Co-designing Citizen Social Science for Collective Action

#5.2

Digital Output on Participatory Methodologies

Research Co-Design in CoAct R&I Action #3 on Environmental Justice

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Document History

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1.0	15th September, 2021	Arza, et al (see list of authors above)	Digital output (D5.2.) sent for comments to Consortium coordinators.
2.0	24th September, 2021	Arza, et al	First draft of D5.2 report to be commented by Consortium coordinators.
3.0	29th September, 2021	Arza, et al	Final draft of D5.2 report incorporating comments by Isabelle Bonhoure and Josep Perelló (UB).

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ACUMAR: Matanza-Riachuelo Basin Authority

CSS: Citizen Social Science

KC: Knowledge Coalition

QPR: ¿Qué pasa Riachuelo? (What's up Riachuelo)

1. Executive Summary

CoAct (Co-designing Citizen Social Science for Collective Action) aims at co-designing concepts, methods and tools for citizen social science (CSS) around "wicked" global social issues. Four different research and innovation (R&I) actions organise the empirical work of CoAct. This report presents the rationale, purpose, structure and content of a video, which constitute the deliverable D5.2 of CoAct, showing the co-creation process to be used in the dissemination of a digital platform developed in the frame of CoAct WP5. This video is especially important to enhance engagement of co-researchers and to foster new collaborations in the platform's implementation phase.

R&I Action #3 aims at co-designing CSS tools to facilitate actions contributing towards Environmental Justice in the Matanza-Riachuelo river basin, carried out by teams from UNSAM and FARN. The basin covers 64 km-long and 6 million people live there, most of them in vulnerable socio-environmental situations. In particular, we aim at co-designing a digital platform to produce and share data that can contribute to mapping different socio-environmental problems as understood by a diversity of stakeholders and promote concrete actions for addressing those problems.

The production and dissemination of the video is part of UNSAM and FARN teams' strategy to promote and sustain participation of the different types of stakeholders in the forthcoming activities of the R&I Action #3. The video shows the collaborative efforts in designing R&I Action #3 goals and the co-design process of the digital platform. By showing the platform as a result of a collective effort carried out during the initial stages of the R&I Action #3, we expect to promote participation in future key steps related to platform adoption and use, the analysis of data shared through the platform and the definition of strategies for visualisation to promote transformative actions.

The Covid-19 pandemic created delays and changes in the activities planned for T5.2 which also affected the D5.2. The former was delayed in six months while the latter was in nine months. We originally planned to co-design research using collective mapping techniques. They implied the organisation of workshops gathering around 40-50 people, from different neighbourhoods which proved to be impossible to implement with social distancing and other Covid-19 sanitarian restrictions. The

communities associated to the R&I Action #3 are amongst the most severely affected by the pandemic in the country, in epidemiological and socio-economic terms. In that context, we needed to change research co-design methods to other participatory methodologies, also based on workshops, but of smaller size which could be organised virtually and separately for different neighbourhoods. As a consequence of the change in co-design methodologies, we also needed to change the planned D5.2: from collapsible cartographies, which would have been the result of collective mapping activities to a digital output on participatory methodologies, which also shows the research co-design activities. Within the R&I Action #3 the D5.2 had the purpose of being used as a tool in the platform dissemination plan. This remained unchanged. In fact, in the context of digitalisation of interactive activities imposed by the Covid-19 pandemic, a digital output works better as a tool for disseminating the digital platform. Changes in T5.2 and D5.2 were included in the RP 1 Technical Report, which has been approved by the Commission.

The report is organised as follows. Section 2 presents an introduction to CoAct and the R&I Action #3 on Environmental Justice; section 3 describes the stages of the R&I Action research cycle and presents different stakeholders' profiles and their roles; section 4 discusses the rationale and differential value of a video in Covid-19 times; section 5 describes the main activities that provided inputs for the video, briefly comments on the video creation process and presents the video structure and detailed content. Section 6 describes how we plan to use the video in the upcoming months and section 7 concludes.

2. Introduction

2.1 CoAct General Concept

CoAct is proposing a new understanding of CSS as a participatory research co-designed and directly driven by citizen groups sharing a social concern (See Figure 1). CoAct proposes to face four "wicked" social global issues by engaging citizens in a vulnerable situation. The joint effort will result in the implementation of new or improved science-related policies and the advancement of the CSS approach with regards to its applicability in concrete fields or research.

Figure 1: Citizen Social Science in Action, with citizen groups who share a social concern as co-researchers and with the support of the Knowledge Coalition.

In all CoAct R&I Actions (Mental Health Care, Youth Employment; Environmental Justice and Gender Inclusion), citizens in a vulnerable situation are placed at the centre of the research and their role and dedication conceptually recognize them as co-researchers. In practice, in all the R&I Actions co-researchers participate in all stages of the research cycle. This requires developing strategies to sustain such participation.

2.2 R&I Action #3 on Environmental Justice: Scope

The R&I Action #3 on Environmental Justice explores socio-environmental problems in the Matanza-Riachuelo river basin, in Buenos Aires metropolitan area, with the aim of promoting transformative actions.

