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## Is Food Still a Stranger in Planning? The Integration of Food Systems in Urban Planning The Case of Urban Agriculture in Quito

Name: Ana Francisca Jijón

Supervisor: Merav Kaddar

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## Summary

The concern on feeding cities sustainably increases the urgency to integrate Food Systems (FS) in planning. Urban Agriculture (UA) has gained attention from city authorities and planners as a strategy to enhance FS's resilience and food security. However, although food is increasingly conceived as a challenge to be addressed in planning, the literature suggests that food policies are still not adequately implemented due to 1) urban bias, by which FS and agriculture are considered rural, 2) inadequate sectorial and centralized governance, and 3) the informality embedded in FS.

The objective of this research is to explain why, despite the existence of policies promoting FS' integration in planning, these are still not adequately implemented. I use the mentioned hypothesis to evaluate food policies and planning's misalignment using the case study of UA in Quito. Building on the conceptual framework of Food Systems Planning, I consider UA as a constituent element of FS, which serves as an entry point to examine the mentioned misalignment.

I conducted qualitative research to compare UA gardeners, planners and city authorities' perspectives about the integration of UA in planning. I used desk research to familiarize myself with UA policies in Quito. Additionally, I completed interviews complemented by observations of the gardens to contextualise UA practitioners' interviews.

The findings show that despite FS are considered in planning tools, these are still inadequately implemented due to their macro and rural focus, resulting in the absence of FS planning at the urban scale. The inadequate implementation is explained by urban-bias and scant governance, as FS are addressed by sectors, and centralized food policies disregard food planning at the neighbourhood scale. I conclude that informality is the factor that helps the most to explain the misalignment given stakeholders' disagreements around UA's role and its implementation in planning. Bourdieu's Theory on Social Fields is a useful concept to understand how these diverse perceptions prompt distinct rationales behind UA policies. Ultimately, I conclude that policies formalizing UA as an economic activity are inadequate as fail to recognize UA's diverse actors, scales and motives. Finally, I determine that UA policies should be more empirically informed responding to US benefits expressed by UA practitioners.

Finally, I propose a revised conceptual framework highlighting how food policies and planning's misalignment is not only explained by planning's limitations, but due to policies that inadequately respond to the local food context, neglecting an ecosystem food systems approach.

## Keywords

Food Systems Planning, Urban Agriculture, Informality, Formalization, Food Policies, Food Security

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I would like to give an special thanks to all the participants of this research. I am grateful with the members of the Quito Council, and Quito Secretaries, who despite their busy schedules, spared some time and expressed enthusiasm in supporting my research. I would like to express my sincere gratitude with Alexandra Rodríguez, representative of AGRUPAR, for facilitating my connection with other relevant stakeholders for my research. I am mostly grateful with UA gardeners who participated in the interviews and field-observations, for whom I travelled from Rotterdam to Quito. I am extremely grateful for their generosity in welcoming me in their gardens and sharing with me their knowledge, valuable time, and delicious organic product.

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## Foreword

This thesis is submitted to the Institute for Housing and Urban Development Studies, Erasmus University Rotterdam, as the requirement to obtain the MSc degree in Urban Management and Development, for the specialization of Strategic Urban Policies and Planning. The subject of this thesis is the integration of Food Systems in Urban Planning, using the case of Urban Agriculture in Quito, as a case study.

Rapid urbanization, urban food insecurity, and the concern to feed cities sustainably make the integration of Food Systems in planning a pertinent topic. Although urban policies increasingly recognize the need to address food systems in planning, their implementation has often been insufficient. Therefore, this research aims to explain why, despite the existence of urban food policies, Food Systems are still inadequately implemented by planning.

My interest in Food Systems, particularly Urban Agriculture, stems from a project I undertook in Ecuador. Supported by the McBurney Latin America Fellowship offered by the McGill Institute for Health and Social Policy during my Bachelor's at McGill. For the project, I used urban agriculture to enhance the social cohesion of a vulnerable neighbourhood in Esmeraldas, Ecuador. Following this experience, my one-year work experience at the European Food Safety Authority (EFSA) further heightened my interest in sustainable and resilient food systems. Lastly, motivated by my strong interest in urban studies, I sought to explore the pressing need to integrate food systems with urban systems.

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## Abbreviations

AGRUPAR	Quito Participatory UA Project
DMQ	Municipal District of Quito
EAQ	Quito Agri-food Strategy
FS	Food System(s)
GN	Global North
GS	Global South
IHS	Institute for Housing and Urban Development Studies
LUAE	License for Economic Development
NBS	Nature-based Solutions
NPO	Non-Profit Organization
PACQ	Quito Climate Action Plan
PMDOT	The Quito Metropolitan Plan for Development and Territorial Planning
PMEP	Quito Masterplan for Public Space
PUGS	Land Use and Management Plan
SE	Secretary of the Environment
SH	Secretary of Health
STHV	Secretary of Territory, Habitat and Housing
UA	Urban Agriculture



## Chapter 1: Introduction

As the majority of the world population becomes urban, the concern on how to feed cities sustainably increases the awareness of integrating FS in planning (Battersby & Watson, 2018; Berberich, 2010; Cabannes & Marocchino, 2018; Jansma & Wertheim-Heck, 2021). Unequal food access, and an increasing difficulty in finding nutritious food is exacerbated in cities due to poverty, climate change, migration, and rapid urbanization (Battersby & Watson, 2018; Gulyas & Edmondson, 2021). Furthermore, FS impact climate negatively, as they account for 30% of global GhG emissions and augment socio-economic and health inequalities (Bonneau, 2023a; Bonneau, 2023b). Moreover, agriculture is responsible for 78% of biodiversity loss and 81% of global warming (Bonneau, 2023b; FAO, 2023). In terms of social and health impact, the current mainstream FS has led to higher disease and mortality risk, with unhealthy diets accounting for 49% of cardiovascular diseases (Bonneau, 2023a). Simultaneously, given the high dependency of FS on global food supply chains, local FS have shown vulnerability given uncertainties disrupting the local food supply like climate change and natural disasters, geopolitical crisis, or pandemics as evidenced during Covid-19 (Gulyas & Edmondson, 2021; Jansma & Wertheim-Heck, 2021; Rodríguez et al., 2022).

To tackle this climate crisis, we must transform the current FS. With the majority of the world's population living in cities, urban residents consume 70% of the world's food. As such, cities are crucial for transitioning into more sustainable and resilient FS, making food an urban concern to be addressed by planning (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Hayson, 2020). In this context, UA has gained attention from city authorities and planners as a strategy to enhance FS's resilience and food security in cities (Cruz & Aguila, 2000; Jansma & Wertheim-Heck, 2021; Morgan, 2015).

However, food remained “a stranger to the field of urban planning” until the early 2000' when first planning research questioned the missing link between food and planning (Pothukuchi & Kaufman, 2000, p.113). Although food is progressively conceived as an urban challenge and UA is fostered in urban agendas, FS have been largely absent from urban studies and planning, while “*the urban* has equally been absent from food security studies” (Battersby & Watson, 2018, p.18; Duch, 2011; Rodríguez et al., 2022). Yet, the increasing demand for feeding cities

and FS' contribution to climate change, has led to a growing attention to integrating FS in planning (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Cruz & Aguila, 2000; Gulyas & Edmondson, 2021; Toriro, 2018).

Nevertheless, food policies are still not adequately implemented by planning, seen in insufficient planning tools that translate food policies into spatial terms. The literature suggests that this misalignment exists due to 1) urban bias, by which FS and agriculture are considered rural, 2) inadequate governance to tackle FS from an integrated approach, and 3) the informality embedded in FS and the difficulty to address it.

In this research, I use the three hypothesis from the literature to evaluate food policies and planning's misalignment using the case study of UA in Quito, the capital of Ecuador. Departing from a FS approach, I consider UA as a constituent element of FS, which serves as an entry point to examine the mentioned misalignment.

I locate my research in Quito given its longstanding history of UA practices due to high rural-urban migration and rapid urban-sprawl absorbing rural agri-food productive areas. The city's long trajectory in supporting UA, and several food policies addressing the FS and UA, such as Quito's Agri-food Strategy, make Quito an interesting case to study the misalignment between food policies and planning. Hence, this research is guided by the following research questions:

*Why, despite the rising awareness of the importance of integrating FS in urban planning and the consequential endorsement of food policies in Quito, is UA not adequately addressed in urban planning?*

#### Sub-questions

- 1. Is there in Quito a misalignment between UA policies and planning?*
- 2. Is this misalignment partly explained by an urban-rural bias?*
- 3. Is this misalignment partly clarified by sectorial or centralized FS governance?*
- 4. Is this misalignment partly explained by the difficulty to deal with the informality embedded in UA?*
- 5. Can other factors explain the misalignment between UA policies and planning?*

I conducted a qualitative research to compare stakeholders' different perspectives and attitudes about the integration of UA in planning. These included UA gardeners, planners and city authorities. Interviews were complemented with on-site observations of UA gardens, and desk-research to familiarize myself with existing food policies in Quito.

The results show that despite FS are integrated in planning, these are inadequately implemented at the urban and neighbourhood scale, and fail to recognize the range of actors and motivations behind UA practices, disregarding an integrated food ecosystem approach in formulating and implementing food policies. I conclude that the inadequate implementation of UA exists given planning's persistent urban-bias in addressing FS and scant food governance, as FS are addressed by sectors, and centralized food policies disregard food planning at the neighbourhood scale. Most importantly, I found that informality is the factor that explains the most the misalignment of food policies and planning due to disagreements around UA's role and policies endorsing its formalization. Bourdieu's Theory on Social Fields (Hilgers & Mangez, 2014) is a useful concept to identify how diverse socio-spatial classifications (i.e. planners and city authorities' positionality and gardeners' experience) generate different perceptions on UA's role and prompt distinct rationales behind UA policies. While the legal perspective promotes UA's formalization as an economic activity, the social perspective advocates for UA policies focusing on food security. Instead, gardeners' experience highlighting the multifunctionality of UA, shows that policies formulated to formalize UA solely as an economic activity fail to respond to the reality of UA. Ultimately, gardeners' experience calls for a flexible UA governance, where formalization is contingent to the variety of *actors, scales, and motives* for practicing UA in Quito. Lastly, gardeners' experience lead me to conclude that UA policies should be more informed by empirical evidence and consider the benefits expressed by UA practitioners to formulate policies that effectively respond to the local needs, endorsing participatory approaches that well represent the diverse groups and motives for practicing UA.

Finally, I revise the conceptual framework to argue that Quito's case helps explaining the broader question about the challenges to transition from food policies to implementation in planning, not only due to planning's prevailing urban bias and inadequate governance, but most importantly due to the formulation of policies that inadequately respond to existing UA

practices and the local food context. This deficiency arises from the absence of an integrated food ecosystem approach in UA policy formulation, that acknowledge the range of *actors*, *scales*, and *activities* of the FS and due to formalization attempts that undermine the importance of informality in FS for securing food security, particularly for the urban poor.

In the following sections, I present the literature review on FS and UA, and their integration in planning, and the misalignment between food policies and planning. Then I continue with the introduction of the case study, UA in Quito, to explain the inadequate implementation of food policies. I proceed with the research design and methodology. Finally, I present and analyse the findings, followed by a discussion and the conclusions.

## **Chapter 2: Literature Review and Hypotheses**

Rapid urbanization and the concern to feed cities sustainably increases the awareness to integrate FS in planning (Battersby & Watson, 2018; Berberich, 2010; Cabannes & Marocchino, 2018; Jansma & Wertheim-Heck, 2021). However, FS have been largely absent in planning and urban studies, and although in the last decades there has been an increase in urban food policies, these are still not adequately implemented by planning. In this research, I study this misalignment between food policies and planning using the case study of UA, as a constituent element of FS, and its implementation in urban planning in Quito, the capital of Ecuador.

### **Policy Connecting Food and Planning**

In view of the social, health and climate threats that cities face today, and FS' central role in delivering sustainable development, there is a normative call from policy makers to integrate FS in planning (Cabannes & Marocchino, 2018). Simultaneously, food practices, encompassing food production, as UA, have long thrived within cities (Degenhart, 2016; Morgan, 2015; Rodríguez et al., 2022). While UA is probably as old as our cities themselves, it is only recent that city authorities have acknowledged it as a practice to be formally incorporated in planning (Cabannes & Marocchino, 2018; Degenhart, 2016; Mougeot, 2000; Young, L., 2019)

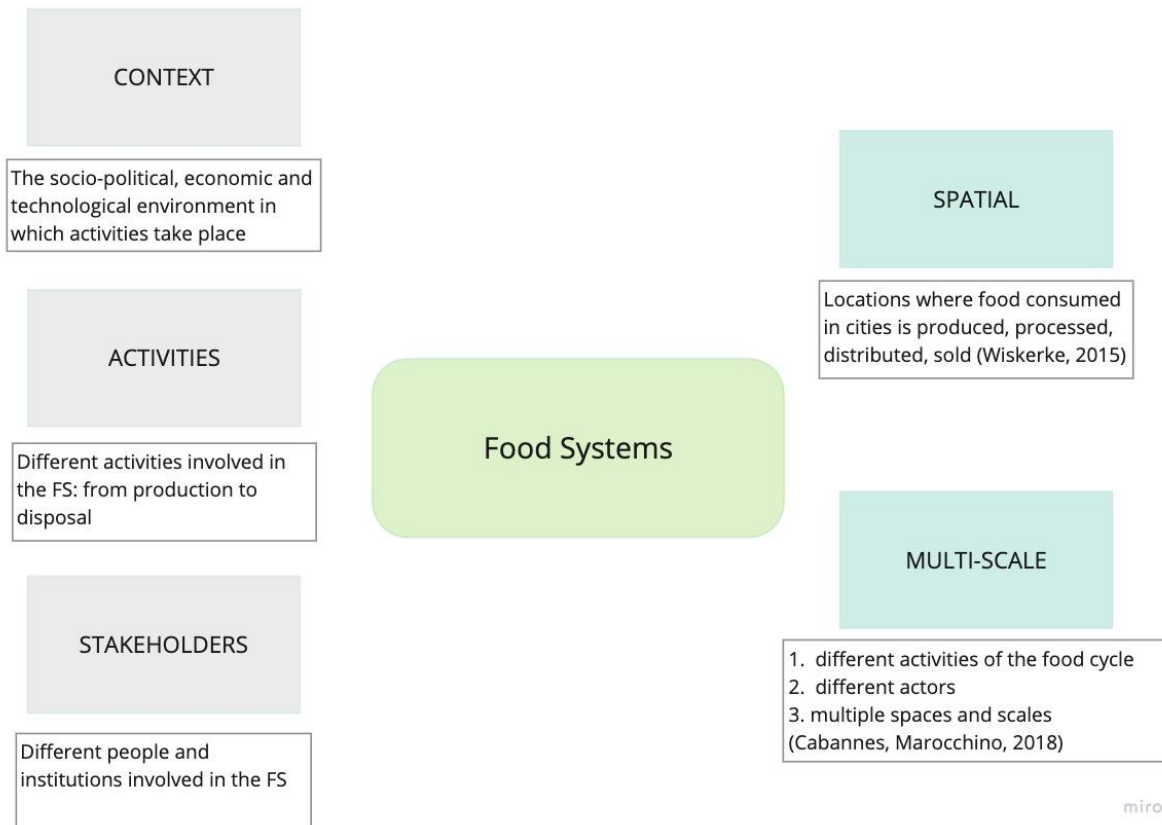
Food remained “a stranger to the field of urban planning” until the early 2000’ when first planning research conducted in the US started to question why food was not considered in urban planning (Pothukuchi & Kaufman, 2000, p.113). There has been significant progress in understanding the benefits of integrating food in planning. Indeed, food is “less a stranger” than 20 years ago as local practices and international agendas that highlight the need to integrate food and planning are increasingly mushrooming (Cabannes & Marocchino, 2018). The 1990s saw UA cast onto the agenda of international summits and local agendas on social development, food security, sustainable and healthy cities, as the Milan Urban Food Policy Pact (MUFPP), and the New Urban Agenda (2016) adopted in Quito at the Habitat III Summit which situated food security as “an integral part of the Declaration of Sustainable Cities and

Human Settlements” (Cabannes & Marocchino, 2018, p.22; Jansma & Wertheim-Heck, 2021; Mougeot, 2000). Interestingly, the Quito Declaration for Latin American and Caribbean Cities (2000) “remains a milestone among international declarations bridging food with the urban” (Cabannes & Marocchino, 2018, p.21).

## **Food Systems Planning**

The increased demand from academia and policymakers to incorporate FS into planning, driven by mounting environmental and social concerns about sustainable urban food security, has necessitated a reconceptualization of urban FS. This has entailed its recognition as a complex ecosystem, stressing its spatial component (Bonneau, 2023a; Cabannes & Marocchino, 2018; iPES, 2015; Wiskerke, 2015).

In his definition of FS, Wiskerke (2015) emphasizes the spatial aspect of FS, including the location of the production, processing, distribution, and sale of food consumed in cities. In their book *Integrating Food into Urban Planning* (2018), Cabannes and Marocchino propose an operational definition of Food System Planning from an ecosystem approach. Accordingly, FS are *multi-scalar* because these involve *different activities of the food cycle* i.e. activities from production, consumption and disposal of food, involve *many actors*, from producers to consumers, and take place at *multiple spaces and scales*. Both definitions add to the conceptual framework of FS, the spatial and multi-scalar component (see fig. 1). An integrated food ecosystem approach in urban planning that understands the complexity of FS is key to ensuring healthy diets and nutrition, and enhance FS’ sustainability and resilience, especially in face of climate change (Bonneau, 2023a; iPES, 2015).



**Figure 1: Conceptual Framework of FS.** *Figure by author*

## Urban Agriculture as an Element of Food Systems

In this research, I examine FS' integration in planning through the study of UA. It is here understood as *a constituent element of FS*. UA provides a starting point to enforce sustainable FS, as it appears as a practical strategy for tackling food insecurity, poverty, and climate change effects in cities (Cruz & Aguila, 2000; Degenhart, 2016; Jansma & Wertheim-Heck, 2021; Morgan, 2015). Integrating UA in planning is increasingly crucial due to the global FS' vulnerability to external shocks like natural disasters and crisis, as evidenced during the recent Covid-19 pandemic (Jansma & Wertheim-Heck, 2021). Increasingly, cities consider UA a strategic avenue for improving the sustainability and resilience of local FS (Gulyas & Edmondson, 2021; Jansma & Wertheim-Heck, 2021; Morgan, 2015). Furthermore, the literature suggests that UA is a trigger for FS planning and cities that promote UA are in a

better position to implement food policies as a contribution to resilience and sustainable urban development (Cabannes & Marocchino, 2018; Rodríguez et al., 2022; Santandreu, 2018).

Building on the integrated food ecosystem approach (see fig. 1), UA must be similarly defined as 1) a multi-scalar and spatial activity, as it includes the production and distribution of food located within or in the fringes of a city, to supply food demand and services in that urban area (Mougeot, 2000), 2) multi-stakeholder, encompassing a range of actors, from small-scale producers to urban farmers (Cruz & Aguila, 2000), and 3) multifunctional, as it entangles health, social, economic, and environmental benefits (Mougeot, 2000).

The main benefit of UA is higher food security, often encouraging the organic farming methods (Cruz & Aguila, 2000; Gulyas & Edmondson, 2021; Mougeot, 2000). According to the experience of diverse cities, urban gardens have the capacity to generate annually more than 1.950 thousand kilos of healthy food, 57% for self-consumption and 43% for sale through different short channels as local markets (Rodríguez & Samaniego Ponce, 2022). Hence, UA also provides an important alternative economic support as it provides employment opportunities for the less affluent sections of the population, allows savings as some food is self-grown, and provides direct income through sale of products (Cruz & Aguila, 2000; Rodríguez & Samaniego Ponce, 2022). As such, UA is used as poverty alleviation strategy (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; De Zeeuw et al., 2011; Dubbeling et al., 2019; Gulyas & Edmondson, 2021; Toriro, 2018). At the urban level, UA can also enhance FS' sustainability at a larger scale by enabling the recycling of organic waste and reducing the reliance on mineral fertilizers (Cruz & Aguila, 2000; Gulyas & Edmondson, 2021). Regarding its social contribution, scholars have argued that UA builds social capital, sense of community and integration and fosters proactive attitudes and collaboration between neighbours (Battersby & Marshak, 2013; Cruz & Aguila, 2000; Rodríguez & Samaniego Ponce, 2022; Sonnino & Hanmer, 2016; Young, L., 2019).



## **Misalignment Between Policies and Planning**

Despite the increasing call for FS planning and promotion of UA, governance of urban FS is still weak, and there is a persistent disjunction between urban planning, contemporary cities, and the needs of urban residents (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Toriro, 2018). Specifically concerning UA, local authorities have realised that agriculture within the urban-region boundary is generally overlooked by planning and disconnected from “the urban” (Jansma & Wertheim-Heck, 2021). Already in the 2000s, Pothukuchi and Kaufman (2000) warned that inaction in food planning often carries weighty repercussions. Indeed, food insecurity and urban poverty partly result from the disconnection between planning and FS (Battersby & Watson, 2018; Hayson, 2020). According to scholars, misalignment between policies and planning is seen in 1) the lack of concrete tools of implementation to operationalize policies (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Santandreu, 2018; UN Habitat, 2009), 2) policy inconsistencies towards FS’ integration in planning, seen in planners’ conflicting attitude towards UA (Battersby & Watson, 2018; Toriro, 2018), and 3) the ambiguity of urban food policies (Battersby & Watson, 2018; Santandreu, 2018; Toriro, 2018). This consequences in the difficulty to transition from agendas to implementation and has resulted in the difficulty to scale up the benefits of sustainable FS to the city level (Cabannes & Marocchino, 2018).

The following section will present the different reasons from the literature that help explain food policies and planning's misalignment.

## **Hypotheses Explaining Policies and Planning’s Misalignment**

In the literature review, I identified three factors that partly explain the abovementioned misalignment: 1) urban-rural bias, 2) sectorial/ centralized food governance and 3) FS’ informal nature.

### **Urban-rural Bias**

Food has been largely ignored in urban policies and planning due to an urban-rural bias, by which food production is considered rural (Battersby & Watson, 2018; Crush & Riley, 2018;

Cruz & Aguila, 2000; Pothukuchi & Kaufman, 2000; Rodríguez et al., 2022; Santandreu, 2018; Toriro, 2018). Similarly, agriculture is often associated with *the rural* (Cruz & Aguila, 2000; Degenhart, 2016; Mougeot, 2000; Rodríguez et al., 2022; Toriro, 2018), as exemplified by Toriro's research on UA in Harare, where it was associated with the non-urban, and therefore not a concern for city planners (2018). According to Duminy (2018) and Rodríguez et. al. (2022), this existent bias in food policy has its roots in colonial approaches to food. Similarly to how planning and management practices, especially in post-colonial cities in the GS, are still biased by the prevailing visions of modernization and economic growth (Jachnow & Garrido Veron, 2021), so are FS biased by a normative view of the idealized *modern city* conceived in opposition to the *rural backwardness* of agriculture and the countryside (Cruz & Aguila, 2000; Duminy, 2018; Rodríguez et al., 2022). This bias has neglected the crucial link between food and planning, leaving hunger and food insecurity largely unaddressed due to planners' failure to perceive these as issues to be addressed by planning (Cabannes & Marocchino, 2018).

### **Governance of Food Systems**

As previously argued, FS are complex given their cross-sectorial, transdisciplinary, and multistakeholder character. To cope with complexity in the urban realm, scholars argue that urban development must be “defined in its systemic character in order to ensure a better management of urban areas, one which is grounded in understanding cities as complex, open, and adaptive systems in which all elements interact with each other and for certain purposes” (Jachnow & Garrido Veron, 2021, p.18). This implies a transition from sectorial organization to cross-sectorial and interdisciplinary governance (Jachnow & Garrido Veron, 2021). A sectorial urban management, with its division into various disciplines has created “wicked problems” (Rittel & Webber, 1973), in which for example, decisions on one aspect of food, e.g. market and retail, do not consider its social or nutritional impact on food accessibility.

Similarly, when addressing the complexity of FS, planners need to promote a holistic, multi-scale, and participatory approach to FS addressing the multi-functional character of food (i.e. health, economic, social, environmental), linking different spatial scales involved in food related issues, and connecting the different stakeholders involved in FS (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; iPES, 2015; Rodríguez et al., 2022). However, scholars argue that a prevailing sectorial approach to food in planning has failed to adequately address the multi-functional and multi-spatial character of UA, limiting the scale and potential of FS

(Cabannes & Marocchino, 2018; Santandreu, 2018; Toriro, 2018). For example, in the case of Lima, Santandreu (2018) argues that although UA was included in urban plans as a permanent activity, the prevailing sectorial approach to food jeopardized the coordination between different areas of the municipal administration, which limited the impact of UA and urban food production in Lima.

Furthermore, the context-specificity of FS has stressed the need of locally-defined policies that respond to local households' needs. This correspond to a shift in food policies' scale and call for decentralization, as a regional approach to FS often neglects FS planning at the local scale (Battersby & Watson, 2018; Thornton, 2018). Accordingly, food governance, "requires serious consideration of context, and of an empirically driven understanding of the local FS and their intersections with urban form and function" (Battersby & Watson, 2018, p.4). Indeed, local governments are key players in food system planning (Cabannes & Marocchino, 2018; Mougeot, 2000). According to Battersby and Watson, "in the absence of local government capacity, decisions impacting the FS are informed by a set of actors, including market associations [...] and large-scale private-sector interests" none informed by the needs of the overall FS or the food security implications of their interventions (Battersby & Muwowo, 2018, p.130).

## **Informality**

FS are shaped by an interrelated system of formal and informal food networks (Chigumira et al., 2018; Middleton, 2003). It is the difficulty of governance to deal with and regulate this informality embedded in FS which seems another reason explaining the misalignment between food policies and implementation (Battersby & Watson, 2018; Cross, 2000; Young, G. & Crush, 2020).

Informality is a central aspect of socio-economic life in rapid urbanizing areas (Middleton, 2003; Young, G. & Crush, 2020). The informal sector plays a central role in urban FS and food security (Santandreu, 2018; Skinner, 2019; Young, G. & Crush, 2020). This informality found in FS is intrinsically connected to poverty, as informal food trading and consumption in cities is highly linked to urban poor and rural migrants' needs (Battersby & Watson, 2018; Cross, 2000; Young, G. & Crush, 2020). Furthermore, the informal food sector is a source of food and

income, and it can provide certain forms of social protection and mobility (Bromley, 1979; Young, G. & Crush, 2020). Contrary to common beliefs on the dichotomy between the formal and informal sector, rather than competing, the informal food sector can complement the formal in the promotion of urban food security (Middleton, 2003; Young, G. & Crush, 2020). Indeed, informal economies thrive amid formal sector failures, absorbing unemployment (Cross, 2000).

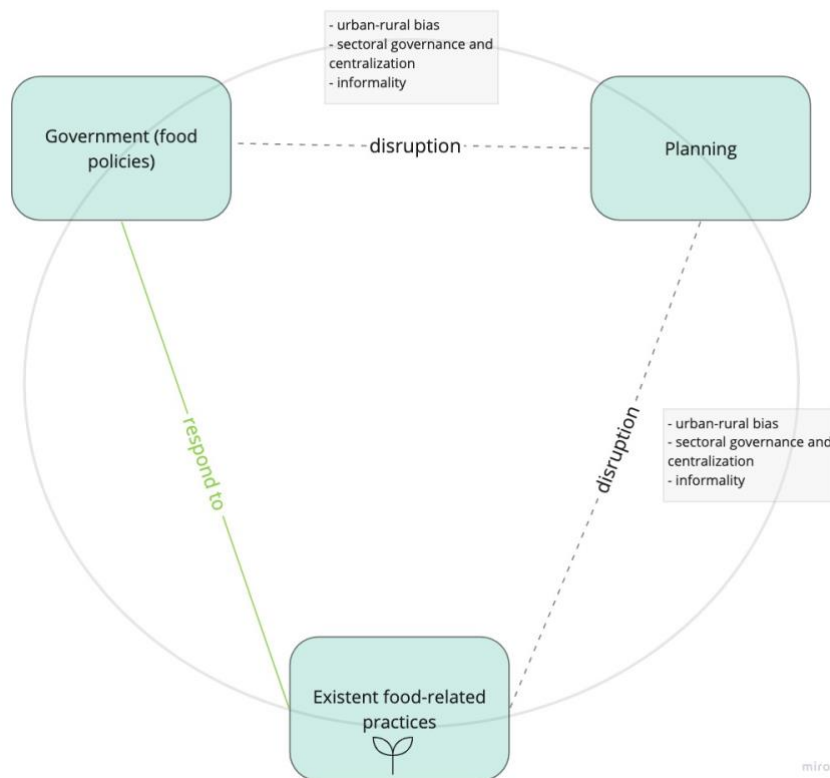
However, urban governance often seeks formalization (Young, G. & Crush, 2020). It is guided by the potential benefits of eliminating the apparent social and economic costs entailed in informality (Young, G. & Crush, 2020). Cross (2000) argues that authorities' perception of informality is determined by preconceived notions of the "appropriate use of public space" (Cross, 2000, p.43). As such, formalization attempts have been "determined by a normative view of an idealized 'modern' city" (Battersby & Muwowo, 2018, p.128), which saw the informal sector as parasitic or threat to the ideals of public order and state control (Cross, 2000). Besides the urban-bias and the association of agriculture with *backwardness*, informal UA practices are often conceived as *non-proper* and thought to *lower-standards* of the modern city, as exemplified by Toriro's research on UA in Harare (Toriro, 2018, p.164).

