

In search of the Tavarandu: Lessons on Public Innovation and Participatory Governance in Local Governments

Report on the learning cycle on Participatory Governance and the implementation of the Itapúa 2022 edition of Tavarandu

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About the title: Tavarandu is a Guaraní word that results from combining two different words: *Tava*, meaning people, and *arandu*, meaning wisdom. Tavarandu is the "wisdom of the people", the collective intelligence that emerges when the intelligences of all members of a community are democratically brought together.

This document has been developed, designed, laid out and printed within the framework of Tavarandu, the capacity building programme for innovation and participatory governance in local governments and communities, developed by the United Nations Development Programme (UNDP) Acceleration Lab, and the organisations Alma Cívica, Cultura y Participación (CyP) and GirlsCode, in alliance with the digital platform Decidim, the National University of Itapúa - UNI (Paraguay) and the Autonomous University of Encarnación - UNAE (Paraguay).

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Made in Paraguay



CONTENT

EXECUTIVE SUMMARY	8
What did we do to learn about Participatory Governance in Paraguay?	8
What did we learn about Participatory Governance?	10
Learnings from our discovery and exploration	10
Learning from experimentation through Tavarandu	10
BACKGROUND	14
The learning cycle methodology	14
STAGE 1: MAPPING SOLUTIONS	17
1.1. Building a Theoretical Framework on Participatory Governance	18
1.2. Learning by doing: identifying capacities for participatory governance from the Lab's practice	20
STAGE 2: EXPLORATION	23
2.1. Exploring Opportunities for Participatory Governance	24
2.2. Tavarandu Programme Design	26
2.3. Development of programme assumptions	27
STAGE 3: EXPERIMENTATION	31
3.1. Participatory governance and innovation training programme for local governments	33
3.1.1. Findings	36
3.1.2. Final evaluation of the training process	39
3.1.3. Conclusions of the training experience	42
3.2. "Hechakuaa" citizens' laboratories as instances of co-design	45
3.2.1. Findings from the Citizen Labs experience	45
3.3. Civic Technologies for Civic Participation Training Programme	49
3.3.1. Citizen Bootcamp	49
3.3.2. Civic Technologies Hackathon	51
3.3.3. Lessons learned and suggestions for improvement	52
Final Conclusions and Recommendations on Public Innovation and Participatory Governance in Local Government	59
Analysis of key learning and implications	60
Summary of final recommendations	61
Special Thanks	65
Bibliographical references	66

EXECUTIVE SUMMARY

Citizen participation is the cornerstone of any open and democratic society. Civic spaces and processes that facilitate this participation enable citizens from all sectors of society to engage more directly in the discussion and resolution of political, economic and social challenges, increasing levels of trust between people and institutions, improving the resilience of communities and generating a greater sense of ownership and empowerment over decisions and actions that affect resources shared by all. **How do we strengthen this pillar in our communities? How do we improve our capacities to participate and to facilitate more participation? How do we connect participation and sustainable development at the local level?**

Hoping to answer some of these questions, **Tavarandu was born**, a program of the UNDP Acceleration Lab that aims to strengthen capacities for innovation and participatory governance in local governments and communities, through the co-design of training, promotion and facilitation programs for citizen participation adapted to the processes that are articulated at the local level. The program is the result of a **learning cycle** that began with studying the dynamics of social capital and trust during the pandemic, and gradually led us towards participatory governance as a **strategic enabler of sustainable development**. This document presents the **key findings of the whole cycle**, focusing on the **Tavarandu program**, the implementation of which is our **first experimental Participatory Governance initiative**.

What did we do to learn about Participatory Governance in Paraguay?

Learning about participation requires listening and observing from one's own experience of participating and generating participation. Throughout its first four years, the Accelerator Lab team has travelled a learning path that included:

1. The **social capital and trust learning cycle**, in which we explored the concept by constructing social capital indices from secondary data, and then measured it directly through the social capital, economic vulnerability and collective action survey.
2. The **design and facilitation of participatory spaces and processes**, such as the Scientific Dialogues and the Territorial Forum on Challenges for Family Farming with the National University of Asunción, or the participatory action research activities that were part of our research, design, development and innovation services. In all these activities, the Laboratory has sometimes been a participant, sometimes a host of participation.

3. The **mapping of institutions and cases of participatory governance** in Paraguay, which documented concrete spaces of participation that are part of the Paraguayan normative framework.

4. The **design and implementation of the Tavarandu program**, based on the learning from previous activities.

Each of these activities can be considered a learning cycle in itself, building on or complementing the previous one. In this paper, we consider them as parts of a **single large learning cycle on participatory governance**. Each led us to fundamental findings related to the importance of citizen participation.

This document summarizes these activities, their components and findings, organizing them according to the 3 phases of **our learning cycle methodology: discovery, exploration and experimentation**. The main focus is on **experimentation**, represented by the implementation of the **first edition of the Tavarandu programme**.

In this edition, **the program opened spaces for training, practice and collaboration** for civil servants and citizens of the Department of Itapúa, focused on the effective application of research, development and innovation methodologies and tools for the participatory identification of local sustainable development challenges and the co-design of solutions to these challenges, giving rise to a portfolio of interventions with **3 lines of action**:

1. A **comprehensive training program** on participatory governance and innovation.
2. A **Citizen Laboratory** that facilitates collaboration between diverse social actors in the democratic and participatory co-design of solutions to local sustainable development challenges.
3. A **Civic Technologies Bootcamp and Hackathon** to explore the potential of technologies for citizen participation processes.

What did we learn about Participatory Governance?

Learnings from our discovery and exploration:

- From observing, measuring and analyzing the dynamics of social capital and vulnerability, we learned about the relationship between collective action and the reduction of vulnerabilities. We found a significant relationship between **participation in collective community asset management and reduced economic vulnerability**.
- From our experiences in hosting participatory processes, we have learned that participatory governance is nurtured by **capacities that function as strategic enablers** of better participatory processes and spaces.
- The principles, skills, tools, methods and methodologies of our learning cycles, and participatory action research and people-centered design methodologies in general, are, if appropriately transferred and adapted to the context, **a first set of strategic enablers for participatory governance**.
- From mapping and exploring cases of participatory governance, we have learned that although there are institutionalized spaces for citizen participation, the protagonist and binding character of these spaces, for them to have influence and reach levels of empowerment, is still very limited and vulnerable to the dynamics of political patronage or leadership's lack of will.
- In addition, it is a challenge to **design innovative institutional mechanisms** for participation and participatory governance processes in order to achieve efficiency in the processes and provide confidence to citizens.

Learning from experimentation through Tavarandu:

From the capacity building experience, we learned:

- The training has provided a platform **for networking, exchanges and peer learning**.
- The program was **effective in generating learning on participatory governance and social innovation**. 80% of the participants who completed the evaluation process incorporated the knowledge of participatory governance and social innovation.
- The instrument most mentioned by participants was the **Municipal Development Council**, which represents a strategic opportunity: There is a real opportunity for participatory governance in **territorial planning processes, within the current regulatory framework** coordinated by central government institutions.
- **Face-to-face learning remains key to learning** these skills. The face-to-face workshops were the ones that best established the knowledge and generated the greatest involvement, especially in their **playful components** that allowed for dynamic learning through play.

- Based on the experience of the course, **a successful case is the municipality of Fram**, which has managed to incorporate citizen participation bodies such as the Municipal Development Council, and others of a more consultative nature, to diagnose problems and redirect actions.
- Citizen participation is a **concept that is well regarded and valued, but is sometimes understood in a very generic way**. The challenge is to strengthen a more precise and actionable understanding of participation.
- An organisational and cultural verticality persists that places the **will of the institutional political leadership, the mayor, as the determining factor** that enables or disables democratic innovation initiatives.
- The low political will to create binding spaces for participation is evident in the fact that **most used instances are still those of consultation and accountability, rather than those of effective co-construction of processes**, such as, for example, the elaboration of participatory budgets.

From the implementation of these capacities through the Hechakuaa Citizen Lab, we learned:

- Hechakuaa, as a citizen laboratory, represents an **innovative and flexible participatory design**, which contextualises and combines design thinking principles to bring as many voices as possible into a process of co-creation and implementation of community solutions to sustainable development challenges.
- As with training, **face-to-face attendance remains key**.
- Sustainable development objectives, localized at the city level, and driven by local community members, **offer a collaborative mission framework** that makes it possible to **synthesize different interests in the general interest**.
- The **constitution of a driving team** with community organizations is a determining factor that provides sustainability to the process.
- On a small scale, we were able to observe that the **articulation of plans and projects** between the community and the government led to concrete and solvent actions.
- Finally, we observe that citizen participation is mobilized around the **real possibilities of changing their reality**. The possibility of implementing community-based solutions to development problems co-created by the community itself encourages participation and commitment in the process.

And finally, from the bootcamp and hackathon to develop civic technology, we learned:

- The adoption of digital platforms for citizen participation in Paraguay **faces numerous barriers that condition its potential** as a tool to democratize and broaden the scope of participatory governance:
 - the difficult task of **building multidisciplinary teams** that effectively integrate people from technology, design and activism to solve the complexity of **structural barriers to citizen participation**,
 - the **lack of political will and promotion** by the state for civic technology projects that go beyond informational or consultative initiatives,
 - **connectivity barriers and the steep learning curve** associated with existing open-source platforms for digital participation, which also generally offer little documentation in Spanish, and
 - the permanent digital divide is also expressed in the **limited skills and experience in using technologies**, It is difficult for them, to find the motivation and confidence to dedicate their time to actively participate in the governance of their territories and communities.
- Despite the barriers, our experimentation with developing civic technologies also allowed us to **identify opportunities**:
 - latent **problems and needs** at local and community levels generate a strong level of engagement and interest in young people who are beginning to learn about technology, which is an opportunity for creativity and innovation in using digital tools for future participation.
 - the **dissemination and diversity of citizen participation platforms** already developed, open, available, adaptable and usable, with their communities of practice and development,
 - the potential of university outreach and **university partnerships** to give birth and sustainability to communities of practice focused on civic technology.

This wealth of learning and findings is detailed and elaborated below. In them, we have an opportunity to continue to contribute to the construction of an increasingly open and participatory democracy at all levels and in all sectors of our society.



