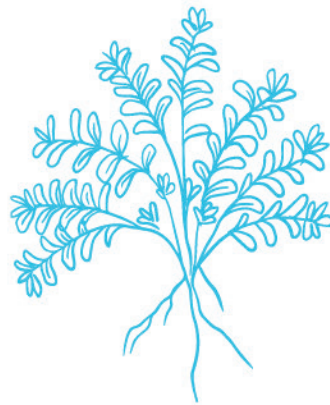


Policy Brief

Recommendations for public policies
for the revaluation of

Medicinal Plant Collectors: Guardians of Ecosystems

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MEMORIAS

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Executive summary

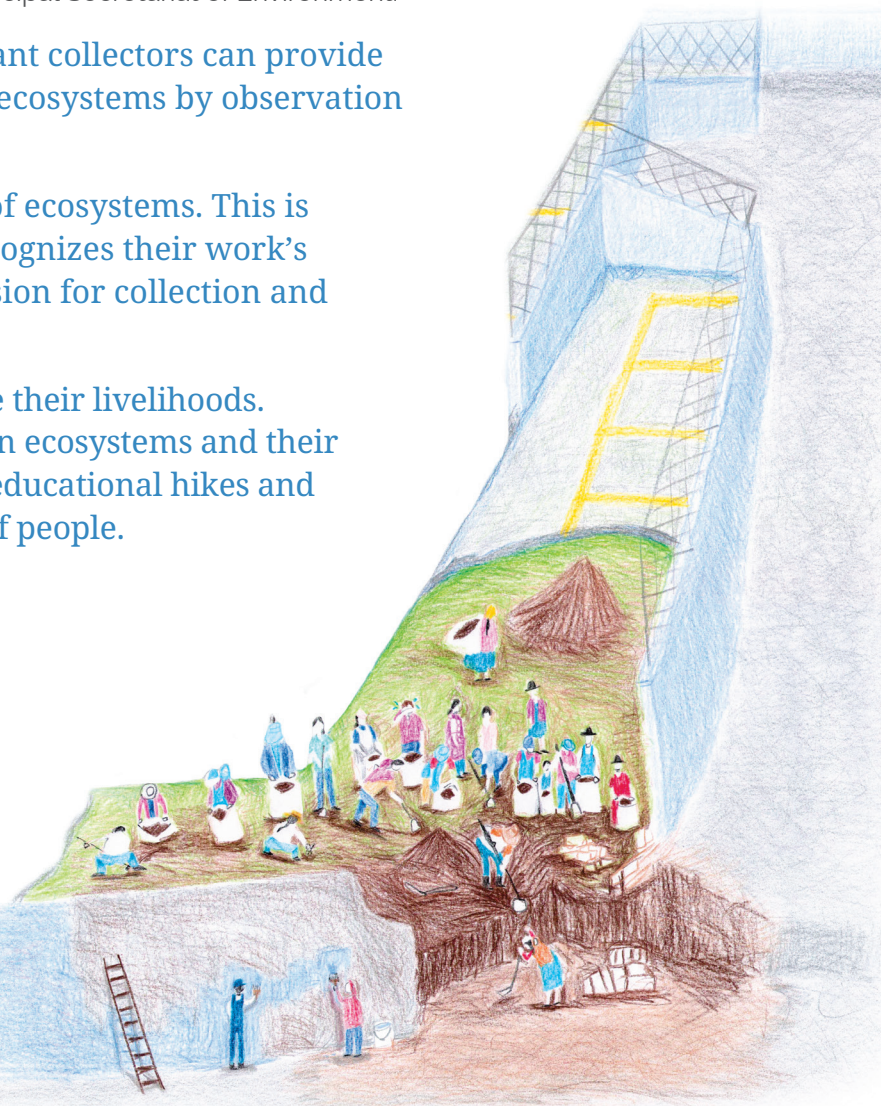
The May 1st Central Market is a wholesale market for medicinal plants located in the San Roque area of Quito. Its products come from agroecological vegetable and/or medicinal herb gardens or collection sites such as ravines, hills, and forests. The trade of collecting provides a significant contribution to the conservation of ecosystems, ancestral wisdom, and health. This report provides learnings obtained after having visited the collection sites with ten female collectors. These routes are displayed on the UNDP Ecuador Acceleration Lab digital map www.otrosmapas.org

We present the challenges faced by medicinal plant collectors, their contributions, and recommendations for public policy design to promote cultural and environmental conservation by protecting their work. After gathering information and discussing with various institutions, the following solutions are proposed to be implemented by the municipal administration through the Municipal Secretariat of Environment.