The Matanza-Riachuelo is a heavily contaminated 64 km long river. 6 million people live in the basin (15% of Argentinean population) and it is estimated that 1.8 million of them live in highly vulnerable conditions[1], in terms of housing and access to basic infrastructure. There are several socio-environmental problems related to:

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[1] See social vulnerability index built by ACUMAR (2018) p. 31.

i) *contamination* from production activities (mainly industrial but also agriculture); sewage effluents since 50% of population in the basin is not connected to sewage system (ACUMAR, 2020, p. 44) and open garbage dumps

ii) *social vulnerability* in terms of housing (around 800 people live in informal settlements and slums (ACUMAR, 2018, p.31) some of them built on garbage dumps), lack of access to safe water for 21 % of the basin population (ACUMAR, 2020, p.36), and poor access to health system, which exacerbate the social impact of contamination.

iii) *limited participation in sanitation policy:* the river marks the limit between Buenos Aires City and Buenos Aires Province, thus there are different political jurisdictions involved, often governed by different political parties: the City; the Province; the Municipalities (within the Province); and the Nation, that rules over water surface. In this context it is very complex to advance sanitation policies. In 2008 a new national authority on the basin was created to develop a sanitation plan. However, there was very limited citizen participation in its design and implementation.

Environmental justice is based on a fair treatment and participation and involvement of people affected by environmental issues in the development, implementation and application of environmental laws, regulations and policies *(EPA, 2021)*. In the basin this is not guaranteed because there is a greater concentration of environmental dangers occurred in "territories of greater social relegation and on citizens with less political and economic power" Merlinsky (2013, (p.31) and because there is very limited participation of people directly affected by contamination (Cané, 2021).

The CoAct R&I Action #3 goal is to promote CSS tools to advance transformative actions towards environmental justice. To that end the research teams from UNSAM and FARN promote strategies for participation of different stakeholders in all stages of the research cycle, as we explain below.

3. R&I Action #3 research cycle and stakeholder's participation

3.1 Stages in the CoAct R&I Actions

Five research stages organised the different R&I Actions in CoAct (Figure 2). In all of them, citizen participation is sought. From the preparation of research (stage 1) and research co-design stage (stage 2), when main target groups are identified and the research question and innovation challenges are co-defined, to the decisions about R&I Actions for transformation (stage 5) guided by the collective analyses (stage 4) of co-created data (stage 3).
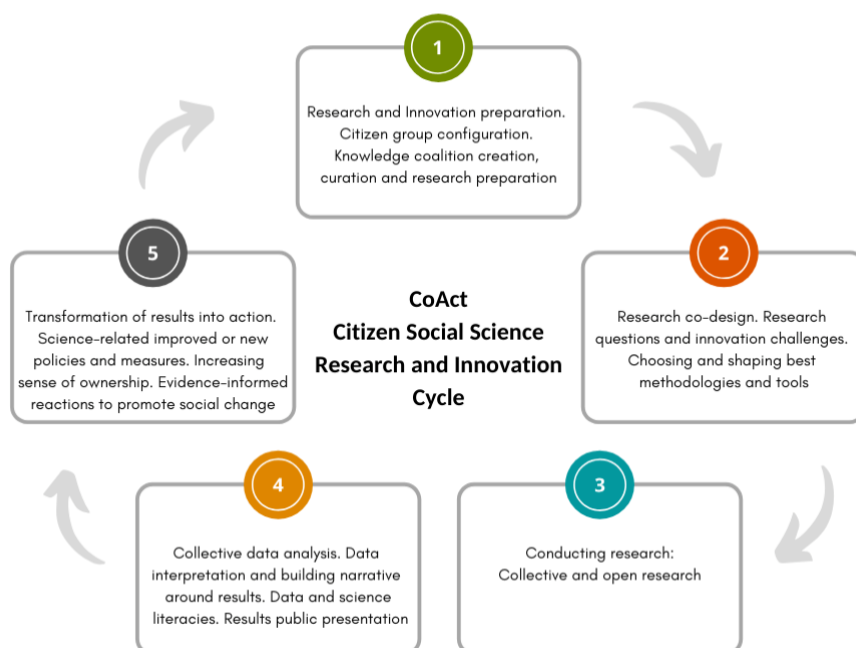

Figure 2: CoAct Citizen Social Science Research and Innovation Cycle: five stages from preparation to transformation.