Nonetheless, scholars argue that if properly managed, the informal food sector has a key role in the promoting food security, inclusive growth, and poverty reduction (Battersby & Watson, 2018; Young, G. & Crush, 2020). Yet, Cross (2000) argues that projects designed to develop the informal sector tend to ignore the benefits of informality and the factors that lead to it. Formalization initiatives that undermine the viability of informal businesses weaken food security, inclusive growth, and poverty reduction (Battersby & Muwowo, 2018; Young, G. & Crush, 2020).

## **Conceptual Framework**

In this research I use the case of UA in Quito, the capital of Ecuador, as a case study to explain the misalignment of food policies and planning. The research follows the conceptual framework (fig. 2) developed after the concepts presented in the literature review.

Accordingly, UA practices have long existed in cities, but only recently a body of policies has emerged after UA benefits in face of FS' vulnerability and food insecurity in cities. However, although food policies respond to local needs, these are not adequately implemented in planning. This creates a simultaneous disjunction between policies and planning, and the latter with local food needs. The three hypothesis coming from the literature; urban-bias, governance and informality, will be used to explain the misalignment between food policies and planning in Quito.



**Figure 2: Conceptual Framework**

## UA in Quito: The Context

Quito is the capital of Ecuador and is for the first time the most populated city in the country with 2.8 million inhabitants (INEC, 2017). The Metropolitan District of Quito (DMQ) covers an area of 423,000h, from which 42,530h are urban (MDMQ, 2017). Situated on a plateau at an elevation of 2,800 mamsl, the city is surrounded by the Andes, with active volcanoes and

an irregular geography traversed by deep ravines, which threaten Quito with volcanic activity, earthquakes, and other natural disasters (MDMQ, 2017). Quito's population is relatively young, with over 60% within economically active age (INEC, 2017). Despite being the capital city and contributing to 32% of the GDP (MDMQ, 2017), Quito faces certain socio-economic challenges. According to the National Institute of Statistics and Census (INEC), the urban area has an 18.5% poverty rate and contends with high youth unemployment, surpassing 60%, and an underemployment rate of 11.9%, with a 20% gender gap, as women experience higher rates of unemployment (INEC, 2017). Regarding urbanization, approximately 60% of the city's settlements are informal, and nearly 79% of the population faces deficits in terms of accessibility and quality of public spaces (MDMQ, 2017).

In terms of the FS, it is particularly vulnerable as only 5% of the food consumed in Quito is produced within the city limits (Rodríguez & Samaniego Ponce, 2022). This is exacerbated by the risks from natural and anthropogenic hazards that could affect almost all of its territory, especially the socially less favoured areas (Jacome Polit et al., 2019). Furthermore, food access in Quito is highly unequal, given disparate share of resources (ENSANUT, 2012). In this context, according to the National Health and Nutrition Survey (ENSANUT 2012), the rates of chronic child malnutrition in the city have an average of 29%, finding sectors of the DMQ where it rises to 47%, as well as overweight and obesity (63%).

At the same time, UA has long been practiced in low-income sectors in Quito, particularly by rural-urban migrants with farming skills, as an alternative means to access food and income (Anguelovski, 2009; Rodríguez et al., 2022). It is commonly practiced given fast urban sprawl and two important rural-urban migrations, both importing ancestral agricultural knowledge into the city (Anguelovski, 2009). Rapid urban sprawl has absorbed land with historic agricultural uses (*haciendas*, *huasipungos*, etc.), resulting in the current presence of vacant semi-agricultural land within the city (Carrión & Carrión, 2002). Also, Quito experienced two strong rural-urban migrations, first in the 1940's after the cocoa crisis and economic recession, and then in the 70's after the agrarian reform (Carrión & Carrión, 2002). This resulted in the growth of peripheral neighbourhoods with rural migrants inserting their ancestral agricultural knowledge in the city (Anguelovski, 2009).

Given the vulnerability of Quito's FS, the socio-economic challenges of the city, and the common practice of UA, Quito has endorsed several policies promoting UA, which culminated in the Quito Agri-food Strategy in 2019. In the process, Quito joined global spaces such as the Milan Food Policy Pact (MUFPP) and the Glasgow Declaration for Climate and Food (Rodríguez & Samaniego Ponce, 2022).

Nevertheless, the literature suggests that food policies are still inadequately implemented Quito due to insufficient planning tools incorporating UA (Rodríguez et al., 2022). Quito is therefore an interesting case to evaluate and explain the misalignment of food policies and planning. The three hypothesis from the literature will be used to evaluate and explain this misalignment.

## **Chapter 3: Research Design, Methodology**

This chapter describes the research type, design and locus of the research, operationalization of variables, data collection methods and sampling strategy. It continues describing the sample groups, and data analysis methods. Finally, I discuss validity and reliability and the limitations of the research strategy.

### **Research Type**

The objective of this research is explanatory, as it aims to explain why, despite existing food policies, these are not adequately implemented in planning. In order to answer my research question, I conducted qualitative research using interviews, field-observations and desk-research. Rather than studying the broader scenario of Quito's urban FS, this research aimed at conducting an in-depth analysis about UA gardeners, planners and policy makers' perceptions on the integration of UA into planning, for which qualitative research was adequate (Bryman, 2012). Furthermore, qualitative research was appropriate because I wanted to understand *why* and *how* UA is integrated in planning in Quito by gathering the interpretations, attitudes and opinions of stakeholders across scales (McGuirk & O'Neill, 2016).

### **Design and Locus of Research**

Quito is a good case study to explain the misalignment between food policies and planning due to the longstanding history of UA practices in Quito due to rural, ancestral agricultural knowledge (Anguelovski, 2009; Rodríguez et al., 2022), and the city's well known support of UA seen in its Agri-food Strategy in 2019 and the Quito Declaration for Latin American and Caribbean Cities (2000), which according to Cabannes and Marocchino (2018), remains a milestone among international declarations bridging food with the urban. Additionally, Quito has gained international recognition for its outstanding support of UA through the Participatory UA project (AGRUPAR), acknowledged by the Milan Urban Food Policy Pact (MUFPP) as a leading initiative for food production. However, UA in the city is still little addressed by urban planning as concrete urban planning plans that promote UA are yet to be implemented



(Rodríguez et al., 2022). This makes Quito an interesting case to explain the misalignment between food policies and planning.

Moreover, the location of the case study in the GS makes a difference in the analysis since motives for practicing UA vary depending on the context. In the GS, UA is mostly practiced to enhance food security, while in the GN, UA is practiced to strength community ties (Cruz & Aguila, 2000; Mougeot, 2000; Taguchi & Santini, 2019). UA' significance in guaranteeing food security urges an immediate integration of FS in planning. Consequently, the research locus in the GS becomes even more pertinent and it deserves greater attention from planners and academia. My research contributes to the study of food policies' implementation in planning, with Quito as the case study. Lastly, I chose Quito given my familiarity with the context and the language, which facilitated my access to the field and connection with stakeholders.

## **Operationalization**

The theoretical concepts described in Chapter 2, are unpacked into variables which are then used to answer the research question. The operationalization process can be overviewed in Table 1 in the appendix.

## **Variables**

### **(Mis)alignment of Food Policies and Planning**

The first objective of the research is to evaluate the misalignment of food policies and planning, to then explain why it exists. Therefore, I start the analysis evaluating this concept.

It refers to the misalignment between the existent food policies and their inadequate implementation in planning (Toriro, 2008). It is defined by three variables: Correspondence of theoretical and practical efforts to integrated FS in planning (Cabannes & Marocchino, 2018), disagreements between planners (Toriro, 2018), and ambiguity of policies (Battersby & Watson, 2018).

The following variables represent the three hypothesis from the literature to explain the food policies and planning misalignment:

### **Urban-rural Bias**

The concept refers to the predominant treatment of food and agriculture as rural, and its absence in urban plans. It is divided in two variables: planners' mentality towards food and UA, and planning tools addressing food and UA.

### **Governance**

It refers to the type of governance to address FS. It is divided in two binary variables; sectorial or integrated planning and centralized or decentralized governance.

### **Informality**

The concept refers to city authorities' and planners' perception on informality embedded in UA. It is divided in the following variables: views on the role of informality, perception of formalization attempts, and perceived challenges of informality.

## **Data Collection Methods and Sampling Strategy**

I conducted desk-research, and in-depth interviews combined with on-site observations, to identify how UA gardeners, planners, and policy makers perceive the role of UA and its integration in planning in Quito.

### **Desk Research**

Desk-research was conducted to familiarize myself with the policies that address FS, particularly UA, in Quito. These included the following policies: The Quito Agri-food Strategy (2019), The Quito Resilience Strategy (2017), The Quito Climate Action Plan (PACQ, 2020), The Quito Land Use and Management Plan (PUGS; 2021), The Quito Metropolitan Plan for Development and Territorial Planning (PMDOT; 2021-2033), and the draft for the Ordinance on UA<sup>1</sup>. These consist of municipal-level policies and planning instruments, and where

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<sup>1</sup> The Ordinance on UA is currently being drafted by the Quito Municipal Council.

selected through 1) literature review on UA in Quito, 2) AGRUPAR work trajectory and its role in food policies formulation, and 3) own interviews mentioning policies addressing UA. Although the policies were not thoroughly examined, I reviewed them to gain a better understanding of the policy context promoting UA and addressing FS in Quito. Initially, the findings were not meant to inform the interviews. However, the interviews' focus shifted to the ongoing proposal of the Ordinance for UA in Quito. This shift occurred due to the document's significance in determining the future implementation of UA in Quito and the controversies surrounding UA formalization. I have used the discussions around this Ordinance as a medium to analyse the different, often conflicting perspectives from the multiple stakeholders involved around UA. The ordinance has three primary objectives:

1. Ensuring municipal support: it seeks to establish clear guidelines for municipal management concerning UA, defining the roles and responsibilities of relevant city and planning authorities.
2. Legitimation and irreversibility: It aims to legitimate and formalize UA and ensure the continuity and sustainability of UA programs along different municipal administrations.
3. Allocation of resources: it proposes the allocation of specific funds to facilitate urban planning that effectively utilizes vacant urban areas to increase urban farming.

## **Interviews**

I conducted interviews to study how different stakeholders perceive the role of UA and its integration in planning in Quito. In total, I conducted 12 interviews (see Interviewees Table 2 in appendix) including planners, city authorities and gardeners. The number of interviews was limited due to the time and scope of this master thesis. I selected the non-profit organization (NPO) Participatory UA Project (AGRUPAR), due to its longstanding support of UA in Quito. To represent policy makers' opinion, I interviewed two councillors involved in the drafting of the Ordinance on UA from the Quito Metropolitan Council (QMC). To gather planners' perspective I selected one planner from The Secretary of Territory, Habitat, and Housing (STHV), involved in the formulation of the UA Ordinance. Further, I interviewed representatives of the Secretary of Health (SH), and the Secretary of the Environment (SE) given their work with UA to combat child malnutrition and climate change mitigation,

respectively. Participants were selected through a snowball effect, starting with AGRUPAR. Lastly, I contacted AGRUPAR-registered gardeners in a AGRUPAR-market for convenience in identifying and contacting fellow UA gardeners.

I formulated the interview guide based on my operationalization table, which was in turn defined according to the literature (See interview guide in the appendix). Semi-structured interviews were necessary for enhanced reliability as questions adapted as the conversation evolved more around perceptions of informality and formalization of UA.

### **On-site Observations**

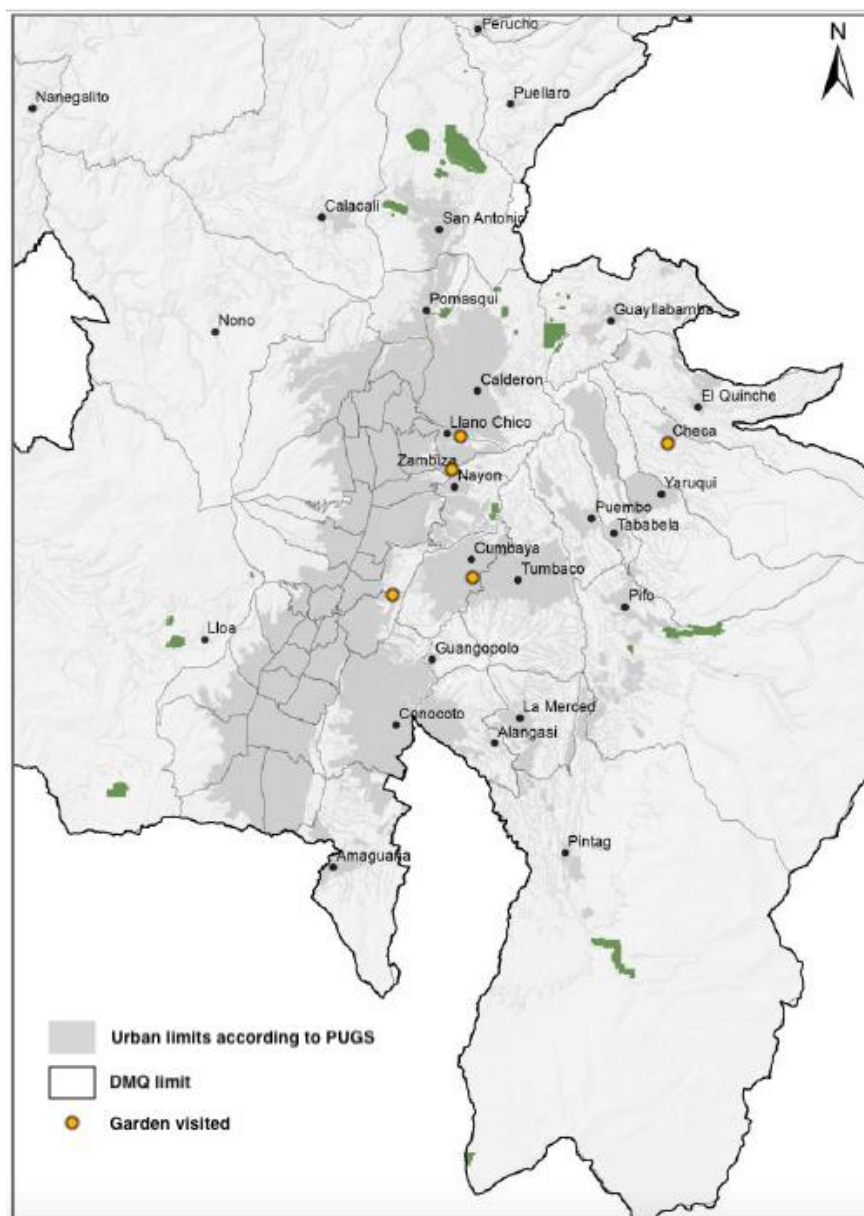
I combined gardeners' interviews with on-site observations, integrating their gardens into my research. These consisted on a 10-minutes visit of the garden and were held before each interview. Therefore, observations were held at different times of the day, most of them in the morning due to availability of gardeners (see table 3 in appendix for observations' time). I collected field-notes from the observations to complement gardeners' interviews. Although observations are limited in their quantity and scope, as these consisted more in short field visits and I was not able to draw extended ethnographical data from them, they helped validating and contextualizing interviews, enhancing their reliability and validity.

## **Sample Description**

### **UA Gardeners**

I categorized the gardens visited based on Cruz and Aguila (2000) proposed typology of UA actors, based on location, size, social organization, and type of production (see table 3 in appendix). They classify UA in three groups: below the poverty line, UA is practiced as a subsistence means to secure access to food. Above it, UA actors engage in self-consumption, *and* market production. The group of urban farmers that I studied corresponded to the latter group. I arranged interviews and observations with each gardener at their respective gardens in urban and peri-urban areas of the DMQ (see fig. 3), mainly Lumbisí, San José de Cocotog, Zámbriza, Cerro Monjas, and Checa.

Three gardens (see fig. 4,8,7) were located in urban land, and three (see fig. 5,6,9) were located in peri-urban land. The size of the garden varied. It is larger in peri-urban land (= 1 h), while those in urban areas were significantly smaller (< 0.1h; see table 3). Gardeners' social organization also varied depending on the garden. Rural gardens were managed by a communal organization, while the rest were managed either by the family or the head of household, being in all of the cases a woman. Furthermore, since all the gardens were contacted through the market, the type of production for all cases was self-consumption and market-production.



**Figure 3: Map of DMQ with locations of gardens visited.** Map adapted from PUGS 2021 by author



Figure 7: Garden in Checa 1



Figure 9: Garden in Lumbisí



Figure 6: Garden in Checa 2



Figure 5: Garden in San José de Cocotog



Figure 8: Garden in Zábiza



Figure 4: Garden in Cerro Monjas

*\*Photos by author*

## **AGRUPAR**

The Participatory UA project AGRUPAR is a NPO, created in 2002 by the DMQ municipality with the objective to promote organically managed production, foster social and gender justice, enhance responsible consumption and increase FS' urban-rural links as well as to promote greater resilience and sustainability in Quito. AGRUPAR has supported the creation of more than 4,400 gardens (currently with more than 2,200 active gardens), covering 65 h of green infrastructure (Rodríguez & Samaniego Ponce, 2022). The project focuses on the more vulnerable sections of the population, with the participation of more than 4,500 farmers each year, mostly women heads of household (84%) (Rodríguez & Samaniego Ponce, 2022). The six gardeners selected represent to the approximate 5% of gardeners who practice UA for self-

consumption *and* market production. According to AGRUPAR, the majority of gardeners (around 95%) practice UA for self-consumption mainly (Rodríguez & Samaniego Ponce, 2022).

### **Quito Metropolitan Council (QMC) and Secretaries**

The QMC exercises the legislative power of the DMQ to issue ordinances, resolutions and agreements. It is composed of Metropolitan Councillors. The councillors interviewed are involved in the proposal for the Ordinance on UA.

The STHV leads the formulation of land-use development plans, including the PUGS (2021), and the PMDOT (2021-2033). Both plans integrate FS in the territorial plans and promote the articulation of agriculture with the larger FS.

The SE has endorsed diverse plans such as the Resilience Strategy (2017), and the PACQ (2020). These include sustainable FS as a pillar for the city's resilience and promote UA as a NBS and as a climate change mitigation measure. The SH collaborates with AGRUPAR to use UA in its work to combat chronic child-malnutrition to increase food security in vulnerable households in Quito.

### **Data Analysis**

I conducted qualitative thematic coding using Atlas.ti to identify themes from the transcribed interviews. Auerbach & Silverstein (2003) helped me understand that there is no one single way to interpret the data, but that my analysis should be guided by my research aim. I went through different stages of coding, that allowed me to find relevant text, and repeating ideas or codes, which helped me identifying patterns as code-groups (18; the most prominent being “regularization”, “motive for UA”, and “integration UA in planning”), from which I found one main debate; the discussion of whether UA is an economic activity that should be formalized. Since I conducted the interview in Spanish, I coded in Spanish.

### **Validity and Reliability and Limitations of the Study**

Reliability and validity are important criteria in establishing and assessing the quality of research (Bryman, 2012). Following Guba and Lincoln (1994; in Bryman, 2012) recommendation to establish reliability and validity, I used respondent validation by sharing my conclusions with participants, and triangulation, by combining interviews with site observations and policies' desk-research to diversify perspectives.

Furthermore, Dowling (2005) defines qualitative research as a social process, influenced by power relations, social norms, and researchers' positionality, and insists on the importance of critical reflexivity to deal with our subjectivity. Besides, Valentine (2013) stresses the presence of power dynamics in interviews and argues that our positionality affects the rapport and interrelation between interviewer and interviewee. Therefore, I reflected on the power imbalances arisen by my positionality as an Ecuadorian young female student in relation to the policy makers and planners I interviewed. This was due to factors such as the age, and their higher professional position. Additionally, I considered how my positionality as a well-educated girl from a stable socio-economic background could potentially influence the rapport between me and the interviewed UA actors, who typically belong to a less-educated, and lower socio-economic group. To improve the rapport, I discussed the concerns of confidentiality, privacy and anonymity using the interview protocol before asking participation consent. This helped respondents understand the purpose of their participation and improved the confidence between interviewees and me as the interviewer.

It is important to note that my sample is limited in its scope and size. The gardeners interviewed were all contacted in the market and do not necessarily represent the Quito's gardeners community as a whole. The participants belong to a specific group of urban gardeners who practice UA for self-consumption *and* market production. Nevertheless, all gardeners from my sample represent both groups to some extent, as they all practice UA including for self-consumption. This distinction was important for my research, as it emphasizes the significance of tailoring UA policies based on specific groups and motives.

Moreover, by the time I conducted the research in Quito, the Municipality was undergoing administrative changes, possibly affecting validity of the long term conclusions for Quito



specifically, but since it is used as a case study of the misalignment between food policies and planning, it does not affect my broader conclusions and findings.

## Chapter 4: Results, analysis and discussion

### Results and Analysis

I analyse the results of the research with the aim to answer why, despite the existing urban policies addressing UA in Quito, planning does not adequately implement these.

To begin, I introduce the existing policies and rationales to promote UA in Quito. Then, I evaluate the (mis)alignment between these policies and planning. I continue the analysis evaluating whether and how the three hypothesis from the literature help explaining the misalignment. I unfold the discussion arising from the proposed UA Ordinance and diverging perceptions of UA, arguing that informality is the factor that helps the most to explain the misalignment between policies and planning given conflicting perceptions of informality and formalization of UA practices.

### Rationales and Policies Promoting UA in Quito

In Quito there are various policies driven by several rationales that promote UA (see table 4 in appendix for summary of rationales informing each policy). The main rationale for supporting UA is resilience and food sovereignty, as stressed by the interviewee from AGRUPAR: *“We had to acknowledge that UA is a crucial component of the food system, driving the difference between the food system itself and a sustainable and resilient food system”* (Interview AGRUPAR). After Quito's adhesion to the Milan Urban Food Policy Pact (MUFPP) in 2016, UA has been increasingly endorsed by urban policies as a constituent element of a sustainable agri-food system, which lead to the formulation in 2018 of the Multi-stakeholder Platform of the Quito Agri-food Pact (PAQ) and the current Agri-food System Strategy of Quito (2018-2019).

Promoting UA is also led by rationales of fostering food security and healthy diets, particularly given the high rates of obesity and malnutrition in Quito (63%; 29% resp.; Interview SH). As such, the SH has collaborated with AGRUPAR in the program to fight chronic child malnutrition *“using UA to increase food accessibility among vulnerable families”* (Interview

SH). Similarly, according to one of the councillors, *“in Quito, there is an issue that hinders people from having proper access to food. It is crucial to address this concern adequately through planning”* (Interview Councillor 2). Furthermore, one of the objectives of the PMDOT (2021-2033) is improving households’ wellbeing by addressing problems related to food insecurity, malnutrition and health. The plan promotes UA as a strategy to secure access to food.

UA is also promoted as an alternative economic support, particularly for vulnerable families. Based on AGRUPAR data, the economic gain coming from UA is significant when compared to the poverty line in Ecuador (Rodríguez & Samaniego Ponce, 2022). According to the National Survey of Employment, Unemployment and Underemployment (ENEMDU, 2023), the poverty line in Ecuador is USD 87.57 per capita monthly. Based on these numbers, the income generated through UA (a monthly average of 175 USD) is significant (Rodríguez & Samaniego Ponce, 2022). This is recognized by policymakers, as expressed by one councillor interviewed: *“UA can be considered a genuine source of economic income for those in need. While I cannot assert that it is the primary source of income for a family, it does represent an additional income that significantly helps low-income families”* (Interview Councillor 1). Therefore, there is a compelling rationale informing policies promoting UA as an alternative means to generate income and employment, including supporting local food value chains and implementing sustainable agricultural practices. The PMDOT (2021-2033) calls for generating income and employment opportunities through supporting local-value chains and sustainable UA.

Regarding the environmental concern, UA is encouraged by the SE as a NBS and measure for mitigation and adaptation to climate change, as stated as follows during the interview: *“We have worked with AGRUPAR to leverage the potential of UA. In addition to implementing NBS, the concept of UA aids reducing heatwaves and temperature while providing food resources [...] UA would also contribute to reducing [food] transportation distances.”* (Interview SE). Therefore UA is added as an indicator of resilience and promoted as a NBS in the following policies promoted by the SE: Quito Vision 2040, Quito Climate Action Plan 2020, The Ordinance Green-Blue.

## Misalignment Food Policies and Planning

In the preceding section, I discussed the rationales and policies supporting UA in Quito, aimed at addressing the vulnerabilities and social challenges of the local FS. In this section, I assess the degree of (mis)alignment between these policies and planning through the level of correspondence between the theoretical efforts to incorporate FS in planning and their practical implementation, the ambiguity of UA policies, and disagreements among gardeners, planners, and city authorities regarding the role and implementation of UA (see table 5 in appendix for a summary of variable (mis)alignment).

The analysis corroborates a misalignment of UA policies and planning evidenced mostly by the low correspondence between theoretical attempts to incorporate UA in planning, and their actual implementation. Although there is recognition from city authorities and planners of the importance of FS in cities, and the existence of planning instruments incorporating FS, their implementation remains inadequate as FS are predominantly addressed on the macro and rural scale.

According to planners, FS are crosscutting in relation to planning, and need to be considered to plan sustainable, inclusive and healthy cities, as stated as follows: *“cities are very complex, there are many cross-cutting issues, we cannot think that food sovereignty is not cross-cutting with respect to urban planning”* (Interview STHV). Furthermore, FS are incorporated in two current planning instruments; the Metropolitan Development and Territorial Planning Plan (PMDOT 2021-2033), and the Municipal Land Use and Management Plan (PUGS 2021). The PUGS (2021) recognizes the importance of the integration of agricultural production zones in the territorial plan to strengthen food sovereignty and emphasizes the sustainable and environmentally friendly articulation of agricultural production zones within the larger agri-food system. Special attention is given to sustainable agriculture as a means to foster economically viable, culturally appropriate and environmentally friendly production systems (STHV, 2021, p.20). Similarly, the PMDOT (2021-2033) promotes food security and sovereignty with the reinforcement of a resilient and sustainable food-system through promoting UA. The corresponding Objective 5 aims to “strengthen UA programs by increasing the coverage of urban gardens” (STHV, 2021bp. 72).

Nevertheless, FS are still inadequately integrated as they are addressed by both documents predominantly at the rural and macro scale, and no technical specifications are given to operationalize UA. This neglects the importance of FS at the urban and micro scale, leading to a lack of FS planning at the neighbourhood level. According to the AGRUPAR interviewee, the “*absence of food in certain areas [of the city] highlights the evident lack of planning at the neighbourhood level*” (Interview AGRUPAR). Accordingly, food security and the inequity in access to food in Quito is aggravated due to this absence of planning in the urban area, particularly at the neighbourhood scale.

The STHV planners recognize the scale and spatial limitations of the current PUGS (2021). To address this, they propose a Master Plan for Public Spaces (PMEP)<sup>2</sup> that focuses on FS at the micro and urban level. The STHV emphasizes the potential of vacant public land for UA and aims to promote UA as a strategy to address the FS’ issues at the city level, such as limited food supply points, reliance on external sources, high obesity and malnutrition rates (Interview STHV). Although the PMEP’s impact on food policies is beyond the scope of this research, it shows urban planners’ recognition of the importance of integrating FS.

Furthermore, according to the representative of AGRUPAR, FS planning requires a multifunctional and multi-component approach to UA, as expressed as follows:

*It is important to promote UA and all that this reflects, not only for nutrition, not only for its economic support [...], but for the whole benefits it has for the environment, for justice, [...] UA as part of the food system can generate a more direct channel for sustainable and resilient FS*  
(Interview AGRUPAR)

Hence, beyond promoting UA gardens, FS planning entails among other the 1) the promulgation of local food production based on agroecological principles, 2) the promotion of short supply chains to improve food access, particularly at the neighbourhood scale, 3) the stimulation of self-consumption and local consumption, 4) the promotion of healthy diets, and 5) the sustainable management of residues that minimizes food loss (Interview AGRUPAR). Accordingly, planning instruments that address the local FS at the urban, local scale in such a

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<sup>2</sup> Currently being drafted by STHV

holistic way are “*yet to be implemented*” (Interview AGRUPAR), showing a low correspondence between theoretical attempts to integrate UA and FS in planning and their actual implementation, and a low comprehension of FS from a holistic, multi-functional approach.

The misalignment of UA policies and planning is further evidenced by the ambiguity of UA policies, as these often miss the technical specifications that allow their operationalization, for which UA policies remain as a “*declarative and poetic act*” (Interview AGRUPAR). Lastly, this misalignment is seen in planners' and city authorities' disagreements as to how to define and implement UA in planning, whether as an economic activity to be formalized or as a subsistence activity that secures the right to food. Disagreements around how to approach UA “*delay the definition and approval of the legislative norm promoting UA*” (Interview Councillor 2), which consequently postpones the formulation of technical specifications needed to operationalize UA policies. This debate will be elaborated under the section “*Informality*”.

### **Hypotheses Explaining the Misalignment Between Food Policies and Planning**

Based on the previous analysis I conclude that despite the existence of UA policies in Quito, UA is not adequately implemented in planning. The case of UA in Quito can be understood by the three hypotheses coming from the literature, namely; 1) urban-rural bias, 2) sectorial/centralized governance, and 3) the informality embedded in UA practices in Quito hindering the formulation and implementation of policies. Although the three hypotheses help explain the misalignment, I elaborate on informality as I argue that diverse perceptions on the role of UA prompt divergent views on informality and formalization, which problematize the implementation of UA policies.

#### **Urban-rural Bias**

The analysis corroborates the urban-bias existing in FS planning as suggested by Battersby and Watson (2018), Toriro (2018), Santandreu (2018), and Rodríguez et al. (2022), whereby food production and distribution is predominantly treated as a rural issue. Although in Quito, UA is considered by gardeners, planners, and city authorities an urban issue to be considered by planning, actual planning instruments still treat it as a rural concern.