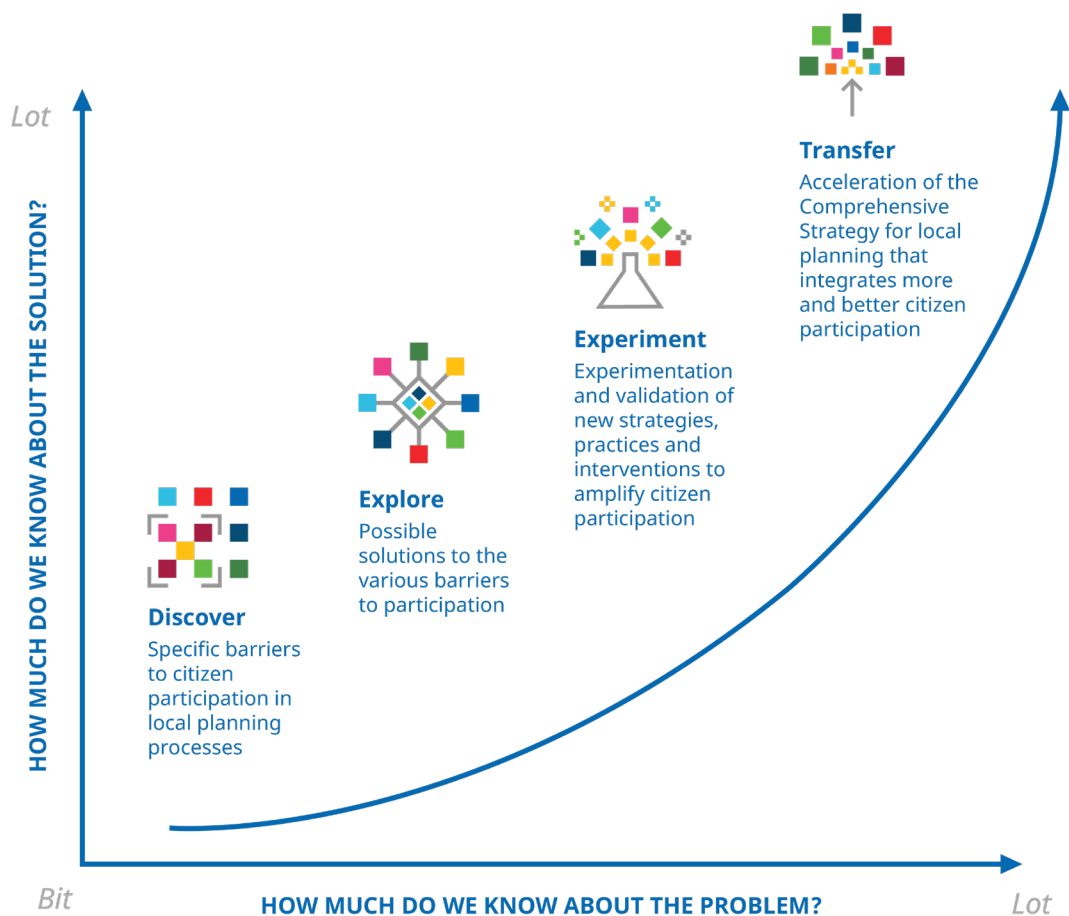
BACKGROUND

The learning cycle methodology


The UNDP Acceleration Lab in Paraguay (AcclabPY) is part of a global innovation network that aims to test and scale solutions to global sustainable development problems, mapping solutions and community innovation, connecting diverse data sources and leading experimentation processes that integrate a people-centred approach to research and development applied to local realities.

Our [learning cycle](#) methodology applies the participatory action research approach to sustainable development challenges, integrating learning dynamics into the continuous action of communities, organizations, businesses and governments to promote the development of people and their territories. In this way, we approach problems and challenges through four stages that begin by understanding the problems in detail and in their contexts ([Discovery](#)), then progressively explore portfolios of solutions that address complex challenges from multiple fronts (Exploration) and generate evidence on what works, how and in which scenarios ([Experimentation](#)), with the purpose of generating and transferring learning (Transfer) that allows us to expand the scope of the validated solutions (Figure 1).

Figure 1. The learning cycle methodology



The skills we apply throughout these cycles include people-centred design methods and tools, participatory action research, design thinking, participatory design, evidence-based public policy, experimental design and thinking, among others. For the implementation of solutions, we develop innovation proposals using a **portfolio** approach in which we seek to simultaneously learn about multiple solutions that address development problems in a systemic way. This leads us to work collaboratively with other existing projects in UNDP portfolios and with partners in the public sector, civil society and business.



STAGE 1: MAPPING SOLUTIONS

1.1. Building a Theoretical Framework on Participatory Governance

Citizen Participation, Public Innovation and Participatory Governance are priority areas for the UNDP Acceleration Lab in Paraguay. We seek to generate evidence and learning about how to improve citizen participation institutions, processes, initiatives, methods, and tools, focusing on understanding their relationship to institutional trust and people's social capital networks.

By **participatory governance** we refer to the set of institutions, processes, initiatives, methods, and tools of citizen participation that enable citizens to govern their common resources, negotiating and making decisions to live together in society. At a more general level, it is conditioned by institutions' participatory processes and practices in the design, implementation and evaluation of public policies. At the local level, it is linked to processes of [building trust](#) and [social capital](#) within the territory, and is a way to reduce economic vulnerability.

This is what we learned in our first learning cycle in our area of **Citizen Participation, Social Capital and Trust**. This cycle is itself the starting point for the discovery phase on Participatory Governance. As we discovered how trust and social capital dynamics were related to economic vulnerability during the pandemic, we came across a key learning that we did not expect: **access to and participation in the management of collective community assets reduced levels of economic vulnerability** (Montanía et al., 2021; Montanía et al., 2022). In addition, we were able to validate with data what we observed in our daily experience: **collective action for the articulation of self-help resources (e.g., soup kitchens) effectively contributed to the reduction of economic vulnerability during the first year of the pandemic**. This collective action can also be seen as a form of participatory community governance.

These early learnings were signposts towards the new questions that launched our cycle on participatory governance: **How to increase access to and facilitate participation in the management of public spaces and other collective assets? How can we strengthen the networks of mutual aid and social capital that were activated during the pandemic to reduce vulnerability? How do these questions relate to territorial development dynamics?**

Finding 1

Access to and participation in the management of collective community assets and collective action to generate community self-help actions reduced levels of economic vulnerability during the pandemic. These learnings and results point the way towards designing programmatic interventions on participatory governance as a nodal strategy for a sustainable development portfolio that increases the resilience of our communities.

Our findings on social capital are also supported by the literature. Social capital refers to those structures in a community that facilitate coordination and cooperation for mutual benefit, such as interpersonal networks and norms of trust and reciprocity (Putnam, 2000). These structures are fundamental to participatory governance, and their effects on the capacity of communities to respond to and recover from disasters, for example, have been widely studied (Nakagawa & Shaw, 2004; Shoji et al., 2020; Smiley et al., 2018).

When we move to the topic of public innovation, recent strands of public administration theory establish a positive correlation between participatory governance and public sector innovation. New Public Management (NPM) theory suggests the institutionalization of competition, to motivate individual and collective actors to develop, implement and disseminate new policies and services. On the other hand, Participatory Governance theory is based on the assumption that public sector innovation is best achieved through the institutionalisation of collaboration between interdependent stakeholders (Soerensen, 2012).

Soerensen explains that while competition is essential to motivate actors to take risks and problems related to innovative efforts and invest in uncertain outcomes, it does not necessarily provide actors with the resources they need to be able to carry out actual innovation. Innovation does not thrive on motivation alone. For collaboration to result in innovations, participants must share the idea that if they cannot come up with convincing results, others will.

Citizen Participation is not a categorical construct (either there is or there isn't), but rather a progressive one. Arnstein (1969) described the "Ladder of Citizen Participation" in three levels and eight sub-levels, in the following order:

- **Non-Participation**
 - Manipulation
 - Therapy/Catharsis
- **Symbolic Participation**
 - Reports
 - Consultations
 - Selective or minority participation
- **Empowerment**
 - Alliances/Agreements
 - Delegation
 - Citizen oversight

Along the same lines, Luyet et al. (2012) discusses the Five (5) Degrees of Public Participation:

1.	Information: explanation of the project to stakeholders.
2.	Consultation: presenting the project to stakeholders, collecting their suggestions, and then making decisions with or without taking stakeholder input into account.
3.	Collaboration: presentation of the project to stakeholders, collection of their suggestions, and then decision making, taking into account stakeholder input.
4.	Co-Decision: cooperation with stakeholders towards a solution and implementation agreement.
5.	Empowerment: delegation of decision-making on project development and implementation to stakeholders.

1.2. Learning by doing: identifying capacities for participatory governance from the Lab's practice

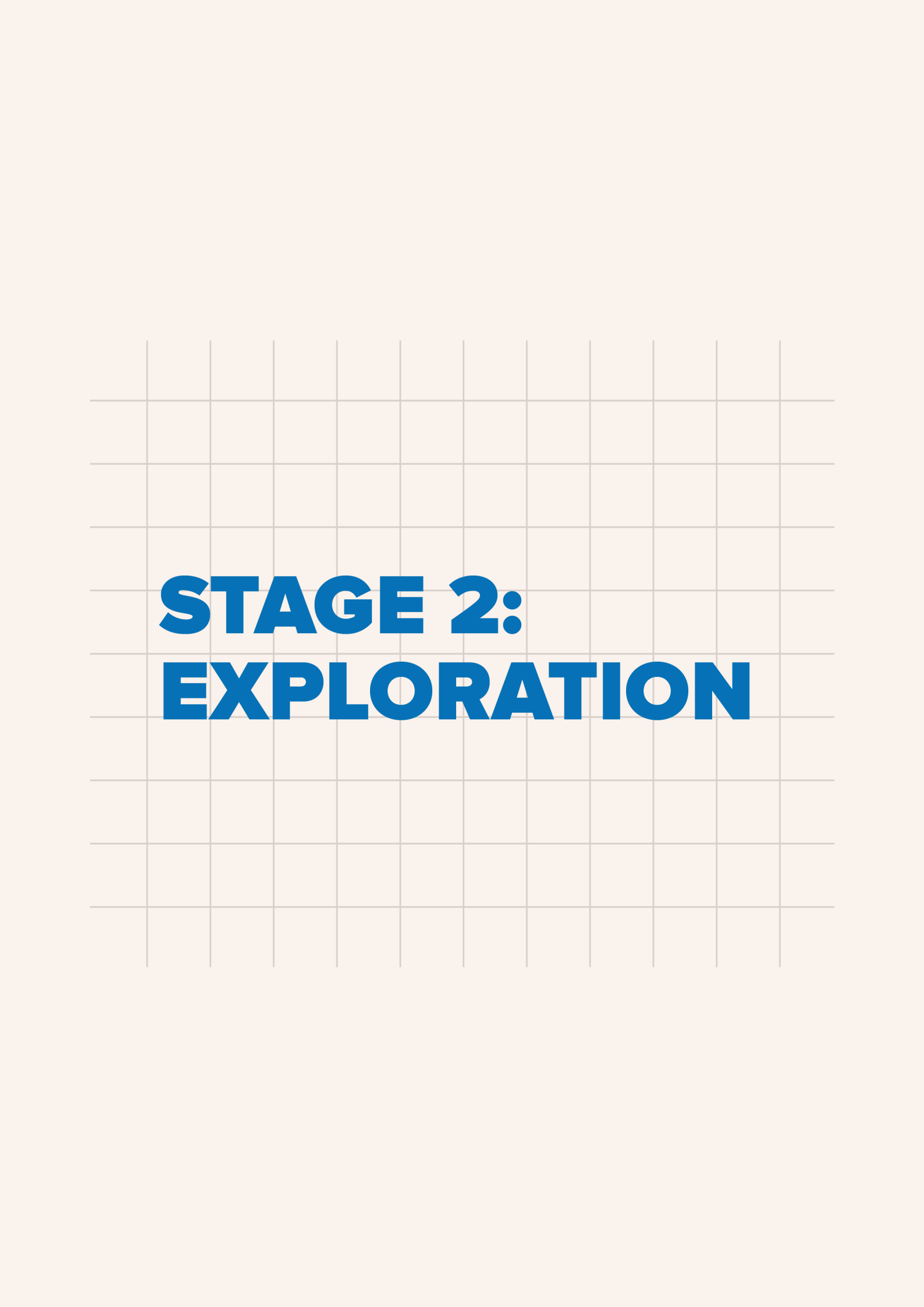
To learn about participation, you need to participate and generate participation. In the Lab's experience, hosting conversations or participatory learning processes has been an ongoing practice. In its first three years of work, the UNDP Acceleration Lab collaborated with different institutional and community actors in the implementation of *learning cycles* applied to issues of employment formalization, inclusive recycling, domestic work, and food security, among others, generating **applied, practical and participatory processes of social and public innovation**. Throughout these experiences, **the need and relevance of stakeholder involvement became apparent** at all stages of all cycles, and the tools and principles of the learning cycle helped us to respond to these needs organically.