3.2 Tasks in the R&I Action #3 on Environmental Justice

In the Environmental Justice R&I Action #3 this research cycle has been organised in five main tasks as can be seen in Figure 3.
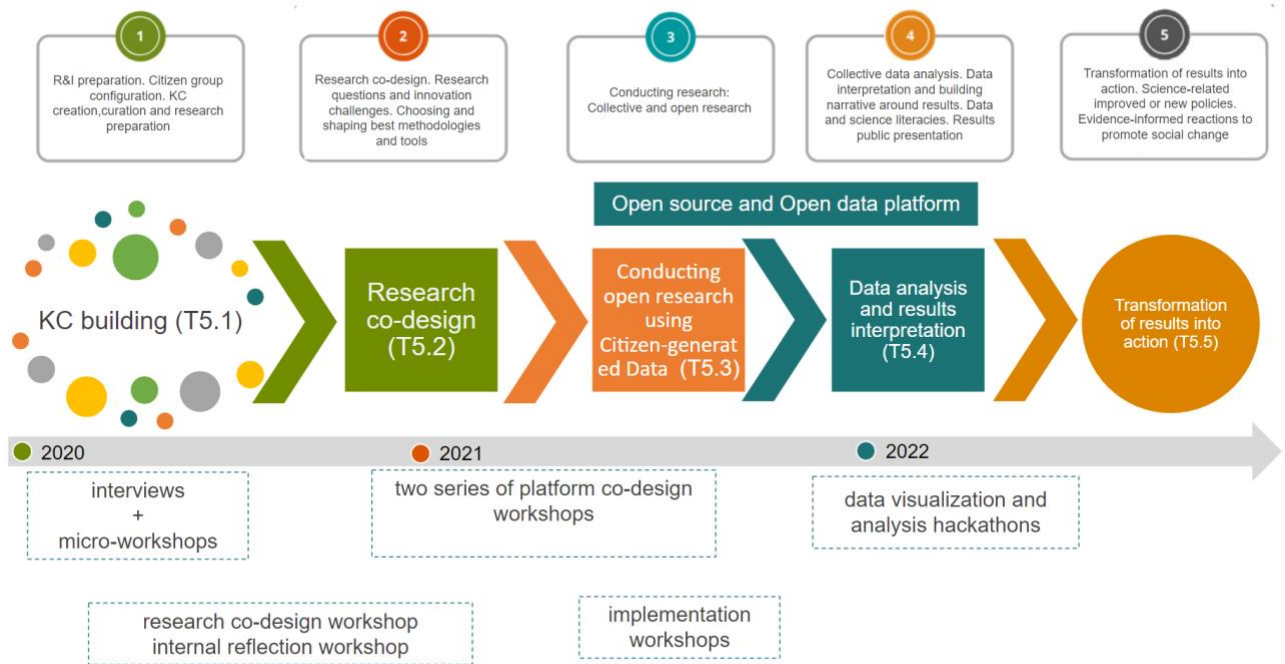
Figure 3: CoAct Research Cycle in the R&I Action #3 on Environmental Justice

T5.1 Knowledge Coalition (KC) creation, curation and research preparation

The aim of this task is to build and enable participation of a network of stakeholders, which either have experience in the basin in different roles, or do research or work for environmental justice, or have previous experience in participatory knowledge production. The KC members frame the research based on their perceptions and understanding about main socio-environmental problems in the basin and their possible solutions.

T5.2 Research co-design through participatory methodologies

In this task we co-design research through participatory methodologies, largely based on virtual workshops with various stakeholders including community actors. The main goal is to co-define the research and innovation challenges we will embrace using a co-designed digital platform for citizen generated data. This task's core activities included the initial identification of themes and purposes of the digital platform.

T5.3 Conducting open research using Citizen-generated Data

The main purpose of this task is to co-design a platform of citizen-driven data and to promote its use. This is done through co-design and implementation workshops organised jointly with various types of stakeholders, but mostly community actors, called co-researchers. The platform development builds on FARN's previous experience with *¿Qué pasa Riachuelo?*, a geo-referenced platform for monitoring sanitation policies in the basin, which was active from 2011 until 2014.

T5.4 Data analysis and results interpretation

With this task we expect to analyse data included in the platform, in order to develop visualisations of socio-environmental issues needing transformation, so as to promote action. Several participatory activities with co-researchers, policy makers, data scientists, social scientists, activists and some KC members are planned for this task.

T5.5. Transformation of results into action and applicability in Europe

The main goal is to identify some measures of transformation that could become visible using data in the platform and to reflect on outputs and processes carried out throughout the R&I Action #3 that could be applied in the European context.

At the time of producing this document we had finished most of the activities included in tasks T5.1; T5.2 and we were running activities included in T5.3.

3.2 Stakeholders in the R&I Action #3 on Environmental Justice

Several different types of stakeholders are involved in the R&I Action #3 such as learning organisations, policy makers, academic researchers, civil society organisations and others, as can be seen listed in Figure

4^2. During the various activities involved in the research cycle and tasks, they may adopt different roles. Three main roles have been identified for this R&I Action #3:

- KC members, who have an advisory and facilitation role for the different activities in the R&I Action #3,

- co-researchers, who participate in the co-design of the different stages of the research cycle, especially in the definition of socio-environmental challenges and the co-design of the digital platform

- data producers, who mostly participate in the stage of data collection using the digital platform

This diversity in profiles and roles implies that there are different factors that need to be contemplated to promote active participation in all the different stages and tasks. The deliverable presented in this document was produced to promote participation from different stakeholders located in the basin to act as co-researcher and data-producers in the forthcoming activities of our R&I Action.