- 1) **Community monitoring – Plant collectors can provide information of the state of the ecosystems by observation and report to the municipality.**
- 2) **Credentialing as guardians of ecosystems. This is done applying a policy that recognizes their work's value and grants them permission for collection and strengthens capacities.**
- 3) **Community tourism to improve their livelihoods. Given the collectors' expertise in ecosystems and their flora, these women could lead educational hikes and guided tours for small groups of people.**



For more information, please visit **Other Maps**





Background

Local markets have historically been fundamental to supplying urban areas. In Quito, the supply of fresh products mainly comes from the four wholesale markets in the district (Mayorista, San Roque, Chiriyacu, and Feria Libre de la Ofelia), which supply 63% of the inventory of products available in markets and fairs, with San Roque and Mayorista being the most important, from which more than 66% of the city's traders are supplied. However, the market system has been weakening and losing customers whose consumption patterns have changed. This is reflected by the fact that the food insecurity index in Ecuador reached 13% in 2021, while food waste reached over four thousand tons that same year.

That being said, it is important to analyze the dynamics of the agri-food market in the city, since its network of knowledge, people, and circuits demonstrate the intricacy of the territorial system involving specific places and flows of people and food, thus, it is important to consider the market's spatial dimension.

This does not mean delimiting them in terms of property boundaries, but rather accounting for the mutual relationship between the geographical and the social space, since popular markets and their organization represent socially differentiated struggles for physical public space.

In other words, physical and geographical space influences the construction of commercial and social networks by promoting the territorialization of power groups. In that sense, the popular market's geography becomes a spatial position as well as a socially differentiating position.

In that context, women's participation in commercial networks is also a field of dispute. According to Hollenstein, ⁽¹⁾ the majority participation of women is built together with family relationships and territorial networks. Daughters inherit their mothers' business, along with the trust relationships that have been built over time with their clients. The participation of daughters in the sales process is crucial for the intergenerational reproduction of family businesses; a participation that has decreased due to the decrease in consumption, a lack of security, and precarious labor conditions in the markets.

This process of precariousness stems from the modernization policies between 1970 and 1990, which García ⁽²⁾ describes as a covert privatization through the weakening of the public management and administration of municipal markets, outsourcing, and the forced accountability of market operations disguised as self-management, resulting in exclusionary management and unregulated competition for central locations in urban areas; which is expressed in patterns of spatial expansion, urbanization of areas of small-scale production and collection, and product loss.



Medicinal herbs collectors and traders, once of great importance within the local medicinal and food tradition, are now beginning to disappear due to the urbanization pressure and public policies that disregard this work. Their workspace is one of the most precarious both in terms of labor, social, and territorial aspects.



Intervention

The San Roque market is one of the main trading spaces in the city, welcoming both producers and wholesale and retail traders. The May 1st Market has operated in this complex since January 15, 1975, bringing together more than 250 merchants of which more than 100 are herbalists engaged in the production, collection, and sale of edible and medicinal herbs. Its customers include intermediaries, supermarket vendors, and companies, as well as direct consumers. More than 85% of these producers earn less than the minimum wage.

That is where the City Museum initiated the project named 'Territorios que Sanan,' initially from a cultural revaluation approach, to which Ecuador's Accelerator Lab joined contributing action lines focused on livelihoods, environment, and innovation, with an approach on solidarity and circular economy, through a Community Innovation Minga process that consisted in understanding and seeking solutions to the problems faced by the herb traders in the market, using design thinking methodologies for prototyping and testing solutions.