Planners and city officials express the need to integrate UA into urban planning, as evidenced by the following opinions from the interviews:

*“The DMQ has rural and urban land, gardens can occur in both” (STHV), and “Cities are thought of as healthy cities, and ultimately in planning, from the moment a city is planned with the land use regulations [...] these are already generating guidelines where space could be generated for cultivation.” (Interview STHV)*

*“AU has to be highlighted and has to be implemented in a logic of urban governance.” (Interview Councillor 2)*

However, at the practical level, these views are not necessarily implemented by planning tools, as evidenced by the PUGS (2021), which assigns agri-food areas as an activity located in rural areas only. This is noted by the representative of AGRUPAR: *“The PUGS does mention the sustainable agri-food system for food sovereignty, but agriculture is still thought of as a rural issue. The PUGS includes the category of family gardens, but in rural territory... and urban areas?” (Interview AGRUPAR).*

Furthermore, the PMDOT (2021-2033) sets guidelines at the macro level guiding sustainable agri-production, but as noted by one of the councillors *“there is no specific urban land-use plan designated for agriculture. In general, within the DMQ, agri-productive land is assigned in rural land” (Interview Councillor 1).*

Hence, although FS are integrated into planning, there is an urban bias, as these are predominantly considered in rural land use (see Table 6 in the appendix for a summary of variable urban-bias).

## **Governance**

Regarding governance, the literature suggests that a multifaceted activity as UA needs to be addressed by an integrated governance (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Rodríguez et al., 2022). The interviews show that the Quito municipality is aware of the importance of transitioning towards an integrated governance, especially when it comes to addressing the complexity of cities and the food system (Interview Councillor 1). However, according to AGRUPAR, reaching an integrated governance is very challenging, and as evidenced during the COVID pandemic, many municipal departments still tend to work

individually (Interview AGRUPAR). There is still a poor conception of food as a complex system which requires a transversal planning approach, integrating planning with health, the economy, and the environment. For example, the SH representative claimed that it is hard to collaborate with planners to promote UA from the health perspective, and argued that *“collaborating with planners has been very challenging, despite we invite them to work meetings, they have not attended [...] it has even complicated our work in using UA to combat child malnutrition”* (Interview SH). Similarly, according to AGRUPAR, still today several municipal institutions don't see their role in contributing to Quito's food system and food security through UA, as an anecdote of AGRUPAR's interviewee recalls:

*It is sad that when inviting various municipal entities to discuss their contribution to building a food policy for the city, the person in charge of markets, for example, says 'I don't know why I am in this network', [...] or that someone from the area of social inclusion says 'well we work with vulnerable groups but I don't really know what I am doing here in this meeting'... but I suppose that the first need of a vulnerable group should be to eat nutritious food* (Interview AGRUPAR)

Similarly, the literature suggests that given the importance of the context for FS, food policies need to be locally defined (Battersby & Watson, 2018; Cabannes & Marocchino, 2018). According to one of the councillors interviewed, food policies in Quito have been locally defined as a response to the social demands coming from local citizens that practice or benefit from UA (Interview Councillor 2). Accordingly, *“UA has long gone unnoticed in Quito. It is only with new perspectives of governance focused on the environment and a solidaristic economy that respond to local practices, that UA is getting noticed”* (Interview Councillor 2). However, from AGRUPAR's perspective, in Quito, food policies are centralized and cover the FS at the macro level, covering from national, district, provincial until the zonal administrations. Yet, these do not cover the neighbourhood scale, leaving an absence of food policies at the local micro-level (Interview AGRUPAR). Recalling Battersby and Watson's (2018) argument that a regional approach to FS often neglects FS planning at the local scale, I argue that in Quito food planning at the neighbourhood scale has been neglected given the macro scale at which the FS has been addressed in planning. Furthermore, building on Battersby and Watson's (2018) claim that regional food planning is highly apolitical as it disregards the complex interactions between actors from the activities of the food cycle, I



sustain that in Quito, the multiple stakeholders of the FS, including gardeners, sellers, intermediaries, and consumers, have been disregarded at the city level. Given this absence, farmers have the fundamental role of feeling the absence of food planning in the neighbourhood.

Thus, food policies are not adequately implemented due to predominantly sectorial FS governance and centralized food policies, which disregards the local context of FS at the neighbourhood scale (see Table 7 in the appendix for a summary of variable governance).

### **Informality**

Informality is the factor that best explains the misalignment between UA policies and planning due to conflicting perceptions of UA's role and consequential divergent views on informality and formalization. These different opinions stem from three different, yet sometimes intertwined perspectives; practical, legal, and social. This section discusses all perspectives, with their diverse views on UA's role and implementation in planning. While recognizing the numerous benefits and multi-functionality of UA, e.g. economic, health, environmental, social benefits, these perspectives emphasize distinct roles. The legal perspective, upheld by the STHV planners and councillors, emphasizes UA as an economic activity that needs to be formalized, whereas the social perspective, represented by AGRUPAR and the SH, highlights UA as a subsistence activity stressing its role in securing the right to food. Ultimately, the debate around UA's role prompts diverse views on informality and formalization.

I begin presenting gardeners' motivations to practice UA. These are important to understand the different or similar perspectives of gardeners, planners, and city authorities regarding UA implementation in planning. If there is a consensus that UA is primarily an economic activity, then it is appropriate for UA policies to focus on its economic aspect. However, if gardeners emphasize additional benefits beyond economic gains, UA policies should consider the benefits expressed by practitioners and implement policies that effectively address their actual experiences.

## Gardeners' Motives to Practice UA

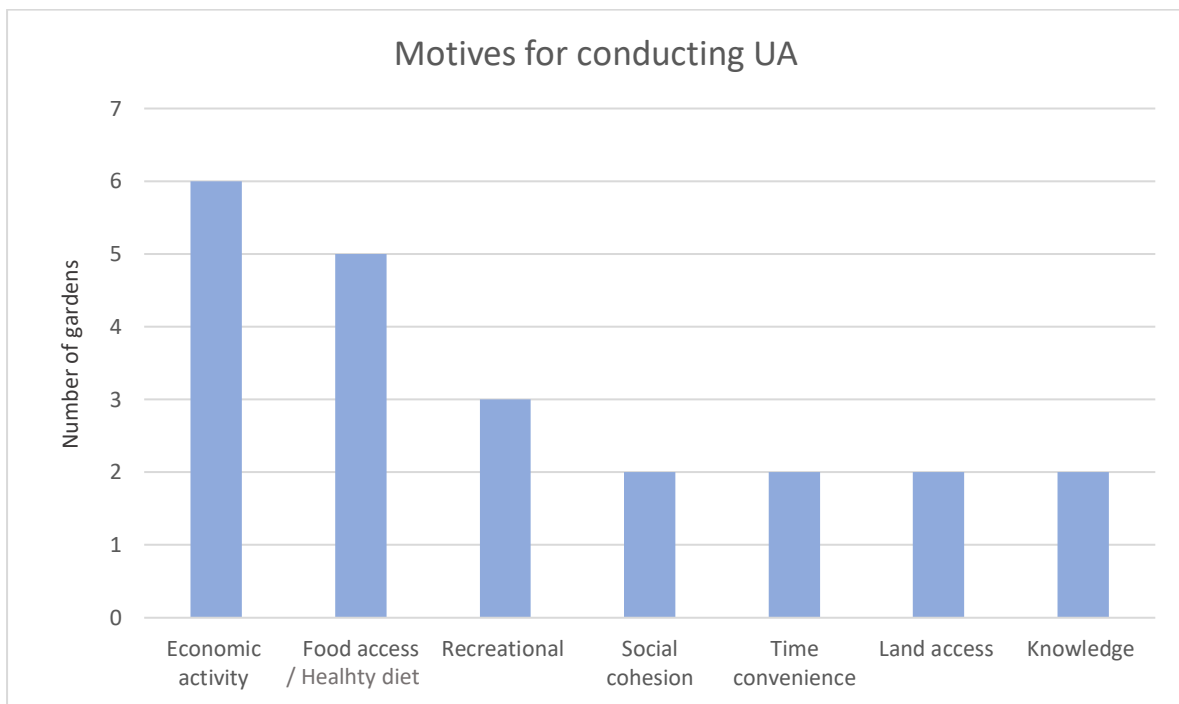
Gardeners interviewed mentioned several motives for practicing UA, economic support and means to food access being the most common (see fig. 10).

Regarding UA's economic support, according to multiple respondents UA provides additional income support, especially for individuals from low economic backgrounds, as expressed by one gardener claiming that UA is of great benefit because "*[they] are from low economic resources, so UA is a great help because [they] eat better and [provides] income for [their] home*" (Interview Gardener Checa 2). Similarly, other responded noted that they "*work in UA, to have something to feed [them]selves and make money to have something to pay for [their] expenses*" (Interview Gardener Cerro Monjas). So, UA provides an important economic support as it offers employment opportunities, provides income through the sale of products, and allows savings as food is self-grown, as expressed by several gardeners: "*everything goes on sale. And we consume, because we save from buying at the market and we know that we eat healthy*" (Interview Gardener Checa 1), and "*if I need a vegetable I go out to the garden and not to the store*" (Interview Gardener Cocotog). Yet, UA serves only as a supplementary economic activity, as farmers' claimed that the gains from selling are not enough to sustain the household, as stated by the same respondent: "*I don't live 100% [from UA], it helps us, it supports us*" (Interview Gardener Cocotog).

As noted by these respondents, apart from generating income, UA provides additional access to fresh, healthy, and organic food. Indeed, the second most frequent motive for practicing UA is securing access to food and sustaining a healthy diet (see fig. 10). "Healthy eating" was mentioned 7 times by four farmers, "organic" was mentioned five times by four gardeners, and "accessing food" was mentioned four times by three farmers. Gardeners practice UA to improve their nutrition and secure access to healthy and fresh food that otherwise would be unaffordable, as expressed by this gardener: "*[UA] is very important because we sell, and that is cheaper, because otherwise it is expensive to buy*" (Interview Gardener Cerro Monjas). Farmers reiterated that growing their own organic food allows them to eat healthier, as expressed by this farmer: "*we know that what we eat is healthy, it's not chemical, it's organic*" (Interview Gardener Cerro Monjas). Gardeners credit AGRUPAR's technical guidance for teaching them the significance of healthy eating and organic growing methods, as expressed

by one gardener: “we grow to eat healthier, before we did not know that chemical products were bad for our health” (Interview Gardener Cocotog).

Gardeners also viewed UA as a recreational activity. Two gardeners believed it fostered social cohesion, creating a sense of community among UA producers, as one gardener expressed: “We've formed a strong bond, it feels like a family” (Interview Gardener Zám-biza). Two female heads of household stated that UA is convenient for them as they work from home and have flexible schedules, allowing them to spend more time with their children. One of them, a female gardener, said, “I manage my time here so that I can have lunch with my children when they arrive” (Interview Gardener Lumbisí). Finally, two mentioned to practice UA given their available open space at home (Gardener Lumbisí, Cerro Monjas) and former rural farming experience, highlighting the rural-urban transfer of agricultural knowledge through migration.



**Figure 10: Motives for practicing UA according to gardeners**

I will continue discussing the different views of UA’s role and implementation, and distinct perceptions on informality and formalization as stemming from the three perspectives; practical, legal, and social (see fig. 11).

## **Diverse Views on UA's Role and Implementation in Planning**

From the legal perspective, although councillors and STHV planners recognize the multiple benefits of UA in enhancing food security and health, increasing FS' resilience, and mitigating climate change effects, this group highlights the role of UA as an economic activity. UA is conceived as such as it generates the sale of surplus and incentivizes commerce and is promoted as a potential additional income source, as expressed by the interviewed councillor: *"The government promotes UA, providing training to individuals to meet their food needs and potentially transform it into a small-scale business"* (Interview Councillor 1). Consequently, the promulgation of UA as a potential economic activity requires it to be formalized, as stated by the following councillor: *"We believe it would be beneficial if all households with gardens were able to sell their surplus produce. In order for such transactions to be considered commercial activities, they must be categorized accordingly"* (Interview Councillor 2). Similarly, the STHV stresses that if planning and policies are to promote UA, the practice needs to follow existing norms and order regarding the regularization of economic activities, as expressed by the STHV representative: *"the moment you want to commercialize [product] in a legal way the norm tells you very clearly that you are already generating an income and that has to be declared"* (Interview STHV).

On the contrary, from the social perspective held by AGRUPAR and the SH, food access is conceived as a human right, and therefore UA should be promoted by city authorities independently of its economic value. This group recognizes that UA can be an economic activity, but above all it accentuates its role in enhancing food security and accessibility as a human right that should be treated accordingly by city authorities, as exemplified in the following quote:

*'they have to pay because it is an economic activity', but first of all it is an initiative whose main objective is food security, which exercises the right to food. So the right to food, which is above all else, cannot be commodified* (Interview AGRUPAR).

Contrary to the legal perspective, for this group, UA cannot be considered primarily an economic activity given the following reasons. First, only 5% of the registered farmers practice UA as economic activity, while the big majority, around 95% of the farmers registered in AGRUPAR practice UA for self-consumption (Rodríguez & Samaniego Ponce, 2022).

Although among these many sell surplus, according to AGRUPAR, it cannot be treated as an economic activity since the income generated is very little and consists only of a support activity. Second, the AGRUPAR interviewee noted that according to their regulations, the registered gardens have a maximum size of 0.7 hectares, which is not large enough to produce for commercialization. Hence, AGRUPAR recognizes the multi-functionality of UA, but stress that although UA can be an economic activity, it is above all a practice that secures the right to food.

While the legal perspective highlights the economic role of UA, the social perspective stresses that UA is a subsistence activity that secures the right to food. Gardeners' experience, however, confirms both arguments, showing the multiple function of UA. On the one hand, gardeners coincide with STHV and councillors' perspective that UA is an economic activity, as the analysis has showed that the most common reason for practicing UA is for its economic benefits. On the other hand, gardeners also practice UA to secure access to fresh, and nutritious food, and benefit from the positive side effects such as enforcing community ties.

The distinct opinions on UA's role, prompt different perceptions on formalization and informality, which are discussed in the following section.

### **Views on Formalization and Informality**

The diverse perspectives on UA prompt a broader discourse on perceptions of formalization and informality. From the legal perspective, councillors and STHV planners see formalization as beneficial, as it ensures specific rights and security in the practice of UA, as expressed by the STHV planner: *“Rather than perceiving [formalization] solely as an unfavourable norm limiting my actions, it is essential to recognize that it grants me rights and provides assurances”* (Interview STHV). As such, formalization procures certain security in the practice of UA, as stated as follows:

*The LUAE (license for economic activity) gives you security elements within the current space to practice agriculture. One of the considerations we had was the garden must have certain safety conditions, such as not being able to do it in a ravine* (Interview STHV).

The STHV argues that often UA does not follow safe planning standards, “*as there were times when the garden was next to the road or a ravine [...] due to lack of knowledge*”, and that it is therefore the “*responsibility of the municipality to provide and demand that security in the public space*” (Interview STHV).

Importantly, formalization also helps legitimize and bring visibility to the previously overlooked practice of UA. According to the councillor interviewed, “*there is documentation and practical efforts to support UA in Quito seen in AGRUPAR work. However, there is a lack of regulations to endorse this practice*” (Interview Councillor 2). From the legal perspective, advocates for formalization argue that UA practices can only gain more visibility and support when they operate within “*the realm of legality*” (Interview Councillor 2). Otherwise, they believe that any practice not formalized by regulation will remain ignored, as expressed by councillor 2: “*We strive to embrace legality, shedding light on the processes that through legalization gain another level of acceptance in the official world. Unofficial matters are often underestimated, ignored, and rejected, while official matters demand respect*” (Councillor 2). In short, formalizing UA practices is crucial to legitimize and promote them, while ensuring necessary security measures are in place.

The opposite of formalization, informal practices and food commerce in UA, is viewed from the legal perspective as a hindrance to development and a lack of state control as expressed by the councillor interviewed: “*In the most commercial streets of the centre of Quito there is total lack of control. Every city has to have order [...] You have to regulate, otherwise you're screwed*” (Interview Councillor 1). The STHV adds that informality in UA increases the insecurity of the practice i.e. not following adequate planning standards as not growing in a ravine, and that remaining in illegality limits the potential of UA as an economic practice (Interview STHV). As such, the STHV argues that “*in the absence of order, the ultimate actor to blame would be the municipality*” (Interview STHV).

In response, coming from the social perspective, AGRUPAR and the SH consider UA a legitimate activity that secures the right to access food, particularly given the absence of formal food planning at the neighbourhood scale. Accordingly, urban gardeners are crucial in filling that absence, as expressed by the interviewee from AGRUPAR:

*The garden creates a resilient space for the neighbourhood by addressing the lack of food planning, which exacerbates food access inequity. It fills the gaps in food availability, highlighting the evident absence of food planning at a neighbourhood level. (Interview AGRUPAR)*

Hence, instead of viewing UA's informality as harmful, it sees it as a complement to the shortcomings of the formal food sector, as expressed by the SH: *“It is necessary to regulate certain spaces and certain practices, yes, but up to a certain point. As soon as we generate a greater benefit [informally] I would think that it should not be necessary to regulate”* (Interview SH).

Responding to the view on formalization coming from the legal perspective, AGRUPAR and the SH, do not oppose providing support to UA by legitimizing and formalizing the practice. In fact, they have been the primary organization in Quito working towards the promotion and recognition of UA and its benefits for local FS' sustainability. However, AGRUPAR opposes formalizing UA as an *economic activity*. While AGRUPAR acknowledges that UA has an economic function, they oppose formalizing all UA practices as solely economic. They emphasize that UA is primarily a subsistence activity that guarantees the right to food. As such, the AGRUPAR representative argues that they are against the *“extremist position”* of treating all UA activities as an economic activity that needs to be formalized (Interview AGRUPAR). In its focus of UA as a subsistence activity, AGRUPAR is concerned for small farmers who, under the proposed Ordinance, are required to obtain a LUAE despite cultivating for self-consumption.

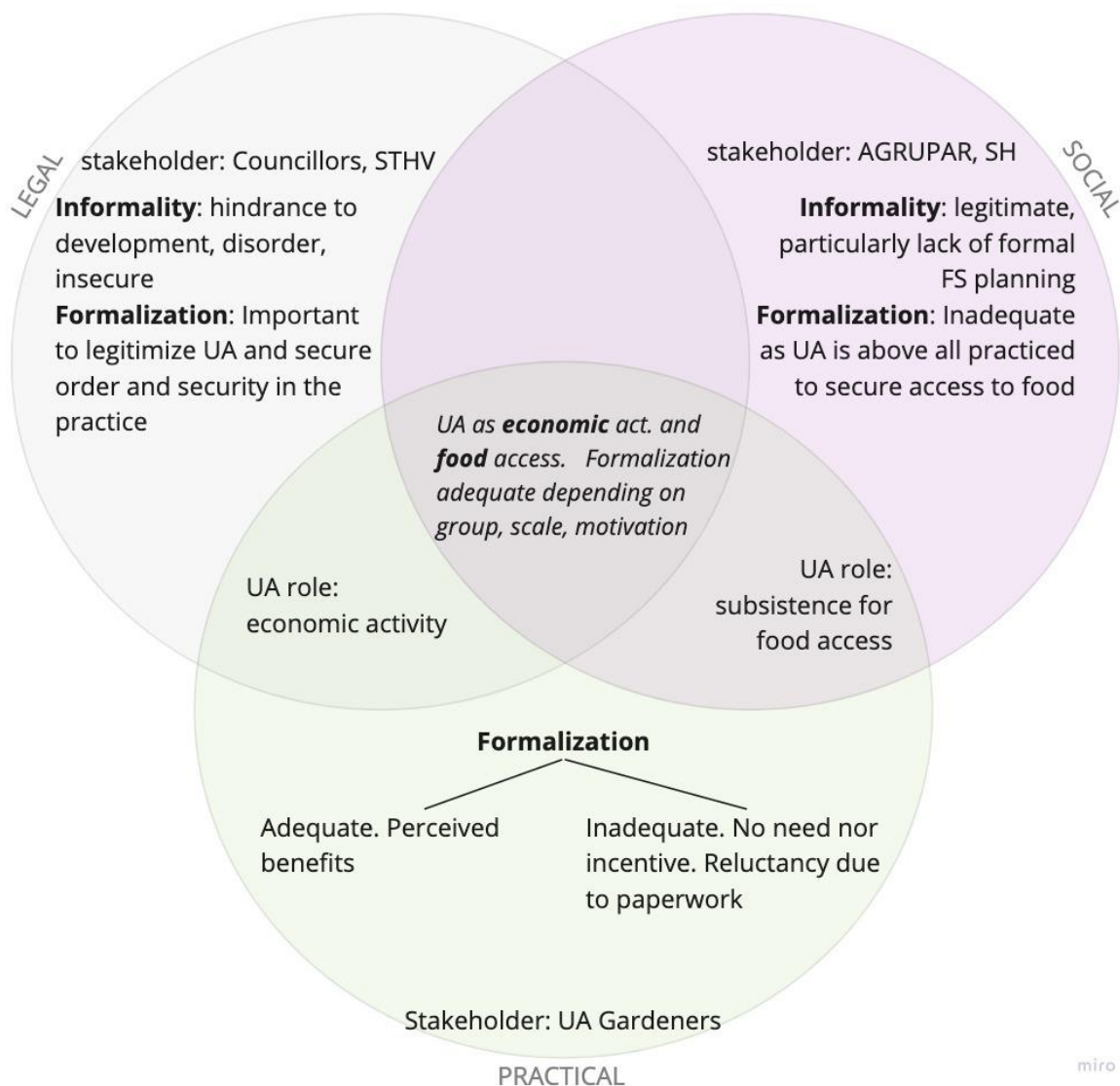
Additionally, from the SH's perspective, the safety conditions imposed on urban gardens by architectural and planning standards, as mentioned by the STHV representative, are problematic. Accordingly, the majority of households who practice UA live in informal circumstances, often locating the garden in insecure land, such as ravines or along roads, which would not meet the required safety standards as indicated by planners (Interview SH). The SH fears that neglecting the informal conditions in which most UA producing households live will difficult their formalization, limiting the official support from AGRUPAR (Interview SH). This situation would exacerbate issues such as chronic malnutrition, poor health, and nutrition, perpetuating poverty's vicious cycle (Interview SH).

Differing from both perspectives, gardeners' experience offers a more nuanced perception on formalization. Their experience suggests that formalization in UA can be beneficial depending on the *group* who practices UA, and the *motives* for doing it. Given the multifunctionality of UA, gardeners hold varying perspectives on formalization, depending on the purpose for engaging in UA. Gardens' experience aligns simultaneously with the STHV and councillors' rationale for formalization, and AGRUPAR and the SH's contest given UA's primary role in securing food access. On the one hand, gardeners recognize the benefits of formalization when commercialization is the main reason for practicing UA, as it provides legal protection, fair market conditions, facilitates product commercialization at strategic selling points, and enhances credibility by obtaining an organic certificate, thus attracting more clients, as stated by the following gardener: *"of course formalization is beneficial, if we are not registered we cannot sell, and [the product] is guaranteed with the AGRUPAR organic certificate"* (Interview Cerro Monjas). On the other hand, gardeners believe formalization can be a disadvantage when the primary purpose for practicing UA is self-consumption, even if a portion of the products are commercialized, as expressed by the following gardener: *"those who are not registered probably don't sell as much or have their own clients, so do not need to go to the market"* (Interview Gardener Lumbisí). In line with AGRUPAR's perspective that informal UA practitioners are hesitant to formalize, gardeners expressed that formalization is inconvenient for many due to additional paperwork, time, and a lack of clear benefits, as expressed by several gardeners: *"they say that we fill out a lot of paperwork, sales records, field records, [...] they don't have the patience to do these procedures"* (Interview Gardener Checa 2) and *"there are colleagues who claim that despite paying, nothing is given to them [...] they are very upset"* (Interview Gardener Cocotog).

This analysis reveals two key findings. First, gardeners practice UA both for its economic benefit and as a means of accessing food. These challenges the prevailing legal and social perspectives that emphasize a single function of UA. It suggests that for an adequate implementation of UA policies, UA policy formulation should rely less on planners and policymakers' views on UA and ideals of order in the public space, and instead be informed by empirical evidence from UA practitioners. This leads me to my second point. Gardeners' experience in practicing UA for self-consumption and market production highlights the multifunctionality of UA, stressing the need for an adaptable governance approach. Rather than focusing solely on a single role of UA, approaches to address UA, whether through



formalization or not, depend on the target group, the scale of the garden and production, and the purpose for conducting UA. Gardeners consider formalization beneficial when UA is practiced by non-vulnerable groups for self-consumption and commercialization. On the contrary, if UA is practiced by the most vulnerable sectors of the population for self-consumption mainly, formalization is not adequate. Ultimately, UA policies promoting formalizing UA as an economic activity, as proposed by the Ordinance on UA, are not adequate as they fail to respond to the reality of UA in Quito, limiting their correct and effective implementation.



**Figure 11: Perspectives around UA’s role and Formalization**

## **Discussion**

The analysis confirms the existing literature identifying a persistent misalignment between food policies and urban planning (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Hayson, 2020; Toriro, 2018). It reveals that while UA is a prevalent practice in Quito and policies have shown growing support for it, expressed in the proposed Ordinance on UA, UA policies are still inadequately implemented in planning tools as the PUGS (2021) and the PMDOT (2021-2033). Deriving from the three hypotheses explaining the inadequate integration of FS in planning I argue that UA in Quito is still inadequately addressed. In terms of urban-bias, referring to the predominantly treatment of food as a rural issue by urban policies and planning, I have identified that despite the theoretical recognition of agriculture as an urban issue, planning instruments (PUGS, PMDOT) still treat agriculture as a rural matter. Regarding governance inadequacy, the analysis indicates that UA policies in Quito are not effectively implemented due to the prevailing sectorial approach to food in planning, as suggested by Cabannes & Marocchino (2018), Toriro (2018), and Santandreu (2018). FS in Quito are not addressed from an integrated approach, and food policies remain centralized, failing to address neighbourhood-scale food planning. Although the previous hypotheses are relevant for explaining the inadequate operationalization of food policies, the results of the analysis suggest that the third hypothesis, informality in UA, is the factor that helps the most to explain the misalignment of policies and implementation in Quito given disagreements on how to define and address UA in planning; whether as an economic activity that needs to be formalized, or a legitimate subsistence activity that secures the right to food access. Different perspectives on informality and formalization raise questions on the larger debate around urban policy formulation and policies' unintended consequences.

### **Policy formulation and unintended consequences: Inadequacy of formalization**

Based on the analysis, I reflect that UA policies are informed by stakeholders' diverse perspectives on the problem, i.e. formalization, and informality of UA. Ultimately, I argue that gardeners' experience in practicing UA for diverse motives highlights the inadequacy of UA policies (mainly the Ordinance on UA) that formalize UA practices solely as an economic activity. Instead, UA policies should be informed more by empirical evidence and consider the

benefits expressed by practitioners to implement policies that effectively address their actual experiences, endorsing participatory approaches that well represent the diverse groups and motives for practicing UA.

According to the literature, policy is an endogenous construct, i.e. it is context-dependent and is motivated by actors' different perceptions of the problem, values and visions of those who define it (Nagler, 2023). Recalling Bourdieu's Theory on Social Fields (Hilgers & Mangez, 2014), visions are framed through symbolic socio-spatial classifications that determine how we perceive and organize our world. In the case of Quito, the analysis has showed that contrasting socio-spatial classifications (i.e. planners and city authorities' socio-spatial positionality, contrasting to UA gardeners' experience) determine different perspectives towards UA; practical, legal and social. These in turn, guide different rationales behind policies addressing UA. From the legal perspective, held by policy makers and planners, regularization of UA is justified due to its economic activity and formalization legitimizing the practice. From the social perspective, held by the SH and AGRUPAR, UA serves as a legitimate response to the absence of local food planning and helps vulnerable populations secure food. In Quito, the Ordinance on UA, endorsing the formalization of UA as an economic activity, is formulated from the legal perspective. Therefore, it is guided by values of order, security and associates formalization with the presence of planning. From this perspective, the informality of UA is problematic as it represents disorder in the public space, insecurity around UA practices, and unfair market conditions.

Instead, gardeners' experience diverges from the previous ideals advocating for UA policy that treats it solely as an economic activity. Accordingly, UA is practiced for its economic benefit, and as a means of food access, and highlight the need for an adaptable governance approach. Therefore, from their perspective, UA policies endorsing the formalization of UA may be adequate depending on *practitioners*, *scale of production*, and *motives for practicing* it. Furthermore, gardeners' experience and interviewees' arguments help recognizing that formalization attempts guided solely by the views on order and security may not adequately respond to the context of informality embedded in the majority of UA practices because, as suggested by Cross (2000), it disregards the causes that lead to informality i.e. inadequate planning at the local scale and rural knowledge on agriculture used to secure access to food.

Moreover, the safety standards demanded by the Ordinance on UA do not respond to the informal living conditions of the vulnerable households who practice UA. Finally, as suggested by Young & Crush (2020) and Battersby & Watson (2018) attempts to formalize UA as an economic activity ignore the benefits and role of informality in strengthening food security.

The case of UA in Quito demonstrates that urban policies are shaped by the perspectives, values, and interests of policymakers, which often may not adequately respond to the real context. Based on the analysis, I conclude that policies supporting UA should rely more on empirical research derived from the experiences of UA practitioners. These evidence the need for flexible governance of UA that acknowledges the diverse groups and motivations behind UA practices. Failure to do so, could lead to eventual unintended consequences of policies. The increasing complexity of FS, characterized by their cross-sectorial, transdisciplinary, and multistakeholder nature, necessitates the inclusion of a comprehensive range of participants and functions of UA when formulating policies to avoid unintended consequences. In the case of Quito, the Ordinance on UA aims to promote the practice, but it only adequately supports those engaged in UA for market-production, neglecting the reality faced by vulnerable UA gardeners who cultivate for self-consumption. Consequently, this policy may discourage urban poor individuals from practicing UA with the assistance of municipal institutions like AGRUPAR.