The same tools and principles were the basis of our practice when it came to designing and facilitating strategic or difficult conversations between multiple actors, often with potentially antagonistic positions. The series of Participatory [Dialogues on the future of "Prociencia"](#), the [participatory forum](#) to explore the future of a community applied research center, [the co-creation processes of our Moiru](#) social innovation challenge, are all **examples of the multitude** of participatory spaces in which we apply the same methodologies, in a multiplicity of forms, to host a participatory and decision-oriented conversation or co-create solutions together.

From our experiences in hosting participatory processes, we have learned that participatory governance is nurtured by capacities that function as **strategic enablers of better participatory processes and spaces**. The same strategic enablers that enrich participatory governance processes also have the dual effect of improving governance in general, making it more effective. The principles, skills, tools, methods and methodologies of our learning cycles, if appropriately transferred and adapted to the context, are **the first set of strategic enablers for participatory governance**.

Finding 2

The broad set of research, development and innovation skills and tools, with participatory approaches, that we apply throughout the UNDP Acceleration Lab's "Learning Cycles" constitute in themselves strategic enablers that have the potential to be applied to enhance participatory governance, and to be transferred to actors at local levels.



**STAGE 2:
EXPLORATION**

2.1. Exploring Opportunities for Participatory Governance

Discovering the importance of participation in reducing vulnerabilities. Experiencing one's own experience of the potential of participation as a strategic enabler of better, more legitimate and more rewarding processes. With these lessons learned, AccLabPY began the exploration phase, focused on the concept of **participatory governance**, and seeking to diagnose where we are today in Paraguay regarding this type of governance.

Participatory governance began to take hold in Paraguay in the 1990s, after the fall of the dictatorial regime in 1989, with the new National Constitution of 1992, which established a representative, participatory and pluralist democracy (Art. 1), the decentralization of the Paraguayan State, and mechanisms of democratic participation, such as suffrage (Art. 3), the referendum (Art. 121 and 122), the popular initiative (Art. 123) and demonstrations (Art. 32).

To understand the opportunities and challenges existing in the normative framework and in the current practice of participation in Paraguay, we conducted a case study of four types of participatory governance institutions with their own normative framework: Neighborhood Councils, Municipal Development Councils, Neighborhood Community Boards and Municipal Councils for Children and Adolescents, also including two cases of participatory governance in civil society: An Association of Producers' Committees that governs itself in a democratic and participatory manner to produce organic yerba mate, and a Local Network for the Rights of Children and Adolescents.

The mapping of these existing "solutions" for participatory governance in Paraguay, through concrete case studies, allowed us to make a comparison between the institutional design of participatory governance bodies and their actual development, identifying potentials, tensions, threats and limitations. In-depth interviews were conducted with key actors in three dimensions of the issue addressed: political will, capacity and available spaces for citizen participation. The results of this Mapping are presented in the [Working Paper](#) "Case Studies of Participatory Governance in Paraguay".

Finding 3

- Although there are institutionalized spaces for citizen participation, it is still a challenge to increase the protagonist and binding character of these spaces for them to have influence and reach levels of empowerment.
- To meet this challenge, we observe that governments must generate effective responses to the demands presented in participatory processes when citizens are willing to participate. The absence of responses to their demands erodes this willingness and confidence in participatory processes.
- In addition, it is a challenge to design innovative institutional mechanisms for participation and participatory governance processes to achieve efficiency in the processes and provide confidence to citizens.

In parallel, in June 2021, another short exploratory study was carried out in June 2021, based on interviews with key actors¹. From this series of interviews, we were able to learn in greater depth about group dynamics in participatory processes, barriers faced by participants, challenges and some actions for moving forward.

Finding 4

- **Initiatives:** the Tava Apó project, implemented by the organization Alma Cívica, was identified as an emerging, recent experience with great potential for training in public management skills, participation and innovation, aimed at public officials in municipal legislatures.
- **Group dynamics:** to achieve greater dynamism, the characterization of the city is key to mobilizing the participation of key groups of citizens. The most active groups are those with a strong community and cultural identity.
- **Barriers:** A very common barrier is the problem of connectivity. Even when connection is accessed, the quality of connection may be too low to enable meaningful experiences. Another barrier is the weakness of local governments on several fronts. In addition to this institutional weakness, the political will to work with civil society organizations shown by several mayors is also weak. This low willingness also applies to working virtually or digitally: face-to-face is the preferred mode of working and collaborating. In general, there is a great dependence on the will of the mayors, and in many cases, we face as a barrier the persistence of prebendary or clientelistic practices that delegitimize the processes of participation.
- **Challenges:** to reconstruct the narrative of how to participate and how to implement the projects while respecting the dynamics of the groups in each city, to achieve a closer link with the Municipality. Diversity is an asset of participatory processes, but when groups are very diverse and have no previous experience of collaboration, facilitating collaborative work is more challenging.
- **Actions to move forward:** it is necessary to find new forms of participation, which unlock the lack of articulation between institutions, emphasizing work that involves or considers all parties equally. It is also important to explore ways of building community within the framework of respect for ideas, facilitating exchange between communities. Train local councillors and leaders, with concrete examples from their cities. Develop an academy for political and public service training for different actors; mayors, councillors, other public officials. Train and maintain mentors (trainer of trainers). Generate public spaces for participation in cities. Launching a line of work through competitive funds for projects articulated between the Municipality and the Citizenry, which seek to work together.

¹ The Executive Director of the NGO Alma Cívica-AC, the head of the Political Training Academy and three representatives of the NGO Laboratorio Ciudad were interviewed. AC is a connecting platform for forming and promoting democracy, incentive actions, identification of positive and strong leadership, and incubator of initiatives. It works together with the Academy and Laboratorio Ciudad in the fields of tourism, trade fairs, sport, education, political education, culture and education. He has experiences in San Juan Bautista and Miguel, Misiones; with the Ñamba'apó group and the Ikatu council. Also in Ava'i and San Juan Nepomuceno in Caazapá.

2.2.Tavarandu Programme Design

The learnings from the Discovery Phase point to the importance of Participatory Governance as a strategic enabler in our quest to achieve the SDGs. The importance of **participatory governance as a mechanism for reducing vulnerabilities**, the challenge of **designing better participatory processes**, the barriers of **political will** and **institutional weakness**, the **needs to rebuild the narrative** of participation and to **move forward with training and practice processes in all sectors**: all these findings inspired the design of Tavarandu, with a special focus on local governments.

Participatory governance provides legitimacy to outcomes and processes by building on the principles of transparency, participation, intergenerational equity, non-discrimination, sound policymaking and leaving no one behind. Based on our learning, strengthening the capacities of governments, especially local governments, represents a key space for improvement that can unlock their potential for good and effective governance. And public innovation capacities are in turn key to improving this effectiveness.

Considering this, we ask ourselves:

How can we develop and implement capacities for public and democratic innovation that are both deeply committed to and informed by principles of effective governance?

And how to disseminate these capacities through a network of Local Government officials and public servants to accelerate and localize the achievement of the SDGs?

Our starting hypothesis was that by strengthening public and democratic innovation capacities in local government public servant teams, we will embed Strategic Innovation thinking at the very core of local governments, making them more responsive and efficient, while opening up opportunities for greater participation and collective intelligence.

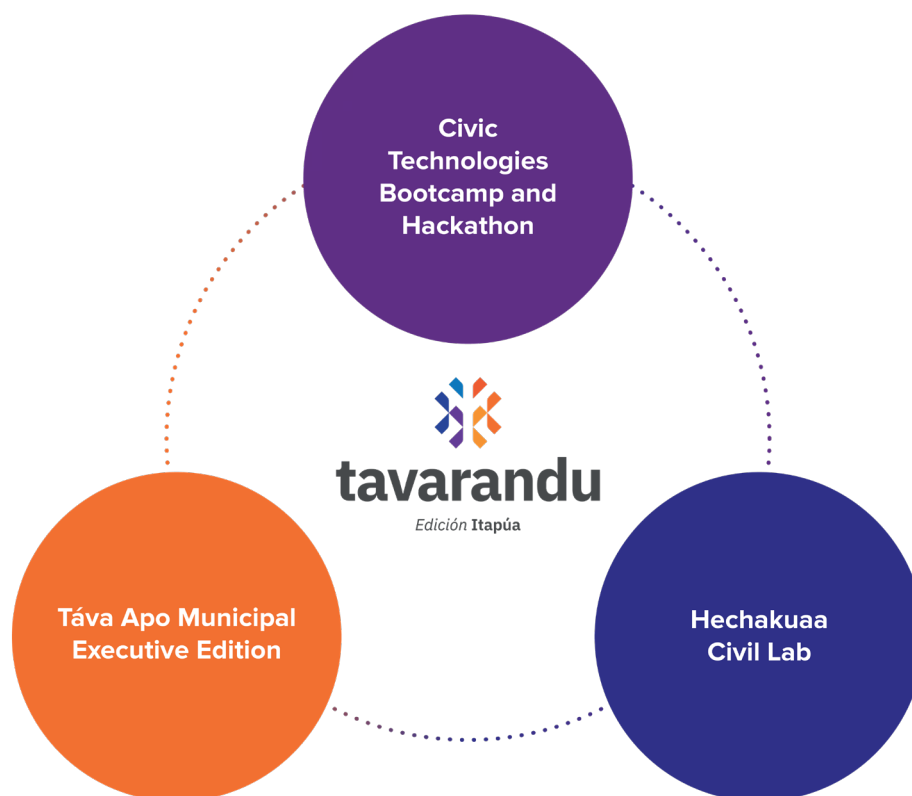
With this idea in mind, Tavarandu is a program to develop public innovation capabilities through the practice of citizen-centered service design and research, evidence-based policy formulation and other methods and tools for public and democratic innovation in the day-to-day work of public servants in local governments.

The Tavarandu Programme has three main components:

- **Training Programme for Municipal Officials:** Training in R+D+i methodologies, integrating tools, approaches and methodologies for citizen participation.
- **Citizen Labs:** Temporary initiatives that facilitate collaboration between different actors (citizens, experts, public officials, etc.) in experiences of public innovation and democratic and participatory co-design of solutions or interventions that address sustainable development challenges, focused and pre-defined at the local level.
- **Use of Civic Technologies for citizen participation:** Bootcamp training program for the customization, installation, agile development and demonstration of a digital platform for citizen participation, based

on the Decidim participation platform. This component will end with a Hackathon open to the public, but prioritizing the presence of Bootcamp participants.