Special attention was given to the issue of herb collectors, which, due to its particularity, required another collaborative work scheme, a different way of understanding, and other opportunities for reflection. Besides, to understand their work, their challenges, and their contributions, we mapped and georeferenced the routes of herb collection with ten collectors which was a key intervention for this report.





The trade of medicinal plants collection

The use of plants for medicinal purposes has been part of Andean traditions that persist despite the consolidation of Western medicine and the use of drugs for disease treatment.

In that context, the collectors' trade is part of the broad understanding required by ancestral medicine. As a result, their knowledge includes not only the properties and healing powers of plants and herbs and the ability to connect and 'converse' with nature, but also knowing the best procedure to treat different ailments, illnesses, and diseases.

Plant and herb collectors have knowledge in botany, which allows them to recognize plants in nature and their edible, medicinal, and toxic qualities. They have knowledge about climatic cycles, climatic zones, and the geographical areas where medicinal plants can be found. Furthermore, unlike botanists, they are aware of the symbolic significance of the plants they collect and the places where they do so. They are also a repository of living culture, preserving in their memory the ancestral stories of ravines, rivers, forests, and mountains.

Their traditional learning makes them expert monitors of the state of rivers, streams, and forests; likewise, their work allows them to recognize pollution in plants and also to locate the pollutants to which they are exposed. They are experts at maintaining plant health and identifying pests, such as the black-eyed Susan vine (*Thunbergia Alata*).





73.1% of the herb traders in the Market are over 60 years old and have been in the trade for more than 31 years. Ten percent of them actually collect the medicinal herbs. Their practice involves traversing protected areas such as ravines, riverbanks, forests, and highland areas páramos in the city, pruning, cleaning, and caring for those areas where medicinal herbs grow. In this way, they protect ecosystems keeping health, life, and culture alive.



The issue

According to a study sponsored by INABIO, Quito's historical growth process promoted filling the city's ravines, resulting from a hygienist perspective, and developing infrastructure in them to solve the waste issue. Thus, out of the 182 ravines in the city, around 70 would have been filled or transformed into sewers (3).

Likewise, the highland areas- páramos- in the Metropolitan District of Quito (DMQ), where the sources of 14 river micro-watersheds are born, are very vulnerable to harmful activities such as grasslands burning, overgrazing, and extension of crop areas. These activities have caused the reduction of the original vegetation cover, which leads to major erosion and drying up of lagoons and water springs (4).

Consequently, both local and national environmental authorities have enacted several laws and regulations in order to protect natural remnants from predatory actions, including prohibitions on plant collection tasks, without taking into account the cultural, environmental, and economic sustainability implications for a small group of people who engage in this activity and preserve its related traditional knowledge.

To understand the real implications of this activity prohibited by local regulations, we accompanied 10 collectors to carry out their tasks, mapping their routes and gathering important information about the collection process.

The collected information demonstrates that, contrary to popular belief, their work, instead of generating environmental damage, contributes to the process of regrowth of medicinal plants in ravines and highlands, and furthermore, it has the potential to be used for monitoring the state of highlands and ravines, thanks to their constant presence in these areas.



Image 1: Deployment of mapped information on medicinal herb collection

► Through the process of accompaniment and participant observation, some of the most important issues were identified as follows according to their level of importance:

- **Park and forest rangers' prohibition** to plant collectors to trespass ecosystems generalizes the misconception that it is a predatory work, thus complicating the trade.
- **The use of chemicals in productive lands** kills endemic vegetation and affects adjacent protection zones, as well as killing pollinators.
- **Tourist activities** allowed in protected areas affect plants because of garbage and damage due to ignorance.
- **Lack of promotion** to change agricultural activities to others that do not affect grasslands and other plants. Residents of communal lands have switched from agriculture to livestock farming, causing greater damage.
- **Natural relics and production lands** in high-value urban expansion areas are at risk of being urbanized in the short term.
- **The open ravines** in urban areas are constantly at risk of contamination from sewage and debris.
- **The edges of ravines** in urban areas are considered to be green areas, which leads to the 'cleaning' of medicinal herbs and endemic plants, and their replacement with other ornamental and introduced species that can be harmful, such as *Thunbergia Alata*.
- **Traffic pollution and noise** have caused changes in vegetation in protected areas.
- **In urban parks**, gardeners are unaware of medicinal herbs and kill them by mistaking them for weeds.



