





**PREFEITURA DE
SÃO PAULO**

CONNECT

THE
DOTS

Introduction	06
Territory as a field for integration Revealing relations, building synergies	10
Administration program and territorial articulations	16
Borders of the city	18
Organic and family farming	22
• Ecology through economy	24
• Inclusion through production	26
• Nutrition through local and organic food	28
Public policies Implementing concrete actions	32
Environmental policy	34
Spatial policy	38
Labor and entrepreneurship policy	42
Food and nutrition security policy	46
School feeding policy	50
Solid waste policy	54
Local agricultural value chain Elements of the value chain	62
Designing value chains, connecting sectorial actions	82
IABR-2016-THE NEXT ECONOMY	87

CONNECT

THE
DOTS

"Connect the dots": a puzzle we have all played before. By figuring out links between seemingly random components, we give shape to a previously concealed image.

Designing value chains in the city is about connecting the dots. Value chains may be a key to understanding the impacts of economic flows in the territory, allowing a fertile field for design in the contemporary city. Within the context of a necessary revision of the role of cities in a national development project, local governments must seek new ways to establish inclusive policies connecting economic, social, and spatial dimensions.

This publication presents one of the integrated strategies undertaken by the Municipality of São Paulo within the framework of the "Borders of City", one of the territorial articulations defined in the 2013-2016 Administration Program. The strategy lies in strengthening the value chain of organic and family farming in the city of São Paulo, made possible through the joint work of several secretariats. The arrangement that sets the connections among multiple initiatives is precisely the value chain, organized from food production to food consumption.

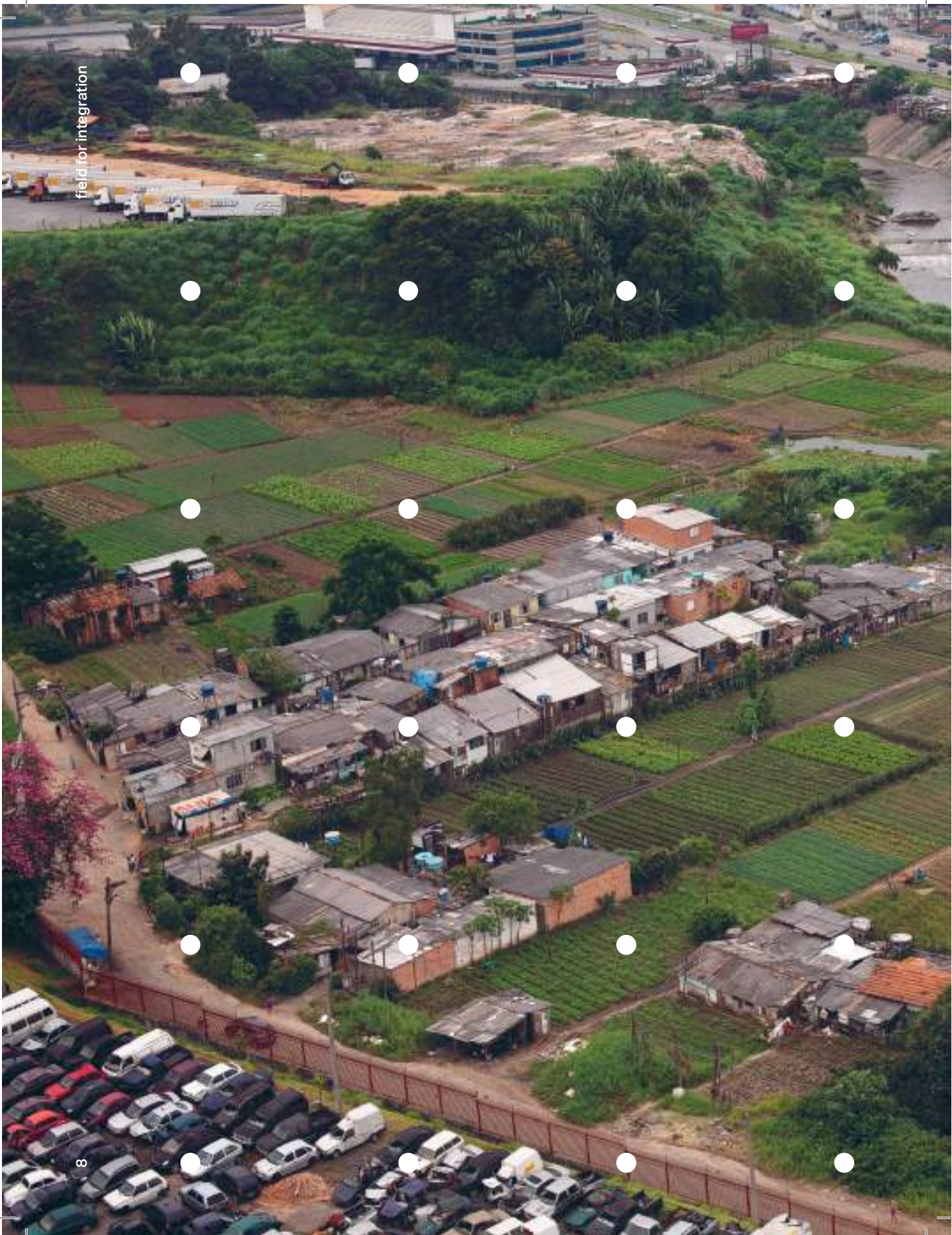
The new Master Plan, retrieving the perimeter of a Rural Zone, ensures access to federal lines of credit for family farming. Programs focused on farmers' enablement and technical assistance are combined with the provision of collective farming equipment to support local production. However, facilitating access to means of production is not enough. It is also necessary to take into account the consumer market. In order to address this end of the value chain, public policies establishing the purchase of family and organic farming produce for school meals guarantee an entry to a large-scale market for family farmers. The Municipality is currently responsible

for providing 2 million school meals on a daily basis. Associated with food security policies, these actions allow the public administration to expand the population's – and especially children's – access to healthy food. Finally, the circular economy is enabled by a policy that promotes composting alternatives to organic waste from street markets, so it can return as input to the productive chain.