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[2] Arza et al (2020) describe some of these groups in more detail in the context of the creation of the knowledge coalition of this R&I Action #3.
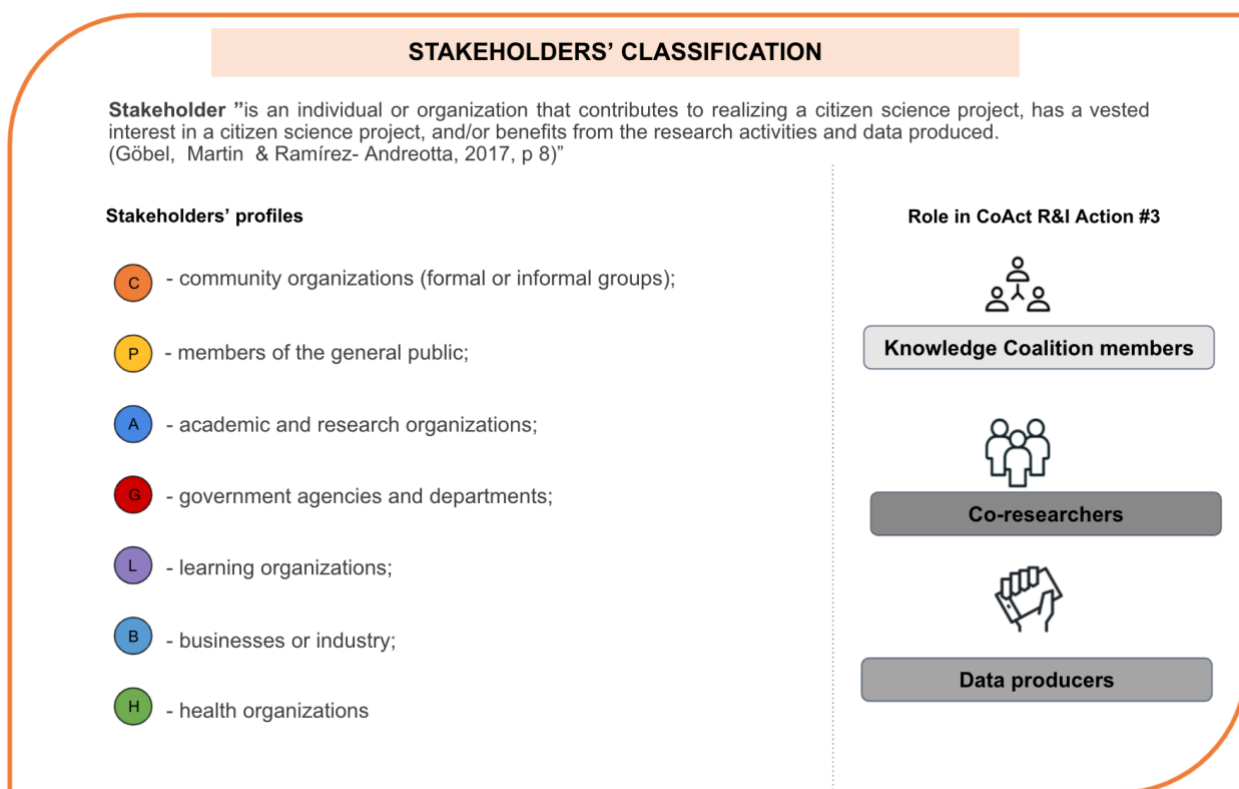
Figure 4: Stakeholder groups and their role in the R&I Action #3 on Environmental Justice.

4. Rationale and differential value of a video in Covid-19 times

The task T5.2 on research co-design has an associated deliverable D5.2. This was meant to be an output that could show the collective effort in designing the research, which will in turn promote further participation by using and disseminating the digital platform. The Covid-19 pandemic implied to adapt the original plans regarding this deliverable.

4.1 The Covid-19 pandemic and associated changes in the original plan

The Covid Situation and the associated lock down restrictions affected the communities in the Matanza-Riachuelo-basin disproportionately more than in other parts of the country. The Buenos Aires metropolitan area had the highest infection rates in the country during 2020 and most of 2021 and consequently very restrictive lockdown measures. Housing conditions made social distance particularly complicated. Restrictions due to lockdown exacerbated economic emergencies in these communities.

Task T5.2 on research co-design was originally planned to be carried out through collective mapping workshops implemented with the participation of around 40-50 people during two days. This proved to be impossible to organise due to sanitary and regulatory reasons. Thus, we needed to change our strategy regarding this task. We used other participatory methodologies mostly based on virtual workshops. Platform co-design workshops used a human-centred and participatory approach for digital design (Boisseau, et al 2018). As a result of the change in the activities and due to the restrictions imposed by the pandemic, we also needed to change the associated deliverable D5.2. Originally, the collective mapping workshops would have produced inputs for analogic cartographies to be designed by an art-activist group (Iconoclasistas), which were going to be used to disseminate the project's forthcoming activities, especially the digital platform. Since we were not able to perform onsite collective mapping techniques in co-design activities, those cartographies could not be produced either. Thus, we changed the deliverable to produce a digital output. These changes were approved by the Commission in March (2021) and were included in the RP 1 Technical Report, which was also approved.

4.2   The differential value of the video in Covid-19 times

The video is more suitable to disseminate future activities in the context of Covid-19, since most of the channels of interaction continue to be virtual. This deliverable is also the result of the co-design activities but has better prospective for contributing to the planned purpose of D5.2: to disseminate the project and particularly the platform. This short video motivates participation for environmental justice in Riachuelo's basin. In the Covid-19 context, when most activities have to be held virtually and communication is predominantly digital, we believe it fits better our R&I Action plans. As it is explained

below, the video presents the collaborative dynamics and reflections that occurred during our co-design activities. We consider that a video makes it easier to promote follow-up communication with co-researchers who participated in previous activities and to engage further participation in their networks. We will include this output in the platform's communication strategy in order to increase the number of final users.