### **Relation to the broader discussion on food policies and misalignment**

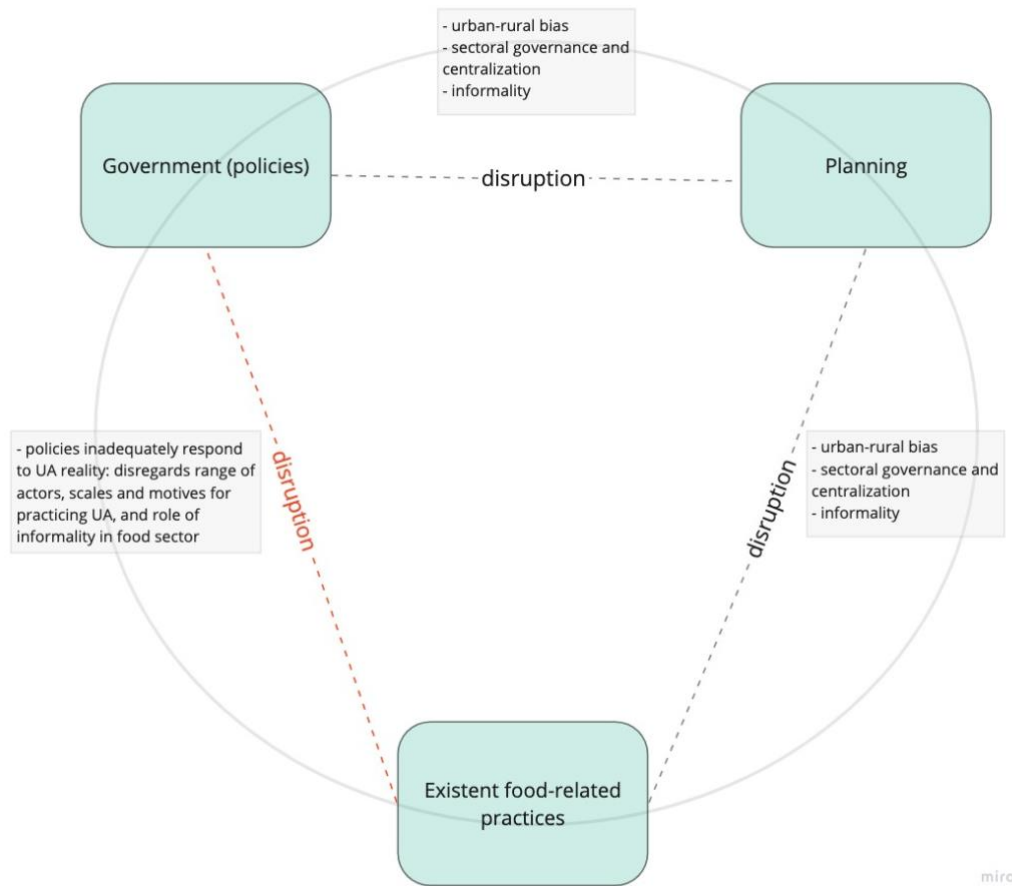
The conceptual framework established that a body of food policies has emerged after the existence of food-related activities in cities and the proved benefits of UA in face of FS' vulnerability and food insecurity in cities. Then, it establishes that food policies are nevertheless inadequately implemented by planning.

After the analysis, I add that the inadequate implementation of UA in Quito is not only explained by planning's insufficient integration of FS due to urban bias and governance, but also due to the formulation of UA policies that fail to adequately respond to UA's reality by disregarding the diverse *actors*, *multifunctionality* of UA, and the role of the *informal* sector (see fig. 12). The Ordinance on UA fails to comprehend the complexity of FS, which according to Cabannes and Marocchino (2018) must consider the various *actors* involved, the *multiple*

*activities* within the food cycle, and the *diverse spatial scales* at which these activities occur. The proposed formalization of UA as an economic activity fails to differentiate the *UA actors*, the *scales of gardens*, and the *diverse motives for practicing UA*.

Furthermore, scholars argue that attempts to formalize the informal sector is a common practice of informal governance (Young & Crush, 2020). Yet, if properly managed, the informal food sector has the potential to play a key role in the promotion of food security, inclusive growth, and poverty reduction (Young & Crush, 2020). Indeed, given the importance of the informal sector for food security, formalization attempts that disregard the functioning of informal practices undermine food security, and poverty reduction (Battersby & Muwowo, 2018). So, formalization attempts guided by authorities and planners' views of order and security undermine the transversality of food with agriculture and the economy, in which the informal sector plays a key role in securing food security particularly for the urban poor.

This inadequate implementation of UA in planning in Quito, helps to explain the broader question on the difficulty in implementing food policies, due to the failure to formulate and implement food policies from an integrated food ecosystem approach that acknowledges the range of actors and activities of the food cycle, and due to governance's disregard of the importance of informality in FS for securing food security, particularly for the urban poor.



**Figure 12: Revised Conceptual Framework**

### **Policy recommendation**

Although by the time I conducted the research, the Quito municipality was going through administrative changes, I hope the following policy recommendations are taken into consideration for future decisions on UA. My policy recommendations for implementing UA policies in Quito derive from the literature on FS and this analysis' findings. First, building on Cabannes and Marocchino's (2018) definition of multi-scalar food system planning, I stress that UA policies need to consider UA as a component of the larger local FS. Therefore, they need to respond to the complexity of FS by considering the range of *actors*, *scales*, and *motives for practicing* UA. Therefore, I suggest that although a formal recognition of UA practices is important to legitimize these and secure the sustainability of UA programs, formalizing UA as an *economic activity* may be (in)adequate depending on three circumstances: if UA is practiced

by a non-vulnerable, medium-scale farmer for market-production, then formalization may be adequate. Otherwise, if a vulnerable household practices UA on a small scale primarily for self-consumption, formalizing UA as an economic activity is inadequate and discourages individuals from engaging in it, disregarding food security and poverty reduction, as suggested by Battersby & Watson (2018; see fig. 13).

Furthermore, building on the literature's argument emphasizing stakeholder participation in FS planning (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Rodríguez et al., 2022), I propose that UA policies be more informed by empirical research and practical insights from gardeners that recognize the multiple benefits of UA. To achieve this, a participatory approach should be implemented, incorporating diverse groups of UA practitioners, including vulnerable households and medium-scale urban growers. This approach ensures the representation of a wide range of participants and their motivations, encompassing both self-consumption and market production. By doing so, UA policies can be formulated more comprehensively and inclusively.

Finally, building on Young & Crush (2020) and Battersby & Watson's (2018) argument on the importance of informality in procuring food security, and Cross' (2000) call for flexible informality governance, I suggest that rather than imposing the formal model to UA practices in Quito, informality governance should allow small urban gardeners to operate in a semi-formalized environment, allowing a self-regulating system with tax and regulatory enforcement reduced to the bare minimum. Furthermore, city authorities should render the formal sector more attractive for informal gardeners by providing incentives, such as legal protections and access to finance, as suggested by Young & Crush (2020). These measures would give small farmers the opportunity to expand the business, without imposing a formal model that does not correspond to their reality. Alternatively, a semi-formalized environment allows small producers to transition into the formal economic sector without the need for extensive regulation as an economic activity.

<i>Formalization as economic activity</i>	<i>Adequate</i>	<i>Inadequate</i>
<i>Who</i>	Non-vulnerable group, Formal living conditions	Vulnerable group, informal living conditions
<i>Scale</i>	Medium – large (max 0.7 h)	Small (<0.05 h)
<i>Purpose</i>	Self-consumption, market- production	Self-consumption

**Figure 13: Matrix for determining adequate formalization attempts of UA**



## Chapter 5: Conclusions

FS are increasingly integrated into planning given the urgency for food security in cities and FS' sustainability and resilience. However, the literature suggests that despite the increased attention to FS in cities, these are still poorly addressed by planning. The inadequate implementation of UA in planning in Quito is used to explain the argument coming from FS planning literature arguing that despite the increased existence of food policies, FS are still not adequately implemented in planning and that there is a misalignment between these two.

I conducted qualitative research in Quito, to study gardeners, planners, and city authorities' perspectives on UA's integration in planning. The results show that although FS are incorporated in planning instruments, these are still inadequately integrated due to their macro and rural focus, resulting in the absence of FS planning at the local, urban scale.

Building on the three hypothesis coming from the literature, I explain the inadequate implementation of UA given 1) persistent urban-rural bias in the integration of FS in planning, 2) inadequate food governance, 3) and the informality of UA. Notably, the concept of informality helps the most in explaining the misalignment between UA policies and planning in Quito, as it reflects divergent viewpoints regarding UA's role and implementation in planning. Bourdieu's Theory on Social Fields (Hilgers & Mangez, 2014) is a useful concept to identify how diverse socio-spatial classifications (i.e. planners and city authorities' positionality and gardeners' experience) guide different perceptions on UA's role and prompt distinct rationales behind UA policies. While from the legal perspective, held by planners and city authorities, UA should be formalized as an economic activity, the social perspective emphasizes its primary function as a subsistence activity ensuring food accessibility. However, gardeners' experiences highlight the multifunctional nature of UA, indicating that it serves both economic purposes and facilitates food access. Consequently, solely formalizing UA as an economic activity may be inadequate, as it fails to represent the reality of UA practitioners, particularly vulnerable households who engage in UA for self-consumption mainly.

Therefore, I conclude that UA policies should be guided less by a prescriptive approach guided by an ideal order that attempts to control informality and city authorities' views on UA, and

more by empirical evidence collected from gardeners' experiences, which better captures the broad spectrum of actors and motives for practicing UA. Notably, the formalization of UA as an economic practice should be contingent upon three variables: the *actors* involved in UA, the *scale* of gardening and production, and the *motivations* underlying UA practices. Failing to account for these variables may perpetuate the formulation of UA policies that do not align with the contextual reality, resulting in unintended consequences such as discouraging UA practices, particularly among the urban poor, and jeopardizing food security.

Thus, formulating UA policies that recognize the distinct *actors* and *functions* of UA, while acknowledging the vital role of the *informal sector* in ensuring food security, not only better reflects the realities of UA but also promotes the practice as an effective measure to enhance the resilience and sustainability of the local FS.

Ultimately, I conclude the discussion by arguing that the case of UA in Quito serves to revise the initial conceptual framework explaining the misalignment between food policies and planning. I add that despite planning's insufficient integration of FS due to urban bias and governance, the inadequate implementation of UA exists due to the formulation of UA policies that fail to adequately respond to UA's reality by disregarding the diverse *actors*, *multifunctionality* of UA, and the role of the *informal sector*.

Furthermore, the case of UA in Quito serves to exemplify the general difficulty of policies from diverse areas to transition to implementation. As demonstrated by Quito's case, often policies guided by policy makers' views, fail to inclusively represent the reality and needs of all stakeholders, rendering policies inadequate to the local context. Finally, the case of UA in Quito shows that recognizing the diverse actors, needs, and interests involved, through the active involvement of various stakeholders in the policy formulation process, can contribute to the development of more appropriate and inclusive policy.

## **Future research**

Future research should extend beyond registered gardeners in AGRUPAR to incorporate a more diverse group of UA practitioners without official support. Moreover, this study highlights the significant role of informality in explaining the misalignment between food policies and urban planning, specifically in UA. Further research should examine this hypothesis across other activities and scales within the broader FS. Additionally, investigations should further study the reasons why, despite the potential to differentiate the formalization of

UA as an economic activity or not, based on the group and motivations involved, empirical evidence indicates that implementing this differentiation proves challenging in practice, as shown by the case of the Ordinance of UA. Lastly, future studies should evaluate the impact of the Public Space Master Plan (PMEP) on integrating UA into city planning. It should consider the effectiveness of utilizing public urban spaces to increase UA, as well as how the PMEP or other planning tools incorporate UA in a multifunctional and holistic manner.

## Bibliography

- Anguelovski, I. (2009). Building the Resilience of Vulnerable Communities in Quito: Adapting local food systems to climate change. *Urban Agriculture*, 22, 25-26.
- Battersby, J., & Marshak, M. (2013). Growing communities: Integrating the social and economic benefits of urban agriculture in Cape Town. Paper presented at the *Urban Forum*, , 24 447-461.
- Battersby, J., & Muwowo, F. (2018). Planning and governance of food systems in Kitwe, Zambia: A case study of food retail space. *Urban food systems governance and poverty in African cities* (pp. 128-140). Routledge.
- Battersby, J., & Watson, V. (2018). *Urban food systems governance and poverty in African cities*. Taylor & Francis.
- Berberich, G. (2010). Megastädte—die Welt von morgen nachhaltig gestalten. *Herausgegeben Von BMBF-Bundesministerium Für Bildung Und Forschung.Bonn.Online Verfügbar Unter [Http://Www.Emerging-Megacities.De/Seiten/Tagung/Dokumente/Megacities\\_Shaping\\_of\\_a\\_sustainable\\_future.Pdf](http://www.emerging-megacities.de/Seiten/Tagung/Dokumente/Megacities_Shaping_of_a_sustainable_future.Pdf),*
- Bonneau, M. (2023a). Can public procurement be a leverage for local food transition? *URBACT Knowledge Hub*, <https://urbact.eu/knowledge-hub/food/public-procurement-food-transition>
- Bonneau, M. (2023b). Cities nurturing local food systems to fight climate change. *URBACT Knowledge Hub*, <https://urbact.eu/knowledge-hub/food/nurturing-local-food-systems>
- Bromley, R. (1979). Organization, regulation and exploitation in the so-called ‘urban informal sector’: The street traders of Cali, Colombia. *The Urban Informal Sector* (pp. 1161-1171). Elsevier.

- Cabannes, Y., & Marocchino, C. (2018). *Integrating food into urban planning*. UCL Press.
- Carrión, A., & Carrión, D. (2002). Tierra vacante en Quito. In Nora Clichevsky (Ed.), *Tierra vacante en ciudades latinoamericanas* (pp. 107-125). Lincoln Institute of Land Policy.
- Chigumira, E., Tawodzera, G., Manjengwa, O., & Mbengo, I. (2018). Governance of food systems in Epworth, Zimbabwe. *Urban food systems governance and poverty in African cities* (pp. 141-153). Routledge.
- Cross, J. (2000). Street vendors, and postmodernity: conflict and compromise in the global economy. *International Journal of Sociology and Social Policy*,
- Crush, J., & Riley, L. (2018). Rural bias and urban food security. *Urban food systems governance and poverty in African cities* (pp. 42-55). Routledge.
- Cruz, C., & Aguila, R. (2000). Conceptual Framework for Urban Agriculture. *Dialog*, 65, 4-7.
- De Zeeuw, H., Van Veenhuizen, R., & Dubbeling, M. (2011). The role of urban agriculture in building resilient cities in developing countries. *The Journal of Agricultural Science*, 149(S1), 153-163.
- Degenhart, B. (2016). La agricultura urbana: un fenómeno global. *Nueva Sociedad*, 262, 1-11.
- Dubbeling, M., van Veenhuizen, R., & Halliday, J. (2019). Urban agriculture as a climate change and disaster risk reduction strategy. *Field Actions Science Reports.the Journal of Field Actions*, (Special Issue 20), 32-39.
- Duch, G. (2011). El bunker. *Biodiversidad En América Latina*,
- Duminy, J. (2018). Historical urban food governance in Africa: the case of Kenya, c. 1900 to 1950. *Urban food systems governance and poverty in African cities* (pp. 83-93). Routledge.

- FAO. (2023, ). Agrifood systems transformation accelerates climate action.  
<https://www.world-food-forum.org/who-we-are/theme/en#:~:text=The%20WFF%20Theme%202023%3A%20Agrifood%20systems%20transformation%20accelerates%20climate%20action>
- Gulyas, B. Z., & Edmondson, J. L. (2021). Increasing city resilience through urban agriculture: Challenges and solutions in the Global North. *Sustainability*, 13(3), 1465.
- Hayson, G. (2020). Perspectives on urban food-system governance in the Global South. *Handbook on Urban Food Security in the Global South* (pp. 363-379). Edward Elgar Publishing.
- Hilgers, M., & Mangez, É. (2014). Bourdieu's theory of social fields: Concepts and applications.
- INEC. (2017). Población y Demografía. (). Instituto Nacional de Estadística y Censos (INEC).
- iPES, F. (2015). *The New Science of Sustainable Food Systems*. iPES FOOD.
- Jachnow, A., & Garrido Veron, G. (2021). What do you know? Ecuador's sustainable urban development dilemma. *Dialog*, Vol. 2/2019(137), 17-22.
- Jacome Polit, D., Cubillo, P., Paredes, D., & Ruiz Villalba, P. (2019). RISQ: Risk aSessment tool for Quito. Paper presented at the *Advanced Studies in Energy Efficiency and Built Environment for Developing Countries: Proceedings of IEREK Conferences: Improving Sustainability Concept in Developing Countries (ISCDC-2), Egypt 2017 and Alternative and Renewable Energy Quest in Architecture and Urbanism (AREQ-2), Spain 2017*, 61-71.
- Jansma, J. E., & Wertheim-Heck, S. C. (2021). Thoughts for urban food: A social practice perspective on urban planning for agriculture in Almere, the Netherlands. *Landscape and Urban Planning*, 206, 103976.
- McGuirk, P. M., & O'Neill, P. (2016). Using questionnaires in qualitative human geography.

- MDMQ. (2017). *Resilience strategy Metropolitan District of Quito*. Municipality of Quito Municipal District (DMQ).
- Middleton, A. (2003). Informal traders and planners in the regeneration of historic city centres: the case of Quito, Ecuador. *Progress in Planning*, 59(2), 71-123.  
[https://doi.org/10.1016/S0305-9006\(02\)00061-2](https://doi.org/10.1016/S0305-9006(02)00061-2)
- Morgan, K. (2015). Nourishing the city: The rise of the urban food question in the Global North. *Urban Studies*, 52(8), 1379-1394.
- Mougeot, J. (2000). The hidden significance of urban agriculture. *Dialog*, 65, 8-13.
- Pothukuchi, K., & Kaufman, J. L. (2000). The food system: A stranger to the planning field. *Journal of the American Planning Association*, 66(2), 113-124.
- Rittel, H., & Webber, M. (1973). Dilemmas in a General Theory of Planning. *Design: Critical and Primary Sources* (pp. 105-89). Bloomsbury Publishing Plc.  
 10.5040/9781474282932.0015
- Rodríguez, A., Jácome-Polit, D., Santandreu, A., Paredes, D., & Álvaro, N. P. (2022). Agro-ecological urban agriculture and food resilience: The Case of Quito, Ecuador. *Frontiers in Sustainable Food Systems*, 6, 404.
- Rodríguez, A., & Samaniego Ponce, Á. (2022). *Agricultura Urbana Participativa 20 años*. AGRUPAR Conquito.
- Santandreu, A. (2018). One (short) step forward, two steps backwards—the limits of urban food planning. *Integrating Food into Urban Planning*, 117
- Skinner, C. (2019). Contributing yet excluded. *Urban Food Systems Governance and Poverty in African Cities*, , 104-115.
- Sonnino, R., & Hanmer, O. (2016). Beyond food provision: Understanding community growing in the context of food poverty. *Geoforum*, 74, 213-221.

- Thornton, A. (2018). Food security in African cities: Linking urban food production with good urban governance. *Handbook of African Development* (pp. 454-464). Routledge.
- Toriro, P. (2018). Urban food production in Harare, Zimbabwe. *Urban food systems governance and poverty in African cities* (pp. 154-166). Routledge.
- UN Habitat. (2009). *Global report on Human Settlement*
- Wiskerke, J. S. (2015). Urban food systems. *Cities and agriculture* (pp. 19-43). Routledge.
- Young, G., & Crush, J. (2020). 10. The urban informal food sector in the Global South. *Handbook on Urban Food Security in the Global South*, , 198.
- Young, L. (2019). Growing food in the city: Urban agriculture in Quito, Ecuador, through a feminist lens. *Journal of Agriculture, Food Systems, and Community Development*, 9(A), 151-158.



# Appendix 1

## Tables

**Table 1: Operationalization table**

Concept	Definition	Variable	Sub-variable	Indicator
<b>Misalignment between food policies and urban planning</b>	Food policies exist, but they are not implemented by urban planning. Misalignment between governance of food production and urban planning (Battersby & Watson, 2018; Cabannes & Marocchino, 2018; Hayson, 2020; Toriro, 2018)	Correspondence (between policies and planning)	Theoretical efforts to implement FS in planning	Government tolerance towards UA policy/ presence Understanding benefits of better food integration in planning (by policies and/ or planners) National or local level food policy supporting UA
			Practical efforts to implement FS in planning	Plans/ instruments respond to food policies Masterplans take into account challenges of food insecurity Urban visions and tools aligned with food policies Existence of concrete planning tools to operationalize policies Planning driven by policy priorities with a view to a healthier and increasingly sustainable development
		Disagreement Between planners and city authorities	NA	Level of agreement between different planning officers towards need to integrated food systems (regarding UA) in planning
		Ambiguity of policies	NA	Place in the municipal chart not clear Disconnection between municipal departments Disconnection of practice to original goals e.g. no clear linkage between UA

				<p>and the food security and supply work carried out by municipal government</p> <p>Not spatial-specific</p> <p>Not urban-specific</p> <p>Not concrete enough for implementation</p>
<b>Urban-rural bias</b>	<p>Food and agriculture traditionally treated as rural, associated with the “non-urban” and “backwardness”, in opposition to “the urban” and “modernity”.</p> <p>This bias has roots in colonial approaches to food (Battersby &amp; Watson, 2018; Cabannes &amp; Marocchino, 2018; Pothukuchi &amp; Kaufman, 2000; Sonnino, 2009)</p>	Perceptions / mentality towards food and UA	NA	Food and agriculture is conceived as either a rural, peri-urban or/ and urban issue to be addressed by planning.
		Planning tools addressing food and UA	NA	<p><b>Planning:</b></p> <p>FS an UA integrated in land use plans</p> <p>Use of public space for UA</p> <p>Food systems planning within urban-rural linkages</p> <p>Vision of different actors is materialized with master-plan</p> <p>Urban planners preserve agricultural land for effective food supply</p> <p><b>Policy</b></p> <p>Integration of food into local urban agenda</p> <p>Urban food policies</p>
<b>Planning governance</b>	Governance structure to address FS (Battersby & Watson, 2018; Cabannes &	Type of governance structure	Sectoral planning	<p>The FS addressed by sectors in isolation i.e. health, economic development, environment, social services, etc.</p> <p>No coordination among municipal departments</p>

	Marocchino, 2018; Jachnow & Garrido Veron, 2021; Rodríguez et al., 2022; Santandreu, 2018; Toriro, 2018)		Integrated planning	<p>Cross-sectoral approach</p> <p>Integrates a cluster of initiatives across sectors</p> <p>Holistic comprehension of the FS</p> <p>System-thinking: connects systems, including the food system</p>
			Centralized planning	<p>Policies defined at centrally at the higher level, as opposed to it being distributed at various lower level governments</p> <p>Food policies defined at national level</p>
			Decentralized planning	<p>Policies and responsibilities are distributed at various lower level governments</p> <p>Food policies defined at local (municipal) level</p>
	City authorities' and planners' perception on informality embedded in UA (Battersby & Watson, 2018; Cross, 2000; Toriro, 2018; Young & Crush, 2020)	Views on the role of informality	Assesses the understanding of city authorities and planners regarding the role and contribution of informal UA in the city.	Identify whether they see informality as positive force or a hindrance to the city's development
		Perception of formalization	Evaluates the perception of city authorities and planners towards formalization initiatives	Assess their level of support, scepticism, or opposition towards such efforts

			targeting informal UA	
		Perceived challenges of informality	Captures the perceived challenges or negative impacts associated with informal UA according to city authorities and planners	Evaluates their concerns regarding issues such as public order, hygiene, spatial planning, traffic congestion, conflicts with formal economic activities

**Table 2: List of Interviewees**

<b>Group</b>	<b>Institution</b>	<b>Interviewee</b>	<b>How they were contacted</b>	<b>Relevance for contacting</b>
<b><i>UA gardeners</i></b>	Gardeners registered in AGRUPAR	6 gardeners: Checa 1 Checa 2 Lumbisí San José de Cocotog Zámbiza Cerro Monjas	Contacted in AGRUPAR market	Actors practicing UA
<b><i>NPO</i></b>	AGRUPAR	Officer responsible AGRUPAR	First contact point. Referred by IHS PHD student	Main institution promoting UA in Quito
<b><i>Policy makers</i></b>	<i>Quito Metropolitan Council</i>	Councillor 1	Referred by AGRUPAR interviewee	Involved in proposal for Ordinance on UA
		Councillor 2	Referred by Councillor 1	Responsible for proposal for UA Ordinance on UA
<b><i>Planners</i></b>	STHV	Planner	Referred by AGRUPAR representative	Critical in defining planning tools integrating UA and FS. Formulation of PUGS 2021, PMDOT 2021-2033
<b><i>Other Municipal Institutions</i></b>	SH	Representative of SH	Referred by AGRUPAR representative	Implement urban gardens in nutrition and health programs
	SE	Representative of SE	Referred by AGRUPAR representative / IHS PHD student	Implement urban gardens in climate change mitigation strategies in Resilience Strategy (2017), and the PACQ (2020)

**Table 3: List of gardens visited**

<b>UA garden</b>	<b>Location and land type</b>	<b>Size m2</b>	<b>Social organization</b>	<b>Type of production</b>	<b>Time of visit (on-site observation)</b>
<b>1</b>	Checa 1 (peri-urban)	10.000	Communal production	self-consumption, market production, Bio-fairs, baskets delivery	9 am
<b>2</b>	Checa 2 (peri-urban)	10.000	Communal production	self-consumption, market production, Bio-fairs, baskets delivery	8 am
<b>3</b>	Lumbisí (peri-urban)	1.000	Family-run garden	self-consumption, market production, Bio-fairs, baskets delivery	10 am
<b>4</b>	San José de Cocotog (urban)	800	Individual led (women head of household)	self-consumption, market production	9 am
<b>5</b>	Zámbiza (urban)	500	Individual led (women head of household)	self-consumption, market production	8 am
<b>6</b>	Cerro Monjas (urban)	800	Family-run garden	self-consumption, market production	5 pm

**Table 4: List of rationales and policies/ programs supporting UA**

<b>Stakeholder</b>	<b>Rationale to support UA</b>	<b>Plan / Program</b>
<b>AGRUPAR</b>	Food access and nutrition Food sovereignty and justice Food security Local FS resilience and sustainability Measure for climate change mitigation Economic resource Increase social cohesion	Technical assistance, bio-fair Quito Agri-food Pact (PAQ) Agri-food System Strategy of Quito (2018- 2019).
<b>SH</b>	Food access and nutrition, particularly in families with child chronic malnutrition	Program that uses UA to combat chronic child malnutrition
<b>STHV</b>	Food access and nutrition Food security Inclusive and healthy cities Economic resource	Quito Land Use and Management Plan (PUGS; 2021) The Quito Metropolitan Plan for Development and Territorial Planning (PMDOT; 2021-2033). Master Plan for Public Spaces (PMEP – ongoing)
<b>SE</b>	Local FS resilience and sustainability Measure for climate change mitigation	Resilience Strategy (2017), Quito Climate Action Plan and the PACQ (2020)
<b>City council</b>	Food access and nutrition Measure for climate change mitigation Right to healthy food access Economic resource Increase social cohesion Local FS resilience and sustainability	Involved in proposal for Ordinance for UA

**Table 5: (Mis)alignment between food policies and planning**

Concept	Variables	Sub-variable 1	Sub-variable 2
<b>(Mis)alignment between food policies and planning</b>	Correspondence <i>between policies and planning</i>	Theoretical efforts to implement FS in planning	Practical efforts to implement FS in planning
		Governance support of UA practices.	Absence of concrete planning tools to operationalize policies promoting UA
		Farmers, city authorities and planners recognize benefits of integrating UA, and FS more generally, in planning.	Land development plans (PUGS, PMDOT) integrate FS but only at macro and rural scale.
		City authorities and planners aware of existent urban policies promoting UA and agree with / support these.	
<b>Disagreement <i>Between planners and city authorities</i></b>			
Agreement across different planning officers and city authorities to integrate food systems (specifically UA) in planning, yet inconsistencies as to how to define and approach UA i.e. whether as an economic or subsistence activity			
<b>Ambiguity of the policies</b>			
Policies promoting UA exist, but its operationalization is ambiguous due to absence of technical specifications: not spatial-specific, not urban-specific, not scale-specific, no target-group-specific Disconnection between municipal departments limits operationalization of UA, as urban policy endorsed by municipal Secretaries but implemented by other municipal departments			



**Table 6: Concept Urban Bias**

<i>Concept</i>	<i>Variable 1</i>	<i>Variable 2</i>
<i>urban-rural bias</i>	Perceptions / mentality towards UA	Planning tools addressing UA
<i>Agriculture traditionally treated as rural, associated with the ‘non-urban’ and “backwardness”, in opposition to ‘the urban’ and ‘modernity’</i>	UA considered an urban issue to be integrated in planning	Planning instruments (PUGS, PMDOT) assigns agri-food activities as an industry located in rural areas only. Promote organic family gardens, but in rural areas only

**Table 7: Concept Governance**

<i>/</i>	<i>Concept</i>	<i>Variable</i>	<i>Sub-Variable 1</i>	<i>Sub-Variable 2</i>
<i>Stakeholder</i>	<i>Governance structure to address urban food policies</i>	<i>Type of governance</i>	<i>Sectoral/ Integrated planning</i>	<i>Centralized/ Decentralized planning</i>
<i>Farmers</i>			Support received inconsistently from different municipal departments, no unified support source from city authorities	Not aware of local policies that support the practice of UA apart from capacity workshops and organic markets
<i>AGRUPA R SH STHV</i>			Different municipal departments still address UA and the food system in isolation, poor conception of food as a complex system which requires a transversal planning approach  Multi-stakeholder approach to define the Quito Agri-food Pact (PAQ). Urban food	Food policies are centralized, cover the macro level (national-zonal administrations), disregard the neighbourhood scale

*Councillo  
rs*

policies defined in  
systematic way to  
connect hunger, poverty,  
waste, health

Aware of the importance  
integrated governance to  
address complexity of  
food system, yet local  
government in transition  
to apply it

Food policies locally defined as  
response to local UA practices  
and demand from local citizens  
Governance focused on  
environment and solidaristic  
economy responding to local  
UA practices

## **Interview Guides**

### **Introduction and informed consent**

#### **Welcoming the respondent**

Hello, thank you for finding the time to participate in this interview.