The mindset of connecting the dots among the several components of the value chain allows the Municipality both to coordinate a strategy, identifying policies and stakeholders related to each component, and to face challenges that cannot be properly addressed by separate sectorial policies. The methodological proposal of this experiment demonstrates a structured public policy that is characterized by the composition of regulations, programs, and projects, resulting in the design of a productive network that is inseparable from the territory it integrates.

This experiment is based on actions conducted by a diverse group of agents within the Municipality of São Paulo, including the Coordination of School Feeding from the Municipal Secretariat of Education (CODAE/SME); the Coordination for Food and Nutrition Security from the Municipal Secretariat of Development, Labor, and Entrepreneurship (COSAN/SDTE); the Municipal Secretariat of Green and Environment (SVMA); the Municipal Authority of Urban Sanitation at the Municipal Secretariat of Services (Amlurb/SES); and the local Subprefectures. This wide set of initiatives was systematized by the Applied Research Advisory Body at the Municipal Secretariat of Urban Development (APAF/SMDU). The motivation for this research results from a broader investigation carried out by SMDU on alternative methodologies for structuring projects and policies of territorial transformation in São Paulo.

field for integration



An aerial photograph showing a complex landscape. In the upper left, a river flows through a concrete-lined channel. To the right of the river is a large, dense informal settlement with many small, makeshift structures. Further right is a commercial area with a large yellow-roofed building, possibly a gas station or warehouse, and a road with several vehicles. Below the settlement is a wide, green, vegetated area. At the bottom of the image are several rectangular agricultural fields, some of which are planted with green crops, while others are bare brown soil. The entire image is overlaid with a grid of white dots.

TERRITORY AS A FIELD FOR INTEGRATION



**Revealing
relations,
building
synergies**

The metropolitan area of São Paulo gathers 20 million people in an urban sprawl of 2,200 km². The city of São Paulo alone houses 12 million people within an administrative perimeter of 1,500 km², of which approximately 2/3 correspond to urban occupation and 1/3 to a wide rural territory comprising areas of environmental preservation.

The figures from the municipality of São Paulo (some of them showcased on the following pages) simultaneously display the variety of potentialities to be fostered, as well as the scale of problems to be faced by city government. Challenges are complex and cannot be tackled separately by strategies limited to a single policy area. It is imperative therefore to uncover synergies among sectorial issues in order to set forth integrated strategies that confront the city's structural challenges.

The socio-spatial inequality is one of these core challenges. Its territorial expression is clear in São Paulo, where formal employment opportunities and infrastructure are concentrated in clustered spaces in the city, whereas the most vulnerable population is detached from such reality.

The expanded center of São Paulo concentrates 57 percent of formal jobs and only 17 percent of city population. On the other hand, about 1.8 million city dwellers live in highly vulnerable conditions on the urban fringes, where few meaningful jobs are available and limited access to infrastructure is patent. The territoriality of so-

cial vulnerability¹ reveals that poverty has dimensions beyond the material conditions of survival (such as income), considering also components like access or denial to typical urbanization benefits, like education, healthcare, and sanitation.

It is necessary to cast a careful and attentive look over vulnerable territories in search of connections among the several existing challenges within this context. Revealing relations between different issues is the path to building multidimensional strategies that can enable a more virtuous and equitable alternative for social, economic, and spatial development. Reducing socio-spatial inequalities is crucial to promote a fairer city, one that operates as a platform of opportunities for all citizens.

¹ São Paulo Index of Social Vulnerability (IPVS), formulated by Fundação Seade, informs the population condition by overlapping two dimensions. The socioeconomic dimension includes the family income per person, the average income of women responsible for the households, the percentage of households with per capita income up to ½ minimum wage, the percentage of households with per capita income up to 4 minimum wages, and the percentage of literate people responsible for the households. While the demographics dimension considers the percentage of people responsible for the households from 10 to 29 years old, the percentage of women responsible for the households from 10 to 29 years old, the average age of people responsible for the households, and the percentage of children from 0 to 5 years old.