5. Structure and inputs for the video

In this section we describe the inputs, the process, the structure and the main contents of the video introduced in this document as the deliverable D.5.2 of CoAct R&I Action #3 on Environmental Justice.

5.1   The inputs

The main inputs for the video are the insights and results of the several activities carried out for tasks T5.1, T5.2 and T5.3 (see Table 1).

During the first year of the R&I Action we conducted **interviews** with various stakeholders (community organisations; academic researchers and policy makers) that contributed to build the KC which was defined as a "network of stakeholders who are interested in and informed about the R&I project goal and vision and who play an active role, either participating in or co-designing different actions" (Arza et. al., 2020). Actors in this network interact and deliberate in spaces mainly facilitated by UNSAM and FARN teams.

We also carried out three **micro-workshops** with community actors and organisations from the basin. Two of them were conducted through video calls and one was onsite. During these workshops we identified and mapped the main socio-environmental problems in the basin, the stakeholders and their practices to address those issues (see Arza, et al 2020).

In addition, based on interviewees' and participants' practices and perceptions and on the analysis of previous experiences of participatory knowledge production in the basin (Actis et. al., 2020) we assessed the potential of CSS tools for addressing different challenges. As a result, we selected three main themes of great relevance in relation to Environmental Justice and which are part of FARN's agenda in the basin:

- **Resettlement** of population affected by situations of environmental risk: some people in the basin currently live in areas where they are exposed to environmental risks and housing infrastructure problems. These affected people are included in resettlement plans. A CSS approach is key in this theme because sharing information and participation are needed to find integral solutions.

- **Conservation of green areas:** in the upper side of the basin there are wetlands and green areas which are important for the basin's biological and cultural patrimony. These create important ecosystemic benefits and allow social interaction and recreation, contributing to the population's wellbeing. However, these areas are currently threatened by industrialisation and urbanisation activities. Thus, a CSS approach is very relevant to share information and promote participation to contribute to the conservation of these areas.

- **River water quality:** the basin is contaminated by industrial waste, liquid effluents, dangerous residues, clandestine dumps and collapsed landfills. A CSS approach is desirable not just to share, create and discuss water quality indicators, but also to highlight the importance of the river as a bio-cultural resource. In this theme we work especially with learning organisations.

The research co-design activities that followed aimed at discussing the characteristics of the platform itself: what it would need to have and allow to do in order to promote transformative actions leading to advance environmental justice in the basin in those three areas.

A **virtual co-design workshop** was organised in October 2020 with community actors, academic researchers and policy makers where we collectively discussed the sources of information they used and the problems they faced when using them. This contributed to broadening the diversity of perspectives of what is considered useful information for the digital platform. We also asked about obstacles and problems that may turn up when designing and using a digital platform. To further process the results of

these activities, we organised an internal follow-up workshop with teams from UNSAM, FARN and platform developers.

The general aim for the platform which at the time of drafting the R&I Action #3 scope had been expressed as "to share and create new knowledge on citizens understanding of socio-environmental problems and their practical experiences in dealing with them" became more specifically defined through the co-design workshop in three purposes:

- to **share experiences** of the actions carried out by communities living in the basin
- to **organise** the available public information and **collectively produce** new information to facilitate actions for transformation
- to work as an **interactive channel** for different groups to develop actions

The activities that came next went more in depth in co-designing with co-researchers the digital platform in the three themes. In April, June and August 2021, we conducted the **first series of platform co-design workshops** in three virtual workshops facilitated by an external human-centred design expert. We organised these workshops thematically (resettlements and conservation of green areas themes) to better understand potential uses and expectations in the platform to address issues related to each theme. Through this series of workshops, we corroborated that co-researchers were motivated to co-design the digital platform as long as it focuses on building a tool that, by enabling neighbours participation, contributes to transformative actions.

In addition, we conducted one additional workshop as part of this first series with community libraries, since we thought they could promote the use of the platform as part of their own pedagogical and information-provision activities. In this workshop librarians interacted with the platform prototype and analysed reporting forms[3]. They found the platform a collaborative tool that enabled citizens to make their experiences visible and to consult information on the basin's environmental situation. Besides, they

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[3] We had previously organised a workshop with several community libraries from the Matanza-Riachuelo Basin when UNSAM and FARN teams introduced the CoAct project and librarians shared their previous experiences working with their community. This workshop was organised to extent the R&I Action #3 territorial network and to identify community libraries that may be interested in the platform co-designed activities.

mentioned that primary and secondary teachers and students might be potential final users of the platform. Finally, librarians expressed that they would like to participate in the following thematic co-design workshops. They claimed that they could play a key role in the platform's implementation, as they are used to provide access in their premises to digital resources and promote their use among community actors.

In **the second series of platform co-design workshops**, which began in August 2021, we explored platform prototype-specific functions implemented according to previous results. We organised one more virtual meeting for the green areas conservation theme and another for the resettlements process theme. By asking co-researchers to test the reporting function and after discussing their assessments, we collected several suggestions to improve the platform's user experience and user interface. For example, they suggested that the prototype as currently developed might not be easy to use if you are not previously informed. Considering this, we decided to create an informative home page to guide new users, show how the platform might be helpful to different stakeholders, and to add descriptions and definitions to the displayed buttons. These new features will be available on the alpha 0.1 version of the platform.