#### **Introduction of the interviewer**

My name is Ana Francisca Jijón, Ecuadorian citizen, currently pursuing a master's degree in urban planning at IHS, Institute for Housing and Urban Development Studies, Erasmus University Rotterdam.

#### **Purpose of the interview**

For my master thesis I am researching on the integration of urban agriculture and agri-food systems in urban planning in Quito. Therefore, it is of interest to me to carry out this interview with the purpose to gain a deeper understanding on your work on urban agriculture and its integration in the city. By urban agriculture I mean the “industry located within or in the fringes of a city, which grows, raises, processes and distributes food using human and material resources from that urban area to supply food demand and services in that urban area” (Mougeot , 2005).

#### **Process of interviewing**

The interview will last between 30 and 40 minutes, but please do not feel restricted by it. Also, if you want to stop at any time please feel free to tell me and I will stop. The interview consist of open questions only. Everything that you, as the respondent, would like to respond is appreciated, and there is no “good” or “bad” answer. At any time, you can redirect the conversation if you do not want to talk about specific topics. It is important to note that your answers are representative for the institution that you belong to.

#### **Confidentiality and protection of data**

The results of the interview, and any possible photo you would share, will be used for the purpose of my master thesis at my university only. It will remain confidential and anonymous. I will not record nor reveal your name at any point. It is important to mention that the results of the interview could be used for further scientific research and education, although there are

currently no plans to use this interview's result. Should the interviews be used again, all the data will be anonymized.

### **Permission to share photos or videos**

Videos and photos of your work on urban agriculture could help me gain a better idea on how agriculture is practiced and supported in Quito . Examples could be photos of the urban garden where you work or photos showing how and with whom you work. After the interview, would you share any photo or video? The photos or videos will aid the analysis but are by no means obligatory.

### **Permission to record**

Before we proceed further I need to ask you if I can record this interview. The recording will aid the analysis but is by no means obligatory.

### **Informed consent**

Lastly, before move on to the interview is your consent to take part in it. Knowing now the purpose, confidentiality and the other aspects we discussed, do you still consent to participate? Please know that you can withdraw this consent at any time and we will stop and erase the recording.

### **Questions**

Before we start with the interview, do you have any questions about the procedure or purpose of the interview?

### **Opening Question**

As I have explained, I am interested in exploring if and how urban agriculture is integrated in in the city.

To begin, what is your first thought when I ask you about agriculture in cities?

(questions continue, part 2)

### **Concluding remark/ question**

You have shared your experience on your work on urban agriculture. Is there anything else you would like to add to our conversation?

## **Interview UA gardeners**

### **Introductory questions:**

To begin, you practice agriculture in the city. Why and how do you practice it?

Do you consider agriculture an activity of the country side, or do you think it can also be an urban activity?

Do you believe it is important to practice agriculture within the city? why?

**Concept:** Misalignment

**Sub-variable:** mentality misalignment

Do you believe that agriculture is accepted to be practiced as an urban activity by city officials and neighbours?

**Concept:** Misalignment

**Sub-variable:** practical misalignment

How do you perceive that urban agriculture is supported/ facilitated by officials from the Quito municipality?

**Concept:** Misalignment

**Variable:** dis(agreement) and Ambiguity

Is your practice of urban agriculture treated equally by different city officials?

**Concept:** urban-rural bias

**Sub-variable:** Planning tools

Do you feel that your practice of urban agriculture is supported by city authorities similarly to agriculture practices in rural areas?

*(Location of implementation of food actions (mainly in the rural areas or also urban? )*

**Concept:** informality *(this questions can be delicate!)*

**Sub-variable:** Informality of practice

Where do you practice agriculture *and how did you get access to that space?*

If you generate any surplus, do you sell/ commercialize the product? If so, how?

**Concept:** informality

**Sub-variable:** Perception of informality

How do you think the support from city officials change if your activity (either the place where you practice agriculture or the commercialization) is not formally registered?

## Interview Secretaries and City Councillors

### Part 2. Interview Questions

#### **Introductory questions:**

What do you understand by urban agriculture?

From your perspective from Secretary x, do you consider food (its production, distribution, consumption) an urban issue to be considered by urban planning? why?

Does the work of the Secretary deal with the practice of urban agriculture in Quito?

**Concept:** (mis)alignment / urban-rural bias

There are a number of policies that integrate food policies, particularly the integration of urban agriculture in planning, like the Quito Agri-food Systems Strategy (2017), Resilience Strategy (2016-17) and the Development and Territorial Planning Plan PMDOT (2021-2033) etc., that recognize the benefit of urban agriculture in increasing the resilience of Quito's food system and enforcing households' food security and accessibility.

**Concept:** (mis)alignment

**Sub-variable:** practical misalignment

How does the work from (x secretary) implement these existing food policies in Quito?

More specifically, how does the work of the secretary support the practice of urban agriculture in Quito?

*(if more detail needed)* More specifically, what tools does the secretary x apply to implement food policies?

**Sub-variable:** mentality misalignment

What is according to the secretary the reason for supporting the practice of urban agriculture in the city?

**Concept:** (mis)alignment

**Variable:** dis(agreement) and ambiguity

Is there a clear, agreed-upon policy supporting the practice of urban agriculture in Quito and its integration in urban planning across planning officials or secretaries?

**Concept:** urban-rural bias

**Sub-variable:** perception

Based on to the Secretary x work, is agriculture treated as an urban issue to be tackled by urban planning/ city authorities?

**Concept:** urban-rural bias

**Sub-variable:** Planning tools

Where does the work (tools of implementation) of secretary x concerning agri-food systems mainly take place?

*(Location of implementation of food actions (mainly in the rural areas or also urban?))*

**Concept:** planning governance

**Sub-variable:** type of governance structure

Urban agriculture has multiple health, social, economic and environmental benefits. Literature suggests that such an holistic activity needs to be addressed with an interdisciplinary and systemic approach.

When it comes to addressing food production across the DMQ, do you collaborate with other secretaries?

Similarly, are the plans/ implantation tools of the secretary x guided by policies coming from the national level or are they responding to policies defined at the municipal level?

**Concept:** informality

**Sub-variable:** Perception of informality

Urban agriculture practices in Quito are often characterized by informality e.g. informal land tenure and link to informal markets.

How has the informality of food systems, particularly of urban agriculture, had an effect on the implementation of food policies in planning?

According to your perspective, do existing food policies address the informality of the food system?



How does the work by the Secretary x treat this informality for Quito's urban development?

Is informality of the food sector aimed to be regularized?

## **Interview for AGRUPAR**

### **Introductory questions:**

From AGRUPAR's perspective, is agriculture considered an activity from the country side, or can it also be classified as an urban activity?

From AGRUPAR's perspective, why is it important to practice agriculture in cities?

**Concept:** (mis)alignment

**Sub-variable:** mentality misalignment

There are a number of publications and policies that building on AGRUPAR work, have addressed the need to integrate urban agriculture in planning such as the Quito agri-food strategy, and the PMDOT. From AGRUPAR perspective, why is this integration important?

**Concept:** (mis)alignment

**Sub-variable:** practical misalignment

From AGRUPAR perspective, does urban planning in Quito respond to existing agri-food policies? If so, how?

If no, why does AGRUPAR think that planning does not directly implement food policies?

**Concept:** (mis)alignment

**Variable:** dis(agreement) and ambiguity

Is there a clear, agreed-upon role of urban agriculture and its integration in urban planning across planning officials or secretaries?

**Concept:** urban-rural bias

**Sub-variable:** Planning tools

From AGRUPAR perspective, where does the work of planning institutions around food production/ agri-food systems mainly takes place?

*(Location of implementation of food actions (mainly in the rural areas or also urban?))*

**Concept:** planning governance

**Sub-variable:** type of governance structure

From AGRUPAR perspective, when it comes to addressing food production and consumption across the DMQ, do the different secretaries/ institutions collaborate with each other?

Similarly, are the plans/ implantation tools concerning food production and consumption defined by policies coming from the national level or are they responding to policies defined at the municipal level?

**Concept:** informality

**Sub-variable:** Informality of practice

Urban agriculture practices in Quito are often characterized by informality e.g. informal land tenure and link to informal markets.

Could you please further specify in what way is urban agriculture related to informality (e.g. informal land tenure, informal markets/ economic activities)?

How has the informality of food systems, particularly of urban agriculture, had an effect on the implementation of food policies in planning?

According to AGRUPAR's perspective, how does the work by urban planners treat this informality for Quito's urban development?

Is informality of the food sector aimed to be regularized?

## **Interviews Transcripts<sup>3</sup>**

### **Interviews gardeners**

#### **Interview 1: Gardener Checa 1**

##### **What do you understand by urban agriculture?**

Well, for me, urban agriculture is the same that, as I told you, takes place in the same parish or city where we grow our products. For me, urban agriculture implies taking care of the environment, taking care of ourselves and promoting solidarity among all.

##### **Have you practiced urban agriculture for a few years? Why do they do it?**

Well, yes, we have been involved in this work that we like for several years. We also do it for food reasons, since before we were unaware of the harmful effects of chemical products on health. There have been serious consequences as a result. In addition, urban agriculture provides us with a small income, helps us women and allows us to spend more time with our children. We can't depend solely on our husbands, plus we all like to have our own money.

##### **Does urban agriculture function as an additional or main income?**

It is additional income. For those who do not have a job, it can become their main source of income. As we get older and there aren't as many job opportunities anymore, it becomes even more important as a main income.

##### **Do you consider that agriculture belongs to the countryside or to the city?**

Agriculture can be practiced both in the countryside and in the city, depending on the preferences of each person.

##### **Do you think that agriculture is supported and accepted by the city authorities?**

Some yes, some no. As small producers, we are not as visible as larger companies that pay higher taxes. We often feel that urban agriculture and small-scale farmers are ignored.

##### **How do you perceive the support of the municipal authorities towards agriculture?**

When they help us find sales locations and provide us with permits, we feel supported. However, there are some people who only approach it for their own interest. Previously, we received support from ETERNI, the former president, and also from CHIP, although the latter

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<sup>3</sup> Please be advised that the transcripts of the interviews have been translated from Spanish to English using Google Translator, which may have resulted in alterations compared to the original interview recordings. The quotations used in the analysis are distinguished by being displayed in bold font.

was from another country. These supports were intended for the creation of a collection centre to process food, but they came from foreign entities.

### **Does agriculture in the countryside receive more support than that in the city?**

Sometimes, especially when intermediaries get involved. At present, there are few people who give help without personal interests and there is a lot of corruption.

Currently, the municipality supports us with training, provides us with places of sale and helps us obtain permits. They have been a great help to us.

### **Please tell me a little about the land you inherited.**

At that time, my grandparents were slaves on a farm Huasipungo . \_ After many years of forced labour, they received a part of the land as compensation, and another part was acquired. My mother inherited that land to me, otherwise we wouldn't have it.

### **Do they generate surpluses for sale?**

Yes, **everything goes on sale. And we consume, because we save from buying at the market and we know that we eat healthy.** We always participate in bio-fairs , since there are many people who claim to sell organic products, but in reality they are intermediaries. Before, they came to buy us here and then resold at higher prices, but we lost out. As producers, we want to sell directly to the consumer. For example, a kilo of tomato sells for 2.50, while we sell it for 1.75. Middlemen earn the most as they sell to their friends at higher prices.

### **Is it necessary to be registered to participate in the bio-fairs ?**

We are all registered, since it is convenient for us to be present at these events.

### **Do you feel entrepreneurial?**

Yes, I'm not ashamed of being a farmer. For us women, it is often our only job, since what little we have is for our husbands. In that sense, it is complementary to them.

### **How did the garden help you during the pandemic?**

During the pandemic, if we had enough production, there were people from outside who would come to buy, since there was no availability in other places. At that time, we received recognition. However, our income began to decline, but we did not give up. Although with masks, we continue to attend the bio-fairs . At first, there was little influx of customers, but little by little people found out about it and began to come again and again. Now we have old and new customers. Sometimes some people complain about the prices, but sometimes they

come back with the same expression on their face, they would rather buy from us. Some even us They mistreat and try to humiliate us.

## **Interview 2: Gardener Checa 2**

**To begin with, what do you understand by urban agriculture?**

**We are of low economic resources, so this is a great help for us because, one because we eat better, we learn to eat better and another is also an income for our home**

**You practice agriculture in the city. Why and how do you practice it?**

We are located in Checa, San Pedro de la Tola neighbourhood. In my case, I have my garden called little bees, so we practice agriculture there, we break it down first with compost, I use chicken manure and make compost. Then with that fertilizer I prepare the filling, I make beds. We cover it and leave it for 15 to a month. From there we proceed to planting. I plant broccoli, carrots, cauliflower, whatever is in the open ground, radish. Then I also have a greenhouse, there I plant tomatoes, gherkins and peppers.

**Do you consider agriculture a field activity, or do you think it can also be an urban activity?**

Also from the countryside and the city, because there are also compañeras from the city of Quito.

**Do you think it is important to practice agriculture within the city? why?**

Yes, it is very important. Because those who live in the city already have their own food, it is much better to consume organic products and even better to consume what one grows.

**Do you think that agriculture is accepted as an urban activity by city officials and residents?**

The truth is, for example, there are institutions that do support. For example, in our case, so many institutions have come to support us, but no, the truth is that they don't come. For example, the provincial council, and we have always worked with AGRUPAR, the ones that have supported us the most, the only ones, because they give us training, everything .

**How do you perceive that urban agriculture is supported/facilitated by officials of the municipality of Quito?**

So, yes, how can I tell you... *AGRUPAR* if it helps us what the training is, the place of sale.

### **Is your urban agriculture practice treated equally by different city officials?**

No, they don't value us sometimes. *From what you tell me, I understand that there are some groups, such as AGRUPAR, that support them and others that show interest but do not support them.* For example, in our case the municipality has gone, the GAD of the parish, but they do not support us. We are 100% supported by AGRUPAR.

### **Do you feel that city authorities support your urban farming practice in a similar way to farming practices in rural areas?**

The truth here in the city I do not know how it will be, because I think that in the field it is different. We have more space. Here in the city there are compañeras who have little land. In the field it is more the land that we have .

### **Where do you practice agriculture and how did you access that space ?**

That is an inheritance from my mother-in-law, my husband inherited. We still don't have papers but there I have my little house, my garden, I have my greenhouse.

If you generate any surplus, do you sell/trade the product? If so, how?

Yes, I sell in the market

### **How do you think support from city officials changes if your activity (whether it's where you farm or trade) is not formally registered?**

*On the ground* : No, it doesn't change, because I already have the piece of land there, I have more or less than 300 meters of open field. The land papers don't change anything.

### **If you are not registered, would you be interested in registering?**

Those who are not registered cannot come to the market, we cannot bring here either, exclusively to the bio-fairs we can bring product that we grow, which is on the ground. For example, a neighbour says, give me ordering this, we don't do that.

### **Why don't these colleagues register?**

You see... quite a few colleagues withdrew and what annoys them and they say it's a waste of time, **they say that we fill out a lot of paperwork, sales records, field records.** The truth is I don't know if it's a matter of money, they say that we fill out a lot of paperwork, sales records, field records, fermentation things that we do everything, **they don't have the patience to do these procedures.**

### **Interview 3: Gardener Lumbisi**

#### **What do you understand by urban agriculture?**

Food production within the city.

#### **You have practiced agriculture for several years, he told me. Why does he do this?**

The truth is that it is with the advantage that we have land to take advantage of the Earth that our parents have given us. This is a commune where the land is inherited from father to son. So, I have something of an advantage that I have on Earth, and I have dedicated myself to this. It is also because of the family issue, **I manage my time here so that I can have lunch with my children when they arrive.** At a certain time I worked in a company and never saw them. I manage my time and my space, so I have that advantage.

#### **And do you think it is important to practice agriculture within the city? Because?**

Of course, because there are very few people who like to practice urban agriculture. Really, what one sows is in high demand. It is an activity that does give, that does help the family financially, both for our input and to sell what is left over. It is financial support.

#### **And why do you think so many people here, having a little knowledge or culture, don't farm?**

They don't like agriculture. I see it this way, because believe me, those of us who do agriculture are few here.

#### **What made you change from business to agriculture?**

Really, it was that, the family issue. I had my son and he was tiny, and in order not to leave him alone I dedicated myself to this greenhouse thing with my husband. At first he was not very convinced, but then they forced me to stay. But it did help me.

#### **Did you have prior knowledge of agriculture?**

Me not much, my husband yes. He has been in this for about 15 years. I, from him, have learned from what I know. I am a fashion designer, the factory where I worked was closed. So, from that, I had to start some courses that they give us in Quito, with other courses that we have paid for, particularly like this. With all that, in mode, I have gained a little more experience and knowledge.

**Well, now I am going to ask you a bit about how the practice of urban agriculture has been in relation to the city authorities. Do you think that agriculture is accepted as an urban activity by public officials and residents?**

Not much. I have not felt such support from here. Everyone does what he can. Agriculture is not very important here. Now, as regards ConQuito, yes, we have received a lot of support there. I think it's also part of the mayor's office and that. From there, no, I haven't felt much support. For example, I heard that in other countries there is insurance for those who are farmers, but here nothing like that.

**What support do you receive from AGRUPAR?**

More than anything, they are training and sales points, which are important. That is very important to me, having a place to sell.

**Do you feel that, because agriculture is practiced in rural areas, there is a difference in support from the authorities towards those from the countryside and those from the city, like you?**

In the field there is less support. Here we have support from ConQuito. And, more than anything, I feel that this is why people here do not dedicate themselves to agriculture, because no... For example, in terms of production, here it is quite organic and sometimes it is lost because there is a lot of rain. So why spend if you are going to lose? No, there hasn't been much support.

**Well, we just visited your garden a bit, but could you tell me a bit about where and how you got this space?**

As I told you, here is a commune where our parents inherit the land from our children. This land was given to me by my mother. So, when it gave me more or less to dedicate myself to what is the part of agriculture, from there the space was born.

**And you have already told us a little about why you produce a lot. So, it is a bit for the self-consumption of his family and a bit also for sale. Can you tell me a little, please, how you make the sale, in what way and where?**

Well, I have not only the clients of the fairs, but also the baskets. There is a specific day, Thursday, I send the list of what I have, they ask me and I deliver it on Saturday, which is when my husband has time. So, he leaves the baskets at homes. That is a theme. Other products that I really don't have a lot of production, I take to the fair. I have a few clients, some from an organic store around here.

**And the fairs are every two weeks?**

The fairs are every Friday in Cumbayá. Now I am going out every Friday and Saturday in La Carolina. Here we are a few people, three people, a companion from here and there.



### **To participate in bio fairs, do you have to be registered?**

Yes, it has to belong, be registered. It's all a process. Go to courses, get trained. After three years in this subject, one can enter the bio-fairs.

### **Are there neighbours who do urban agriculture but are not registered?**

Yes of course. For example, I have organic certification. We are certified. There is a process that is the folder. The folder is where we fill from the seed, the plant, the sowing, the harvest, the sale, that is, the entire life of the plant. We keep a record. But these people don't like that topic, so they have their own methods. They don't like to fill out the papers because it's time.

### **Why else do you think they would not register if it is so beneficial to be able to go to fairs to sell?**

**Those who are not registered probably don't sell as much or have their own clients, so do not need to go to the market.** Yes, yes I believe. I don't know why not, yeah.

### **Because, for example, for the issue of the basket, should it be registered?**

Not that, then. Now that is very personal. Although I do have to register myself in the folder. One registers all the places where he sells. Yes, it registers. It's called a private sale. I fill that folder to GROUP, that is, everything that one produces and sells has to register.

## **Interview 4: Gardener San José de Cocotog**

### **What do you understand by urban agriculture?**

That means that we **grow to eat healthier, before we did not know that chemical products were bad for our health.** We have received a year-long course on organic farming and have started growing organic pulses. Every year we have increased our production with the help of an engineer who reviews our work every month. They always require us to sell only our own crops, not those of relatives or neighbours. Also, we have a boss who oversees everything. Before, he would take broccoli leaves three times a year for organic examinations.

### **Why do you practice agriculture?**

First of all, God helps us to have a good mentality. It's a good thing, growing healthy, organic food, with no gimmicks or substitutions. We only use guinea pig fertilizer to fertilize our crops.

### **Do you produce for self-consumption or for sale?**

In addition to consuming what we grow, we also sell at the fair. Selling is my distraction, it allows me to be with my colleagues, and my clients have known me for many years, they know that we offer quality vegetables.

### **Can you live from agriculture? Is it your main activity?**

Before it was good, but **I don't live 100%** from agriculture, but with the increase in plant prices, it has become more difficult. Although the prices of our products have not risen. **I am not completely dependent on agriculture for a living, but it helps us, it supports us.** *Above all, if I need a vegetable I go out to the garden and not to the store.*

### **Do you think that the city authorities support agriculture as an activity?**

AGRUPAR has given us a one-year course to learn how to farm organically.

### **What difference do you notice between agriculture in the city and in the countryside?**

In the city, everything is done on a smaller scale. In contrast, many pesticides are used in the field. Here, in our urban garden, we do not use any type of fumigant, and we have not fumigated on other land that we have.

### **How did you get access to this land?**

I had the initiative on my own. I used to work as an employee and started growing white onion and spinach. A cousin told me about a plant cultivation course, I signed up and I liked it. It's a distraction for me, instead of falling asleep. At 6 in the morning I am already in the orchard. I had a bar, so I also took care of that along with the plants. My compañeras tell me that I don't look my age.

### **Where do you sell the products you put out for sale?**

I sell them at the La Carolina fair, always at the bio fair . Sometimes the neighbours also buy me at home. I write down all those sales in a report to keep track of what I sell at home and at bio-fairs , organized by date.

### **Does being part of AGRUPAR benefit you in any way?**

They don't give us anything. We pay \$2 for the fairs in Carolina. They are fighting in the juntas, **there are colleagues who claim that despite paying, nothing is given to them**, that don't want to be certified, we pay \$80 a year to be certified and we pay the pacific bank \$60 and \$20 for the patent. That's why my colleagues are fighting, **they are very upset**. If they certify, certify everyone or nothing, because we all sell and we all have to pay. All those who sell from grouping, but not all of them are certified, not many are certified, but if they are from grouping

they should be certified. And they don't want to be certified because the sheets don't arrive, it's because of the paperwork, because of the copies. We have to pay these 60 and 20 for the organic certification. We are certified, I don't know if you can see on the internet, but we pay 80 per year. That they don't get anything. But they say that they have to pay for a driver, for the tents at the fair.

### **Do you consider yourself an entrepreneur?**

I tell my colleagues that if I were 50 years old, I would do it all by myself.

### **How did having a garden help you during the Covid pandemic ?**

There were no fairs, but I sold to the neighbours from my house. I had about three clients who called me and I brought them the products.

### **How many square meters does your garden have?**

Before it was 800 square meters, but later I built the house.

### **Do you work alone?**

Sometimes I hire someone to help me with the cultivation work.

## **Interview 5: Gardener Zámbrava**

### **What do you understand by urban agriculture?**

What I understand by urban agriculture is within the city where there are small houses, enough and few pieces of land, and that is where animals are created, agriculture is done to continue living.

### **Why do you practice urban agriculture?**

For holding me, feeding me, also very spiritual. Getting into agriculture is really hard, at the mercy of time. Sometimes it is very hot, the plants do not grow or a hailstorm comes, what do I know. What protects us are the greenhouses. Sometimes, when we have a lot of things from the climate, very harsh, the greenhouse is the one that saves us.

### **Do you produce for self-consumption or sale?**

For both of us, for my family that also supports me, for my neighbourhood that also buys me. When the pandemic hit and tomato production was going on, I also donated to foundations.

### **Do you think it is important to do agriculture within the city?**

For me, it is the most important thing. Others think about renting the house, but not about loving nature. That we, when least expected, in this country sometimes there are stoppages, strikes, earthquakes, and where is the production? That has happened to us all these years, where do I eat, where do I buy? What has saved us are the small orchards from strikes, earthquakes, pandemics. I don't know why people, look, my neighbour doesn't like not even a leaf to pass her by. Here compromise is very difficult. We, as ladies, have already struggled for 20 years, and they have more or less recognized what we are for.

### **Is it accepted as an urban activity?**

From grouping, yes. We have lasted over time. We have more than 20 years. In the meetings they said that if we don't produce more, the authorities don't support us. Those who lead us have also battled with us. **We've formed a strong bond, it feels like a family.**

### **Is agriculture different in the countryside than in the city?**

In the countryside it is tougher, more difficult due to the issue of transportation. Less recognized. A farmer who wants to harvest potatoes cannot. They are going to buy him, but at what price. Pure intermediaries. Here comes very expensive. Instead, we are close to the city, we have more training. Those in the fields sow more than us, but on the other hand they have the mentality that there must be chemicals. But there are examples that, from so many chemicals, they throw away the land because they no longer produce.

### **Do planners help in production?**

Yes, but not 100%, because we are self-managed. At the beginning, more support, from there some foundations give us support. From the municipality yes, but very little.

### **How did you have access to the land where you have your garden?**

It's familiar, my mom lends me because she hasn't given me writing. More than 100 years that the family lives. They are efforts of my family, of my mother. It is 600 meters. I work mostly alone, but when I have money I hire someone to help me.

### **How does the support of the authorities change if your activity, be it the place or sale, is regularized?**

It does change a lot, but instead we have to pay the municipality, the patent, the certification. It changes a lot, yes, of course, because people see that we are certified, with a stamp, but they don't know what we have to be giving and we have almost nothing left. It's just the love for my garden and I know that I eat well. I no longer have the palate more than my garden. It is not much that regularization costs, but suddenly another tax comes out that they came up with.

Those above do not have a conscience, on the other hand, those who do not pay are in run because the municipal are behind them.

### **Why don't they register?**

Because of the paperwork and lack of knowledge and support. They don't like to regularize.

### **Do you feel entrepreneurial?**

Yeah, I've never liked having a boss.

### **During the Covid pandemic , how did having a garden help you?**

It even makes me want to cry, the garden has always helped me, at all times. Yes, in times when we have hard times, we are not going to starve. You always need the money, I had to go to sell in the middle of a pandemic. I didn't go to the fair, but I did go to the neighbourhood. I have not spent so many hard moments. I have 2 children, no mijita, don't worry about food. Above all, it is emotional and spiritual. When you are on earth, you can no longer leave it. Only if I get old and sick, only then will I have to leave it.

## **Interview 6: Gardener Cerro Monjas**

### **What has it been like to practice agriculture inside the city?**

The neighbourhood board was formed and we had an invitation from the municipality with all the neighbourhoods. There they tried what to do with each neighbourhood for their progress. In another session, a fish water agronomist came. There was another secretary of the municipality who directed the improvement of sidewalks and streets. The man of agriculture invited them to teach how to sow and what plants to plant. We learned to do hydroponics, but no one kept doing that. Better, since we have land, we have to take advantage of it. The engineer advised us to go to CONQUITO. We learned with them and he told us how we should make the greenhouses. Many did for the surrounding neighbourhoods.

### **What was your motivation to do agriculture?**

We were in charge of two children of my daughter who passed away. When he passed away, I said that I give them to the buses. God is for everyone, I asked him for something to help us and the engineer came. He told us that we are going to work **in agriculture, to have something to feed ourselves and make money to have something to pay for our expenses.** There I loved it and I said that I am going to train, and I told my husband to continue doing it. Since my husband retired from work, I told him to do the training with CONQUITO. When the tomato was ready, I called him and told him to help me sell. There he told me to go and do that to sell in Carolina. I started leaving and everything I was carrying was being sold.

### **Is your main income farming?**

Yes, and it has also favoured the closure. Since CONQUITO's training, I have dedicated myself to planting the plants, harvesting and selling. But now with age I no longer have the same capacity.

### **Do you have help? Is it just the two?**

No, we still can. Sometimes our children come to help on weekends.

### **Do you think that agriculture belongs to the countryside or also to the city?**

Well, since I am a peasant, this is from the countryside, but since we live in the urban city, we take out and it is used to sell.

### **Why is urban agriculture important?**

It is very important for all people because we learn, the boys also learn. We sell, and that is cheaper, because if it is not expensive to buy. Since it's not just me, it's some of the ones we have in Guápulo, that's what we sell in Carolina. **We grow to eat healthier, before we did not know that chemical products were bad for our health.**

### **How do you farm in the city? Do you have support from the authorities?**

Yes, the AGRUPAR technician tells us how to sow and what to do if there are pests. For the insects we have to call, he comes and says "here I have some jars for your bug". Put that in and that helps your plants.

### **And you said you were a farmer. Is there a difference between the countryside and the city?**

There in the field they sow quite a lot. On the other hand, here it is tiny, we sow what comes in. **It is very important because we sell, and that is cheaper, because otherwise it is expensive to buy.** No, there is no support from the field. Since I don't have land, I don't know. For the countryside there is support, peasant insurance.