12%
of Brazil's
GDP

355 km²
of municipal
preservation
units



5.3 million
formal jobs

1.8 million
people in highly vulnerable
conditions



16,430 Gigatonnes
of CO²-equiv per year

5.8 million cars

2 million
school meals served
on daily basis



+2,500
municipal schools

32 municipal
markets

+300 million
m² of regular residential
built area

+1,600

favelas

880

street markets



1,042

irregular settlements

+330

municipal health units

+300,000

regular businesses

0.67

Gini index

+20,000 tons
of solid waste
produced daily



65 km

of subway lines

270 km

of metropolitan train lines

243 km

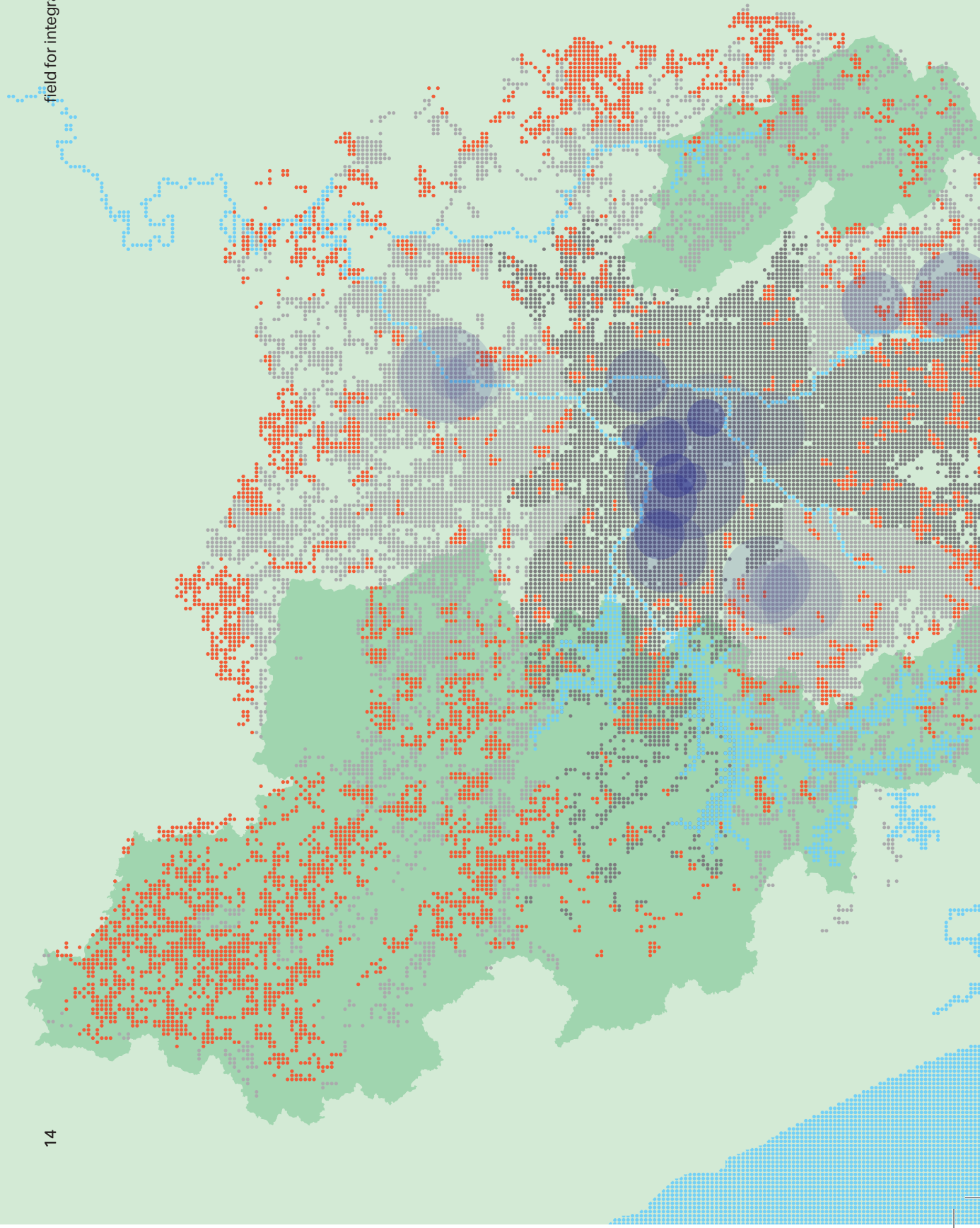
of bus corridors

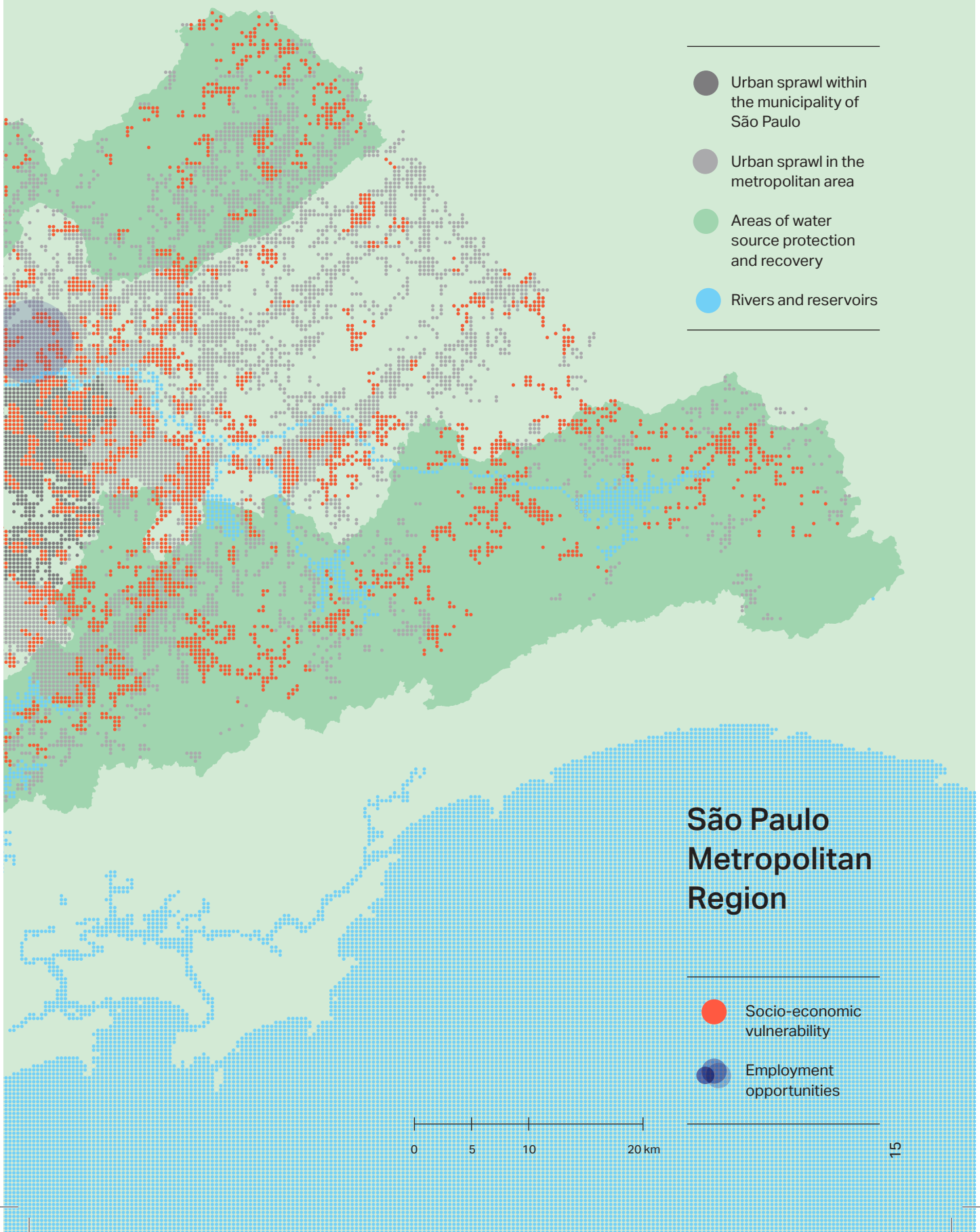
1,807

slum tenements

385 km

of bike lanes





Urban sprawl within the municipality of São Paulo

Urban sprawl in the metropolitan area

Areas of water source protection and recovery

Rivers and reservoirs

São Paulo Metropolitan Region

Socio-economic vulnerability

Employment opportunities

0 5 10 20 km

Administration program and territorial articulations

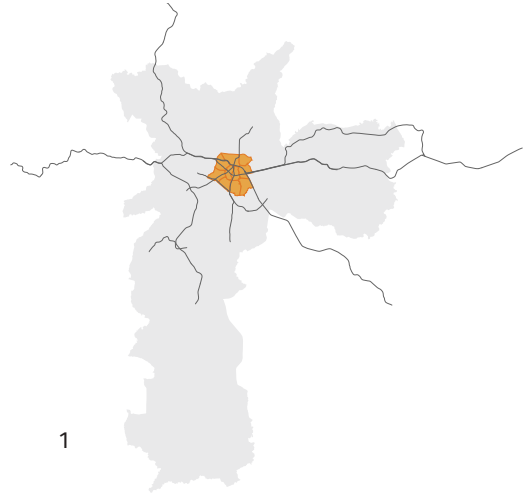
The amendment #30 to São Paulo's Municipal Organic Law establishes that every new administration must present, from the start of its mandate, its priorities, strategic actions, and quantitative goals. These commitments are set out in an Administration Program, which formalizes the government obligations towards the population.