Figure 1. Axes of Tavarandu in its Itapua 2022 Edition



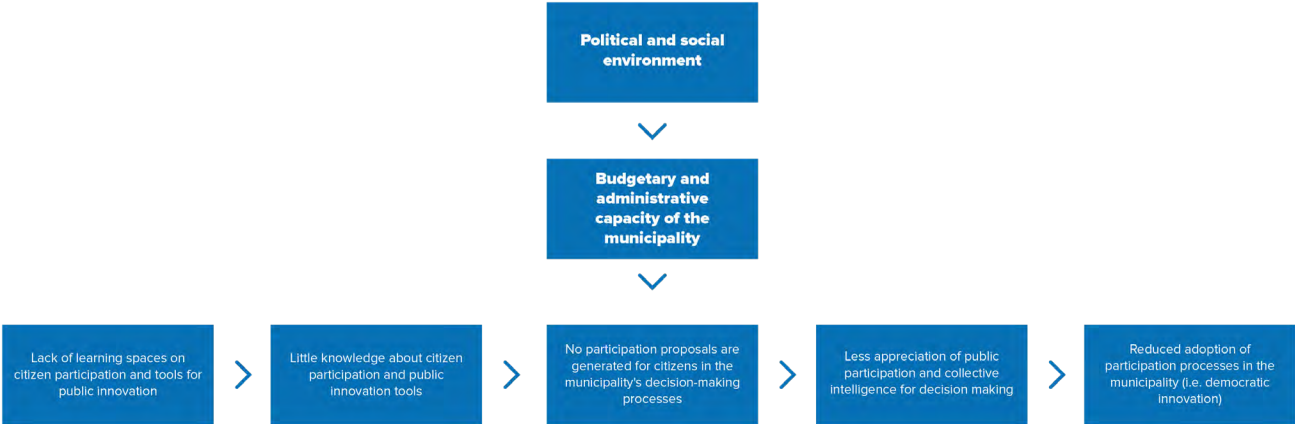
2.3. Development of programme assumptions

The program design responds, in its training component, to the following development of hypotheses about how we believe these components would have an impact.

Hypothesis Causal

The lack of learning spaces that combine knowledge and experience on citizen participation and tools for public innovation, oriented towards **municipal officials with decision-making capacity, limits the knowledge and opportunities for implementing participatory tools** in the municipality's decision-making processes. This **affects the generation of participatory proposals that involve citizens and reduces the democratic innovations** that the municipality generates, implements or adopts to improve its services and public policies.

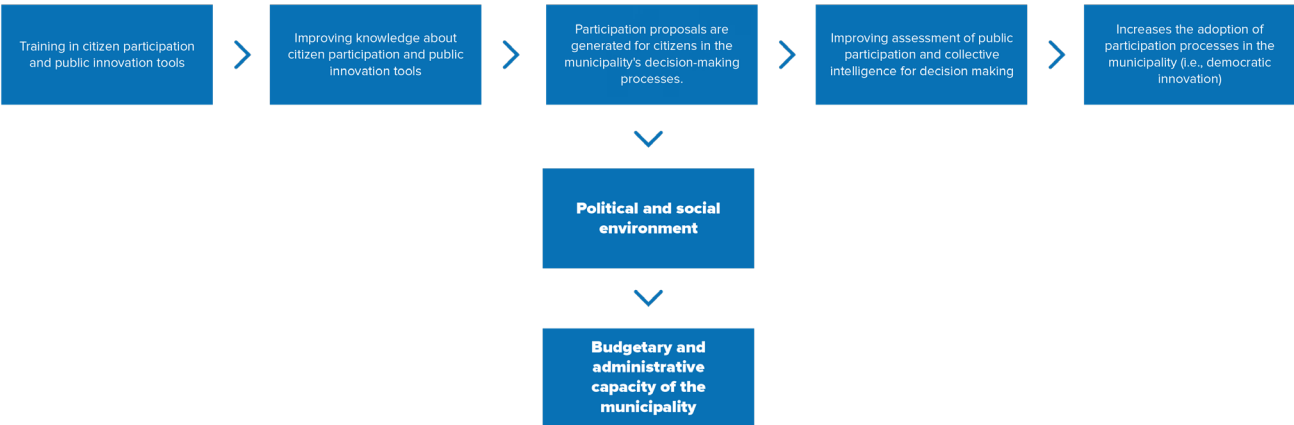
Figure 2. Tavarandu Training Programme Causal Hypothesis



Intervention hypotheses

Based on this hypothesis, an experimental hypothesis is proposed where training in public innovation and citizen participation tools, provided to municipal officials, would lead to the generation of participatory proposals that improve the valuation of participation in decision-making processes, eventually leading to an increase in the adoption of these participatory processes in real processes of the municipality. When the **administrative capacity** of the municipality is high, and the **political environment** is favorable (i.e. there is alignment between the executive and the legislature), the implementation of **democratic innovations in its governance** is favored according to the defined causal chain.

Figure 3. Tavarandu Experimental Hypothesis of the Training Programme



Experimental design

Intervention: training in citizen participation tools. At the end of the process, each municipality presents proposals for participatory processes for its community and the institutional commitment to achieve their implementation is assessed.

Outcome variable: adoption of democratic innovation in the municipality.

Control variables: municipal capacity and political environment.

Municipal capacity: defined as the ratio of tax revenues/transfers, higher dependence on transfer revenues implies lower institutional capacity/administrative infrastructure for innovation/ change generation. The variable classifies municipalities into two levels:

- "Budgetary independence" >2ds (two standard deviations)
- "Budget Dependency" <1ds (one standard deviation)

The political environment: defined as the council/council alignment (equal party representation), having a majority aligned with the mayor's office may favor decision-making (greater potential for intervention).

Evaluation Methodology: heuristic evaluation of project plans designed by program participants, based on criteria they define:

- (1) The inclusion of public innovation and citizen participation tools
- (2) The value given to these tools in the proposal is as follows
- (3) The potential for adoption of the proposal by directors of the municipal executive.
- (4) The public's assessment of the proposal.



STAGE 3: EXPERIMENTATION



3.1. Participatory governance and innovation training programme for local governments

We use the following learning questions:

How to incorporate innovation and participatory governance tools in local governments?

How can we develop and implement capacities for public and democratic innovation that are both deeply committed to and informed by principles of effective governance?

And how to disseminate these capacities through a network of Local Government officials and public servants to accelerate and localize the achievement of the SDGs?

We used the Táva Apo program, which was already being used in local governments², as a basis, and adapted it by adding research, design and innovation (R&D&I) methodologies applied to the public service with a people-centered approach, integrating concepts of citizen participation.

In the Itapúa 2022 edition, 59 civil servants from ten municipalities in the department participated, with work experience in tasks related to planning, management of local community development projects, points of contact or citizen services, and other related tasks.

The training modality was hybrid, with virtual theory classes and face-to-face practical workshops. During the face-to-face workshops, we used an adaptation of the Collaborative Design Thinking methodology (Aragón et al., 2014; Bassetti et al., 2019; Gross & Schulte-Römer, 2019), for the participatory construction of an action plan for the promotion and strengthening of the Municipal Development Councils, designed and facilitated by the coordination team of the citizen laboratories, which are introduced below. A 63% participation rate was achieved in the 10 virtual classes and 3 face-to-face meetings.

Empathy Stage 1:

An empathy bag dynamic was applied, inviting volunteers to represent an everyday situation and the other participants to put themselves in the place of each of the assigned roles: the Mayor, the Municipal Official and a woman citizen leader of a recently formed neighborhood council.

Stage 2 problem definition:

The municipal working groups were formed. Each group received a kit of materials and the Working Guide. Each group made a diagnosis of problematic situations that hinder the strengthening or formation of the MDCs.

² On behalf of the NGO Alma Cívica

Solution ideation stage 3:

Each group collaboratively developed proposed solutions using the brainstorming technique. This was then synthesized into an Action Plan. It was left as a task and recommendation that this Action Plan be sent by note to the municipalities as a recommendation.

To evaluate the learning process, pre- and post-class knowledge questionnaires were used.

Table 1. Training programme developed

Public Innovation Module		
Week	Content	Objectives
Week 1 Virtual	<ul style="list-style-type: none"> Course Introduction 	Week 1 Course Presentation. Introduction of participants and the municipalities. Survey of expectations.
	<ul style="list-style-type: none"> What is it? Why innovate? Closed Innovation VS Open Innovation Public Innovation Methodologies 	Exploring the theory and scientific evidence on Open Public Innovation
Week 2 Virtual and face-to-face	<ul style="list-style-type: none"> Relevant Cases of Public Innovation Origin of MDCs and Regulatory Framework; Planning and Plans: PDD and Urban and Territorial Management Plans (POUT); participation beyond legal requirements. 	To learn about relevant cases of Public Innovation that can be applied in Itapúa
	<ul style="list-style-type: none"> Face-to-face workshop 	Conduct practical exercises on Open Public Innovation
Participatory Governance Module		
Week	Content	Objectives
Week 3 Virtual	<ul style="list-style-type: none"> What is it? Why is it important? Legal framework Influencing Factors in Participatory Processes Obstacles to Citizen Participation Evaluation of Citizen Participation 	Exploring the theory and scientific evidence on Participatory Governance

Week 4 Virtual and face-to-face	<ul style="list-style-type: none"> • Instruments for Citizen Participation: • Municipal Development Councils 	To learn about relevant cases of Public Innovation that can be applied in Itapúa.
	<ul style="list-style-type: none"> • Participatory face-to-face workshop on MDCs 	Conduct practical exercises on Participatory Governance
Week 5 Virtual and face-to-face	<ul style="list-style-type: none"> • Instruments for Citizen Participation: • Participatory Budgeting 	To learn about relevant cases of Public Innovation that can be applied in Itapúa.
	<ul style="list-style-type: none"> • Participatory face-to-face workshop on Participatory Budgeting 	Conduct practical exercises on Participatory Governance
Week 6 Virtual and face-to-face	<ul style="list-style-type: none"> • Instruments for Citizen Participation: • Participatory Mapping 	To learn about relevant cases of Public Innovation that can be applied in Itapúa.
	<ul style="list-style-type: none"> • Participatory face-to-face workshop on Participatory Mapping 	Conduct practical exercises on Participatory Governance
Week 7 Virtual	<ul style="list-style-type: none"> • Instruments for Citizen Participation: • Open Data 	
Week 8	<ul style="list-style-type: none"> • Course Evaluation 	Evaluating the course

3.1.1. Findings

Understanding public innovation

In the class on theory and evidence of public innovation, 36 participants took the pre-test and 8 took the post-test. In the pre-test, 53% answered that they know of cases of public innovation, 42% do not, while 1 participant said that they only know of innovations in the private sector.

When asked about the reasons why he considers "public innovation" necessary, it is noticeable that the term is associated with the application of technologies as a tool for "modernization" in general. In some of the responses the word technology is mentioned directly, in others more indirect references are made.

- *"I think it is important because through this technology would have a direct impact on people".*
- *"It's important because technology helps to improve many activities that used to take a long time to do".*
- *"It is important because it speeds up bureaucratic matters".*

Prior knowledge surveys | module 1

Generally, it can be summarized that municipal officials see "innovation" in their respective municipalities positively and necessarily, but in conceptual terms, public innovation is still an unknown or unexplored universe. Post-class 2 responses showed no significant difference from the pre-assessment. 8 responses were received

Understanding of citizen participation

In class 4 we received 22 responses to the pre-questionnaire and 14 to the post-questionnaire. No significant changes were identified between the pre- and post-test applied. In class 5, we received 26 responses to the pre-class questionnaire. The post-class questionnaire was not applied.