### **How did you get access to the land you farm on?**

Well, this land was inherited by my wife from her mother, so I started working because it was quicuyo. We got this engineer, that's when I began to make these greenhouses under the direction of the engineer. The land that I had there I gave to my children. We have 2,400 meters, and here I sold almost a thousand meters. It's over.

### **You produce for your own consumption, but do you also sell them?**

Now with the municipality, because it is quality for us. It is not like before, that they put more chemicals that are bad for health. Instead, here it is guaranteed, we cannot put chemicals.

### **Do they sell at bio-fairs? Also in another way?**

Yes, the neighbours request us. Down here in the Orchids. They call on the phone, "Bring four or five parsley and cilantro." I pick them up and carry them. But our main sale is the bio fair.

### **How does it make it easier to be registered for sale?**

**Of course it makes it easier. If we are not registered we cannot sell. In addition, it is guaranteed with the AGRUPAR seal.**

### **Do you feel entrepreneurial?**

Yes, of course, he doesn't see that before we had nothing. The dumped land, we did not know how to work on it. I only planted eucalyptus. On the other hand, now I know how to plant little plants and vegetables.

### **How did having a garden help you during the pandemic?**

We also had. I never stopped producing, I always went to sell in my uniform in the neighbourhood. They called by phone. The money that we did not have, we sell and thus we have to buy meat and bread.

### **Do you have irrigation or drinking water?**

Just drinkable, it's not that expensive.

## **Interview AGRUPAR**

### **What does AGRUPAR understand by urban agriculture?**

It is multifunctional and multi-component, although very little understands it itself, it is not only producing food, it is not only integrating people, it has an extremely broad, very comprehensive systemic sense. It contributes to food security and sovereignty, allows social inclusion and promotes the use of vacant public or private spaces of any size or scale. It is used in the city for self-production of food and for various reasons. In addition, AU can be very scalable.

### **From the perspective of grouping, is agriculture considered a rural activity or can it also be classified as an urban activity?**

It is not rurality in the city, each one has its space, each one goes beyond the scale. In this sense, it is not bringing the countryside to the city or doing it on a small scale. They are completely

different dynamics because the people who farm in the countryside are different from the people who farm in the city, the motivations are different, the size of the territories are different, the types of water qualities, the diversity of inputs available in each space are different and the culture and philosophy of the people is different, how work is done in the field in "the minga" in the association, in the community, people are born in community. In the city you live individuality, you don't know who the person next to you is or what your neighbour's name is. You are an individual oblivious to what happens in your environment, so that marks very different dynamics. But from the practice of agriculture, it rather manages to intertwine that social fabric that is lost in the urban.

### **So, from AGRUPAR's perspective, why is it important to practice agriculture in cities?**

It is super important because most of the world's population resides in cities and it is growing every time it is not true for 2050 it is estimated that 70% of the world's inhabitants will live in cities. Cities are the ones that consume about 80% of the food produced in the world, so they are centres where everything comes together. Cities extract resources from the countryside, they also generate resources, it is a permanent flow of inputs and outputs. But they attract more than they generate in terms of food. Not only because of the number of inhabitants residing in a city, but also because in a city like Quito there are marked inequities in access to food in terms of availability. The geography that we have allows us to produce food all year round, but it does not mean that because we have food markets, or the store, the supermarket, or the informal sales on the corner, it does not mean that everyone eats or it does not mean that you are economic access for all, because that is the main limitation we have in the city. As a consequence of these inequities we have malnutrition in all its forms in Quito. For example, the percentage of chronic child malnutrition exceeds the national average. It is a matter of great concern and historically it has not had the attention it deserves, so I believe that there has been this lack of municipal planning to connect or work in coordination in favour of combating chronic child malnutrition. Specifically looking with a magnifying glass at the food system and what the city feeds on, that is, what is the type of industry that has developed the most? that of the accused, who decides what we eat? Do you decide what we eat or do the industries decide? industries decide. Of the food diversity that the planet has, how much is the human diet reduced to? to a few species and who decides on those species? the transnationals that are the owners of the inputs of the land, of the crops, of the industry that processes them, many times even of the supermarkets where they are sold. It is a chain of dependency and finally you as a consumer, what do you buy in a supermarket? what there is, of course, with little knowledge and ability to discern if this is healthy and yes, it now has at least one nutritional traffic light, but it goes beyond that, where does the food come from?, who made it? what is the carbon footprint of food? We need to tread lightly, all of this implies understanding the food industry and who we are benefiting. So I think that having a garden is also a provocative and revolutionary act, it's my way of saying I decide what I want and I have control over what I produce and what I want to eat because also, even if it's fresh or what is sold in the markets You don't know the load of pesticides it has. So even if you decide how to eat, or want to have a more balanced diet, it may not be a healthy diet.



**Well, now I am going to ask a little more about how policies have been responding to the integration of agri-food systems and planning in Quito. From the perspective of grouping, why is this integration specifically of agri-food systems in planning so important?**

It took many years until, even inside our organization, we managed to understand that of course **It is important to promote UA and all that this reflects, not only for nutrition, not only for its economic support, but in all that series of benefits that it has for the climate, for justice, for a lot of things, as a solution based on nature, that is, it will be understood that its contribution actually goes beyond feeding a person who in itself It's already relative. UA as part of the food system can generate a more direct channel for sustainable and resilient FS. We had to acknowledge that UA is a crucial component of the food system, driving the difference between the food system itself and a sustainable and resilient food system.** So, for example, it marks a before and after since 2016, when Quito signed the Milan Urban Food Policy Pact (MUFPP), presenting 37 actions in 6 major lines of action that guide cities to build sustainable food systems. So we began to understand what this is about, what are we doing as Quito, not only as AGRUPAR, but as the city of Quito, what is the municipality promoting? What actions are we already carrying out? What could we articulate better? What can we give coherence to? What are we doing wrong? So I mean that it was a before and after and for that we also decided to participate in an international project to carry out a diagnosis of the food system as a guide to understand not only the reality of urban agriculture, but with a much more city X-ray macro. What about the city? In other words, in terms of who produces the food? Where is the food produced? How is it produced? Who transports it? Where is it sold? How much is lost? ?, what happens with post consumption?, how is it consumed? In other words, a complete analysis of all the links in the food system and it is landing in a reality of Quito. As our geography allows us to have food all year round, people do not worry and there is no detailed analysis of the food reality. The Milan pact made it possible to invite citizens, international cooperation, grassroots organizations, the ecological movement, consumers, other entities of the municipality of the national government of the province, the food industry was also here. In other words, we all have an implication in the construction of the system, they all have an interest that goes beyond doing a business with food and we began to build a discourse on the need to integrate food into city planning because, **It is sad that when inviting various municipal entities to discuss their contribution to building a food policy for the city, the person in charge of markets, for example, says 'I don't know why I am in this network', or that someone from the area of social inclusion says 'well we work with vulnerable groups but I don't really know what I am doing here in this meeting'... but I suppose that the first need of a vulnerable group should be to eat nutritious food.** So first land those ideas of sensitivity in officials and It was quite a challenge for policy makers to understand why they are sitting here.

**How is the issue of urban agriculture being integrated into the agri-food system?**

Yes, at the city level it can have a huge benefit, but if you go to the diagnosis of the neighbourhood scale it is even more important. In other words, the scale of analysis is not the city, it is the neighbourhood, because if you look at there are neighbourhoods that within a radius of 1 km have no food supply, or what they have is unhealthy, they are deserts or food swamps . Quito has 40,000 stores, with that it is solved, that was the analysis during the pandemic. That is why I tell you, the scale of analysis where urban agriculture comes into play with a very important role is at the neighbourhood scale. If you don't have anything, if you

don't have a market, if you can't use transportation, I don't know if you're disabled, and you don't have someone to help you, an older adult and you live alone, if you don't have money to buy food, even if you have a car, what is your strategy? **The garden creates a resilient space for the neighbourhood by addressing the lack of food planning, which exacerbates food access inequity. It fills the gaps in food availability, highlighting the evident absence of food planning at a neighbourhood level.** You have areas where there is no lack of a supermarket and you have saturated spaces, but you have spaces that are empty of food. So from there, the lack of planning for food that is not supplied with emergency food rations is evident, because that cannot be sustainable, and resilience is not built. **The absence of food in certain areas highlights the evident lack of planning at the neighbourhood level.** The garden, yes, is to build resilience because it is based on learning, on skills, the capacities that are activated in learning are improved, which is generated in practice, which is lived and in the dynamics that you create, because it is an activity that it can be maintained by the action of those who produce. There may be technical assistance with a certain frequency, there may be delivery of seed plants when there is. That has been a weakness that our project has had in terms of budget. Rather, sometimes it is a strength that has allowed it to be sustainable, not giving away everything, rather because people have learned to buy, to make their input, to exchange, so they are not dependent on the delivery of assistance. That is also an element that worked very well at the time of building resilience in the pandemic. The orchard, in a moment of crisis, begins to water benefits in the closest circle, reinforces resilience. Now, on the same scale of analysis, having spaces for the sale of surpluses and like healthy eating points, of course they are already on a much larger scale, taking advantage of the public space, it is also an interesting proposal because surpluses are channelled there. The income of various sectors also improves, women above all, who, due to very low schooling, will not find work... but here comes another problem, planning, which is the use of public space because everything is put in the same bag, so... Since it is the use of public space, then **'they have to pay because it is an economic activity', but first of all it is an initiative whose main objective is food security, which exercises the right to food. So the right to food, which is above all else, cannot be commodified.** I am critical, it does not make sense to me, I think that there are moments and there are spaces that of course they do deserve, yes, rational use and payment, but we are talking about promoting food security, of exercising the right to food, not only for those who produce it but also for those who buy it, it is a product free of locally produced toxins, that is, it has a series of pros behind it... perhaps not all planners understand that space. The public must have another type of planning, it must be managed differently...

### **From AGRUPAR's perspective, how do you think planning implements food policies?**

The policy that exists is the Quito Agri-Food Strategy, where it was possible to integrate urban agriculture, urban agriculture is within the strategy as a sum of the sustainable use of land, on the other hand as a contribution to food security for vulnerable groups, income improvement, so looking at it like this, it cannot be easily accomplished because there is useless public land that cannot be used because there is no correct treatment so that those who do not have it can use that land, without comparing as if it were a kiosk that does business. It's not like that but now everything is more or less involved there, I don't know how, how advanced the Master Plan for the Use of Public Space is, but they are working on that at the Territory Secretariat, I

don't know how the progress is. Now, on the other hand, for the use of the land for the sale of food, it still has a cost, it depends on who promotes it, if it is public or private, if it is public there would be no cost, if it is private, you have to pay, then it is like... no, there must be many nuances to that analysis, there must be a lot of discussion on that topic. And I think that as I once told you about wanting to regulate today the activity of simply having a garden even if you don't sell, the CIU is a code of economic activity, having a garden is not an economic activity by itself. If I have fruit plants I have to register. Although not with surplus. They are giving it whatever name it is for self-consumption, but it is illogical because you are on a scale of economic activities. It is to overcome the need to address the right to food as it should be addressed by the prevailing need to charge whatever it is to the one who sells to have income for the municipality. We do not agree with an initiative like that because instead of promoting it will demotivate, so what do we take advantage of as urban agriculture, eh do we take advantage, for example, of what Quito's agri-food strategy mentions, because it addresses the issue of food sovereignty and the need to build urban agroecology as a model of sustainable production and a more equitable philosophy of life, for coexistence, for healthy eating, management, for example with the Quito Climate Action Plan we also managed to have an impact in a rational way. In other words, include urban agriculture with a criterion of sustainable production for the territory where what it represents for a city is valued, the more urban agriculture you have, the better response you will have to climate change, excess rainfall, islands of heat, it was integrated into the Green-Blue Ordinance of Quito, which is also in full construction, if there are a couple of spaces where the issue of urban agriculture has been raised but with this agroecological or organic management base. In the 2040 vision we are now going to integrate a complete chapter of AU, today it is part of the urban green network, it is a green space, it is part of the interconnection of the urban-rural network...

**Given that all these plans exist within this political framework and even in the PMDOT, urban agriculture and its integration into planning instruments were mentioned, what background does it have in planning? for example, on the issue of land use or on the issue of access to public space. What is AGRUPAR's perspective regarding the implementation of this policy?**

They are often declarative acts, **planning instruments integrating UA are yet to be implemented.** The time to exercise them, to put them into practice with a lot of edges... is precisely the inconvenience we had when working on the technique of the Urban Agriculture Ordinance proposal. From the space in which he proposed, it was thought to be such a nice thing: "Let's propose and well, where do I sign?!" But it goes far beyond that, because if you want urban agriculture to grow in a city, you have to address the problems and you have to have a single solution or see how you are going to address the issue. But you can't just say "I propose that it be done and that it be done." So, those edges that were identified are several: the use of potable water, the cost of using public space. The proposal finally was the text: "Yes, that is, the norm that is in force must be applied." Yes, well, if the norm says that you pay, from here you have to pay, but it doesn't tell you not to do it, but then, who can do it? Nobody. So, it remains as a **declarative and poetic act.** Not true, huh. The issue here is not who should have a place in a single economic activity license. The one who sells, the one who sells and the one who exercises that sale on a recurring basis, by scale, by how I know, the one who has to be regularized, is formalized before the SRI. And it is not true, depending on the level of billing,

what we demand at fairs like the one you met. Everyone that is there, everyone is formalized, everyone has LUAE and everyone has, uh, minimal RIMSE. And now it is, well, charging with a credit card. It has to be regularized in many ways, eh, but they sell. The thing is: if you have an urban garden in your neighbourhood when you have the national strike and there is no food after 10 days, and the lady is just harvesting four small pieces of radish, right now it's a chick, I don't know what, and you buy from him, that **extremist position**, then he has to have LUAE, then he has to be registered, why not, then he can't sell, because that's already an economic activity. So, we can't take things to that point, because then what are we going to try that people don't do? So I don't do what you once said, that they are going to continue doing it but without the support of the group, and that they can continue doing it. The truth is that, of course, I want to, I don't necessarily have to go somewhere, but possibly the person who advises me is not a technician who does organics, or rather Jaime is the man who sells agrochemicals, and he is going to recommend me to use a herbicide, he is going to recommend me to use a chemical synthesis, he is going to recommend me to use a urea-type fertilizer, I don't know what type. So, of course, it's going to be the same, but how is it going to be and what's next? There is a school, there is a health centre. So, it's not the best, it's not true, but that's what it's going to cause.

**Talking about the issue of informality, because much of the practice of urban agriculture within cities is informal, so how has this informality of food systems, particularly urban agriculture, affected the implementation of food policies in planning?**

I think there are some scenarios. Urban agriculture is an expression that has accompanied humanity to the extent that it is being built or settled in the territories, that is, when people settle in them. Since the world stopped being rural and cities arose, people stopped having food close to their environment. Actually, that's how it's built. It isn't true? It is true, they expand and there is exchange and so on. Therefore, urban agriculture is a natural expression of survival, since otherwise, there would be no growth of cities.

Now, in the context of Quito, the city hosts many rural migrants. Let's go to reality. They bring with them the knowledge, since they were born in a rural environment. They know how to sow, how to harvest, and have knowledge of seeds, whether they are from conventional or traditional production. That knowledge is in them. Those people who sow seasonally by tradition. For example, when it starts to rain, they plant corn, since with the rains they will harvest for Easter. After corn come clams, then potatoes, and then other cereals. That is the knowledge, those are the expressions that you see now. We are still in time for corn, and people still raise chickens and guinea pigs. Not many pigs are raised anymore due to the control that exists over mismanaged pigs. The cows are hardly bred, but are sometimes still seen grazing in the Occidental. But it is also true that the city gradually ate up its spaces or became integrated with various indigenous communes. For example, within the city there were Cocotog , Sám-biza , Llano Chico. They are Quitucara , and they plant their own variety of corn. And they are going to continue doing that, because that is passed from generation to generation, and that is perfect. It is good that for that they do not need to AGRUPAR. You should not stop doing that, because that is important. Also, having that legacy is very valuable. But with the training of AGRUPAR, perhaps a part of the plot is no longer just maize or seasonal, but a permanent planting with greater biodiversity. We are going to have carrots, lettuce and many medicinal plants. We may

continue to raise animals, but in a different way. There they will have better technology and health for animals, with less safety problem for human consumption.

Also, you know, they still have a pig in the rural parishes that still consider themselves that way, but are already assimilated. For example, Calderón is overcrowded, but it is still rural. People are still raising pigs. Sure, but then you have to contact an environmental manager of those who collect food waste from restaurants and food courts, so they can eat and not give them any garbage. Also, it is important to vaccinate and deworm them to ensure that when they are euthanized, there are no problems. This is regulated by the Phytosanitary Regulation and Control Agency (Agrocalidad). I think that by injecting a series of technical elements, we raise the level of the producer and improve his capacity, without stopping what he has been doing. So I think that this is the difference between a support with AGRUPAR and a support without AGRUPAR. But I insist that it is valuable to recognize the knowledge that people have and that is why they continue to cultivate.

### **And from this perspective, how is informality treated from planning?**

That is a difficult question. I still believe that it persists in urban planning. Sometimes urban planning must be rural urban planning, because city dwellers depend on what is produced in the countryside. Without it, the city does not eat. The water is generated in the mountains, and the mountains are in the countryside. The air is purified there. And the city returns garbage and polluted water to the countryside. Also, in environmental and inequity terms, the city returns very low purchase prices to the farmer who produces your food. It stays in intermediaries. And you, as a citizen, do you agree with that? Would you rather buy from a big chain instead of buying from farmers? And what about you, as a planner, instead of supporting your own territory, like Quito, which has rural parishes and a large production of many things, more than vegetables? You do not privilege local production. I'm not talking about agroecology or organic, just proximity. I'm talking about your own markets or the public space that is generated. That feeling of recognition or belonging to your territory, to your farmers, to cut the chain and make that food supply for the city more fair. And you, as a consumer, be a part of that. Urban planning is not generating those spaces, it definitely does not generate them today. Now there is a scale that should be integrated into planning, which is the city-region scale. It is a concept that forces you to think about the city, but not with limits, but at least with a radius of 100 km, which is your closest food region. Because the elements definitely come from much further than 100 km, they can come from other countries or whatever you want, but that food region that surrounds you and the one that you have within your own criteria, such as urban agriculture, is very valuable. However, I can't find a space. Yes, it only says in the PMDOT that more orchards need to be made, but if you nail them with LUAE, they won't be able to grow. If you don't give them permission to hold fairs for the sale of surpluses, they won't be able to grow. If it is not promoted or if there is no better information for the citizen by the local authority itself on the consumption of the production of Quito, which is consumed in Quito, organic or agroecological local foods. And instead you have ads for KFC, Burger King and whatever. And that is also public space. Have you seen anything on billboards that encourages you to eat healthy? I don't. So, all these spaces are not used by the municipality itself to make the construction of a sustainable and resilient food system grow.

Responsible consumption is what drives you towards sustainable production. If you, as a consumer, do not demand, no one is going to change their way of producing, whether in the countryside or in the city. No, no, the forms are not going to be easily changed, and that does not have to be confused with fashion either. Aha, I'm vegan, fair, and I also eat agroecologically. So, it's not a fad for those who can pay. It is a right to food, aha. Therefore, it would be great if, in your thesis or analysis, you emphasize the issue of the right to food, which is above all else, right? Because I, in summer, can afford to buy a liter of almond milk for 7 USD, aha, but those who are not vegan and live in the south of Quito have to feed 5 children, right? And also, organic is more expensive, but they can raise a cow, possibly, or they can have chickens and get eggs every day, or raise guinea pigs and give their children guinea pig meat at least once a week. The guinea pig has 70% protein, it is the meat with the highest protein content. So when we try to regulate beyond that, we lose all the wealth that urban agriculture offers us to guarantee the right to food for all, both for those who can pay a lot and for those who cannot and have no other way but produce for themselves and, in addition, sell the surplus. I don't have an orchard, but I do benefit from the production surpluses that the women in the orchards sell there.

**Regarding the urban-rural bias, from AGRUPAR's perspective, where is the planning work mainly carried out around food production? Does it have a more rural focus or is it also thought at the city, urban level?**

They make a very specific difference. Not between us, we care about the sovereignty and food security of Quito. **The PUGS does mention the sustainable agri-food system for food sovereignty, but agriculture is still thought of as a rural issue. The PUGS includes the category of family gardens, but in rural territory... and in urban areas?** And yet, they have terrible mistakes. For example, the industrial park in Guamaní, one of the best lands in Quito to produce food. No, it's not like that. What do we have left? What quality of soil do we have left? There is water here, there were many springs. What is left for us in the north where there is no water and the land is eroded? What do we have left to produce? But the paper supports everything. It is that in the planning, the paper supports everything. But another thing is to look at the planning of a territory with a more technical perspective, from the point of view of what will happen to this land in the future. The building is going to stand where you put it, but the food is not going to grow well where you put it. So, the agricultural way of life is not going to be the same as it was here all our lives, than it was there where there never was an agricultural way of life.

In addition, the dynamics of the people are changing a bit, because if they are people in the culture, as they farm, especially if they are rural migrants, the city changes and their space also changes and their way of life changes.

Yes, that's the sad thing about the way they look at agriculture and the farmer, second-hand yes. So, for me, that is somewhat the conception of the current land use plan. No? I mean, you have this urban axis. Mhm, well, and you have the rural parishes here that are in green. So, as you can see, our intervention is more urban. If there is activity in a rural area, it is also more concentrated in the urban area. But the use of land, for example, where do you guarantee spaces for agriculture? Do you guarantee here? Here. And they don't sell here, but that's it. Expensive on paper, it's guaranteed here. But how do I guarantee ah? Yes, surfaces cannot be made shorter.

You can't do anything other than that. But until someone I want to put here comes along, I don't know. Well, the industry, if Coca-Cola wants to set up shop here, they declare it the industry. It's all over, because also, from a single rich in water, so green, so precious, the best soil was under Machachi, right now under the factories. Me a little that is, that has been the effect of planning. I suppose that they do, they want to make efforts to have a greener territory, more, I don't know what else, but I think that it is still very little inclusive."

**To end the conversation, regarding the issue of governance, from the perspective of AGRUPAR, when it comes to addressing the production and consumption of food in the metropolitan district, is there a systemic and comprehensive look between the different secretariats/institutions towards the management of food systems?**

It's very difficult, uh, even taking the example of the fight against chronic child malnutrition. There, the strategy is in bloc, that is, you need to have the one who builds the house, the one who arrives with drinking water, the one who builds the road, the one who manages the waste, the one who promotes the markets, the one who does production, which has registered the cases of greatest vulnerability and health need. You need everyone working in an articulated way in the territory to be able to overcome a problem, and the same goes for the example of care in an emergency situation. We need everyone, to be clear that each one does their own thing, the other does what they have to do, the other what they can, the other what they were given. You don't know where the disabled are, you don't know who hasn't eaten, you don't know who is sick. Yes, I mean, I think that, for example, in the pandemic, the lack of planning was very noticeable, and it also marked the inequities with which we live, but they were accentuated much more in reality.

**From the literature it is said that urban food and agriculture, being so holistic, having so many benefits in terms of health, the environment, social issues, and also economics, also needs governance in the same comprehensive manner. Is there little by little a systemic approach on the part of the local government?**

For example, I believe that since the pandemic and now, as the country is within it, it promoted this great strategy of Ecuador free of child malnutrition, it has a technical secretariat that decants in all the cantons, and in the Quito canton. The strategy is led by the Ministry of Health. We work very closely with them. So, that has been one of the issues that have positively detonated the joint. We participate in the tables on child malnutrition every month and everything, and we make gardens in the territories that are prioritized by the strategy, because there are territories where there are more problems. That, for one thing. But, on the other hand, for example, now the Ministry of Health also promotes, invites, it is not mandatory, it invites municipalities that qualify as healthy municipalities. So, they have to meet 70 and some indicators, yes, to have that certification, and there it forces all municipal entities, at least a very good part, to have something to do with it so that a municipality can be considered healthy. In other words, there has to be adequate waste management, there has to be water, have rules that I don't know how PS entrepreneurs have, have urban agriculture, have healthy food fairs. There are many things. We directly contribute to this framework of indicators with 3 indicators

, with orchards, with the food system as such, and the policy is being built, which as a much larger vision and the theme of healthy food fairs. So, we already contribute with that, and that also makes it seem more connected, that the municipality itself connects more. So some things. Of course they do. So, that has also helped us to better connect with some secretariats . So, of course, it's easier in quotes, because that's it, there is already an intervention from another institution that is investing, that has technical monitoring. So, it's easier for them to say yes, so I organize the fairs or something like that. I don't know, the dynamics are very pleasing. In any case, it is a mechanism to find a co-participation or involve the zonal administrations. They depend on the Territorial Coordination Secretariat, for example, that they put even 1,000 USD in their budgets, much more, uh, to buy inputs, to buy plastic, drip irrigation systems, seeds or pylons. So, we complement the resources that are not infinite, those who manage the project, we complement with these, they are small steps, but they serve in situ to deliver to farmers only in those areas. So if we work that way, I think it could work better.

**Another thing that the literature says is that many agri-food policies are defined at the central level, but since the context is so important, the policies need to be defined at the local level. According to AGRUPAR, do food policies come from the central or local level?**

It is just what I was telling you: the territory, the multi-scalar planning of the territory. Yes, first we have, uh, the force of the global because food comes and goes for everyone. Then we have, let's talk about the regional, let's talk about the national, let's talk about the district (not the provincial in the case of Quito, the district). Then we have the zonal scale, the zonal administrations. And then we have, ah, we have the parish and then we have the neighbourhood. Each one has actors, each one has flows, each one has different dynamics. And if we analyse this picture versus the links in the system (food, production, transportation, marketing, consumption, and post-consumption), you will find that for each one, at a global level, you will have some actors that make production. But at the neighbourhood level, it has its own actors and dynamics, so what do you mean by that? That the decisions made by our national government (and in their hands is the issue of guaranteeing food security) are decanted to the local government. Let's talk about local governments, they can be municipalities, yes, metropolitan districts, cities or metropolitan districts. But the planning is up to the zonal scale, the parochial scale integrates them into the parochial councils when they are rural, but not when they are urban. In productive terms, but the scale of the neighbourhood is not planned. And as you saw here, the intervention for us is good. Here are the fairs, it is the scale of the neighbourhood. The scale is from the neighbourhood, so that's where things happen. And for us, planning has to come in all directions, but at the neighbourhood level it is one that still has many gaps. On this scale is urban agriculture, on this scale are bio-fairs , on this scale is, in terms of transportation, is walkability , this is walkable, this is proximity, this is resilient when it comes to marketing, there is fair or is the garden itself. In other words, you have the 2 strategies. In terms of consumption, it responds directly in family terms, in terms of exchange or sale of surpluses. So on this scale it works super well.



## Interview City Councillors

### Councillor 1

**From your perspective as a councillor, why is it important to integrate agri-food systems into planning and what kind of policies are there for integrating urban agriculture into planning?**

I don't have in mind right now, for example, how many hectares of land the canton has, but I do know that the number of inhabitants is currently very high. At the beginning we had more than 3,000,000 inhabitants, making us the most populous city in the country. Although we have a lot of land, it will never be enough to supply the more than 3,000,000 inhabitants. Obviously, this leads us to consider the proper use and management of the land. Provisions and resolutions defining the urban, residential and rural areas for the future have already been passed. Originally, the city was planned with spaces for agriculture and livestock, but this is not enough. In addition, there are sectors that are politically correct and have different social classes or vulnerable groups that, due to lack of income, do not have access to adequate food.

The idea is that, as established in the Ordinance and other provisions, certain separate land can be used for urban groups that need these agricultural products. Land can even be lent to directly satisfy people's food needs or solve an economic need. This has generated certain conflicts and urban agriculture has been regulated in various sectors. **The government promotes UA, providing training to individuals to meet their food needs and potentially transform it into a small-scale business**, such as beekeeping, for example. There is ongoing work on these initiatives and regulations in Quito, which started with Paco Moncayo.

It is interesting to see how, in the end, the objective of satisfying the nutritional need and limiting economic dependence is achieved. There are spaces, such as the old northern head of the Quito airport, which have been destined to become a centre for agricultural production and experimentation. Although there are still small parcels within Quito, more needs to be done in terms of meeting economic need and encouraging mass food production.

The scale of the benefit of urban agriculture is the neighbourhood scale because it is not that you are going to produce for the scale of the city, but rather all the benefits of food security, social cohesion, economic support, everything is at the neighbourhood level, it is the families of the farmers. that they benefit

**Well, going back specifically to urban agriculture, why from a councillor's perspective, and even from the ordinance itself, is it considered important to integrate it into urban planning?**

There are two reasons that we must take into account. First, urban agriculture can be considered as a real source of economic income for those people who need it. We are not making something up here, it is a reality. **UA can be considered a genuine source of economic**

**income for those in need. While I cannot assert that it is the primary source of income for a family, it does represent an additional income that significantly helps low-income families.**

Second, urban farming is a source of cool items. For this, an entire training unit is provided. If you already have a training, you can do very well. In fact, at first they even provide you with the seeds or, failing that, the seedlings ready to be grown. Both issues are extremely important.

In addition, there is a third point that I consider very relevant. There are municipal lands that are currently not being used and are surrounded by a fence. These lands could be used to carry out urban agriculture. We must not overlook that they are currently unused land, but could become very useful land.

**And what kind of policies and tools exist now from urban planning or are expected to exist to facilitate urban agriculture?**

Not much, because he remembers that urban agriculture is not a subject that generates greater economic benefits . We cannot talk about urban planning in terms of allocating specific land for urban agriculture. We can say that one piece of land is residential, another is for factories, another is for warehouses, and so on. **But there is no specific urban land-use plan designated for agriculture. In general, within the DMQ, agri-productive land is assigned in rural land** Let us remember that in rural areas there is water and space for agriculture. These lands are intended for agriculture, but in rural areas, in order to avoid urban sprawl. As of 2,800 meters above sea level, a restriction was established to prevent agriculture on land above 2,803 meters. However, on a small scale, vegetation, preferably native, can be maintained. Although it has not become a city policy, there are ventures and they are encouraged for the reasons we have mentioned.