Driven by a long-term goal to overcome socio-spatial inequalities and developed through a participatory process during the first semester of 2013, the 2013-2016 Administration Program lists 123 goals. Taking into consideration the variety of challenges faced by a city as large and complex as São Paulo, the Program goes beyond establishing quantitative goals, by pointing out comprehensive objectives and territorial articulations that highlight intersections among the several sectorial actions.

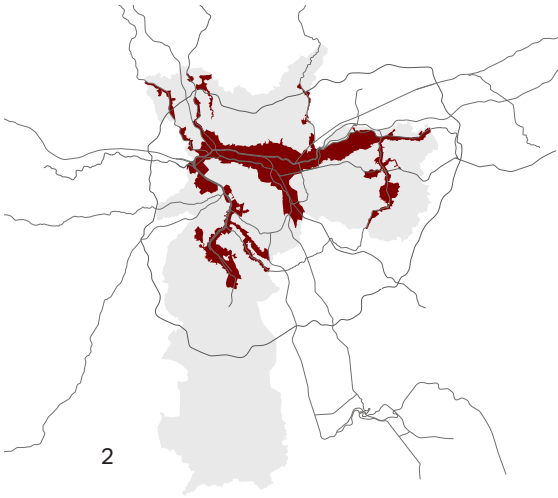
The hypothesis is that the territory allows a cross-cutting understanding of the city as it congregates multiple drivers of the built environment, such as its stakeholders, technical systems, and dynamics and flows of historical, social, and economic processes. This confluence warrants a character of synthesis to the territory that enables, on the one hand, a complex awareness of connecting issues and, on the other hand, the setting up of appropriate goals.

Thus, the 2013-2016 Administration Program proposes five territorial articulations of sectorial goals, in order to strengthen the linkages among sectorial demands, budget planning, and urban development. The articulations proposed are:

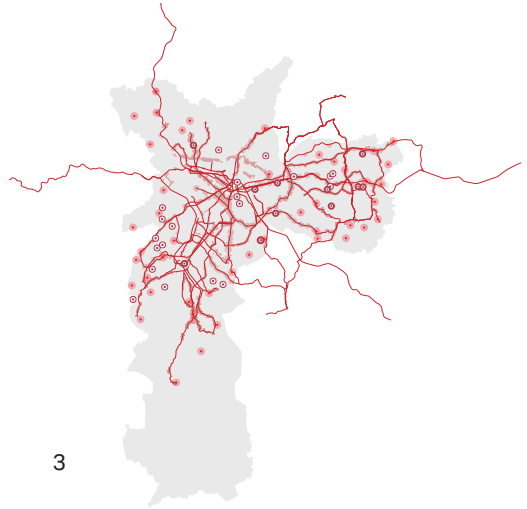
1. Renewing the Central Area
2. Structuring the Arch of the Future
3. Strengthening the Network of Centralities
4. Rescuing Citizenship in the Most Vulnerable Territories
5. Reordering the Borders of the City



