curiosity and openness to learn" is an important element for equitable partnership. Indeed, we recognize that the large (cultural, disciplinary, linguistic) differences existing within the Quito Hub imply that we all have different strengths, knowledge and capacities, and all of them should be equally valued. We can also consider equitable in the sense of accessible. In this case, this means that we all have an "Equitable access to opportunities". To ensure the same access to everyone, we need to recognize the differences existing since the start of the project, and to balance those differences to "correct" these imbalances. Similarly, this idea of the equal value assigned to each knowledge reveals the importance of what Elisa P. defined as "Horizontal Relationships". Meanwhile, thinking in an equitable way also leads to reflect on how people are recognized in respect of their contribution across the project. We also need to consider how do we work as a group and how do we show our collective work when we interact with other stakeholders. As Jerry pointed out, "We need to think about working as a group with diverse experience and background and we need to represent that in our outfacing interactions".

#### Survey on satisfaction around equitable partnership in the Quito Hub

Mieke conducted an exercise to measure our satisfaction about the Quito Hub performance in respect of different elements of equitable partnerships. These elements were based on the main definitions and elements of equitable partnerships emerging from the previous discussion.

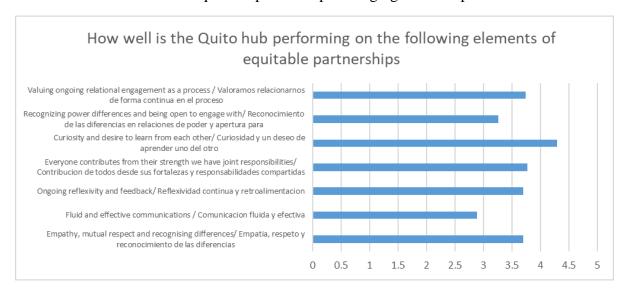


Figure 9: Mentimeter results on how well the Quito Hub is performing on elements of equitable partnerships. Likert scale of increasing satisfaction from 1 to 5 (26 participants, means).

During the plenary, several themes emerged from the discussion in relation to Communication, Hierarchies, and Hidden Work. These themes will be presented and discussed below.

#### Communication challenges

The team had a long discussion around different aspects of communication, as the feature "Fluid and effective communications" received a lower mean score in the Mentimeter exercise (see Figure 9). On this regard, Elisa S. added that this emerging issue makes us aware of the fact that language is still a challenge within our communication strategy. Notwithstanding this, it is also a way of learning and we should ask how people want to engage with the different language. In terms of communication, another challenge is related to the way top-down communication occurs to the rest of the Quito Hub. While the Quito Hub has done formal communication efforts through newsletters, discussion groups and seminars, there are also other informal communication means, such as Whatsapp groups across team members based in Quito, that are very effective and informal communication channels but UK people often are not part of them.

Slightly different voices emerged into the debate around communication. While the challenges of language and of formal vs. informal communication channels need to be recognized, Daniel also stressed that our interdisciplinary work is doing quite well exactly thanks to good communication channels. Therefore, we need to recognize that some aspects of communication are working. According to Marco, communication challenges emerge due to the complexity of the project. Therefore, it is important to clarify each one's role in order to not being overwhelmed with all communication, while maintaining horizontal relationships. On this regard, Alfredo made an important point around the need to contextualize internal communication within the personal time that everyone can invest in the project and the

individual over-efforts to comply with all the project's requirements. According to Alfredo, the project is very time consuming, and "the point is not that communication is challenging, but the fact that there are many activities and too much communication". The challenge rather is how to communicate well in respect to all the received information. In this way, there is no lack of good communication, but rather excess of communication.

#### Hierarchies

In previous discussion around interdisciplinarity, power and hierarchies emerged as topics that have strict relationships with equitable partnership. Indeed, while we consider hierarchies as a point for discussion in the Quito Hub, Jenni claimed that we should also recognize and appreciate the differences between the way the Quito Hub is run and the way the project as a whole is run, in particularly in terms of hierarchies. Accordingly, in the management of a large project such as Tomorrow's Cities there are some "roles of the game" we need to recognize. Indeed, as Marina added, ongoing internal discussions at GCRF level focus on the need for decolonizing GCRF research and revising pre-existing structures of decision-making and management. With no doubt, power relations and associated hierarchies exist within the Quito Hub. However, Teresa pointed out that in a project such as Tomorrow's Cities there are people who are responsible for other people and for their tasks; therefore, hierarchies in some ways help to manage these responsibilities. This is what we realized for example in our meetings in March. From then, this point has been actioned in a very positive and fruitful way. Therefore, the Quito Hub probably does not need to get rid of hierarchies, but rather to discuss them, for example in terms of gender.