Regarding prior knowledge, it was observed that what is most associated with citizen participation is the action of a government "listening" to citizens. That is, instances where people can let their governments know what their needs are, so that the government can take action accordingly.

Terms such as "working together", "listening to the opinion of the people", "proper administration of resources", "government that consults and consults with its inhabitants", "government that includes the people", "integrating and working with all sectors" are mentioned.

When asked why they consider participatory governance important, we read the following response from participants:

- *"I think it is important to involve civil society, but our democratic system chooses who governs".*

The phrase reinforces what is already evident in the responses to the first question: that the government is a very separate body from citizens, which makes it difficult for citizens to participate beyond the consultation stage.

Regarding the consultation on difficulties in the application of participatory governance, the responses are also diverse, but it could be said in general terms that, on the one hand, the lack of interest and capacity of citizens to get involved in participatory processes is mentioned, and on the other hand, the lack of openness and initiative of governments to provide these spaces.

In this respect, some answers could be cited:

- *"Our own people don't get involved or participate, they keep quiet".*
- *"There are several difficulties, people's habits, the culture, the political system".*
- *"1. unqualified rulers 2. Citizens believe that governments are responsible for solving all problems".*
- *"It could be the poor relationship of the authorities with the citizens, and that sometimes citizens do not want to get involved because of unfulfilled promises made by politicians."*

The responses from the first class on the subject reveal a "culture" of non-participation installed in both citizens and governments. In this sense, there is still much work to be done in the field of education and in establishing citizen participation as a value and as part of the collective imaginary and common sense.

In the next class, participants were asked again what they understood by participation? We were able to group participants' responses into two key dimensions of participation:

1. Related to the possibility of expressing opinions/talking/exchanging ideas. It is as if participation is related to the freedom to express oneself and to be heard.

- *"It is having the opportunity to express our ideas with other people who are different or similar to us".*
- *"It is for more people to be part of the processes and for their proposals and voices to be part of the decisions".*
- *"Plurality of ideas".*

2. Related to action/involvement/commitment. Here, participation is understood in a more practical sense and on a more material level, in common projects and undertakings.

- *"It is to intervene, to be, to act in something or some activity".*
- *"It's when people get involved for a certain purpose".*
- *"It is the incorporation of citizens into an activity or project.*
- *"In my own words, I can say that participation is being part of an event and taking action in it".*

Citizen participation vs. Political participation

We asked participants: **What is the difference between political participation and citizen participation?** And interesting responses emerged. For most of the participants, political participation refers to party politics, the holding of public office by a few, belonging to a reduced sector of society, and does not necessarily have to do with the presentation of proposals or projects aimed at a collective. On the other hand, when referring to citizen participation, most of the responses revolved around ideas such as openness, that it is for everyone, broader and more inclusive, and in the implementation of projects.

- *"The first refers to a more select group of people, and the second is more general, covering everyone".*
- *"One has a partisan, sectoral purpose. The other is open to all citizens".*
- *"Political participation is about those actors who develop actions to influence the process and outcome of a political contest, and citizen participation is about mechanisms that involve citizens in the development of projects and decision-making by the government of the day."*
- *"The difference would be that obviously, on the one hand, there are political interests, and on the other, the honest and sincere part of the citizens, see the problems from outside the institution."*

It is interesting to note how these two concepts are well differentiated in the participants' understanding, and how the concept of political participation has been confused with that of political-partisan, or simply partisan, participation.

Participatory mapping

In the common sense of the participants there is the idea that participatory mapping is a tool that allows the collection of data, information about a territory and people, but until before the participation they did not know very well what this tool consists of: if it is technological, what materials are used and how exactly it is applied. The answers to the question "what is participatory mapping" were as follows:

- *"Collective construction of what you have and what you want".*
- *"Through participatory mapping, information can be obtained about different problems or needs present in a segment of the population".*
- *"Participatory mapping, I think, refers to carrying out a neighborhood-by-neighborhood house-by-house survey, and finding out how much they know about their municipality, how involved they are with their neighborhood committee".*
- *"It is a tool that allows you to have different knowledge about the state and situation of a place or a project you want to start".*

Some answers are striking, in the sense that mapping is suddenly thought to be a complex process, or one that requires technological materials: "a technological technique to analyze the community environment", "i don't know the term", "the design of a strategic methodology of a productive process".

Open data for informed participation

In the training session, emphasis was placed on participants incorporating the following key notions:

- Once data is open and released, anyone can use it for any purpose.
- An open data portal is NOT a website where the organization's institutional information, such as mission, vision and contact option with the institution, is published, but where data is made available to the public as a public good.
- Achieving open data maturity involves not only publishing the data, but also allowing data to be processed and interacted with, through formats such as CSV or Excel spreadsheets, filterable tables and interactive analytical charts. Processing and interaction cannot be done with hard data presentation formats such as PDFs.
- Data visualisation is only a first step in open data portals. The most comprehensive open data portals allow interaction with and processing of data by the users of these portals themselves.

3.1.2. Final evaluation of the training process

Two tools were used as an evaluation strategy: a. Initially, a pre-post model was incorporated to measure the intention to include public innovation and citizen participation tools. b. At the end of six months, follow-up interviews were conducted to assess whether the pre-post test model was consistent with the ownership of learning that participants demonstrated in the medium term. In addition, qualitative information had been collected on control variables that could influence as hindering or facilitating factors in the incorporation of learning into administrative practice. Specifically, information was collected on the political environment³ and municipal capacity for genuine resource management⁴. However, the limited number of cases and the degree of variability in the responses did not allow direct correlations to be established between these variables and the results.

A. Pre-post test model

Participants were asked to develop a list of 10 steps they would have to take in their role as a municipal official to find a solution to the problem. The focus of the exercise was not on implementing a solution, but rather steps to devise a solution. The case study was related to waste management in a municipality. There were 15 full papers, where it was possible to compare the pre- and post-document, 12 of them mentioned directly and concretely the implementation of citizen participation instruments in their proposals for finding solutions to the problem.

B. Medium-term follow-up phone calls

Six months after the end of the course, all participants were contacted by telephone messages, inviting them to be contacted by telephone for a brief follow-up interview. 58 registered participants were contacted and valid responses were received from 21 participants. Of these, 6 reported having implemented parts of the knowledge acquired, 10 did not implement, 2 did not give clear answers to identify their degree of incorporation of the tools, and 3 did not participate in enough classes to be evaluated.

We wanted to compare the correlation between the pre-post test assessments and the actual implementation of medium-term learning, but did not have a sufficient number of cases to draw conclusions. However, as shown in Table 1, from the statements collected from the interviewees, there seem to be indications that the pre-post test is a valid assessment tool, which allows some prediction

³ The political environment: measured by the degree of alignment between the municipal executive and legislature.

⁴ Municipal capacity is defined as the ratio of tax revenues compared to transfers from the central state. Greater dependence on transfer income implies less institutional capacity/administrative infrastructure for innovation/ change generation.

as to whether the trained official will indeed have the competencies to implement tools in his or her management practice.

The political commitment and trust that the mayor gives to generating spaces for participation emerged as an important enabling condition for implementing the learnings.

Table 2. Comparison between the results of the pre-post test and the follow-up interview.

Municipality	Pre-test Initial project	Post test Final project	Follow-up interview
Municipality 1, Official 1	She does not include any participatory governance tools or methodologies.	He/she incorporates Participatory Mapping	He/she incorporated the theoretical concepts well and implemented the tools in the field. He/she shared learning with other actors
Municipality 1, Official 2	She does not include any participatory governance tools or methodologies. He/she discusses the generation of agreements with international cooperation institutions and the Governor's Office.	He/she discusses Participatory Mapping in the city and Census in the community, referring to the tool's applicability to a specific urban context.	At no point in the interview did he mention anything about citizen participation.
Municipality 2, Official 1	He/she discusses applying Collective Intelligence She does not include any participatory governance tools or methodologies.	He/she puts forward the idea of creating cooperatives of collectors, but does not do so through a participatory process.	Did not respond to the interview
Municipality 2, Official 2	She does not include any participatory governance tools or methodologies.	He/she mentions the importance of citizen participation, but does not propose any specific tools.	There is much emphasis on the need for the executive to have these tools because otherwise, implementation is very difficult.

Municipality 3, Official 1	She does not include any participatory governance tools or methodologies.	He/she mentions the importance of citizen participation, but does not propose any specific tools.	Very good appropriation of concepts and methodologies. The municipality found much motivation to use the tools and they are using them.
Municipality 3, Official 2	She does not include any participatory governance tools or methodologies. Mentions training in educational centers on waste separation	He/she mentions the formation of a Development Council for the involvement of the different sectors involved in the proposed problem.	He/she did not respond to a request for an interview.
Municipality 3, Official 3	He/she mentions instances such as meetings between neighbors and authorities, the formation of neighborhood councils and the articulated work between municipal authorities and neighborhood councils.	He/she mentions that prior training courses are necessary so that citizens can understand how a Participatory Budget works.	He/she did not respond to a request for an interview.
Municipality 3, Official 4	He/she discusses instances of dialogue with one of the actors involved in the aforementioned problem.	He/she mentions instances such as public hearings, citizen surveys, socialization of results.	He indicated that they tried to implement the participatory budget and called the neighborhood councils, but the people did not participate.
Municipality 4, Official 1	She does not include any participatory governance tools or methodologies.	He/she talks about convening citizens to identify problems and solutions.	He/she incorporated basic concepts and is incipiently incorporating some tools in the municipality.
Municipality 4, Official 2	She does not include any participatory governance tools or methodologies.	He/she discusses the Municipality calling for a dialogue with the affected parties.	He/she did not respond to a request for an interview.

Municipality 4, Official 3	She does not include any participatory governance tools or methodologies.	He/she discusses the setting up of councils between the municipality, citizens and other actors.	He/she did not respond to a request for an interview.
Municipality 5, Official 1	She does not include any participatory governance tools or methodologies.v	He/she discusses the creation of working councils between the citizens and the Municipality.	He/she did not respond to a request for an interview.
Municipality 6, Official 1	She does not include any participatory governance tools or methodologies.	She discusses the setting up Municipal Development Councils	She was pleased with the planning and monitoring concepts she learned. However, she did not mention anything about citizen participation.
Municipality 7, Official 1	She does not include any participatory governance tools or methodologies.	He/she discusses the Municipal Development Council and the Participatory Budget.	She believes that the training was very theoretical and that the methodologies are not adapted to the type of population in her municipality. They did not apply it.
Municipality 7, Official 2	She does not include any participatory governance tools or methodologies.	He/she discusses the Municipal Development Council, the Participatory Budget and Participatory Mapping.	No respondió al pedido de entrevista.

3.1.3. Conclusions of the training experience

Although there are some municipalities with citizen participation experiences in the department of Itapúa, most of them are in a very incipient stage. The training has been a platform for networking, exchanges and peer learning, since it has been possible to observe, on the one hand, the exchange of theoretical knowledge on the subject, and, secondly, the exchange of experiences and collaborative work among the participants, especially during the workshops.