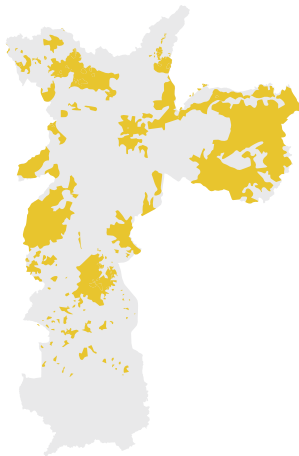
1



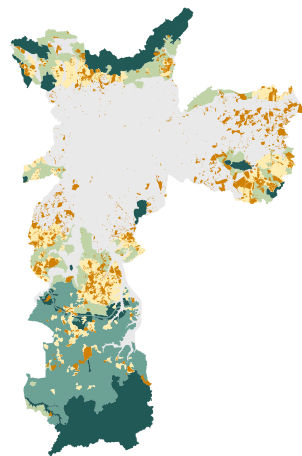
2



3

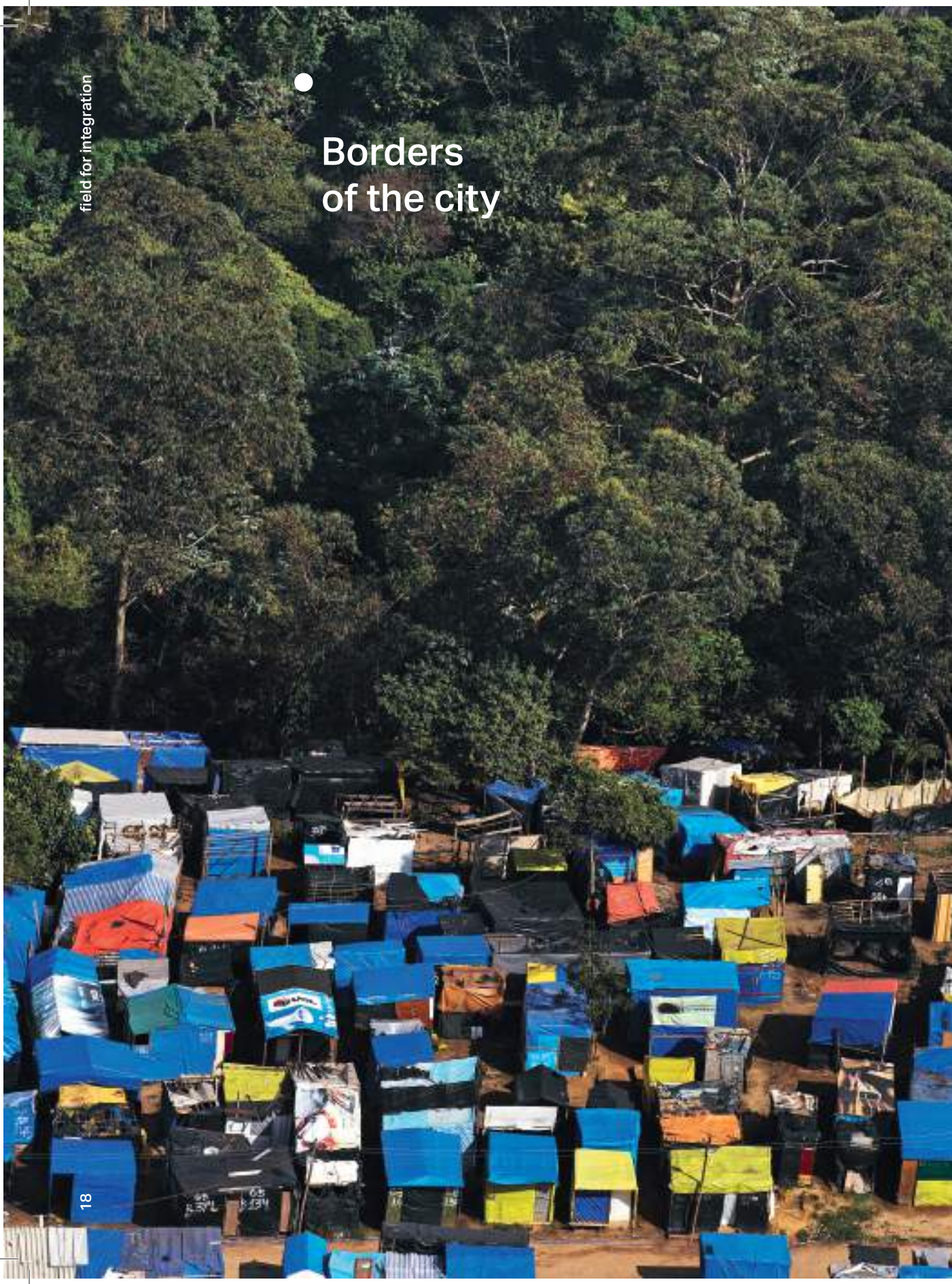


4

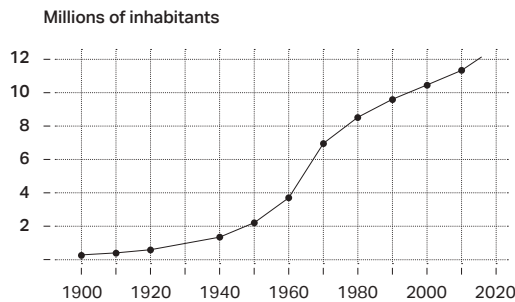


5

Borders of the city



Population growth in the municipality of São Paulo



The territorial articulation of sectorial goals at the “Borders of the City” aims to promote the sustainable development of the urban fringes, an area comprising irregular settlements, agricultural production units, and part of the city’s most important environmental assets, such as remnants of Atlantic Forest. The territorial articulation induces the coordination of initiatives related to the protection of natural resources and the maintenance of environmental services; to the improvement of habitat quality with infrastructure and re-urbanization of vulnerable settlements; and to the creation of job and income opportunities. In order to better understand this framework, it is important to recognize the processes that led to the current configuration of this territory.

The huge extension and explicit vulnerability of great part of the urban area in São Paulo result from a continuous and unplanned process of urban sprawl. From mid-twentieth century, the concentration of industrial activity in the city of São Paulo and its surroundings deepened the inequalities among the different regions in Brazil, driving the urbanization process of Brazilian population.