**I understand that the ordinance wants to implement this type of land that is urban agriculture, because in the PUGS, yes, as we were talking about, it is classified as rural land. But would it be classified as a type of economic activity?**

Aha, sure. Spaces in some municipal public spaces that are unused could become sites where urban agriculture is developed.

**Aha, what is the reason why it is considered as an economic category?**

Because it is necessary to verify that the spaces have an IDN (Regulatory Development Index) and a land use. Your house is your house, residential or rural, today we are allowed to build. All spaces must have a land use classification. The idea is that there are spaces outside of Quito reserved for agriculture, but in Quito the idea is to have spaces in urban areas for urban agriculture, to prevent your neighbour from telling you that it cannot be done there.

It is classified as an economic activity because people... The land use is for urban agriculture, that is, planting. It would be an economic activity that should be regulated, that is what we are trying to do now. However, this isn't just for low-income sectors, and it doesn't really affect whether you're in that category. The idea is to classify and categorize the space because it is mandatory. Right now, this space is designated as an urban agriculture space, but it could actually be used for something else temporarily. It is like urban agriculture or this space is not going to be used only for the cultural benefit of the neighbours.

Land use is different from economic activity. Land use refers to the use that can be given to a property, and there are broad categories such as residential and economic. That is where economic activity comes into play. In addition, the idea is to include a land use classification for urban agriculture. This is the specific land use for said activity. Economic activities, on the other hand, are the actions that are carried out on a property. For example, if I want to put a bar, the corresponding land use must allow that activity. That is, the space must be authorized to house a bar. Once the bar is established, it becomes an economic activity. However, if you try to carry out an economic activity in a place categorized as a school, you will not be granted the corresponding permit. That is why it is necessary that the category of land use is aligned with the economic activity.

**You cannot carry out an economic activity in a space that is not categorized for it. The ordinance sets land use urban agriculture, economic activity**

A little bit, let's see, we are going to determine which spaces can be for agriculture, land use, but it does not determine economic activity. Because of course, urban agriculture is going to be done here. You have to give him an urban garden, a LUAE (unique license for economic activities). LUAE here to whoever does urban agriculture, to whoever does... no, it wouldn't be logical.

**How is the informality of urban agriculture dealt with?**

Urban agriculture has always existed in Quito and has many features of informality and even urban gardens. But the informality is due to the fact that, not being a classified economic activity, urban agriculture is not considered as such. If you have a piece of land where you are doing agriculture, let's say 1000 m<sup>2</sup>, and it has always belonged to someone, nobody is going to come and tell you that you are informal for planting. However, if you sell the products (28:12), that is where the problem arises, because urban agriculture is not yet regulated in that regard. In other words, urban agriculture as production for self-consumption does not matter if it is formal or informal, but when you go on to sell those products, it is considered informal. The moment you start selling in unauthorized places is when the informal activity arises. If you take the products from the land authorized for urban agriculture and sell them, it is an informal activity that must be regularized. For this, it is suggested to form an association or group and have the support of the municipality. In addition, a fair can be established on Sundays in a certain sector, where the sale is authorized without problems because it has an authorization.

## Why is the issue of regularization a bit of a scare for informal sellers?

It has a cost, but it is very little. It's not the cost. The fact that he goes out to sell his potatoes on the sidewalk, in the public space, does not follow the rules of the public space. That is why they withhold the product until you justify or pay a fine for having sold it in the public space. But you have to regulate, if not, you're screwed.

The lack of regularization due to lack of knowledge and because it is more convenient to be a street vendor has generated a total lack of control. They have tried to control it, **in the most commercial streets of the centre of Quito there is total lack of control.** In addition, further down there is a lady who is formal, pays for her premises, electricity, taxes, everything, and in front the same lady who sells the same thing without paying. It's not fair. **Every city has to have order. You have to regulate, otherwise you're screwed.**

## Councillor 2

### What do you understand by urban agriculture?

Urban agriculture is what is done, obviously, within the urban limits. And it is not only an aesthetic or food issue, but also from a multiple perspective. I would say aspects related to preparing for climate change, climate regulation, giving employment to the elderly, people who live and do not have a way of distracting themselves, generating and using abandoned spaces in the city. Not only superficial spaces, but also upper spaces such as terraces, which could help this dynamic, generate some extra income for families, allow families to have a chance to have safe food .

Not only that, establishing and ensuring that families have the possibility of having a diet with all the necessary nutrients for a healthy life. That is to say, the conception of urban garden not only has to do with a matter of a biological order, but also of a cultural, environmental and economic order. Even human security. In other words, making the city more resilient, families resilient, making sure that the spaces in the city are used in aspects that will generate greater empathy in society with its physical structure and with society.

When we have a global policy to promote gardens, everyone who is interested in that policy enters a new dimension. Here it is not a matter of attacking anything, but of promoting life, and that also changes the mentality. I know that this is not immediate, it is not something that we generated on this date and here on this date we have already achieved it. Rather, it is a process, like everything human, everything planetary. It is an evolutionary issue that we are going to get to, yes, if we develop this practice consistently, in a systematic way, and we explain and educate the population about what this practice allows us in the cities.

### From your perspective, do you consider that food production is an urban issue that should be considered within urban planning?

Of course, of course, the population's access to food at the moment globally could be said to be reasonably satisfied. But there are certain areas of the city in which there are populations, there are children, who do not meet the food standards established in the world. There is chronic malnutrition, and here in Quito there is malnutrition. So, this malnutrition can be due to multiple factors, but one of them, the most important, is the lack of access to healthy food. They may have access to food, but ultra-processed food, food that is unhealthy. It can also be due to educational factors and multiple other factors. **In Quito, there is an issue that hinders people from having proper access to food. It is crucial to address this concern adequately through planning**, because planning is not only designing the physical part, but also establishing mechanisms, making a social design as well, a design that even addresses cultural factors that are subliminal aspects that sometimes we do not take them into account. We believe that by setting up markets throughout the city we are automatically giving everyone the chance to eat, but we don't see that this is the case. So, we must investigate more what is happening, because there are certain sectors where there is malnutrition. So, it is a challenge for planning, for the academy as well, for us who have to undertake, why the hell is it that we can't get certain families to have access to food. So it could also be an economic aspect, whatever the reason, we have to plan. And if there is poverty, which obviously must be one of the first elements, then we have to establish a mechanism so that no human being, at least in this geographical area, is left without food. So, we have to create a food bank, we have to create soup kitchens and we have to be strategic in where we create them.

On the subject of food, there is also a reality, which happens in Quito as in the whole world: food is destroyed, food is wasted, there are many foods worth taking advantage of. So, there has to be participation, and participation doesn't have to be addressed only in the physical part, but it has to be sustainable and it has to be with the right actors. In other words, there must also be a citizen agency that is interested, it is also a series of factors that make this visible. So planning doesn't have to be bureaucratic, because urban planning is generally already established bureaucratic planning. And it is true, there are markets, there are all over the world, within a radius of so many kilometres, half a kilometre or 1 km, there is a market. If they don't want to eat, why don't the neighbours feed them? It's that they don't want to eat, so that's not an answer. From a social perspective, you have to investigate what factors there are.

**Are food systems, or specifically urban agriculture integrated in planning tools? Are there concrete planning tools?**

Let's see, there is a magnificent work by ConQuito from several years ago that has consolidated a dispersed social group and has led it to be consolidated. There is, let's say, a culture of urban gardens in a diverse social sector, not limited to economically privileged people. **There is documentation and practical efforts to support UA in Quito seen in AGRUPAR work. However, there is a lack of regulations to endorse this practice.** Fortunately, this practice has been maintained despite criticism, but that does not prevent a mayor or politician with different ideas from questioning it in the future and preferring to work at an industrial level, leaving urban gardens aside.

From my perspective as a municipal official, I had the opportunity to prepare an Ordinance for Urban Gardens. We elaborated it in a participatory manner from the office headed by

Councillor x. Our idea was for this to become a citizen's right, a human right. We want a city like Quito to allow, support and subsidize the creation of orchards.

At this time, the Ordinance is in the process of being approved. The ordinances, which are local laws, have a process that can take around two years. At this point, the management of political X is coming to an end in a few days, so there must be another political actor to continue the work. In addition, it is important that there are social actors that support this initiative, since when there is social demand, an issue is given importance in politics. Otherwise, they are not interested.

Now, going back to the Ordinance, if approved, it will guarantee three main aspects. In the first place, it will ensure municipal management with respect to urban gardens. Secondly, it will prevent this practice from being reversed, since human rights should not be eliminated or worsened, but rather improved. Third, it will allocate funds to establish urban planning that facilitates the use of vacant areas in the city to generate orchards.

In addition, from the private sector, there is no regulation in relation to this issue. In the new developments, at least 5% of the total area will be designated specifically for orchards, thus avoiding the taking of land from recreational or public areas. The idea is that this law begins to change the culture around urban gardens. This is based on the fact that in Quito a traditional urban area is preserved and many houses have large patios, which is strongly related to life and knowledge from the countryside.

This connection is also related to worldview and folk medicine, as herbs and plants are used for healing and aesthetic purposes. Even in ancient times, during Palm Sunday, it was strongly associated with the plant world. I am sure that in the past, each house in Quito had its own garden to cultivate what we now do on Palm Sunday. In short, this law would allow various aspects that not all require, but we must do an exercise in rationality and consider the most complex.

We were lucky to have the experience of a person who had studied in Germany, where they have a long tradition in the field of bioenergy and biomedicine applied to health. This person explained that having a garden also allows people to think differently, organize themselves differently and experience therapeutic changes. Changing the pace and lifestyle can be something spiritual and personal. I myself, when I was studying and working as a gardener, never thought I would be captivated by it. Each person gives it the meaning they want, be it spiritual or religious. We are putting our lives into it, it is something related to health, with preparation for climate change.

**I want to emphasize that urban agriculture has to be highlighted and has to be implemented in a logic of urban governance.**

**And I understand that what the Ordinance on Urban Agriculture does is give a land use classification to urban agriculture. How does it work?**

Classification... that must have been commented by the representative of AGRUPAR, right? The CIU thing. There is an international classification of socioeconomic activities (CIU). That's an international standard, like ISOs and stuff, right? What is that needed for? It serves to categorize, and not only in tax matters, but also in terms of requirements and impacts. If that

has an X impact, I connect you not only with the CDI for taxes, but also with the environment, with the Ministry of the Environment. Yes, it is a very true thing. So, there has to be in all socioeconomic activity, right? We cannot, that is, the activity of urban gardens is in between. It is a non-economic activity, but it may also be economic. **We believe it would be beneficial if all households with gardens were able to sell their surplus produce. In order for such transactions to be considered commercial activities, they must be categorized accordingly.**

Of course we argued enough in the sense that, to promote this, we have to make any urban agriculture be registered so that it pays taxes or has to meet certain requirements. We try in various ways to establish when yes and when no, but it is really difficult, because when we do establish all yes, that it does not fall into an economic categorization, we come across that this could be a niche that takes advantage of, let's say, other sectors that have conventional agriculture, agriculture and could go through urban agriculture, even nurseries to raise avocados. And that is feasible in Quito because there are areas where these extensions exist. And the opposite is also detrimental, because if, of course, we regularize everything and do not allow those who do want to get involved in this, that there are no pesticides, that there is another socioeconomic dynamic, they cannot market. In one case it takes advantage of one side and in the other case we would prevent us, that is, what, what, what was the solution? The solution was that this will be regularized. A code has already been put in, not the same, which gives flexibility. It gives flexibility and that would be regulated administratively through the Secretariat of Productivity. So this part was a stumbling block, actually. AGRUPAR representative was very, almost very, even angry. I understand, I am an environmentalist in the first place, I understand, but also as a lawyer, I also understand the other side.

### **What was the conflict about?**

Representative of AGRUPAR and ConQuito want it to be considered a very liberal issue, without regulation. And that, in the short or long term, does affect. So they support small-scale producers. But we have another problem. In addition, there are regulations and the comptroller, that is, the state has a series of rules that, if they are ignored, an infraction is committed. For example, there are other rules in which we cannot intervene. If urban vendors and farmers who sell in the square begin to emerge, it is important to know what their permits are, since they have a series of requirements to meet. It would be better to regularize this situation. This is our permission, and it allows us to have surpluses, as long as we are within the allowed limits. But this is only a minor regulation, we cannot make an exception. There must be something that regulates it.

### **Did you manage to put this code to differentiate between large and small scale?**

So, I am aware that every law and every social process begins with the illusion that those of us who are involved in that culture want. So, I consider that, with all the defects, it is already inserting ourselves into the **realm of legality** and, in this way, we make visible all the processes

that, more discussed, are opened and already have, let's say, another level of acceptance in the world official. Because what is not official is underestimated, ignored, initialized and rejected. What is official has to be respected, and that happens in many societies. It starts with something very small and then we move forward, gaining more ground. So, it's a matter of strategy. In other words, there is a legal fence that gives authority to various municipal entities. But yesterday there was a meeting in which, due to that extremism that the ordinance is the most beautiful in the world, not in that reality of Quito itself yesterday (28:40), yes, and for what reason he rejects and then the regularization that the regularization and an aspect of explanatory reasons. AGRUPAR representative made 2 or 3 observations. One is a conceptualization, it is not a preamble that explains everything that this ordinance connects with, what this ordinance is for, what it is going to promote. In political activity, you have to focus on what you let in once you're not inside. Now, and until you get there, you don't have to worry about secondary things. The important thing is to enter. That is the political game anywhere in the world. So, we enter and when we are already secured at this level, then we fight to go to the next level and so on. And that there has to be a strategy. But we cannot go with the beautiful ordinance that will not allow us to pass even the first. That is the theme. So, it's strategy stuff. Maybe I can work on social and legal issues. I understand and I have explained well. But when there is a unilateral person, he is only with one person, so he does not see the contours, he does not see that there are other actors who also threaten us. So, that's when this type of impasse is generated, let's say. And I feel sorry because I already left the municipality, I'm just working here. So I can't do anything anymore. I am very sorry that yesterday in a meeting, the person with the empty chair, who was the lady from urban agriculture, had complained that we did not include them, there had been a lot of discussion, that she did not know, that she did not agree. So, it was as if the all for all. When the dissatisfaction is in a small part that, moreover, once the first filter passes, they can be fixed. But in this account she was torpedoed at the start of the commission. But there will be one more meeting on Friday in which the officials who have to give the favourable report are asked. So, another matter that I think the representative of AGRUPAR does not know is that the official of the appearance in her files, well, he is an asset, it is a very methodical process, it is almost religious. So much more rigorous.

For this document to come to a good end, there has to be a process. And this process, until the last second, the representative of AGRUPAR and another person, as they say, "no, I don't like that", can no longer. That did throw me off.

### **The great disagreement is over regularization, what does regularization imply?**

Let's see, it implies that certain urban merchants possibly, they have to get permits and pay something. Possibly, that is not 100% certain that this will happen because the idea is also to work on the regulations. The regulation is the one that will determine, not in the sense of the law. In the regulation you can establish things that are less than the law. The question is that the regulation does not determine if from here to here it is paid or not, but that is already done in the field.



So far, what the ordinance says is: "we are going to regularize urban agriculture as an urban garden." Until there. From there, what regularization implies would come later, what that urban garden implies. The idea is that this categorization is as loose as possible to allow more people to have access to markets, to have access to platforms that they can sell every Saturday, I exaggerate in the big square, so to speak. So don't have any problems. This, of course, because there also needs to be an accompaniment and for that there is the economic sector, which is behind that ordinance. I, personally, will also continue in this process. No, and I think that Con Quito and the AGRUPAR representative have done a magnificent job. We greatly appreciate the work they have done. What I am telling you is an impasse only due to disconnection. I think it is the lack of understanding that exists, because sometimes it is difficult to explain in detail because this is strategic. But for the rest, we are very grateful and we really appreciate what they are doing, which is the most important thing.

**Among the women, I think that informal vendors are wary of regularization, is it mainly because of costs or because of paperwork?**

This is a question that is also human. Nobody, I want to do such a thing when I want and I don't regularize myself, because if I do regularize myself, I already have an order, right? So, for example, in market vendors, with a vendor who is regularized, who gives you a position, you are going to sell. Here you have to go to that brand every day, because if you don't go every day and leave your job, what was given to another person can be taken away from you without regularization today. So that's the first question. The other is a psychological fear that exists, how much will it cost me?

I don't know if you are aware of how AGRUPAR works now, I understand that the women farmers who participate in the bio-fairs are registered and invoice, what is the difference between that and being regularized under this Ordinance?

None. In other words, when the ordinance comes out, it would be the same, but it may be better. But never worse, that is, the status they have right now is not going to get worse, this is going to improve. Already then. So, the fear of regularization is, in practice, the people who have this activity do not have a problem because they do well, they sell well. No, because in supermarkets organic foods cost significantly more. They, it is possible that they are selling at the same price as conventional food, but I say I am organic agriculture and when one already has a certification that a profit would be that day, this person is registered as organic agriculture, not at this time it does not exist that and I also bring potatoes from anywhere with pesticides ...there must be differentiation when being registered.

I understand that to participate in the bio-fairs they have this organic certificate, but there is, this certificate is, let's say it is not municipal, it is a certificate that gives them grouping, there is an industry called ARCSA, they regulate everything that has to do with the use of pesticides, medicines. That is not a national attribution of the central government. The other would be that the certificate, a formal certificate, would be expensive, delayed and they would have to

queue because they would come from all sides and in the end that would discourage activity. So I understand that it's that ConQuito in a faster way is good , but it's more to promote and that's it.

**Well beyond the interest in regularizing, does the ordinance have concrete proposals to promote urban agriculture?**

Yes Yes Yes. Of course, of course. It is important that there are specific sites where urban farmers can access, such as an urban garden in the Parque Metropolitano or other designated public areas. This is part of the state concept and is defined through the regulations. After the Legislative Ordinance is established, the administrative regulation is elaborated by the mayor's office, and obviously, this regulation is fundamental for its implementation. But disagreements around UA **delay the definition and approval of the legislative norm promoting UA.**

**What role does the Planning Secretariat, the Territory Secretariat, that is, urban planners have here in this regulation?**

In the regulation, you would have to participate with the objective of giving your perspective, not, for example, the urban planners, how you should design the different works, how they should establish... I don't know, there are many overpasses that have what if well the second is true and the upper part is quite extensive, which is that it can be covered, right?, and they can be done there, for example. So, I am only exaggerating, but once with the Ordinance , the planners would continue , they already know that this is normative. That is to say, no, not there they already have a justification. The design of the neighbourhoods would also be established, another series advancing so that people establish their houses, so that they establish urban gardens.

**Regarding the governance of urban agriculture, the literature says that being such a holistic system, governance also has to be interdisciplinary or interdepartmental. Does this exist here in Quito?**

Yes, yes, that is, there is this Ordinance that is going to have to be respected by various dependencies. For example, there's a market dependency, a space dependency, and a tax dependency, right? So there has to be this connection. At first, it will possibly be difficult, but it is best to start it now.

**Similarly, the literature says that agri-food policies often come from a central level, that is, from the national government, but since the context is so important for agri-food systems, it is important that policies are defined at the local level. Does this happen in Quito?**

I would say yes, that is, here it has been the social sector that has prevailed. That is, there are people from families that have orchards and do agriculture within the urban limits of the city. **UA has long gone unnoticed in Quito. It is only with new perspectives of governance focused on the environment and a solidaristic economy that respond to local practices, that UA is getting noticed, right?** And it is sought, then, that it has an intentionality.

I believe that there has always been agriculture in the city, it has been hidden and now what we want is to give it a certain functionality, to prosper, let's say, and to expand. There are a lot of places in Quito that are not being used and could house urban gardens.

## **Interview Secretaries**

### **Secretary of Territory, Habitat, and Housing (STHV)**

#### **What do you understand as urban agriculture?**

From the context of the secretariat, the issue of the AU is worked through the axis of food sovereignty, inclusive and healthy cities, which create conditions so that the population can eat healthy. That is important and how can the city be planned towards that. There is a dilemma with the orchards for being called urban. The orchards are not necessarily urban. **The DMQ has rural and urban areas, orchards can occur in both.** There are generally orchards in rural and urban areas, not restricted to one urban or one rural area.

#### **From the perspective of the STHV, is the agri-food system considered an urban issue to be considered by planning?**

**Yes, totally. Cities are very complex, there are many cross-cutting issues. We cannot think that food sovereignty is not transversal with respect to urban planning. Cities are thought of as healthy cities and, in the long term, in planning from the moment a city is planned with the use of land, where it is built, etc., guidelines are already generated where spaces for cultivation could be created.** On the other hand, the issue of urban planning goes hand in hand with promoting healthy eating through instruments within the scope of planning. For example, finding public space to cultivate through permits, etc.

#### **There are several food policies in Quito. How does the Secretariat implement these policies that already exist in Quito?**

What is now in force is the PUGS. We are in transition of mayor, so the PUGS can change. However, the PUGS generates guidelines at a macro level, such as ecological protection, where it is increased by almost 40% in relation to what was the PUOS. Now, the PUGS decreases the urban land and restricts the expansion of the urban sprawl. First, it is at the macro level, where through land use, areas where there can be agriculture are limited. This is what the Secretariat

does, thinking that agriculture can also be done in that area and protect the agriculture that already exists throughout the city.

On the other hand, there is a smaller scale, which is the Public Space Master Plan, which has been under development for a year . What he seeks is to work through fundamentals, closely aligned with the urban agenda through the SDGs. The master plan works fundamentals that have to do with active, resilient, healthy, sustainable, safe public space, etc. There are 8 fundamentals. Within these foundations is food sovereignty, on a smaller scale the orchards, within the resilient public space category. Not necessarily every foundation is rigid, there are many cross-cutting issues. The orchards can also be seen from the healthy public space, etc. But they are under the resilience category because we have seen that they provide resilience for the community in a time of crisis. So, through the resilient public space, specific issues are worked on. The resilient approach focuses on resilient practices in the city, and one of these is vegetable gardens.

The first thing we considered was a methodology. What we propose is to have ordering questions. It is structured in three parts: current state, crisis and strategies. In the current state, we propose to understand and demonstrate that changes are needed. If that is not evidenced, it is difficult to propose plans. This synthesis of food sovereignty works on the current state and asks three questions: where does our food come from? Understanding the issue of the city and other cities for food, concession axes from where food enters and the percentage of what enters through each axis. The second question is: what percentage of self-sufficiency is there? These are data from ConQuito, the AGRUPAR publications. So we ask ourselves this, what is self-sufficiency like? There is 5% of the city, but 12% at the provincial level. Then, how many orchards are there? The ownership of orchards tells us that 6% are public and 94% are private. Of those, 6% are municipal orchards . Most of the orchards have a small area and are on private land. There are only 72 orchards in public space, but through the master plan we can act . Through questions, we plan important data that comes out, such as the kilometres or square meters of gardens in the public space.

Then we ask ourselves 3 ordering questions that pose the crisis. The crisis that exists in relation to this is the issue of the closures of the 4 axes , such as the demonstrations and the COVID, which are closed and what happens to the city? That is a crisis at a more macro level. Another question goes to how the people of Quito eat . The WHO says that one should eat around 400 grams of vegetables a day, but we found data from studies that say that Ecuadorians eat 183 grams a day. Here is evidence that as Ecuadorians or Quito people we do not eat well. There are rates of childhood obesity and malnutrition . Then, the crisis also has to do with a pandemic that happens, and people started to produce a lot more. People expanded their gardens and produced more. During the pandemic, 40% increased their production and 44% increased their area. This shows the crisis. Then we move on to strategizing.

As strategies, on the one hand, it is to enhance the benefits that we all already know . But, on the other hand, what is the scope of the master plan? And that is to understand that there is land in the public domain that through the master plan can be potentiated for the implementation of orchards , either in a community or organizational way. With an organization, more detailed things can be accomplished. The final intention of the strategy is to promote this land in the public domain so that it can be used in orchards and thus respond to these crises that we have

mentioned: the crisis of the health of people in the city, the crisis of road closures and the crisis during events such as a pandemic . Now we are at the moment of strategies, and what we did is identify the square meter needed per inhabitant in Quito, taking into account how an Ecuadorian eats and how much a garden produces here in Quito. Because an orchard that produces you in another city, even in another country, is not the same. Taking all this data, we arrive at a figure of 4.32 square meters that a person needs to eat annually. With this condition, it is what we are working on and looking for vacant land to see potential areas of implementation. We do not implement them directly through the Secretariat, since we plan public policy. What we do is facilitate this public policy so that other companies, such as ConQuito , manage those spaces.

**In other words, from the master plan the use of this public land for urban agriculture is allowed, but is it already another company like conQuito that manages it?**

Sure, bio-fairs are sales. No, that is important that you mention, no, not because it also exists. One of the main problems is also that they do not have spaces for bio-fairs . Sometimes, the administrative issue to obtain permits is complicated. So another important issue is not only the issue of production at the city level, but also the issue of marketing. So, another of the strategies that the master plan seeks is to facilitate that this public space can be used for this type of commercialization that goes directly hand in hand with this, that is, those are the strategies, they are the objectives, as well as a specific plan where We can say to have this type of technical standard or it is going to be legally implemented like this, things like that. We are not there yet, that is a super advanced phase, when the projects and programs are being developed. Now we are giving the strategies in a general framework, but I think the important thing is that we are focusing a lot on one of the fundamentals towards this issue of food sovereignty.

**So if I understand correctly, the master plan seeks to encourage the use of public space for production and also considers the marketing of the product?**

Yes, it is promoting the public space that, if you already see it in the territory, it is not true. Because sometimes we talk about a super macro scale, that we are sort of isolated, no. But when you go to parks, that's why you go to a park and you see that there are parts of the parks that are not used, that is, there are no games or they are remnants within the parks. No maybe, that could do with a practice like this. So, returning to the macro scale, which is the master plan, is to generate facilities through public policy, which would be the great umbrella of the public space master plan.

**And well, I don't know if you are already at this level to answer this question, but how is integration considered or what does using public space for farmers imply? Is there a plan through regularization? In other words, what does it mean to use that public space?**

Of course, we have not yet developed precisely that level of detail, because that implies entering the next phase of the master plan, which is to develop the plans and projects on a more detailed scale, at the micro level, based on the legislation that regulates the use and occupation

of public space. We have not reached that point yet, as we are not only dealing with the issue of food sovereignty, but the public space master plan has 8 foundations in total, so there are many more things that are being worked on. At this level, I can't answer or tell you much, since it's not developed yet.

However, in the case of ConQuito, we were also collaborating and this arose from the hand of councillor X, who is no longer in office. It is an Ordinance of urban gardens. They call them urban gardens, although I don't call them that because they are limiting the space. In any case, in this ordinance they already had more specific guidelines on these issues, maybe they can help you there. I know that the ordinance is not yet approved and has not gone to the second debate, to the best of my understanding. At this time, it is up to the new council to decide how it will be carried out.

**Of course, yes, that's exactly what I wanted to ask you: how is this strategy of the master plan related to the ordinance of the orchards? Because I think they are quite aligned in the fact of promoting the use of public space for gardens. Eh, but I know, because we have been talking more about the ordinance, that they are classified under the CIU, that is, that it is an economic activity. And of course, right there enters the discussion.**

Of course, the discussion enters because the regulations ask you to regulate this and have a CIU for this, that is, it may be that sometimes in practice or in real life one does not go out to sell, but this works. like this, but as a municipality we cannot encourage doing it in a way that goes against the norm . So, the CIU is a way of keeping a record, right?, and that this activity is known and entered into the CIU so that it can be carried out in a legally viable manner and is not contradicted. So I think that's an important issue there. We have been discussing it a lot with ConQuito, and well, right now we haven't seen it for a while, but I think the important thing there is also to understand it at the city level, as a municipality, how can we project politics or draft laws that conflict with other laws? ?, and then that creates problems already in the territory for the person who wants to implement something, because one rule tells you A, the other tells you B, tells you "you can't do this", and the other is giving you an option. And when things happen to people who are already in this norm, that's when, well, what happens here? We oppose each other So, I think this issue is important, no, it's a CIU issue, it's an issue that allows this to happen through the standard and not oppose it.

Lawyer enters to support interviewee

**I understand that the ordinance wants to promote even public space for orchards, but it is not clear to me why there has to be a CIU that classifies them as an economic activity. It is mandatory to promote the use of public space, give it a type of activity. How does it work?**

You see, as it was thought in the ordinance, it was not necessarily urban gardens in public space, because for public space, the legal regime has other considerations here in the DMQ. So, for the public space, you need to make this resolution to 022, which is the exclusive and

temporary occupation of the public space. It was one of the things that was required in the discussion of the ordinance, because the occupation of public space with urban gardens is not foreseen. So, I will give you an example of how 022 works: you want to do a career that you have to close a certain public space, you want to put some element in a public space, you have to request this authorization, which is an agreement that you sign with the zonal administrations to that allow you exclusive and temporary use. It's logic, for a while. So, for the urban garden right now it is not scheduled at 0:22. So, I think that we do have to differentiate a little between the public space and the private space, the issue that applies when we do it in a private space, because the urban garden as such, at some point, what we were discussing is that it can allow you this exchange of surpluses, and that necessarily becomes an economic activity, the exchange through a sale, barter is an economic activity . So, if you need to determine the possibility that you can carry out that activity in that space where you are going to do it, then it is not only linked to the CIU, but also the use of land that allows you to carry out agro-productive activities on that land. . We are now proposing it in the land use and management plan, and in addition to that, to be able to obtain a single license for economic activities to carry out what becomes an economic activity. And it is not so much because of a matter that the municipality profits from obtaining, because you get a license, but because **the LUAE gives you security elements within the current space to practice agriculture. One of the considerations we had was the garden must have certain safety conditions, such as not being able to do it in a ravine.** It is one of the considerations we had: OK, are you going to be the urban garden? The ordinance was considering that it could be up to I don't know how many hectares remained, but you have 300, 400 m, 800 m, and possibly it does not have certain security conditions. To prevent it from being done in a ravine or you can do it on a terrace that doesn't have..., you can do it with fertilizer that is often flammable and you can have it near areas that shouldn't do it. So, the logic of the LUAE is not to profit, but rather to guarantee these security conditions for people so that they can carry out the activity adequately.