#### Hidden work

It was mentioned the need to recognize the work each one does in the Quito Hub. However, there is a lot of "hidden work" —as mentioned by Eva- in the Quito Hub that is crucial for realizing everyday tasks and for as an effective communication channel and networking. However, this hidden work and the people who do it are not recognized within the Quito Hub. Jenni raised a similar point and urged the need to talk about the unexplored topic of gender and hidden work. Indeed, from the discussion along the two workshops it was clear that a lot of people are doing some forms of hidden work. Therefore, recognizing that we are all doing more work than required is a priority, but on the other side we need to avoid people do hidden and extra work at all. We can do this by helping each other, and being curious, gracious and kind to each other. On this regard, Marina added that clarity of role is a critical element across main interdisciplinary projects. We should ask ourselves where does own role begin and where does it end, and how do we navigate the differences while also recognising that people are contributing from their roles.

#### Final reflections

The fruitful engagement around some major points for discussion led us to conclude that we have a lot to celebrate and we need to tell ourselves that we are doing well. Marina recommended that we work through some of the challenges that have emerged in these sessions and that we have a follow up with some case studies for example where some of you are happy to talk about their experience into interdisciplinarity. Similarly, Elisa S. added that a good starting point is that we are all very proud about our work, as well as we are motivated and

committed to navigate through these challenges. Our curiosity is also one of the strengths we have, but we also need to have this idea of kindness not to compete with each other but to work together. While we are committed to work in the project, we also need to learn how to say no, as we cannot be engaged in everything. This is also a useful suggestion when looking at our personal impact in the project, and we need to learn that we cannot have impact everywhere. We need to choose where we can contribute in order to maximize our possibility to have impacts. We know we are trying to be innovative but we also recognize this is difficult and hard. We are committed to continue working hard and to put ourselves in difficult positions, but at the same time, we recognize that this is challenging.

#### Actionable learning

During these two workshops, we discussed and reflected on several aspects related to research and to internal and external interactions of the Quito Hub. We had the opportunity to share our knowledge, opinions and feelings within an informal environment that was open to give value to and to learn from each other. We openly discussed the challenges and opportunities that we faced along these difficult months. Thanks to this, we generated relevant knowledge about ourselves as individual researchers and as Quito Hub. In turn, this knowledge generated opportunities for individual and collective learning, and for moving towards actions that can benefit the Quito Hub and pave the way towards achieving its goals. As a form of actionable learning from these two workshops, we are drafting a plan with general rules that mirror the main points emerged in the workshops and that we think are important to guide in an equitable way our everyday individual and collective work, interactions, and relationships within the Quito Hub. The sections below will show how to promote actionable learning into future activities of the Quito Hub. To do this, we have summarised the most relevant points that emerged during the discussion, and proposed an actionable learning strategy for each one.

#### Reflexivity

During these months, an individual and collective reflexive journey within the Quito Hub allowed reflecting critically on our research and interactions, and on their challenges and opportunities. Reflexivity helped to reflect on the meanings of being a researcher in a project such as Tomorrow's Cities and working on Quito, on our relationships and positionality with the stories that we collect and the people who tell them to us. In terms of actionable learning around reflexivity, we will continue to consider our work in the Quito Hub as a continuous reflexive process. We will create moments like these two workshops in the future, into larger groups involving the whole Quito Hub or in smaller groups based on a specific subtheme. These moments will allow reflecting and being self-critical on ourselves and on our work, and will also help us in using our knowledge to build genuine interactions and fruitful relationships with actors outside the Quito Hub.

#### The political nature of ethics and positionality

Ethics and responsibilities of doing research in Quito emerged as key points to reflect on our interactions with research participants. We realized an ethical dilemma exists around our positionality between communities and institutions. We reflected for example on the involvement of the Municipality as partner of our project, on the use of data, and on how to take into account for pandemic's impacts on communities within our research and interactions. We also realized that research is not neutral and that is an explicit political act and a responsibility with political consequences. These reflections offer a great opportunity for the Quito Hub to create a space, and to plan in an innovative and reflexive way for negotiating ethics and our interactions with research participants. In terms of actionable learning, we will create organized moments to discuss more in depth the role of ethics and positionality into our activities.