As the main destination for internal migration, São Paulo experienced an intense demographic growth pace in the twentieth century. In 30 years, the population raised from 2 million in 1950 to a little over 8 million people in 1980. The enormous flow of people and the insufficiency of social housing policies to address the scale of the problem led to the unplanned occupation of the territory with precarious housing solutions.

Poor residential settlements in increasingly more distant areas defined a clear pattern of social and spatial segregation in the city. Additionally, environmental problems, anticipated decades earlier, have critically worsened. São Paulo currently lives through a serious water shortage while its main water springs are threatened by illegal occupations, right at the urban fringes.

Today, the Borders of the City amount to a quite complex reality. Composed by a mosaic of small rural properties remaining from a previously existing agricultural belt around the urban area; irregular settlements, sheltering part of the most vulnerable population in the municipality; and preservation areas including Atlantic Forest remnants and water springs that source one of São Paulo’s water reservoirs.



The Rural Zone defined in the new Strategic Master Plan (Municipal Law 16,050/2014) covers 420 km², or 28 percent of the municipal area. About half of the Rural Zone corresponds to areas of preservation of natural ecosystems, that is, natural forest remnants, watercourse banks, and water springs and creeks that have been little impacted by anthropic activity. In the remaining territory, around five thousand hectares are currently occupied by agricultural production.

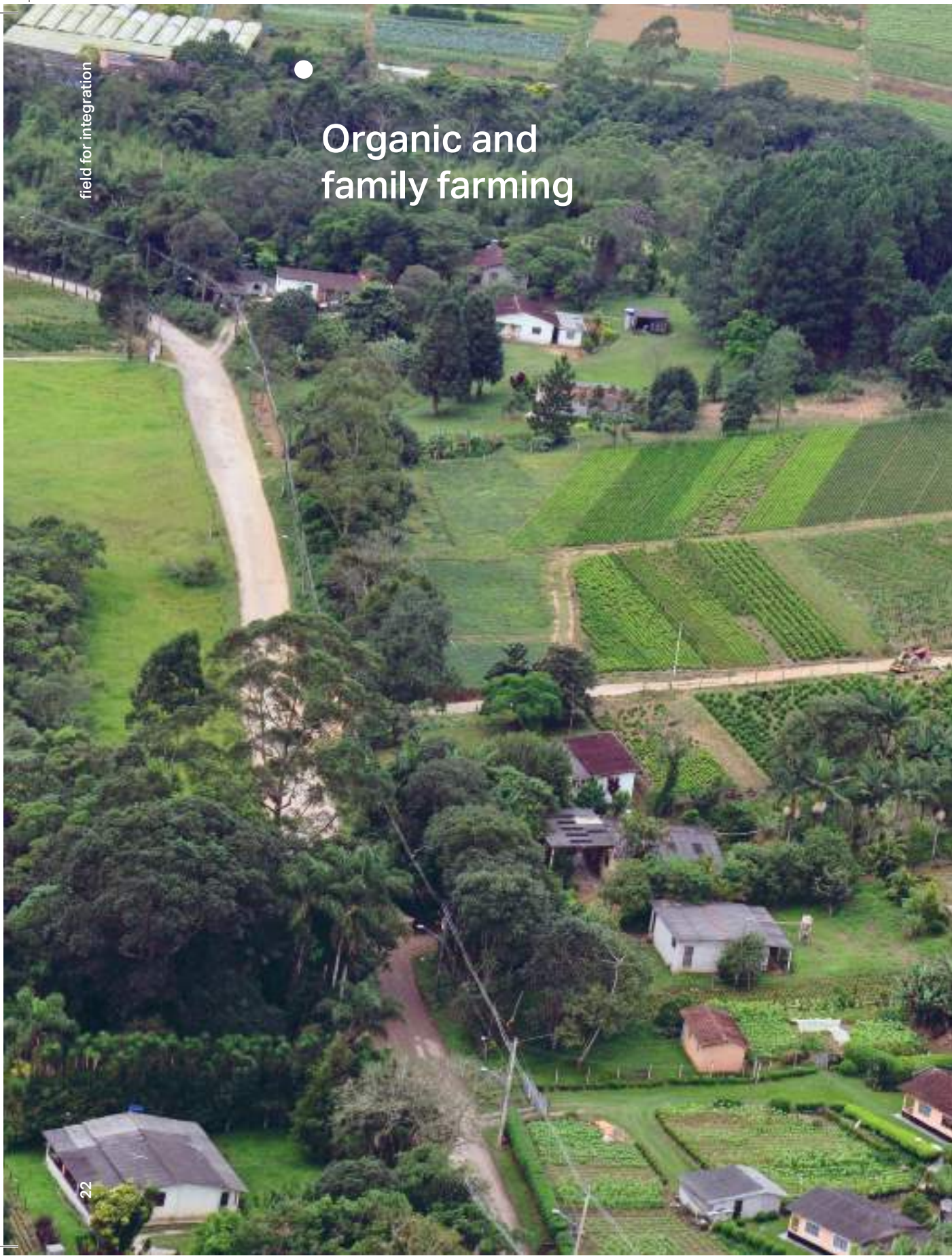
According to 2010 Census data, about 40 thousand people live today within the perimeter of the Rural Zone. Out of them, 84 percent earn up to two minimum wages per month and the average household income is R\$ 2,000 – much below the average of the city, which is about R\$ 5,700. The population currently living in the Rural Zone includes, among others, agricultural producers. These farmers must deal with an added layer of precariousness, concerning the difficulty in


accessing proper infrastructure and lines of credit to obtain appropriate means of production. The situation of the Rural Zone is of extreme economic vulnerability.