Of the 10 steps to participatory planning, 80% of the participants who did both practical work (at the beginning and at the end) incorporated the knowledge of participatory governance and social innovation. The instrument most frequently mentioned by participants was the **Municipal Development Council**. The high interest generated by the figure of the Development Council, whose role is mainly linked to the elaboration and implementation of Municipal Development Plans, represents a strategic opportunity for Central Government planning institutions: there is a **real opportunity for participatory** governance in territorial planning processes, within the current regulatory framework. Presentiality remains key for learning these capacities. Increase the number of face-to-face workshops, since this is where the knowledge was most deeply rooted. The classes with the highest involvement were the practical ones, and those when other participants spoke about their experiences. Games and the playful component were also key. The promoting organization re-designed a didactic game on Participatory Budgeting, with the objective that this instrument (with

its instruction manual) can remain input for all municipalities so that they can implement it with the other municipality officials and the citizens themselves.

It is vital to generate pedagogical materials, whether in the form of documents or otherwise, so that the capacities built in the participants can permeate the municipalities to which they belong and other municipalities.

Other questions revolve around the sustainability over time of the actions or initiatives carried out to incorporate citizen participation processes in municipal practices. It is important to show the benefits of citizen participation, and concrete examples at the local level.

Based on the experience of the course, an example of this type of process is the municipality of Fram, which has managed to incorporate citizen participation bodies such as the Municipal Development Council, and others of a more consultative nature, such as meetings with neighborhood or neighborhood councils, to diagnose problems and redirect actions if necessary. A more specific peer-to-peer exchange experience, where some municipalities can tell how they do it specifically, could serve as a basis or inspiration for those still at a more incipient stage.

According to what could be gathered in the different evaluations carried out throughout the program, it can be observed that "Citizen Participation" is a concept that is well seen and positively valued, it is understood generically, in part, and in part there are notions that are closer to the different dimensions of it. However, it can also be observed that an organizational and cultural verticality persists in the way in which the figure of the mayor still conditions the possibility or not of carrying out any "innovative" initiative within the municipal institution. **The will of the institutional political leadership is the determining factor that enables or disables democratic innovation initiatives within the municipal institution.**

The low political will to create binding spaces for participation **is evident in the fact that the most used instances are still those of consultation and accountability, rather than those of effective co-construction of processes that could be institutionalized** in the future, such as, for example, the elaboration of participatory budgets.



3.2. "Hechakuaa" citizens' laboratories as instances of co-design

We asked ourselves the following learning question:

What barriers limit the implementation of a binding citizen participation process focused on localizing and addressing sustainable development challenges and how to mitigate them?

We use the **Citizen Participation Labs** methodology in the municipalities of Encarnación and Edelira to facilitate collaboration between diverse social actors in the democratic and participatory co-design of solutions that localize the Sustainable Development Goals (SDGs) and address their challenges through public and social innovation. For its development,⁵the consulting team developed a synthesis of several previous experiences of participatory spaces. The activity took place in four moments:

1. A first moment of analysis, co-design, effective inclusion and validation of the Citizen Labs' participatory design.
2. A second moment of collaborative mapping, identification and participatory selection of the specific problem to be addressed.
3. A third moment, of co-creation between the actors of the community of the solution to be applied to the defined problem.
4. And a fourth and last moment, of implementation of the action defined and built in a participatory manner, as well as a final evaluation.

The implementation tools of this initiative, together with further details of its implementation, are presented in the toolbox ["Hechakuaa: democratic and participatory design of local innovations for sustainable development"](#).

3.2.1. Findings from the Citizen Labs experience

From the participant observation of the two specific instances of these laboratories, we document the dynamics of collaboration and tensions that cross each moment of the process, as well as barriers and opportunities for citizen participation in community contexts, defined and localized, we derive the following conclusions:

- Hechakuaa, as a citizen laboratory, represents an innovative and **flexible participatory design, which contextualizes and combines design thinking principles with various face-to-face and virtual tools, to add as many voices as possible to the process** of co-creation and implementation of community solutions to sustainable development challenges.
- As with training, **face-to-face attendance remains key**. The face-to-face meeting of different sectors and organizations broadens the challenge of participatory processes, as they have different (even conflicting) interests to be addressed. Sustainable development objectives, localized at the city level, and driven by local community members, offer a **collaborative mission framework that makes it possible to synthesize different interests in the general interest**.
- The limits of the spatio-temporal conditions necessary for democratic participation processes from the point of view of citizenship are limited. **The constitution of a driving team** with community organizations, aimed at guaranteeing the process, is a determining factor that

⁵ Culture and Participation (C&P)

provides sustainability to the process, bringing together organizations and citizens and achieving the proposed result.

- **The articulation of plans and projects** between the community and the government, whether local or national, allows for solvent action that, in turn, advances in institutionalization, sustaining itself over time as public policy, benefiting the communities and participating citizens.
- Citizen participation is mobilized around the **real possibilities of changing their reality**. The possibility of implementing community-based solutions to development problems co-created by the community itself encourages participation and commitment in the Hechakuaa process, giving greater strength and empowerment to the participants.

In conclusion, we identified that the "Hechakuaa" Citizens' Labs methodological tool works, allows for a synthesis of diverse citizen interests and is appropriately integrated into the institutions and forms of local participation that exist in Paraguay.

Evaluation by the team of consultants

Table 3. Barriers identified by the team of consultants

Barriers identified	Mitigation
<p>Related to logistics</p> <ul style="list-style-type: none"> • Lack of knowledge of local actors • Low turnout due to the time of year and elections in between • Unsuitable timetables for participants • Short project implementation time • Obtain municipal authorization for the participation of civil servants. Many officials were interested but did not have the approval of their mayor. 	<ul style="list-style-type: none"> • Face-to-face meetings were key to strengthening participation and interest. • Provision of mobility incentives to mitigate mobility risk for face-to-face encounters • Weekly follow-up meetings and progress logs with the consultant teams.

Barriers identified	Mitigation
<p>Related to the theme</p> <ul style="list-style-type: none"> • Skepticism towards civic technologies • Lack of municipal support. The participants • said that "the mayor does not want me to participate because innovation will cause us problems". • Participatory governance and public innovation make authorities uncomfortable because they challenge, but at the same time can help to get the attention of public officials. 	<ul style="list-style-type: none"> • Map strategic partners, who they are and where they are located. • Always have a letter of introduction of who we are and what we do to reach institutional authorities. • To Incorporate moments of general political and party political analysis.

Operational recommendations

- Exploring new tools, logical frameworks and indicators to monitor the process
- To incorporate the social communication component into Tavarandu's design.
- To integrate each component: One should not work on each axis separately, but push the efforts more cohesively.
- To prioritize local examples: People connect more when their peers discuss experiences where everything that is presented is used in a technical and theoretical way.
- To involve municipal officials as drivers of initiatives. To keep in mind alternatives for processes to survive the change of authorities.



3.3. Civic Technologies for Civic Participation Training Programme

We asked ourselves the following learning question:

What are the barriers and opportunities of participatory formats such as bootcamps and hackathons to design digital platform ideas for citizen participation?

In recent years, technological means have expanded into all spheres of our lives, and citizen participation has been no exception. [Digital platforms](#) for participation have emerged and matured in the last decade, bringing new opportunities and challenges to participatory governance processes.

Civic technologies promise to increase the scope of citizen participation processes, challenging conventional paradigms of collective action. But **what are its real barriers and opportunities in contexts such as local government in Paraguay?** To create a small temporary space for learning and exploring possible responses, two training programs were developed in the format of Bootcamp and Citizen Hackathon, for the customization, installation, agile development, and demonstration of a digital platform for citizen participation, using open-source⁶.

3.3.1. Citizen Bootcamp

The Citizen Bootcamp was an intensive four-week, mostly online programme that connected experienced software development professionals with students and amateurs who participated in online training sessions and one-on-one mentoring⁷.

The program sought to train participants in specific tools that are used to customize and develop local instances of a multipurpose, open-source citizen participation platform with an international community of developers and wide international adoption.

A total of 30 people participated. Out of 4 modules, only 14% managed to complete them adequately and 22% reached module 3. The remaining 64% consider that they participated adequately only up to module 2 or less. A total of 8 participants had contacts with the mentors, and half of them rated them as excellent in subject mastery, listening skills and support tailored to the needs. One of the participants rated these items as acceptable. Two participants considered the number of hours as poor

There were 28 responses to the expectations questionnaire and 8 responses to the evaluation questionnaire. Participants ranged in age from 16 to 35 years. The average age was 25. Based on the comments received in the evaluation, we organized the following table with challenges and recommendations.

⁶ The experience of Decidim.org, an open-source collaborative platform based in Barcelona, which is used in experience in several cities worldwide, was used.

⁷ Tools were provided for the use of the Ruby programming language, the Ruby on Rails (RoR) development framework, web development technologies such as HTML, CSS, SCSS, Javascript, and other web design and development technologies and tools used in Decidim.

Table 4. Opportunities for improvement

Opportunity for Improvement	Improvement Strategy	Impact
<p>Several participants indicated that they had problems with downloading software, where specific versions of certain software or configurations were needed.</p>	<p>Participants suggested recording the video conferences. In addition they indicated that having more specific video tutorials for specific challenges and developing guides for some activities would be helpful.</p> <p>They also requested that at least one or two classes be face-to-face to learn how to download the programs and make progress.</p>	<p>High</p>
<p>Participants with specific problems that make it difficult for them to make progress, but in the videoconference modality, they had difficulties in expressing their concerns because sometimes they did not know how to raise them.</p>	<p>Participants would benefit from fixed dates and times for consultation with mentors during the challenges.</p> <p>To open spaces of 30 minutes or 1 hour every day so that if someone has questions or problems, they can comment on them.</p>	<p>Moderate</p>
<p>Participants with specific problems that make it difficult for them to make progress, but in the videoconference modality, they had difficulties in expressing their concerns because sometimes they did not know how to raise them.</p>	<p>Selected participants to have access to the courses and tutorials from the first stage (training and participatory governance), and when addressing civic technologies, the participants can focus on the challenges exclusively to be better prepared.</p>	<p>Light</p>

Positive comments from participants

- Excellent and challenging. Despite not being able to finish the homework, I learned the basics, although I know that I still need to learn and understand much more. I would like the classes to be face-to-face at some point, or at least to be hybrid.
- Good, it helped to dabble a bit in using an open-source project for something potentially far-reaching for our society.
- It is a good experience, something different and very innovative. Raises awareness of the role of participants in implementing projects focused on solving a problem in their community.
- All the tools provided to us are part of the present and the future, it is necessary to create more training spaces so that more people can participate, learn and get involved in the collaboration to improve their communities or organisations as much as they can and as much as the knowledge acquired through this platform or the next ones that will come.

3.3.2. Civic Technologies Hackathon

The Civic Technologies Hackathon was an intensive, marathon-style meeting where teams collaborated for two days to develop demo versions of a citizen participation platform, based on the open-source platform known as Decidim.

Before the two-day Hackathon, online training sessions were organized, supported by one-to-one mentoring, on the following topics:

- introduction to citizen participation and the platform Decidim.org
- Workshop on configuration and administration of the Decidim platform
- Programming solutions with Decidim.org
- Participation in the world of computing: how to be part of an open source community?