Ecosystem guardians potentialities

1 Community monitoring: The routes carried out by the herb gatherers cover extensive areas within the MDMQ, including ravines, forests, slopes, and highland areas *-páramos-*.

No other activity makes it possible to cover the breadth of protected territory with the consistency that is achieved through collection tasks. Their economic interest forces these women to recognize the constant threats to their livelihood areas, making them natural observers of protection areas.

2 Credentialing to recognize collectors' ancestral knowledge: There is a mistaken interpretation that herb collection tasks endanger protected plant species. Thus, park rangers and other protectors and caretakers prohibit this activity. It is important to understand that collection does not generate environmental damage, as other activities allowed in protected areas do (motocross, grazing, etc.); rather, the prohibition of this activity leads to a loss of ancestral knowledge. Qualifying and credentialing collectors would help sustain a historical activity in better conditions and under appropriate controls.

3 Community tourism as a means of livelihood: The herb gatherers make extensive journeys to collect medicinal plants, walking or riding donkeys through routes in Ungüi, Pintag, Tolontag, among others. They could become tourist guides of these places and rescuers of ancestral knowledge. This activity could contribute to improving their livelihoods and promoting conservation and ancestral knowledge.



To visit 'Territorios que sanan' map from 'Otros Mapas' website please follow this link:

<http://u.osmfr.org/m/765556/>



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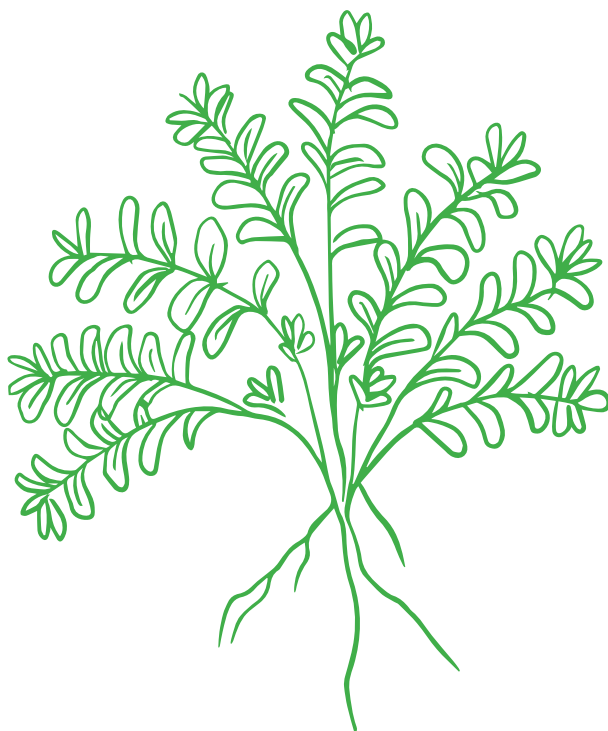
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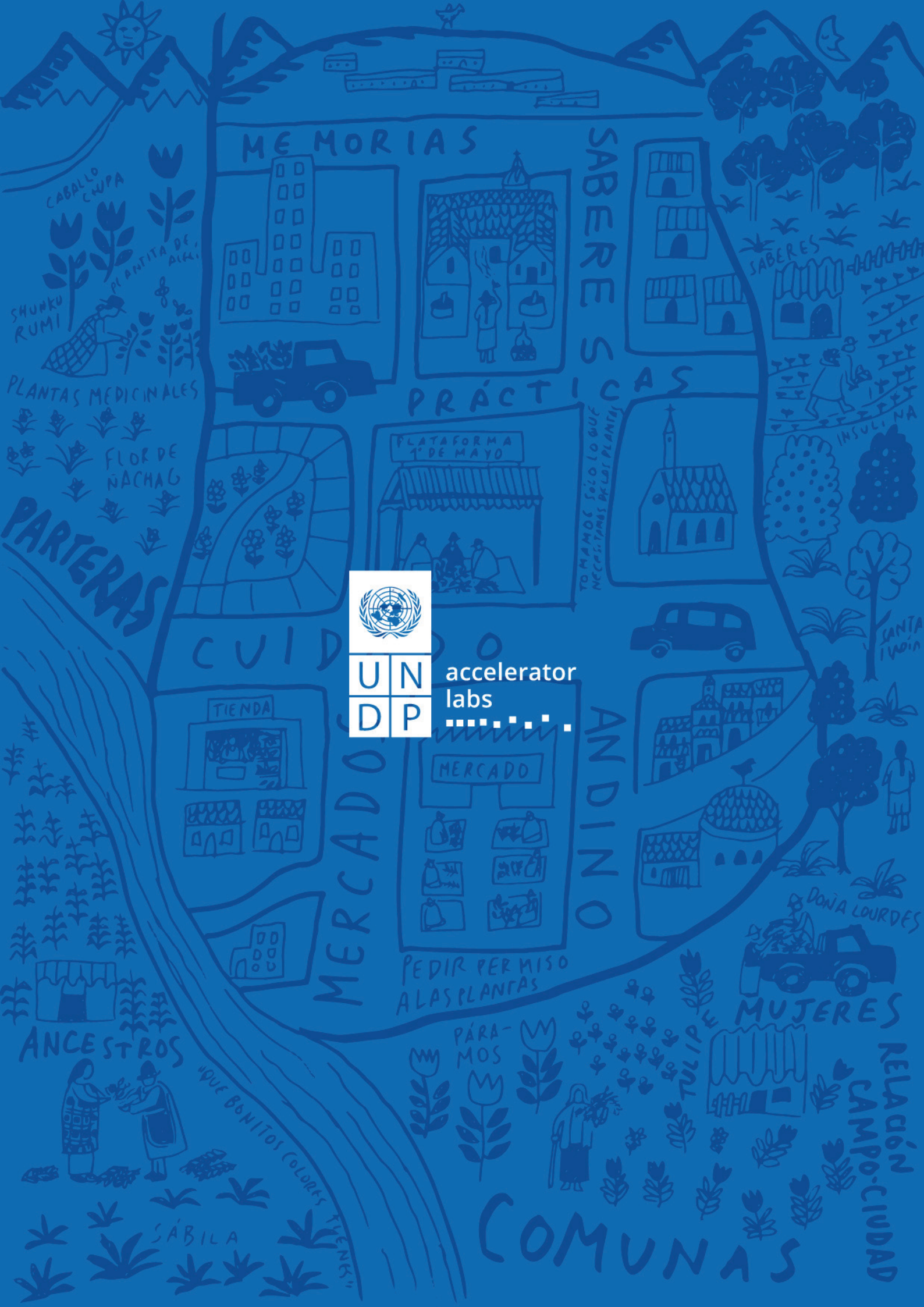
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MEMORIAS

SABERES

PRÁCTICAS

CUIDADO

MERCADO ANDINO

ANDINO

PARTERAS

ANCESTROS

COMUNAS

MUCHERES

RELACIÓN CAMPO-CIUDAD



accelerator labs



CABALLO CUYA

SHUNKU RUMI

PLANTITA DE ALCA

PLANTAS MEDICINALES

FLOR DE NACHAG

PLATAFORMA 1º DE MAYO

TO MA MOE SÓLO LO QUE NECESITAMOS DE LAS PLANTAS

INSULINA

SANTA IVONA

DONIA LOURDES

PEDIR PERMISO ALAS PLANTAS

PARAMOS

PILTUPLE

SÁBILA

"QUE BONITOS COLORES TENDEN"