I was just thinking exclusively for the cultivation of gardens and the exchange of surpluses. So, here I think it is important to make this differentiation, that currently why what was proposed in the ordinance was proposed, is because currently the land use and management plan does not allow you to carry out agro-productive activities on urban land . So, we had to find a way to solve this so that the orchards can be applied and the surpluses can be sold, which is one of the proposals that are put forward . So, we were even introducing the cultivation and orchard activity into the CIU code, and always tying it to the exchange of surpluses, so that it can be applied at the time and the people who are going to sell at fairs, who already have licenses, which they already have according to CONQUITO, they can continue to get and don't have a problem. Because in reality, this situation had arisen in which many people could not obtain a license to exchange surpluses because they were on urban land and the norm did not allow them. And on the other hand, for us, this is a first moment with a current PUGS and an ordinance that was intended to be issued in the previous management period. A reform to the land use and management plan is currently being carried out, in accordance with LOTUGS. The new mayor has 1 year to update the plan, and as part of these ideas is to generate this possibility that cultivation in urban land orchards already exists. So, we would no longer have to make such drastic changes as the CIU ordinance stated, but rather we already foresaw it in the plan, so that once the land management plan is approved, they can already obtain a license in case of let it be that But it is basically that: it is due to economic activity at the moment of exchanging the surpluses, and because they are going to be at fairs in certain spaces where they

are going to us and you are going to enter, on the other hand, because the norm provides for the obligation to take out a license at the time of carrying out economic activities. One of the discussions we had with CONQUITO was: OK, if you don't want urban gardens to get a license, let's technically and legally justify why we make an exception to the rule? My legal criteria, rather, was: there is no need to make an exception, rather we provide facilities so that CONQUITO can direct you on how to obtain the license. Because, and here we go to the third point, what I was telling you, is not getting a license to profit from the municipality, but getting a license to provide safety conditions, so that firefighters can carry out inspections, depending on the area it can even be the Security secretariat, so that the activity is carried out safely for people, and avoid any problems. Even, from the examples that CONQUITO showed us, there were times when the urban garden was next to the road or next to the ravine, so there are some security elements that perhaps, due to ignorance of the people, they are not taken into consideration, but that the municipality should guarantee. So, with CONQUITO, it's not so much because we need to put the license and we have to charge, what it charges is rather to guarantee the conditions to who is going to carry out the activity.

**Of course, let's see, then, is the whole theme of the loa for the private space, not for the public?**

That's right, the public is not required to get a license. In that case, the public should have a technical standard that regulates under equal conditions and other standards in the public space. Because what can happen, and it is always important to consider when proposing rules, is to think of the worst scenario to prevent these things from happening. So, in the best scenario, everyone wants to make orchards and occupy the park, and that's pretty cool, right? But what happens when there are abuses? For example, when games are removed to place orchards, because it turns out that there is a lot of surplus and people see this as something lucrative. Let's put it in that scenario. I'm not saying it's happening, but if it does, it's important to understand how it's done in space and what conditions it must have to keep people safe. Because not all of them want a garden in the public space; others will want to go play in a park. That is where the issue of equity arises.

Actually, with the ordinance, the idea is to have a technical standard that indicates how gardens are going to be implemented in public spaces. What is the area to be used depending on the public space? What is the purpose of this public space? That is to say, because each space has an end defined by the norm, which says that this is a park because that sector needed this equipment as a park. But it is going to start making changes. To what extent, to what extent could the modality of a park be modified to turn it into a part of the neighbourhood that has games on a field, while... It's creating minimal conditions, right? It should not be seen as restrictions, but as those conditions that ensure equity in the public space. TRUE? We know that we are talking about things that are not yet happening, but we must prevent them to avoid conflicts. It is not that either.

And just to comment on that, with the private space, we also make the observation of the CIU, because it is a legal condition that the orchards, in a first instance, in the ordinance, I think it



was intended up to 7 hectares. The garden, I don't know how, but 7 hectares is enough. So, we are not talking about a self-consumption process on 7 hectares, it can be for a sale, not just surplus. So, it's fair to look at this worst-case scenario and say, "OK, people, if you're telling them not to license, the people who produce the most might start taking advantage." So, it is important that it is regulated by the CIU, because if this exception is made, tomorrow we will have many people who, because of this exception, can do other things. I know that this doesn't always happen, that there are many people who are going to do it in a good way, but what happens when they do it in a bad way? To whom are they going to repay that guilt? **In the absence of order, the ultimate actor to blame would be the municipality**, to those of us who are generating this exception and creating this conflict. So, I also think that is important, and that is the **responsibility of the municipality to provide and demand that security in the public space**.

### **What is the difference between registering for the AGRUPAR Bio-feria and according to the regulations?**

I understand that it is a registry, they have a registry with ConQuito, an internal registry. It is an internal record that you can participate in our bio-fairs. They keep it as their database. Anyway, I imagine that they have some parameters that these people follow, that's why healthy things are marketed and, in addition, they must have a level of quality, right? I imagine that the irrigation water they use is not from the stream. Many things must comply. We don't know about it in detail.

More than regularizing, it is a matter of registration to participate in bio-fairs or in ConQuito processes and follow their training. However, that does not exempt you from complying with the other regulations so that they have the licenses. I don't know if they have RUC. If they have a RUC, you are demonstrating that you carry out economic activities, therefore, you are becoming the taxpayer of the license. So, you should already get a license. It is as if ConQuito wanted to say: 'OK, since you are a matter of internal self-consumption and do not take out RUC, do not bill, no, there is no such argument, or at least until now we have not found this technical or legal justification that explains why What do you make an exception so they don't take out.

And it is something that they were even warned about, when you have a RUC, there is a national and municipal registry that you are carrying out an economic activity. At some point, the municipality is going to tell you: 'Hey, you have a RUC, it means you're doing this. Where is your license? Where is the payment of your patent? Where are the requirements that the standard establishes?' Well, you are also going to start falling into these illegalities . And I say illegalities because not as something bad, but as the non-compliance with the rules of legality in which people can fall . So , rather, it is not seeking to hinder them, but that the rule is complied with so that they can carry out their activities calmly, do not have any observations and that ConQuito also supports them in obtaining this. We understand that bureaucratically it is sometimes very complicated.

Sure, I think it can become a barrier. The idea is for CONQUITO to help train farmers who can give you those facilities, not how to skip the norm, but I give you the facilities so that you can do it.

**I don't know if there are already defined criteria to be able to regularize, that is, so that farmers can register. Is there a criterion for farmers to obtain the license?**

Currently there is that gap, and ConQuito has made us realize that many times farmers want to get that permit and they are not allowed because they are not in the CIU, there is no compatibility with land use... something that we want to change in the ordinance proposal. They are not thinking about requirements because, in reality, you should meet the same ones that are for the sole license of economic activities for the LUAE, that is, we have not thought about it with greater requirements and it may be greater because we do not take care of that issue. We are a planning issue and this management issue if you need it or not. We haven't reached that level, but I can tell you, in principle, they should meet the same requirements for license compliance. "

**Because I understand that a bit of the conflict comes from the fact that a large part of those who do urban agriculture live in informal housing, on informal land. So I think the conflict is going OK, if they don't even meet these two requirements that are basic before agriculture, how are we going to give them the license for urban agriculture?**

From a person's point of view, I have my little house. It is an informal occupation and that is where I make my garden. Sure, you see it, yes, but you also have to see the other side, like the municipality. How can we generate a norm that makes me skip the norm, or somehow other activities can also say the same thing? That is to say, I also have an urban garden illegally and I want to do this because gardens do, because I don't. So, I think it's also important in that sense to see it from both sides. For this reason, I believe that the fundamental thing is that, if this is done as well as ConQuito supports with the issue of training, I can become the manager. I don't know if ConQuito or another company in the municipality, the manager that this process is not tedious and that it is easy and accessible for farmers. I think that would be like the fine point before trying to see how to continue, as in this proposal, let's remove it if we put it. Let's take it away, what's more, it's worth seeing how, without breaking the rule, this support can be generated for these people, so that it doesn't end up being harmful to them and so that they don't continue illegally and can't have rights. Because a norm is not just seeing it as "oh, how bad the norm, it doesn't let me do something". **Rather than perceiving it solely as an unfavourable norm limiting my actions, it is essential to recognize that it grants me rights and provides assurances.**

Even there are 2 points that I remembered, on the one hand, the LUAE license would not have to go in to check the formality of the house. We understand that 70% of the DMQ are informal constructions that do not have a building license, but the LUAE license does not go into verifying if your construction is informal or not. Because you are talking about the LUAE, which is the sole license for economic activities. Here it does not go into reviewing whether the construction is formal or informal (41:50). Perhaps there may be a problem if your home is

not regularized in the sense of ownership. That can happen, that is, when you have informal and consolidated settlements that do not have property deeds, it may be that there you find out who owns the property. It's not the one who gets the license, but it doesn't necessarily happen when you get a license as a renter, you can do it. You don't have a restriction that only the owner can get a license. So, perhaps not completely complex in that regard.

On the other hand, it is to think that the logic of urban gardens is not only for a certain population group, which, I believe, is somewhat the way in which the ordinance is being viewed. It applies to the entire DMQ, which means that both people who may have informality in their home and people who do not, and large builders can access the modality of urban gardens. So, we also thought in these conditions that perhaps they could become restrictive in certain cases for a certain population group, but in another case it is also to guarantee that there are no abuses by others who may have more economic facilities to build and access. Yes, the ordinance is not intended only for people who fulfil informality or people who need for self-consumption. The reality is designed for all the DMQ that can access orchards and that can implement orchards. It is more than anything for the commercialization of surpluses. The CIU, as we proposed in the ordinance, is expected to be the cultivation in orchards and the commercialization of surpluses. The two conditions are to sell and to be consuming for oneself. That is what maybe happens to you, to us who have that, nothing happens. And you don't have to see it from that side either. It is **the moment you want to commercialize in a legal way the norm tells you very clearly that you are already generating an income and that has to be declared**. That is to say, if I, for example, have my garden, the norm does not tell me that I have to obtain the Unique Certificate (CU), but at the moment that I want to market, then I do have to align things. Of course, always with the commercialization of surpluses. If you have your urban garden, nothing happens. That is not going to affect many people who already have orchards and who do not market. That also happens, doesn't it? You don't have to get a license because you're not practicing. Perhaps from there what we mentioned is that you comply with certain rules of architecture and urbanism, that is, do not put the garden on steps in spaces where accessibility, walkability could limit you, but in spaces that I understand that is the logic. But I repeat, the reason you put yourself in these kinds of conditions is not because of the people with whom ConQuito works. It is for the rest of the DMQ so that they can also access the standard and that they have to comply with it.

Now, in the new PUGS proposal, it is thought that in all residential use you can have an urban garden and you can get the license because the planning logic does not change, it is not like you put on an industry. So that's what you think of the new PUGS. If you set up an orchard and you don't sell it, nothing happens because that doesn't provide you with the norm, it's for self-consumption. But at the moment when you already want to have economic activity, you are going to verify if indeed that economic activity can be carried out in that sector, and that is where the CIU comes in and if indeed the cultivation and commercialization of surpluses is allowed. It is sought that this CIU activity is allowed in everything, not in each place, basically not in the neighbourhood where the majority of people who have the orchards live, but also in consolidated areas and at a private level. If someone wants too, they can do it. It's not important to just see who is currently there, but to think about a projection of who else might be there and how that could benefit the city on a larger scale. So, the time that the CIU opens up to more spaces with this means that it can provide more opportunities. I think that is also important, to

see the logic of not only focusing on seeing well, right now there are these people who are with the orchards, cool, but what happens if it opens up to other sites? There are more people and it is also important that the rules always change. So, in the end, I always believe that when a regulation is proposed, there is a trial period. It no longer begins to be exercised, there in practice begin to appear, let's say, problems and good things. It isn't true? So here, from the municipality, one has the opportunity, based on this practice, to be able to generate these changes to improve if necessary or to strengthen what is lacking. So that is also important to see, that it is not something that remains fixed and is removed and no longer happens, that has happened with many resolutions and ordinances, the same PUGS.

That it helps you to understand also from the point of view of the secretary, from the legal part, not only from the technique, that when one studies it is the technical part, this from the data to sometimes generate ideas that do have something as a concept interesting or very good for the city, but it is also important to understand it from the legal side and that is not so easy, because you have to see the mechanisms. The perspective of the territory secretary is legal.

## **Secretary of Health (SH)**

### **From the perspective of the Health Secretariat, what is understood by urban agriculture?**

Well, urban farming on idle is not true. This allows the production of food, such as vegetables, fruits, vegetables and others, within a space that can be public and accessible without any cost to citizens. So, that is, they are spaces where it is allowed to harvest these foods. That type of activity, that I think is an urban garden.

### **Why, from the perspective of the Ministry of Health, is urban agriculture considered all the production, sale and distribution of important food as an urban activity?**

Urban agriculture is extremely important from the perspective of the Ministry of Health, because it is precisely the production of food, right? In other words, people have, we stay healthy, we have a nutritional state. We can reach a normal nutritional state with food harvested from our Earth. In other words, we are now in a pandemic, for example, of the consumption of industrialized and processed foods that cause malnutrition, due to excessive overweight and obesity, for example, and which are a risk factor for chronic non-communicable diseases.

In Ecuador, our first causes of mortality are diabetes, hypertension and cardiovascular diseases, which are associated with diet. It is because our type of food culture has also been changing and we have been adopting certain food patterns outside of what we normally consumed. So, urban agriculture is also like a window of opportunity on how we can have this consumption of natural, organic and easily accessible food for families, **we use UA to increase food accessibility among vulnerable families**. That is why from the Health Secretariat it is a fundamental activity.

**In Quito there are some agri-food policies, such as the Quito agri-food strategy. Even the PMDOT includes the issue of urban agriculture and its need to integrate it into urban planning. From the Ministry of Health, how are these policies implemented in relation to food security, that is, related to urban agriculture?**

True, that is exactly what I was going to tell you from the beginning. We, and how we adopt public policy, always see it from the health problem that exists at the national level and at the district level with the municipality . So, we have a pretty strong problem, right? When we talked about the problem of COVID and we mentioned that it was a pandemic at the global level, at the national level, at the district level, right? But there are also other types of pandemics such as obesity, overweight, and chronic malnutrition in our country. So, it helps us to adopt these policies that exist, such as the urban agriculture policy, the policy of agri-food pacts that are in the PMDOT, to be able to reduce or work a little on the problem. So what have we done? Well, regarding the nutrition part, as they were telling you, we generate projects that promote and use urban agriculture as a means to produce food that perhaps families cannot afford economically . We are talking about the fact that if a family with low economic resources is going to access food that fills their stomach faster and that is not necessarily healthy, it may be the cause of the appearance of some type of disease. But with the organic garden, urban agriculture allows us to generate these tools that, in the long run, allow families to have a better quality of life, in terms of health. If we have health, well, in reality, we have everything.

**From the perspective of the Ministry of Health, do you consider that there is support from the Ministry of Territory and the Ministry of Planning to implement urban agriculture?**

No. Even from there it has become a bit more complex for us because, well, although it is true, we do it under this approach and we work with Casas Somos and this time they are part of one of the Territorial Coordination and Citizen Participation Secretariats. But **collaborating with planners has been very challenging, despite we invite them to work meetings, they have not attended, it has even complicated our work in using UA to combat child malnutrition.** And, health, yes, in fact, now, it is one of the critical knots that we currently have. Because we know that agriculture is an economic activity, but also if we only see it from that side, for as long as we want to do it or we want to implement these gardens inside the homes of families with malnourished children, in which we teach them , perhaps, how we have food, because it is seen in a complicated situation. Because perhaps, they mentioned to us in planning that it is important to obtain, for example, the fire permit or administrative issues, it is very neat, no, to be able to create a vegetable garden . But it is, in reality, that is, it is an area. No, it will not work within our logic of using a garden to promote health . So, yes, that is, actually, in these 2 years that we have been working, well, we have not done it in conjunction with planning. Well, obviously, they are going to be an important actor, they are present in the creation of the ordinance, but perhaps they do not have that vision of the offer in social health that has a lot to do, also, when applying or implementing urban agriculture .

*Of course, of course, that is just a topic that I also think is complicated. It is also a bit difficult for me to understand it from a different perspective, because I understand, on the one hand, the motivation to regularize it if it is an economic activity that is going to be sold. I also understand how the reason for regularizing it is similar to regularizing any other vendor in the market. But, of course, I also understand the point of view of whether it is a human right, in the case of food, because there is a need to regularize it. What is the big but of regularization for small urban gardens? Implying?*

As long as they are not at the level of very large spaces, such as parks or houses with public access, as I mentioned, there will be no problems and people will be able to learn how to make an organic garden or have family farming and implement it at home. The problem is that, as I mentioned earlier on the topic of child chronic malnutrition, this is such a multifactorial problem. That is to say, there are several factors that intervene in a child having chronic malnutrition, not only the lack of food, but also the lack of drinking water, the sanitation of basic services, access to health, such as health centres, and access to vaccination. There are children who do not have access to vaccination, the roads are in poor condition, and all of this contributes to chronic malnutrition.

So, when we go home with very young children, we teach them how to plant, for example, and how to create their own garden and then make a soup with some chard or other vegetables. If this were to be regularized internally in families that need various requirements, not even their own houses have those requirements. That is to say, in general, they are informal houses, informal constructions. Obviously, they will not have permission to implement a good urban garden.

### **And regularize, what does it mean more specifically?**

That was what the Secretariat for Territorial Coordination and Planning mentioned. I'm not sure, but that Secretariat was the one that told us several requirements. I don't have the requirements at hand, I think that the representative of AGRUPAR should know. I'm not sure if there shouldn't be some planning contact. In fact, she had one. They sent me an email to just send them this information and they placed several requirements. Among one of those, the one that worried the AGRUPAR representative and me the most was the requirement of the fire brigade. Because obviously, for it to be a certified orchard or perhaps for it to be within an area... uh, I don't know, well, yes, maybe you know it better with the subject of planning and health. To form an orchard, there must be a fire permit. So, if that happens in real life, that is, with families that have malnutrition, that will never happen. It will never happen because it could be that, for example, the families that we teach on the subject that are in urban areas that have a little more access, that they are going to implement it on a terrace, even if they have a regular house or are regularized with permits and so on. But where we are going, where there are no roads, is where they have to walk a lot to get to it, it can even be an informal neighbourhood.

**The problem is not so much the economic problem of registering, but the fact that if your housing is already informal, it is absurd to regularize a practice like urban agriculture.**

**But I think that the problem is not the case of these women who participate in the bio-fairs, but more extreme cases that live informally.**

Exactly, of the people who live in informal spaces and who do not have permits, and which is in fact one of the strongest problems in the district of Quito. I think that 60% of Quito is informal, and what they want is how to start regularizing. But that too, I mean, I understand why that is something that makes many things difficult in the city, because it is precisely this planning to build houses in places where they are not suitable. And it is precisely there where the most problems exist, they do not have sanitation, they do not have basic services, there is malnutrition and these are the houses that we go to prevent the child from growing up with poor nutrition that could affect his whole life. So, that's the problem above.

**How does the ordinance and how does the regularization of the urban garden affect your work?**

We could not support non-regularized orchards. We, for all the orchards, need the technical support of AGRUPAR first, because they also give us a technical vision of how to implement the orchard. Faced with this, nutritionists are the ones who give advice on how to fertilize the land and others, but prior to that we have the technical support of AGRUPAR for these activities to take place. If AGRUPAR does not support us in the implementation of orchards with the families, that is, these orchards simply will not be carried out. For us, it is actually complex because it is one of our strategies to reduce a health problem.

So, it's like a vicious circle, you reach points where, well, it's one activity among several activities that are carried out to fight malnutrition. It is a strong activity, in reality, it is about generating tools so that families can have a garden. Yeah, it kind of goes a bit further, especially the part where health becomes such a big issue.

**Why is it important to have an ordinance?**

An ordinance will always allow the actions to be maintained in a sustainable and permanent manner. Regardless of whether it is our health project, at least it happens to us very often. Health projects are created depending on the highest authority that comes. There was a very good project that was one of these: salud al paso, strategic points where nutritionists were located in the city and provided nutritional care and tried to reduce malnutrition in the face of nutritional education. They took glucose, weight, height. A lot was invested in this project. A new mayor came and said: "it's over." So, that is the problem of the sustainability of things, and the support that is provided, I believe that up to a certain point, despite the fact that AGRUPAR is a fairly consolidated project at the municipal level, there may come a point where they say: "You know what, there are too many resources that are invested in what is being generated, are the results good? Is there a balance between investment results?". So, all that can, yes, affect. Well, an ordinance allows that, not that the entire council agrees, that the entire mayoralty agrees and that this be maintained in advance of the long and the families that are part of this project and that are beneficiaries of various things, well do not be left without

that protection. So, that is one, I would think, which is one of the main reasons because, of course, that is, AGRUPAR in Quito has always worked in its east line, perhaps, productive. And when I arrived and told them: "please, let's do this here." Of course, many more projects were used and have, community kitchens and things like that are also more directed towards health, or under their health focus. But of course, now the moment when we say that there could be a much stronger regularization on the subject of space is worrying and we can no longer do it.

**And, from the perspective of the Ministry of Health, how is it considered that the Ordinance integrates this informality of urban agriculture?**

In other words, from my point of view and being rational on the issue of citizenship, that is, enough of the informality of problems like this. Be clear, obviously I would like there to be no informality, that is, from that clear point. In other words, I think that informality affects many ways, including the way citizens act or have certain behaviours. We are very used to having a lot of informality, seeing it from my work. **It is necessary to regulate certain spaces and certain practices, yes, but up to a certain point. As soon as we generate a greater benefit I would think that it should not be necessary to regulate.**

**Secretary of the Environment (SE)**

**Thank you, well, so to begin with, what do you understand from the perspective of the Ministry of the Environment by urban agriculture?**

From the Ministry of the Environment, we have a climate action plan that promotes carbon neutrality. This plan includes mitigation and adaptation actions. The issue of urban agriculture is related to adaptation measures. Promoting urban agriculture implies developing permeable spaces at the urban level, which allows water to filter and prevents the increase in the population's vulnerability to climate risks, such as floods, landslides and other effects of climate change.

**From the Secretariat, is agriculture considered an urban issue that needs to be covered from urban planning?**

Yes, well if we are talking about urban agriculture, well yes, it has to be included in urban planning. From that perspective, of course, the Secretariat also supports rural agriculture, but with issues related more to natural heritage.

**Why would you think it is important to integrate it into urban planning?**

It is good, precisely, because of what we were discussing today in the climate adaptation part. Uh huh, we need to have these review measures and climate change. So, the Secretariat



supports these issues in that sense. Obviously, with the start of AGRUPAR and ConQuito, they are directly involved in the issue of promoting urban gardens. But we, from an environmental perspective, have these issues of climate risks and sustainable benefits. They are supported through the perspective of this Secretariat, and are directly involved in the issue of promoting urban gardens. But we, from an environmental perspective, have these issues of climate risks. In turn, the theme of sustainable benefits is supported through nature-based solutions.

And, well, what we are doing in Clever Cities. In other words, Clever Cities still promotes solutions based on all these issues that I mentioned before, but we support it from a regulatory perspective. Not anymore because obviously the Secretariat has its powers and we cannot interfere, for example, with Conquito. Instead, we promote these themes and the benefits they bring to them. So, we are supporting Clever Cities to create regulations for the entire city to promote this type of nature-based solutions, since urban gardens and all agriculture will be framed within this concept.

**Does this regulation have anything to do with the ordinance on urban gardens that they are trying to get out today?**

Do you know that we had workshops with various municipal actors and NGOs at the local level? People from the competitiveness secretariat participated. So, yes, of course, that is, the idea now that we have identified this regulatory proposal is to link it to what we are doing. So, there it shows a bit how the municipality is so big, there are so many entities that perhaps we are doing similar work .

**And that, for example, is comprehensive governance managed in the municipality?**

More in sectors, but obviously it is intended to do it comprehensively. It is intended to be something more comprehensive, but in reality it is more in sectors, but it is intended to make it increasingly comprehensive. Precisely in these workshops that we had, we were able to contact many, well, with all the secretariats and with many from the housing field and, of course, we can articulate more, obviously, with more communication, but based on a specific topic. So, climate change is common and transversal, therefore, you have to go for the simplest for now, framed in a specific topic. For example, if there were agriculture, how much can the Ministry of the Environment contribute? How much can the Ministry of Productivity or Housing contribute?

**Regarding urban gardens, does the Ministry of the Environment have some specific implementation projects or does it stay more at the regulatory level?**

Yes, that is, due to the characteristics of the secretariats, we are entities that generate policies. Now, that is, we are not, uh, in the implementation . So, we have this level of the secretariats and below us, to put it in some way, are operating companies, they are those of implementation.

So, these would be the ones in charge of implementing the policy, yes, what we put there in the regulations.

**Well, I know that in Quito there are some food policies, such as the Agrifood Pact and the Metropolitan Plan for Territorial Development and Planning (PMDOT), which mentions urban gardens. How does the work of the Ministry of the Environment respond to those policies that already exist?**

Well, what we want is, on the one hand, for the Climate Action Plan to also include urban agriculture. Through the Climate Action Plan, we want the projects that are generated in the different municipal institutions to consider the issue of climate change, the co-benefits and the reduction of the carbon footprint. We have that on one side. In addition, within the Climate Action Plan, there is "Clever Cities", where orchards are an alternative to address climate change. Organic waste is very important, so it is necessary to treat it through actions of good environmental practices. It is also important to educate the population so that they can have their own gardens and use organic fertilizer.

**How do you collaborate with the Planning Secretariat?**

Let's say that within the planning activities we have the Annual Operating Plan, that is, each institution must have a plan that includes the activities that we are going to execute. By departments or units, we have a list of activities that we must plan and carry out. This planning is sent to the General Planning Secretariat, which includes all of us, so that they can help us in some way to follow up on everything we do and provide us with details of the progress towards the goals.

**And, for example, in the policies that come out of the Ministry of the Environment, be it an ordinance or like this climate action plan, the issue of orchards is mentioned as a strategy, let's say, but are there more specific guidelines on how to implement them?**

Well, what happens inside is that, as I was telling you, we are not directly in charge of the issue, but the Ministry of Productivity and ConQuito are in charge of the issue of orchards. And all the issues of urban gardens in Quito that are promoted by the municipality are managed under AGRUPAR. We promote it but from an environmental perspective of climate adaptation.

**How do you work with planning to make sure that it can be integrated into the city plan?**

The Planning Secretariat has a master plan, yes there is the PMDOT, the PUGS. These are our master plans, let's say, that apply to the entire city, but the Secretariat follows up on what we tell them we are going to do. It's not that they tell us what we have to do, we already tell them that they have a follow-up role. Directly with the Ministry of Productivity or with Quito, so that it can be considered, that is, it is a little more direct.

**OK, for example, with the issue of orchards that are in the climate change plan, could you go to the Territory Secretariat and tell them: look, this is raised in the plan, could you integrate it into the PUGS, For example?**

Yes, we could, that is, in fact, the issue of solutions based on nature is an example of that because in the PUGS there is the issue of solutions based on nature, but still in very simple terms.

So, in this case, we are promoting that the secretariat of the territory include them in the PUGS in the urban standards as a measure to take into account for the planning of the infrastructure in the city, that is, in the sense that, uh Yes, it can be inserted into other plans, master plans, let's say, for the whole city. You have direct communication, precisely, that is, we as secretary of the environment tell him: "They could be interesting for the public space master plan", and that is what we are doing with the subject. In order to generate the master plan, the environment secretariat asks us for inputs because, for example, in these issues of the project it is an issue that has not been done in the city. And they ask us for technical information, technical standards, but also costs because since it has not been done, it is not known how much will be invested. Of course, what the secretariat does is compile this type of information, but it does not generate it specifically. We can provide you with that information. In other words, in fact, well, here in the plan it is as a climate adaptation measure. Yes, yes, but we are promoting a document called "Guide to Guidelines in Nature." In that document we are promoting urban gardens because it is a super good measure to promote sustainable development, which also promotes income.

### **How is it incorporated into the agri-food system in the Ministry of Environment?**

What specifically would the agri-food system be? In other words, it is not integrated as an agri-food system itself, but rather as an environmental policy because we are the Ministry of the Environment . So, if the agri-food system, in terms of urban agriculture, in the urban area is one of the sectors of the Climate Action Plan, conceived as an adaptation measure, it also contributes to mitigating greenhouse gas emissions, improving biodiversity and take advantage of waste. It is a totally comprehensive approach.

However, the policy of the agri-food system is carried out by another instance of the municipality. Regarding the issue of agriculture itself, we work at the rural level . We work with farms and sustainable farm management plans, implementing climate change policies and sustainable livestock farming according to the climate. We have shown that the agricultural barrier has increased significantly, so public policy must intervene to prevent it from affecting the environment. It is important to note that we set policies, but do not directly implement them. **We have worked with AGRUPAR to leverage the potential of UA. In addition to implementing NBS, the concept of UA aids reducing heatwaves and temperature while providing food resources [...] UA would also contribute to reducing [food] transportation distances.**

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