Prior policies, based on strict restrictions of land use, stripped the land of its exchange value, spurring the process of irregular urbanization. The proposal now is to recover the multiple economic dimensions of the Borders of City, recognizing its potential for fostering sustainable use combined with more meaningful generation of income than the illegal urbanization of land. Among several possible courses of action – which include fundamental initiatives undertaken by the current administration, such as the re-urbanization of vulnerable settlements and the promotion of an Eco-tourism Hub in the region – the integrated strategy of strengthening the organic and family farming value chain in São Paulo has a great potential for driving local and sustainable development in the region.



Organic and family farming





The south area of the municipality was once an important vegetable production area, supplying the central districts of the city. From the 1970s, without technical assistance and after the bankruptcy of Cotia Co-op – an important player in the region – producers received less and less support. Moreover, many farmers ended up giving way to the pressure of urban growth and irregular settlements, and farming families lost the continuity of their business as their youth was lured by the opportunities of the urban area, extremely close to them.

The transformation of small rural properties located on the urban fringes into irregularly urbanized areas represents a great loss for the city. On the one hand, it resulted in the decrease of productive activities and employment opportunities in that area, and therefore, in the exacerbation of social and economic segregation of its population. On the other hand, it led to the worsening of existing environmental problems, putting at stake, for example, the water supply for several municipalities in the region.

Even in an adverse context, there are today over 400 farming units in the municipality of São Paulo. Most of these units are still located at the south, where Japanese and German farmers were historically settled. However, it is also possible to identify about 30 farming properties in the north, located between the urban occupation and Cantareira's State Park, and 80 farming properties in the east, located in

the interstices of the neighborhoods of São Mateus and Itaquera.

These farming units are usually characterized by having less than ten hectares and a family workforce, and by growing ornamental plants and vegetables, even though a few of them also grow fruits, mainly in the east. For at least half of these producers, farming is their only source of income. Also, there are currently 14 producers with organic production certification, 25 in the ongoing process of organic farming transition, and one cooperative, the Agro-ecological Co-op of Rural Producers and Clean Water of the South Zone of São Paulo (Cooperapas).

The strategy of strengthening the value chain of organic and family farming is not only about reordering the territory of the Borders of City, where it is necessary to contain urban sprawl, but also about addressing solutions to other cross-cutting challenges, such as reducing socioeconomic vulnerability and increasing food security. This strategy lies in three hypotheses: promoting (i) ecology through economy, (ii) inclusion through production, and (iii) nutrition through local and organic food.

Ecology through economy





In several decades of urban growth, the metropolitan area of São Paulo saw its population expand at a very quick pace. Between the 1950s and 1980s, the average growth rate was more than 4.5 percent per year. Even though the urban expansion pressure has decreased in the last decade, irregular settlements continue to collide with the need to preserve environmental assets. Legislation prohibiting urban sprawl has been inefficient in São Paulo. Today, about 1.7 million people live in an area of water source protection, jeopardizing water production that supplies over five million people in the metropolitan area. How can urban sprawl over environmentally sensitive areas be contained?

The hypothesis is to promote ecology through economy. It means to protect environmentally sensitive areas – such as water springs, forest reserves, and other green areas – through the sustainable economic use of the territory. Organic farming and ecotourism fit this strategy, since they reinforce the economic meaning of rural territory, preventing the urban sprawl over threatened areas. The practice of organic farming is particularly interesting, since it does not use artificial fertilizers and promotes the restoration of biodiversity through alternating crops, being the ideal option for areas of water source protection. Additionally, the productive use of land, mainly the use of unoccupied areas close to urban settlements, reverts the conditions for both insalubrity and violence in the region.

Inclusion through production





The metropolitan area of São Paulo occupies only 0.03 percent of national territory but is responsible for 18 percent of Brazilian Gross Domestic Product (GDP). The municipality of São Paulo alone accounts for 12 percent of national GDP. From 2003 to 2012, the unemployment rate was reduced from 18.7 to 10.2 percent in the city. Even so, about 3.8 million people live in a highly vulnerable situation in the metropolitan area, being 1.8 million in the municipality of São Paulo. These people have limited access to urban infrastructure, social services (such as healthcare and education) and decent job opportunities. Socioeconomic vulnerability is more critical at the urban fringes, a territory detached from the privileged context where jobs are clustered. How can social and economic vulnerability in the outskirts of the city be reduced?

The hypothesis is to foster inclusion through production. The commitment to including low-income families in the economy by means of redistributive policies and access to lines of credit for consuming durable goods must have a new focus. Within a wide spectrum of programs for promoting professional qualification, innovation, and opportunities for job and income generation, one of the alternatives is to promote jobs related to productive activities in the city. Thus, promoting micro and small social businesses linked to the family farming value chain, and supporting local producers based on organic farming represent possibilities to include the vulnerable population living in this territory into the dynamics of the urban economy of the largest metropolitan area in the country.

Nutrition through local and organic food





There is an increasing interest in consuming healthy food. This movement raised the organic production earnings estimates in Brazil to about R\$ 2.5 billion in 2015. Organic-only street markets and food retailers have multiplied, but are still mostly clustered in the wealthiest neighborhoods. Meanwhile, a larger part of the population does not have access to healthy food, either because of its price (usually higher than conventional products) or due to lack of information. Obesity and malnutrition rates show the importance of an effort by the public administration in the field of food and nutrition security. Especially for the children, this problem is quite expressive: about one-third of children between 5 and 9 years old are overweight in Brazil. How can access to healthy food by the most vulnerable be increased?

The hypothesis is to promote nutrition through locally produced organic food. For that, local government holds a great opportunity since it is responsible for providing two million meals on a daily basis for students in the municipal school system. For the most vulnerable, the school meal is usually children's main meal of the day. In this sense, in addition to caring for the nutritional aspect of the menu, school meals can be an important tool for food education. The availability of fresh and varied produce in school meals represents a significant consumer market for local producers, through which local farmers can be directly connected to consumers, benefitting both ends of the value chain.