During the event, face-to-face workshops were offered on three themes:

- How to make a good presentation (Pitch)
- Dynamic focus on ideas: Lightning Decision Jam
- Workshop on examples of citizen participation

The main objective of this activity was to promote the learning and collaboration of multidisciplinary work teams, made up of people with a technical profile and experience in software design and development, and people with a social profile, with experience in participation and volunteering processes.

Six teams were formed, with a total of 24 participants, from different universities, university courses and cities. In addition, 8 expert mentors and 6 jurors representing experts from the public, private and academic sectors participated.

Among the citizen participation challenges to be solved with alternative digital platforms and applications, case studies that had been mapped in the previous stages were used.

For example, the following questions were presented, in the format of Design Scenarios and Challenges⁸:

- **More Participatory Neighborhood Councils:** How could we facilitate, promote, increase and improve the quality of participation of the residents of a neighborhood or defined territory in the activities and decisions of the neighborhood council(s) closest to them?
- **Participatory Management and Governance of a Public Park:** How can we help an organized group of citizens to coordinate activities that activate a public space, such as a neglected urban park?
- **Participatory Planning and Articulation of a Municipal Development Plan through the Municipal Development Council:** How could we promote the creation of more Municipal Development Councils, increase awareness and knowledge about their importance, and improve citizen participation in the drafting of Municipal Development Plans?
- **Participatory Risk and Disaster Management:** How might we facilitate participatory understanding and identification of hazards, vulnerabilities, disasters, and capacities to address or mitigate risks in a community?
- **Participatory Governance of an Organisation:** How can we facilitate the governance processes of community organisations, civil society organisations, cooperatives, and organised local communities in general?

⁸ Each of these challenges was presented in a format that introduced a scenario based on real participation spaces, followed by design questions introducing the challenge. The full challenges are available in this supplementary material: <https://drive.google.com/file/d/13DsTLL36hur56Scn-QqRbG64i6n-7P3Q/view>

- **Participatory Drafting of Popular Initiatives:** How could we facilitate the process of participatory drafting and signature gathering for legislative proposals to be submitted through popular initiatives?
- **Participatory Town and Country Planning:** How might we broaden the scope and improve the quality of participation of a municipality's residents in the process of creating their city's Town and Country Plan?

More information on the development of the event and its winners is available on the [Information Blog](#).

3.3.3. Lessons learned and suggestions for improvement

To evaluate this experience and learn from it, we used two methods of data collection: 1) an online evaluation survey https://docs.google.com/forms/u/1/d/1gpigGQcQYEH1bYy1p1ijc41gCo5GG487c4PXdi_g4aU/edit?ts=642c6834 - responses addressed to the people who took part in the Hackathon: participants, jurors, mentors and the coordinating team, 2) observations collected through participant observation and 3) recommendations from the consulting team.

The survey was administered after the end of the Civic Technologies Hackathon. It consisted of 19 questions and was answered by 27 people in total. Of these, 19 were participants, 5 mentors, 2 jurors and 1 from the coordinating team⁹.

Table 5. Opportunities for improvement

Opportunity for Improvement	Improvement Strategy	Impact
Low participation of women	A Hackathon exclusively for women could be envisaged. It would also be a good strategy to send out individual invitations through partners to get more women to apply.	High
Provide a stable Internet connection. Among the logistical aspects, there was a high level of satisfaction with the Hackathon venue (Universidad Autónoma de Encarnación) and the food offered during those days.	Test in advance the speed and stability of the Internet connection of the venue where the event will take place. In case it is unstable, contract your own connectivity service.	High
Help participants to focus challenges into real design questions. Most people rated the	Some of the mentors could be members of organizations that are familiar with one or more of the challenges to be solved in the Hackathon; this makes it easier for participants to discern real problems with	High

⁹ It is important to emphasize that the aim of these analyses is the systematization of learning, i.e. they are neither statistically representative nor conclusive.

<p>proposed challenges with 5 and 4 points (on a 5-point scale). In a more disaggregated manner, we can see that the highest average corresponds to the participants (4.7), while the lowest averages are associated with the jury and the coordinating team (3.5).</p>	<p>viable solutions.</p> <p>To provide more guidance on real needs for participation, to ensure the relevance and applicability of proposals. It would be advisable to contrast the ideas with real users, in order to adapt and adjust the initial ideas.</p> <p>Participants should have access to more information about them before holding a hackathon.</p>	<p>Alto</p>
<p>Simplification of the grading scale. The majority of respondents gave the highest score (5) to the evaluation criteria. In the case of the participants, they showed more agreement with the criteria (average 4.5). In contrast, mentors scored an average of 3.6 points on the evaluation criteria.</p> <p>The majority of participants who answered the question considered the criteria to be transparent. While some mentors and jurors (7 people in total) felt that the criteria were confusing, too long or not flexible enough.</p>	<p>Add concrete and specific examples for each category and level of fidelity. Avoid sentences that may imply generalizations or free interpretation.</p>	<p>Moderate</p>
<p>Give pitch workshop earlier</p>	<p>The pitch workshop could be held one day before the presentation of solutions, rather than on the same day.</p>	<p>Light</p>
<p>Strengthen the basic knowledge leveling of the Hackathon.</p> <p>The majority of respondents rated the difficulty as 4 and 5, i.e. the perceived level of difficulty was high. As for the average per group, it is interesting to note that the participants had the lowest score (3.2), i.e. the group that found the Hackathon the least difficult, while the highest score was associated with the</p>	<p>The onboarding or basic knowledge leveling on the topic of the hackathon (citizen participation) should be mandatory for the participants to make better use of the ideation time.</p>	<p>Light</p>

mentors who accompanied the teams (4.4). This might suggest that the mentors observed more difficulties in the teams that the participants themselves could not perceive.

Light

The Hackathon's difficulty was associated with using Decidim as a platform. In this sense, of the people who considered Decidim as a difficulty, 7 were participants, 4 were mentors and 1 was a member of the jury. The following are some of the reflections made by the participants:

- *"The main difficulty was getting access to Decidim's source code".*

Participant

- *"Decidim provides documentation which in my opinion, is not enough. There are some things that you don't quite understand how to implement. There is little information available outside the official websites. The webinars were key".*

Participant

- *"The difficulty was high, the knowhow of the tool was low, and the tool is not particularly practical for beginners. For future occasions, the collectivity at the site should be better anticipated and tested, and the challenges of both infrastructure and development operations should be resolved."*

Mentor

- *"Learning something new restricts and does not allow you to show technical ability".*

Jury

Respondents' overall experience within the Hackathon was very positive. 26 out of 27 respondents rated the experience with 5 points. For more detailed information, we asked respondents what they liked most and least about the Hackathon. Among the most appreciated aspects **were the good atmosphere**, the mentoring, the challenge, the organization and the participants' enthusiasm. This reflects the need and importance of generating spaces for co-creation and solutions to community challenges through technology in this community. Among the aspects that were least liked were: logistical aspects (accommodation, meals, the transfer to Itapúa, lack of sleep), the agenda and timetables, and the technical aspects associated with Decidim.

Barriers to the development of citizen participation platforms

As previously mentioned, one of the main objectives of the Tavarandu Civic Technologies Hackathon is to identify and learn about the barriers that exist in Paraguay for the use of technologies that facilitate citizen participation. For this reason, we asked respondents to share their views on these barriers. In total, 18 respondents answered the question, and in some cases, respondents gave more than one opinion. The responses were systematized, Table 2 summarizes the systematization categories: 1) barriers associated with the Hackathon, 2) institutional barriers, 3) technological barriers and 4) citizen barriers.

Table 6. Systematization of identified barriers to the development of citizen participation platforms

Citizens' barriers to the Hackathon	4	Citizens' Barriers	7	Citizens' Barriers	7	Citizens' Barriers	7
Lack of space for exchange among participants	1	Lack of political will	2	Limited internet access	5	Technological illiteracy	2
Lack of multidisciplinary teams	2	Little promotion by the state	2	Limited access to the platforms once developed	2	Resistance to change	2
Lack of consensus in the teams	1	Lack of support to carry out projects	2			Lack of interest in citizen participation	2
		Lack of budget	1			Lack of a lead person to lead the initiatives	1
						Lack of consensus on the needs of the community	1

Amongst the **barriers associated with the Hackathon**, we can see that the one most frequently identified by respondents is the lack of multidisciplinary teams to tackle the challenges. This is associated with the complexity of **structural barriers to citizen participation** that exist in the normative, cultural and practical framework we find in our communities.

"I believe that those who design a participatory process must have a very varied skillset, so it is essential that the team is multidisciplinary. Understanding the legal framework, policy, technology, usability, design, etc. It's a challenge in itself to get the right team in place."

Mentor

Institutional barriers include lack of political will, lack of state promotion and lack of support for civic technology projects. This dearth of advocacy can also be seen in the limited number of local digital participation initiatives that go beyond generating informative, consultative or monitoring platforms (Pogrebinschi, 2018).

"The main barriers are disinterest, lack of budget and support from government and citizens."

Participant

In terms of **technological barriers**, the digital divide, expressed in terms of lack of internet access or poor quality of available connectivity, is one of the most frequently cited by respondents. During the Hackathon and Bootcamp, we were also able to observe that there is a **steep learning curve** associated with existing open source platforms for digital participation, which also offer, in general, little documentation in Spanish.

"Access to the internet and motivation to use it are barriers".

Mentor

Finally, among the citizen barriers, the digital divide also emerges, **which is expressed** in the limited skills and experience of using technologies by citizens, who **also find it difficult** to find the motivation and confidence to devote their time to actively participating in the governance of their territories and communities.

"The refusal of some people to change how things are done and include technology in the processes".

Participant

Opportunities for the development of citizen participation platforms

On the other hand, we analyzed the opportunities for developing citizen participation platforms according to the respondents. In total, we received 15 responses, and in some cases, respondents offered more than one opinion. In general, **we can observe that solving latent problems and needs** at local and community levels generate a strong level of commitment and interest in young people who are beginning to learn about technology, which represents an opportunity for creativity and innovation in the use of digital tools for future participation:

"Optimise the idea of selecting real needs, which can be tested and applied by specific groups of people, in real situations".

Coordinating team

In addition, the **dissemination and diversity of citizen participation platforms** was also identified as an opportunity by respondents. There are already numerous digital platforms for participation, already developed, open, available, adaptable and usable, with their communities of practice and development (Saldivar et al., 2018).

"Giving more knowledge to other people who don't know about the platforms".

Participant

The **use of the Decidim platform and doing more of these activities** were also identified as opportunities by respondents:

"The Decidim platform is an opportunity, because of its modules and components".

Participant

"More events like the Hackathon! Bringing together those passionate about technology who are looking to use it as a tool to see positive change in the community".

Participant

One of the responses that opens up an interesting perspective of opportunities has to do with making **alliances with universities** to carry out this type of initiative. This opportunity points to the potential for university outreach to give birth and sustainability to communities of practice focused on civic technology:

"Working them from the universities can start as something internal and then as an urban observatory from the academy, linking them to organized civil society, by themes".