Task	Type of activity	Date	Stakeholders' profiles who participated	Activity Goal	# People reached
1	Interviews	April 2020 to May 2021	C A G	Mapping socio-environmental problems in the basin. Identifying initiatives of knowledge co-production in the basin. Understanding perceptions of the potential of CSS tools for Environmental Justice.	29
1	Three micro-workshops (two virtual and one in person)	August 2020 (virtual) and December 2020 (in person)	C L	Mapping socio-environmental problems in the basin. Identifying initiatives of knowledge co-production in the basin.	18
1 and 2	Research virtual co-design workshop	October 2020	C A G	Understanding perceptions of the potential of CSS tools for Environmental Justice. Building the KC.	22
2	First series of platform co-design workshops (three virtual workshops)	April, June and August 2021	C G	Presenting platform's progress in resettlements and conservation of green areas themes. Collecting impressions, suggestions, potential uses and expectations regarding the digital platform.	14
1 and 2	Workshop with community libraries	May 2021	L C G	Presenting CoAct. Expanding the KC and amplifying the territorial reach of the R&I Action #3.	10
2	One virtual workshop with libraries and cultural centers (part of the first series of platform co-design workshops)	June 2021	L C	Amplifying territorial collaboration networks. Presenting the platform's progress. Collecting impressions, suggestions, potential uses and expectations regarding the digital platform.	9
2 and 3	Second series of platform co-design workshops (two virtual workshops)	August and September 2021	C G L	Exploring the use of specific functions of the platform for the theme on conservation of green areas and resettlements. Using the reporting function.	7

Table 1: Main activities carried out in CoAct R&I Action #3 from April 2020 and September 2021 which provided input for the video.

5.2   The video creation process

To begin with the planning and the definition of the conceptual and visual content for the video, we started with collecting information from the activities carried out as Tasks T5.1, T5.2 and T5.3.

The first activity was to examine the informed consent forms for all people we reached throughout the activities described in Table 1 to be sure of what information can be shared in each case.

Secondly, in order to show the importance of citizen participation in the platform co-design for each of the three themes, UNSAM team analysed transcripts to identify quotes that showed that the platform themes were relevant for Environmental Justice and that actors' participation was key for the platform to be appropriated and used. The importance of collaborative approaches and its power for transformation became evident in the words of different stakeholders.

Thirdly, the same team analysed the results of co-evaluation activities to more clearly identify the stakeholders' expectations regarding the platform.

Fourthly, we described the different activities carried out as part of the research co-design (see Table 1) and the planned activities for the near future to create a narrative of how a CSS approach was implemented in CoAct R&I Action #3.

Fifthly, UNSAM team created a document with these insights and shared it with FARN, which organized the material in a script. Both teams worked together refining the script in several rounds.

Then, FARN communication team selected and produced images and produced a first version of the video.

Finally, both teams evaluated the video, suggested minor corrections for improvements and shared it with other members of CoAct Consortia, who also suggest some revisions. The final version was created including these revisions.

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5.3   The script

In what follows we literally translate the script and show some of the images included in the video. To gain from FARN's reputation and networks we decided to name the digital platform as FARN's previous one *¿Qué pasa, Riachuelo?*, which means "What's up, Riachuelo?", in short QPR.

"

> *CENIT-UNSAM and FARN present "¿Qué pasa, Riachuelo?" an interactive platform created within the framework of the project "CoAct: Citizen Science for Environmental Justice in the Riachuelo."*
>
> *CoAct proposes a new way to promote environmental justice using citizen social science tools through the development of participatory research co-designed and driven by groups of people who share a social concern and co-produce useful knowledge for social transformation.*

"¿Qué pasa, Riachuelo?" was born under this premise. This platform enables people to organise, systematise, and share the visions and knowledge accumulated over the years by social and scientific organizations, NGOs, and other actors seeking solutions to the Basin's severe socio-environmental problems.

How did QPR come about?

The platform developing process had three stages.

Stage 1: Action Preparation

In this stage, conversations, exchanges and micro-workshops with inhabitants of the Matanza-Riachuelo Basin were the basis for:

Building a critical actor-network with whom to work for environmental justice in the Basin.

Identifying the area's environmental problems to be addressed through citizen social science tools.

And defining themes to address in the next stage. These are:

- *Resettlement process of families that live in neighbourhoods, slums and informal settlements in the Basin.*
- *Key natural spaces to preserve the basin's cultural and biological patrimony.*
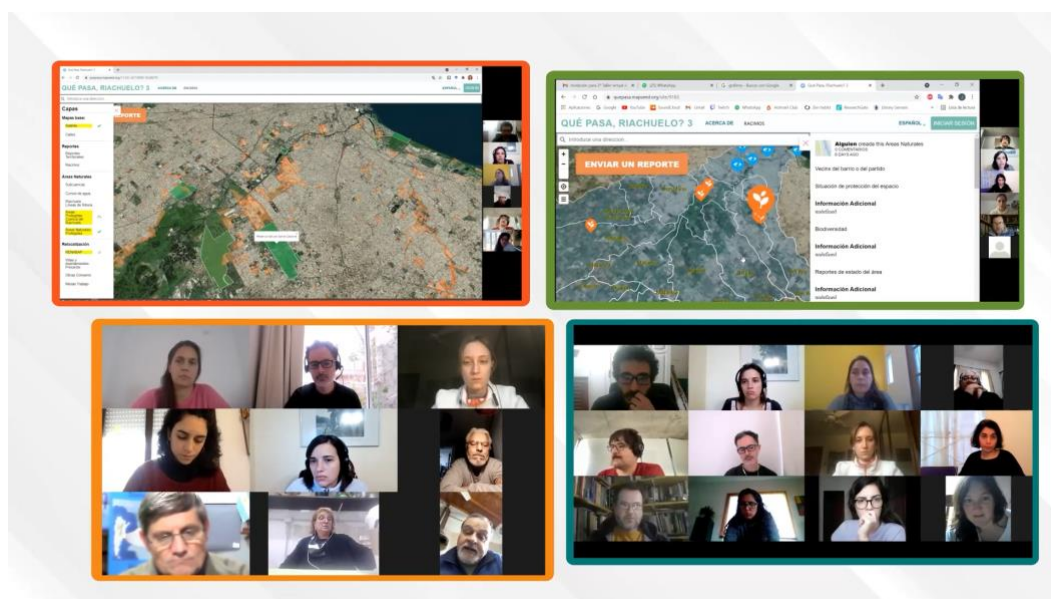- *And the river water quality*

Stage 2: research and platform co-design

Through virtual co-design workshops held between 2020 and 2021 and putting into practice citizen social science, we defined the platform's purposes and determined the sources of information to nourish it.

In addition, and always taking the three themes defined in the previous stage as an axis, we designed "¿Qué pasa, Riachuelo?" functionalities and sketched the prototype.

de "¿Qué pasa, Riachuelo?"
y se realizó el primer prototipo.
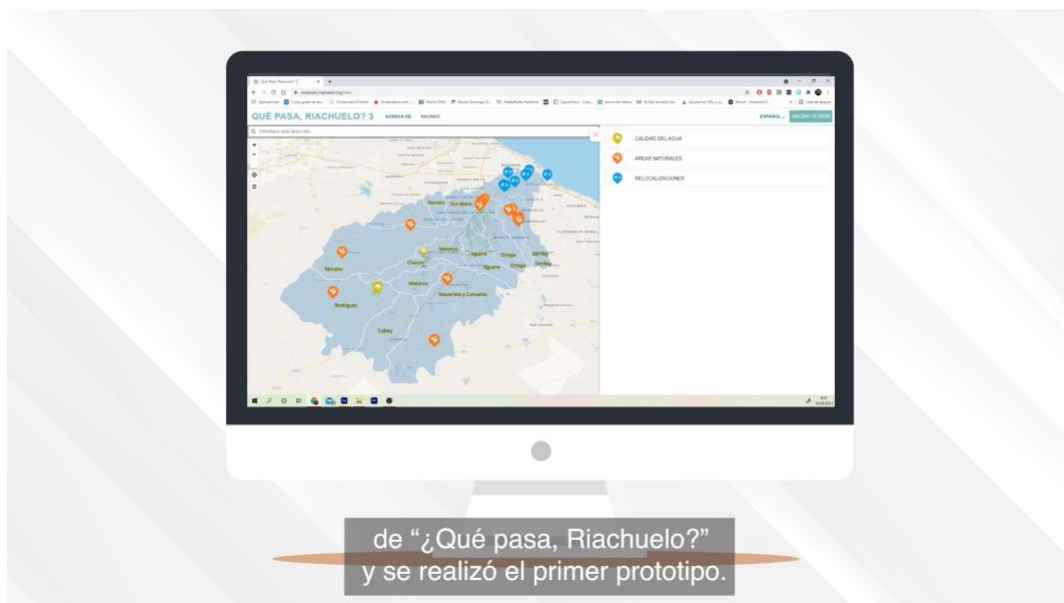
ETAPA 3
Co-diseño de la implementación

### Stage 3: co-design implementation

It's time to make everyone know about all the work done!

This third stage, to be carried out throughout 2021, aims to create a network that contributes to dissemination; so that those who live in the Matanza-Riachuelo Basin know and use the platform. The first steps in this direction are to articulate with community libraries and neighbourhood networks.