#### Working with the Municipality of Quito

We have previously mentioned the ethical dilemmas of having the Municipality of Quito as a partner of the project. In terms of actionable learning, we will foster a cross-hub discussion around this, as other project's hubs might have similar issues and can offer inputs for a common solution. We want to share our experiences with other hubs and learn from them, as well as ensure consistency along the project for ethics and decision-making around these issues. Meanwhile, we are drafting a clear letter of intent with the Municipality where we outline the activities we are conducting and how we are going to share data with them, as well as when they will be included in the activities that the different teams do, and when not.

#### Knowledge co-production

We have recognized that generating knowledge is not an exclusive top-down process enacted by academic scientists and experts, but rather a process of mutual learning shared with communities and institutions. This process gives value to local knowledge and experiences towards a co-production. In the Quito Hub, knowledge is not just the academic co-produced knowledge, but is also related to learning about how to do research, interact, and promote networking in an international, multi-hazard, participatory, and impact-oriented project. Indeed, for many of us, recognising and reflecting about this kind of knowledge is relatively new. Therefore, we think this is an important aspect that deserves to be fully acknowledged as a part of our learning process and knowledge co-production. In terms of actionable learning, as our activities into case studies include by design the deep engagement of local communities and institutions, we will continue to make efforts into creating a space for dialogue in order to co-produce knowledge through a process of feedback and constant interaction with research participants and stakeholders.

#### Interdisciplinarity

The Quito Hub did an intense work towards designing and implementing interdisciplinary research both across disciplines and between researchers and research participants and stakeholders (see Annex 3). Interdisciplinarity allows recognizing and giving value to each researcher regardless of background, age, and expertise, and integrating methods and data from different disciplines. Interdisciplinarity also allows thinking about risk in a systemic and complex way, and unpacking complexity and diversity of multi-level urban risk in Quito. Notwithstanding this, interdisciplinarity requires time, patience and mutual understanding, and we need to reflect more on moving from intentions of interdisciplinarity to its practice. We also need to take into account language barriers, power relationships, or hierarchical roles in our everyday interactions, and to ensure the real engagement of all the people formally involved in the project. Nevertheless, we are all committed to interdisciplinarity. Therefore, in terms of actionable learning, we will create a structured process to:

- identify the areas within the Quito Hub and each subtheme where interdisciplinarity is still challenging;
- identify moments or activities where the Quito Hub members (or disciplines) felt excluded or marginalized into subthemes' or hub's discussion;
- move from this to create a space for designing theoretical and empirical trajectories for interdisciplinarity.

#### Moving forward after the impacts of the pandemic

The pandemic has had several impacts on both the research participants and us as researchers, and in turn on the Quito Hub activities. However, the pandemic also allowed to take an active break and deeply reflect on our everyday individual and collective practices and interactions in the Quito Hub. Thanks to these reflections, we understand better the need for taking care of ourselves, our colleagues, and all research participants. We recognize that these challenging times require empathy and patience. Therefore, in terms of actionable learning, we are committed to building formal and informal relationships that promote empathy and care about other members of the Quito Hub and research participants, in particularly those from the most affected communities.

#### Impact and TOC

During these two Workshops, we have realized that the TOC offers the opportunity to have a reference point to reflect and discuss the ways to achieve impacts and design impact pathways. TOC is also an opportunity to build a structured and systematic framework to guide us from the initial mobilization of resources to the implementation of activities and the reach of the final impacts, and to constantly revise our paths to wards impacts. However, the Quito Hub has still work to do to conceptualize the Tomorrow's Cities project with an impact-oriented perspective, and to reflect on its application within each subtheme. In terms of actionable learning, therefore, we will finalize our TOC by receiving feedback from the Quito Hub and research participants, and will update and revise accordingly. We will also narrow reflections at the subtheme level so that all members can understanding and frame their work in an impact-oriented perspective.

#### Curiosity and openness

We have realized that curiosity and openness are ideally characteristics of each member of the Quito Hub. By doing attempt to be interdisciplinary and learn from each other, we have been showing being curious about methods and knowledge from different background, as well as open in learning new things and interacting with research participants and stakeholders. We believe that a genuine and spontaneous tension towards curiosity and openness exists in the Quito Hub and represents an invaluable strength to facilitate our interactions and be innovative in research methodologies and dialogues with research participants. However, in terms of actionable learning, we will consolidate curiosity and openness in our work practice.