Jury



**FINAL CONCLUSIONS
AND RECOMMENDATIONS
ON PUBLIC INNOVATION
AND PARTICIPATORY
GOVERNANCE IN LOCAL
GOVERNMENT**

How do we strengthen citizen participation in our communities? How do we improve our capacities to participate and to generate or facilitate more participation? How do we connect participation and sustainable development at the local level?

Throughout this participatory governance learning cycle, we have found different answers to these questions: from the importance of collective community assets and participatory management to reduce vulnerabilities, to the need to design comprehensive capacity development and practice programs for participatory governance in all sectors. All of these responses are offered to the local, national and international community as starting points for continuing to build more open and participatory democracies.

For UNDP and its Acceleration Lab, learning about participation meant introspection into our own practice and experience, and helped us progressively to better participate and host, with more care **and ethics, every participatory process, every conversation, every dialogue**, that we had to facilitate, whether to govern resources, make decisions, co-create solutions, or generate knowledge and evidence on sustainable development. Our learning path has been emergent, continuous and dynamically building.

Tavarandu, the *wisdom of the peoples* in Guaraní, is designed as a programme because we aspire to be an articulator and seedbed for initiatives that promote the vision of a future with more participation. This whole learning pathway points strongly to the fact that **investing in participatory governance is about enabling sustainable development**, opening the door for it to flow and achieve legitimacy. This working paper has elaborated on all the **key findings of the whole Public Innovation and Participatory Governance cycle in Local Governments**, focusing on the **Tavarandu program**, whose design and implementation represent its first experimental stage.

As an articulating and seed program, our evaluation points to it as an example with much potential to articulate various institutions, organizations and citizen groups working on these issues and host processes that allow for the design and experimentation of new participatory governance initiatives applied to different processes.

Analysis of key learning and implications

The results of this type of process are observed over the long term, so measuring indicators of leadership, participation, institutional capacity and trust, among others, is complex. These phenomena do not change easily in the short term, which is why finding resources to invest in Participatory Governance programmes is often a challenge. In this first working paper on participatory governance, we have synthesized findings and lessons that, we believe, can be used to improve the design of such programs in the future, many of them connected to concepts and findings also documented in the academic and practical literature.

Many empirical studies on participation point to the institutional design of institutions and organizations as a determining factor (Fung & Wright, 2003; Setrini & Recalde, 2019), i.e. the normative and organizational institutional framework that enables participation. In our cycle, we observed that although we have interesting institutional arrangements, **the practice of participation** is limited because these designs generally lack mechanisms to generate a binding response from local authorities, which in turn results in a low culture of participation. Against this background, two factors that can help bridge the gap between design and practice have to do with the **level of competitiveness of the political party system and the strength and autonomy of civil society at the local level** (Zaremborg 2012). Bringing the agenda to public officials, political leadership, and local citizens' groups, to increase competition on the one hand, and the strength of civil society on the other, may be the key to overcoming the limitations of our institutional designs.

However, as we have seen throughout the cycle, the need for **political leadership with the will to drive democratic innovation initiatives** is a factor that makes or breaks processes. Finding, or developing, willing leaders, or 'political entrepreneurs' (Mayka, 2019), is the other element to consider to ensure the success of programmes such as Tavarandu. From what we have learnt, it is advisable to associate political entrepreneurs with social entrepreneurs, actors committed to local sustainable development who can form part of **teams promoting participatory governance initiatives**.

Fung and Wright (2003) mention other elements: (1) devolution of power to local units (binding, non-advisory power), (2) centralized and coordinated oversight, and (3) reforms aimed at transforming governance institutions. Developing participatory governance capacities in **local governments is an example of devolution of power to these local units**, and the opportunities that exist in territorial planning processes, with their central government oversight and coordination components, point us down a **path of opportunities** for participatory governance in processes such as the **construction of development plans and urban and territorial planning**.

However, as we have seen, these participatory planning processes often need to be more abstract and connected to the immediate problem. **Connecting territorial planning with concrete and tangible sustainable development actions is a gap that can be bridged with processes such as the Hechakuaa Citizen Laboratory**. If we can link these actions to the generation of new collective community assets, we may be able to experimentally validate what our social capital data pointed us to from observation.

Sustainable development objectives, localized at the city scale, and with the leading role played by local community members, provide these processes with a **collaborative mission and strategic framework** that makes it possible to connect plans with local actions **and synthesize different interests in the general interest**.

The emphasis on face-to-face is another factor to keep in mind, especially when we consider exploring the use of civic technologies to broaden the scope of participation. Our learnings imply that integrating technology must occur in hybrid participation processes that configure what we could call **multimedia or hybrid communities** (Mosconi et al., 2017): **groups of citizens who participate through multiple channels, forms, and media**. The challenge of developing digital platforms becomes even greater when considering that there are not only structural barriers to citizen participation and digital divides, but also the need to properly integrate the analogue and digital worlds.

Finally, promoting citizen participation, beyond metrics and tangible results, **is a rewarding experience in itself**. Local governments, citizens' groups, researchers, consultants, technicians: when the conditions are right, each participant enjoys participating and takes something away with them. Ethics and care for group dynamics are essential for these programs to work, especially **special attention to power inequalities between participants in a process**. As hosts of a participatory process, our role will generally be to ensure equity and reduce inequalities so that the processes are truly inclusive and empowering.

Summary of final recommendations

- To bridge the gap between institutional governance design and practice, we, therefore, recommend **bringing the program not only to public officials, but also to political leadership and local citizens' groups**, to increase competence on the one hand, and the strength of civil society on the other.
- We recommend seeking out, or supporting the development of, **willing leaders, or "political entrepreneurs"**, to ensure the success of programs such as Tavarandu.
- In addition to political entrepreneurs, *social entrepreneurs*, actors committed to local sustainable development who can form part of **teams promoting participatory governance initiatives**, should also be involved.
- There are good opportunities to develop participatory governance in spatial planning processes, with its monitoring and coordination components from the central government. We recommend developing programs such as **participatory Tavarandu in processes such as developing development plans and urban and territorial planning**.
- To connect participation to real local problems, we recommend **connecting territorial planning with concrete and tangible sustainable development actions**.
- We also recommend the adoption of the Sustainable Development Goals, localized at the city level, as the **mission and strategic framework for collaboration** to synthesize different interests in the general interest.
- For the design of participatory processes, we recommend designing the processes in a way that generates hybrid participation, allowing **groups of citizens to participate through multiple channels, forms, and means of communication**, appropriately integrating the analogue and digital worlds.
- Finally, promoting citizen participation, beyond metrics and tangible results, **is a rewarding experience in itself**. We recommend adopting an ethic of care that focuses on the **power inequalities between the participants in each process**.



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BIBLIOGRAPHICAL REFERENCES

Aragón, P., Bria, F., Filippi, P. de, Halpin, H., Korhonen, J., Laniado, D., McCarthy, S., Medina, J. T., & Waa, S. van der. (2014). D4. 3 *Technical Design of Open Social Web for Crowdsourced Democracy*. 610349.

Arnstein, S. R. (1969). A Ladder Of Citizen Participation. *Journal of the American Institute of Planners*, 35(4), 216-224. <https://doi.org/10.1080/01944366908977225>

Bassetti, C., Sciannamblo, M., Lyle, P., Teli, M., Paoli, S. D., & Angeli, A. D. (2019). Co-designing for common values: Creating hybrid spaces to nurture autonomous cooperation. <https://www.zotero.org/google-docs/?IWPSaQ>
<https://doi.org/10.1080/15710882.2019.1637897>

Fung, A., & Wright, E. O. (2003). Thinking about Empowered Participatory Governance. In *Deepening Democracy*. <https://www.hks.harvard.edu/publications/thinking-about-empowered-participatory-governance>

Gross, M., & Schulte-Römer, N. (2019). Remaking Participatory Democracy through Experimental Design. *Science, Technology, & Human Values*, 44(4), 707-718. <https://doi.org/10.1177/0162243918799172>

Pogrebinschi, Thamy. (2017) *LATINNO | Innovations for Democracy in Latin America*. <https://latinno.net/en/>

Luyet, V., Schlaepfer, R., Parlange, M. B., & Buttler, A. (2012). A framework to implement Stakeholder participation in environmental projects. *Journal of Environmental Management*, 111, 213-219. <https://doi.org/10.1016/j.jenvman.2012.06.026>

Mayka, L. (2019). Society-driven participatory institutions: Lessons from Colombia's planning councils. *Latin American Politics and Society*, 61(2), 93-114. <https://doi.org/10.1017/lap.2018.79>

Montanía, C., Parra, Cristhian, Setrini, Gustavo, & Rios, Monica. (2021). *Social capital in Paraguay: An asset for combating vulnerability during the COVID-19 pandemic? | United Nations Development Programme*. UNDP. <https://www.undp.org/library/dfs-social-capital-paraguay-asset-combatting-vulnerability-during-covid-19-pandemic>

Montanía, Claudia, Parra, Cristhian, Setrini, Gustavo, & Ríos, Mónica. (2022). *Social capital during the pandemic in Paraguay : United Nations Development Programme*. UNDP. <https://www.undp.org/es/paraguay/publicaciones/el-capital-social-durante-la-pandemia-en-paraguay>

Mosconi, G., Korn, M., Reuter, C., Tolmie, P., Teli, M., & Pipek, V. (2017). From Facebook to the Neighbourhood: Infrastructuring of Hybrid Community Engagement. *Computer Supported Cooperative Work: CSCW: An International Journal*, 1-45. <https://doi.org/10.1007/s10606-017-9291-z>

Nakagawa, Y., & Shaw, R. (2004). SOCIAL CAPITAL AND DISASTER RECOVERY: A COMPARATIVE CASE STUDY OF KOBE AND GUJARAT EARTHQUAKE. *Japan*, 771.

Putnam, R. D. (2000). Bowling Alone: America's Declining Social Capital. In *Culture and Politics*. https://doi.org/10.1007/978-1-349-62397-6_12

Saldivar, J., Parra, C., Alcaraz, M., Arteta, R., & Cernuzzi, L. (2018). Civic Technology for Social Innovation: A Systematic Literature Review. *Computer Supported Cooperative Work: CSCW: An International Journal*. <https://doi.org/10.1007/s10606-018-9311-7>

Setrini, G. A., & Recalde, L. R. D. (2019). The development of participatory institutions in Paraguay: a tool for democratization or for state control? *Paraguay Journal from the Social Sciences*, 0(10), 68-89.

Shoji, M., Takafuji, Y., & Harada, T. (2020). Formal education and disaster response of children: Evidence from coastal villages in Indonesia. *Natural Hazards*, 93250. <https://doi.org/10.1007/s11069-020-04077-7>

Smiley, K. T., Howell, J., & Elliott, J. R. (2018). Disasters, local organisations, and poverty in the USA, 1998 to 2015. *Population and Environment*, 40(2), 115-135. <https://doi.org/10.1007/s11111-018-0304-8>

Sørensen, E. (2012). Governance and innovation in the public sector. In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 215-227). Oxford University Press.

Zaremborg, G. (2012). "We're Either Burned or Frozen Out: Society and Party Systems in Latin American Municipal Development Councils (Nicaragua, Venezuela, Mexico, and Brazil). In M. A. Cameron, E. Hershberg, & K. E. Sharpe (Eds.), *New Institutions for Participatory Democracy in Latin America* (pp. 21-51). Palgrave Macmillan US. https://doi.org/10.1057/9781137270580_2



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