In addition, at this stage, we continue to articulate with various actors to co-produce strategies for visualization and analysis of QPR data to promote environmental justice in the basin.
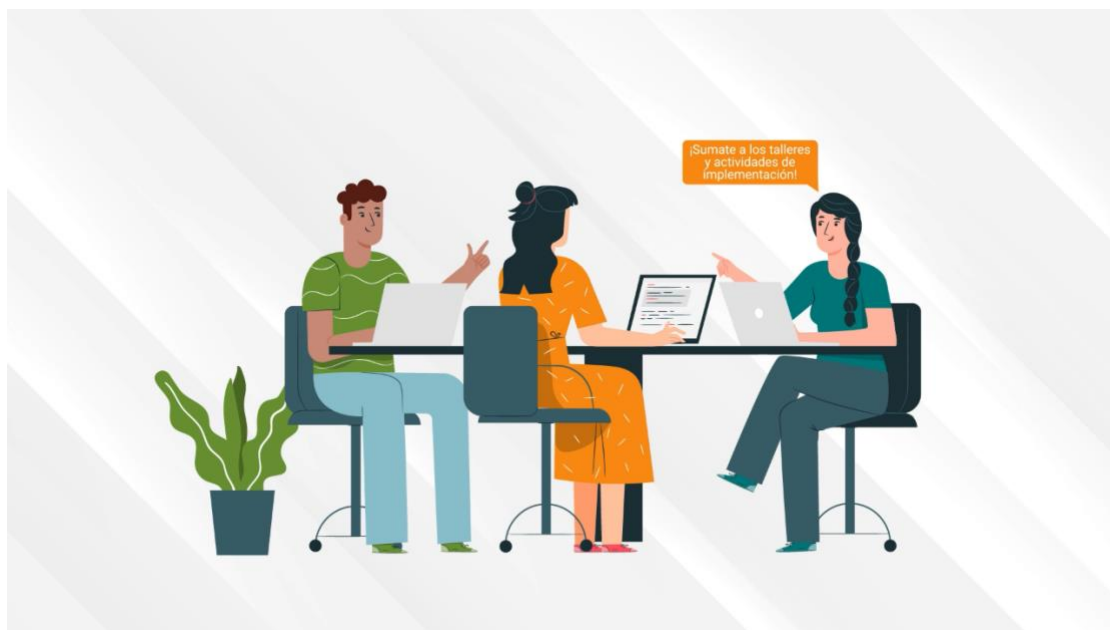
This path is just the beginning! We invite you to be part of "CoAct: Citizen Science for Environmental Justice in the Riachuelo"! If you want to be part of this process that seeks to improve the quality of life in the Basin, join our following workshops and activities in the implementation stage to create and analyse information using QPR.

Citizen Social Science tools are crucial to produce scientific knowledge and to generate social transformations.

Find more information in farn.org.ar

We are waiting for you!

”

The video will be shared with this description in FARN channel on YouTube (translated from Spanish):

"This video shows workshops and activities done during 2020 and 2021 to co-create ¿Qué pasa, Riachuelo? (QPR). This platform seeks to generate, analyse and visualise information to promote socio-environmental transformation in the Matanza-Riachuelo Basin. ¿Qué pasa, Riachuelo? is the result of a collective effort from Fundación Ambiente y Recursos Naturales (FARN) and Universidad Nacional de San Martín (UNSAM) and other actors that share a social concern: environmental justice in the Basin. Since 2020, they have collaborated and participated in activities framed in the "CoAct: Citizen Social Science for Collective Action'' project. Do you want to be part of this process that seeks to improve the quality of life in the Matanza-Riachuelo Basin? Find more information in https://farn.org.ar/proyecto/coact/"

6. Future activities using this digital output

The video is shared through FARN's channel on YouTube and CoAct webpage. At the time of producing the video, *¿Qué pasa, Riachuelo?* (QPR) is in its prototype version and the URL is not the final one yet. Once we have the definite web address, we will share it in the video description of YouTube. We will publish the video on FARN's and UNSAM's social networks and websites. Both organisations have a page for CoAct R&I Action #3 where we share news about the project. The video will be displayed during workshops and institutional and academic presentations of the FARN and UNSAM teams. The video will be also disseminated in local media of different neighbourhoods and through WhatsApp with co-researchers, so they could further share it within their network when co-organising future implementation activities. In addition, the KC members will receive a short summary of the advances of this year's activities with the link to the video. We will ask them to share it with whom they may consider suitable.

7. Conclusion

The R&I Action #3 had to be re-framed due to Covid-19 pandemic and associated restrictions. The research co-design methods of collective mapping to be developed through in-person large workshops had to be changed to smaller size virtual workshops carried out with people located in different neighbourhoods. The multiple interventions and discussions with and among co-researchers had direct impacts on the platform development, and on the design of future activities. This co-design process is of great value, as it potentially creates legitimacy for the use of the tool among the local communities that promote environmental justice. The collective mapping workshops were intended to both generate information about these communities' perceptions of problems and to create an output, the collapsible cartographies (the planned D5.2), that may contribute to the implementation phase of the R&I Action

#3, when the platform has to be disseminated and used. This new D5.2 Digital Output on Participatory Methodologies is a video that shows that the platform is the result of collaborative effort; its content and functionality were co-designed and therefore they take into account community needs and demands. It depicts the different stages in the co-design that we have actually implemented. This may further engage other actors, as they will recognise that platform not only seeks to promote participation but is actually the result of a co-creation process. Therefore, it will contribute to reaching the next milestone: to disseminate the digital platform *¿Qué pasa, Riachuelo?* along the Matanza-Riachuelo basin. We expect co-researchers will not only contribute by engaging in the dissemination activities organised by CoAct R&I Action #3's team, but also by using this audio-visual material to engage new co-researchers who may discover innovative ways in which the platform could help their communities. We expect people in Matanza-Riachuelo basin will come across this video on the multiple channels mentioned above and discover the platform as a helpful tool that they could use in their actions to promote the socio-environmental transformation of their community.

8. References

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