#### Communication means

We have realized that sometimes our communication has not been effective. Language barriers have inhibited the participation and engagement of some people. Also, due to the pandemic, some of us missed the opportunity to travel and practice the less spoken language into fieldwork or meetings. In addition, informal communication channels, while effective for some members of the Quito Hub, sometime inhibited some people to receive useful information. In this way, we commit to identify those communication channels that make the dialogue as much as open and inclusive. We should be also aware that we need a balance between the communication flow and the time and resource that can be invested individually and collectively into the project. In terms of actionable learning, we will continue making an effort to ensure that any communication mean is bilingual and inclusive, as well as that we will recognize informal

communication means as part of the Quito Hub communication strategy. We will also review the use of the Quito Hub newsletter and we might change it accordingly.

#### Hierarchies and power

We have recognized that within the Quito Hub hierarchies and power exist and involve both interactions between Quito Hub members and interactions across stakeholders (e.g., interactions between communities and institutions) or within stakeholders (e.g., power relationships existing within communities). While this in some ways potentially conflicts with the idea of equitable partnership, we should also recognize that hierarchies exist because in the Quito Hub each role has different responsibilities, and in several cases some team members are also responsible (in terms of e.g. mentorship and funds) for other Quito Hub members. In terms of actionable learning, we will ensure that no one considers him/herself or the group where he/she is involved as subaltern to any other ones. Meanwhile, we will clarify our roles and individual responsibilities into subthemes or the whole Quito Hub, and continue to use our different experience and responsibilities as a form of commitment towards mentorship and mutual learning.

#### Hidden work

Everyone in the Quito Hub is committed to work hard and be enthusiastic about the assigned tasks. However, we have also realized that there is a lot of hidden work that people do (e.g. networking, building relationships, team building, administration, and mentoring). This work and its time often are not considered as official part of the project. It is therefore important that this work —and the time invested to do it- is recognized as such. It is even more important that this hidden work is fully recognized as formal work instead of as a burden impacting professional and personal time, and is shared across team members. In terms of actionable learning, we will ensure that each member of the Quito Hub is happy with the quality and quantity of the time and the work dedicated to the project, and in case they are unhappy, to understand the reasons and to find a solution (e.g., sharing tasks or removing any unnecessary work).

#### Gender

We have recognized that gender is one of the issues that did not emerge often into our discussions in these months but that needs to be taken into account during everyday interactions within the Quito Hub and with our research participants. In terms of actionable learning, we will make an effort to include a balanced representation from different genders into each of our activities (e.g., organizations of or visibility into collective meetings). We will also develop a specific research focus on gender, and include activities specifically targeting gender dimensions. In addition, we will organise some training activities to discuss gender bias. We would like support from the central hub on this point.

#### Conclusions

Along these workshops, we have recognized all the challenges that we have navigated in the past and we should cope with in the future. However, we have also realized that being part of a project like Tomorrow's Cities in the Quito Hub implies to navigate through several challenges and to find the best solution for them. Therefore, we have to congratulate ourselves

about where we are now, and look positively at the future with a positive attitude and feeling, in particularly in respect of our research practice and interactions. We have recognized that we are doing well in certain things and we need to improve in others. We have clear in mind what is going well and what needs to be improved. We are also ready to continue our reflections in designing and implementing our research methodologies in a multi-hazard, interdisciplinary, impact-oriented and innovative way, as this is key for being successful in providing adequate DRR impacts for the city of Quito.

We have reflected and discussed on the new knowledge generated along these months. However, at the end of these reflexive steps, which is the kind of knowledge we have created and are celebrating for? Our knowledge has been generated from our research theory and practice, ranging from the historical trends of multiple hazards in Quito to institutional actions of different stakeholders in DRR, soil and physical analysis in volcanic areas, or preliminary data on everyday life into communities. However, we should not forget that the discussions that emerged along these workshops and resulting from the reflexive and self-critical process along these months are themselves part of the new generated knowledge, and are themselves inherently part of our research. Therefore, they are research objects per se. The struggles we face in dealing with language issues, solving ethical dilemmas, reaching communities, delaying our fieldworks, addressing gender issues, and so on, are the new knowledge generated from a research process about ourselves. As mentioned at the beginning, indeed, MEL work into the Quito Hub does not just have reporting and accountability purposes, but also represents a process where the research team investigates itself, and where researchers and research subjects overlap.

### ANNEX 1 ACENDA Workshop 1 - 4th Soptember 2020, Workshop on our new kn

### AGENDA Workshop 1 - $4^{th}$ September 2020. Workshop on our new knowledge and Next Steps.

Time (BST)	Session	Outline
14:30 - 14:35	Introduction	Jenni Barclay: Our research agenda and how this is reflected in the presentations and discussions
14:35 - 15:07	THEME ONE: Hazards: historical records and impacts (Je-S THEME 1.1. and 2.1)	<ul> <li>Maria Antonieta Vasquez: The new historical timeline of hazards</li> <li>Francisco Vásconez: Recent geological history and changing ice cap of Cayambe</li> <li>Camilo Zapata: Detailed data obtained in the Quito case studies</li> <li>Scott Watson: Mapping change across the city: insights from above</li> </ul>
15:07 – 15:27	THEME ONE Discussion Panel	'Our forensic analysis: detailed foci and integration'.     Chair Elisa Sevilla. Panelists: Arry Fraser, Eliana     Jimenez and Liz Holcombe.
15:27 - 15:35	Screen Break 1: Introducing 'Risk Disco'	
15:35 - 16:00	THEME TWO: Theory and practice in urban planning (Je- S Theme 1.2 and 1.3 and 2.3)	<ul> <li>Jonathan Menoscal, Eva Filippi et al.: Governing, planning and managing risk-informed urban development.</li> <li>Maryssa Cupuerán: Unpacking the complexity and diversity of urban risk at neighbourhood level in Quito</li> </ul>
16:00 - 16:20	THEME TWO Discussion Panel	'Where next? Integrating Top down and bottom up'. Chair Marco Cordova. Panelists: Mark Pelling, Emily Wilkinson and Charles Tonui (ACTS, Nairobi)
16:20 - 16:25	Screen Break 2: Risk Disco 2	
16:25 - 17:05	THEME THREE: The experience and understanding of risk at different levels in a COVID-19 framework (Je-S theme 1.1. 2.3 2.4 and 1.4)	<ul> <li>Elisa Puga: What we have learned from community interactions during COVID-19 (an anthropological framework)</li> <li>Juan Gabriel Barros: Adapting physical vulnerability mapping for multihazards and our case study areas</li> <li>Malena Bedoya: Public history and building interactions with museum communities</li> <li>Giuseppe Forino: Our interactions during the pandemic: the process of knowledge production</li> </ul>

17:05 - 17:25	THEME THREE Discussion Panel	'Knowledge circulation as process to benefit the most vulnerable to risk' Chair: Teresa Armijos. Panelists: Alfredo Santillan, Ryerson Christie, Amy Donovan
17:25- 17:30	Screen Break 3: Risk Disco 3	
17:30 - 17:45	THEME FOUR – NEW APPROACHES TO RISK REDUCTION (first thoughts for Je- S Theme 3)	<ul> <li>John McCloskey: The new Tomorrow's Cities Risk Group – opportunities for Quito</li> <li>Marco Cordova: The Quito Hub risk Labs</li> <li>Sindicato Audiovisual/Kari Barragán: Introducing the Digital Platform</li> <li>Final remarks - Elisa S. and Marina</li> </ul>
17:45 - 18:05	THEME FOUR Discussion Panel	Developing Quito Hub's Plan for defining risk. Chair: Jerry Phillips. Panelists: John McCloskey, Marco Cordova, Kari Barragán and Joel Gill
18:05 - 18:15	Closing	Closing Remarks and commentary on relevance to MEL: Marina Apgar and Daniel Andrade

#### ANNEX 2

#### AGENDA Workshop 2 - 11<sup>th</sup> September 2020. Learning our way to Impact.

Time (BST)	Session	Outline
14:30 - 14:45	Opening	<ul> <li>Reflections from our last week's meeting - Jenni</li> <li>Introduction to the session – Marina</li> </ul>
14:45 - 15:35	Reflecting on Theory of Change	<ul> <li>Introduction - Giuseppe</li> <li>Quito's TOC - Marco</li> <li>How do we contribute to TOC? Break out groups discussion</li> <li>Plenary discussion</li> <li>Reflections and Comments – Marina</li> </ul>
15:35 - 15:45	Break	
15:45 - 16:40	Interdisciplinarity	<ul> <li>Introduction - Marina</li> <li>Where are we now? - Jenni</li> <li>Seminars and Workshops Evaluations - Giuseppe</li> <li>Interdisciplinary Stories - Break out groups discussion</li> <li>Plenary discussion - Marina</li> </ul>
16:40 - 16:45	Break	
16:45 - 17:55	Equitable Partnerships	<ul> <li>Introduction - Teresa</li> <li>What are Equitable Partnerships? - Mieke</li> <li>How do we define EP? Break out groups discussion</li> <li>Plenary discussion and reflections – Mieke</li> </ul>
17:55- 18:00	Break	
18:00- 18:15	Closing	Final remarks - Elisa S. and Marina

**ANNEX 3** 

#### Connections among Quito Hub members by main engagement into subthemes

Participatory Methods