PUBLIC POLICIES



Implementing concrete actions

In 2012, twenty institutions and civil society organizations united to build up a Platform to Support Organic Farming in the City of São Paulo². This mobilization brought attention to the topic and introduced several demands and proposals. The issue of organic farming in São Paulo is gaining more and more space in local administration in the recent years, reasserting the importance of social participation in the development of public policies, as well as in agenda-setting for the city. Such engagement remains active at multiple channels of dialogue between government and society, through discussions promoted at the City Council, workshops with local producers, and meetings with co-ops and organized sectors of civil society.

These participatory efforts invigorate the strategy of strengthening organic and family farming, which must then unfold into a wide set of concrete initiatives undertaken by the public administration in order to turn ideas into reality. Governmental actions take place at multiple scales, with different scopes, and through a variety of tools, such as regulations, programs, and direct public investment. In order to make an integrated approach feasible, the local secretariats play different but mutually complementary roles in this strategy.

The activities related to environmental policy are carried out by the Municipal Secretariat of Green and Environment (SVMA); the efforts towards urban planning are under the responsibility of the Municipal

Secretariat of Urban Development (SMDU); the local projects and investments are undertaken by each Subprefecture; the programs related to job promotion and food security are implemented by the Municipal Secretariat of Development, Labor, and Entrepreneurship (SDTE); the management of school meals for public schools is done by the Municipal Secretariat of Education (SME); and finally, the projects, programs, and contracts related to solid waste policy are under the supervision of the Municipal Secretariat of Services (SES).

São Paulo's municipal secretariats have been performing concrete actions to make possible the strategy of strengthening organic and family farming in the city. The initiatives, uncovered in the next pages, translate the initial hypothesis for transforming a territory into tangible and effective policies.

² The Platform was subscribed by the following entities: Associação de Agricultura Orgânica (AAO), Associação Biodinâmica (ABD), Agricultura Natural de Campinas (ANC), Associação de Produtores Orgânicos de São Mateus (APOSOM), Associação Holística de Participação Comunitária Ecológica (AHPCE), Casa do Rosário, Centro Paulus, Cooperativa Agroecológica dos Produtores Rurais e de Água Limpa de São Paulo (Cooperapas), Fundação Mokiti Okada, Instituto de Defesa do Consumidor (Idec), Instituto Alana, Instituto 5 Elementos, Instituto Kairós, Instituto Pedro Matajs, Instituto Pólis, Instituto Refloresta, MOA International Brasil, Slow Food São Paulo, Campanha Permanente Contra os Agrotóxicos e Pela Vida, and Movimento Boa Praça.

Environmental policy


Agroecology contributes to the goal of protecting the environmental heritage of São Paulo, as it is based on the ecological management of natural resources and the sustainable development of the rural area. Furthermore, by promoting agriculture close to the urban area, where the consumer market is concentrated, we also contribute to decreasing greenhouse gas emissions, considering that the distance between producers and consumers is significantly shortened. Thus, the incentive to local and organic agriculture is one of the pillars of the environmental policy in the Municipality of São Paulo.

São Paulo has two Areas of Environmental Protection (APAs) within municipal jurisdiction, both in the south: Capivari-Monos and Bororé-Colônia. As conservation units of sustainable use, these areas can house economic activities promoted by local communities, provided that they are compatible with the sustainability of natural resources. Organic agriculture fits these conditions, and so it is one of the main activities promoted by the APAs' Managing Councils, which have a specific chair for farmers' organizations. Technical Chambers from these councils articulate different initiatives to encourage this activity, such as implementing workshops to teach proper sustainable environmental sanitation, promoting joint efforts coordinated by APAs' managers, and providing support for Cooperapas' and Cambuci Route's activities.

Conservation units of sustainable use can include economic activities provided that they are compatible with the sustainability of natural resources.







The conversion from conventional farming to agro-ecological production is a long and costly process that must be supported by public policies. The images on the opposite page show a group of farmers that had just received its organic production certificate, as well as an aerial view of an Area of Environmental Protection in São Paulo.

In addition to the work undertaken at the APAs, the Municipal Secretariat of Green and Environment (SVMA), as a way to encourage the practice of agro-ecology, also promotes partnerships for implementing domestic, community, and school gardens; the Gardening School, with the assistance of UMAPAZ teams; organic-only markets with local producers in municipal parks, such as the Ibirapuera; and the Reference Center in Sustainable Food and Nutritional Health at Butantã neighborhood.

The Special Fund for the Environment and Sustainable Development (FEMA), created in 2001, provides funding for projects developed by civil society aiming at improving the environmental quality of the city. FEMA has launched eleven public calls for allocating nearly R\$ 15 million between 2005 and 2014. Two of these calls focused on promoting projects related to agroecological activities. In 2009, public call n. 8 allocated R\$ 2 million for projects that contributed to the development of the activities specified in the Urban and Peri-urban Agriculture Program (PROAURP). Public call n. 10, from 2014, allocated R\$ 1.5 million for projects fostering practices of agroecology and permaculture. The resources from FEMA currently guarantee the viability of several capacity building projects for farmers in transition from conventional to organic agriculture located in the south and east of São Paulo.

Another important line of action is implementing the environmental management tools defined in the new Master Plan. Among them, the Payment for Environmental Services (PSA) stands out. This tool will allow the financial compensation of those who preserve forest remnants and water source areas, such as the organic agriculture producers. The implementation of the PSA tool will expand the possibilities of income for vulnerable farmers, encouraging their stability in the rural area while they practice environmentally sustainable activities.






The Atlantic Forest Municipal Plan, provided in federal law and incorporated in the new Master Plan's guidelines, is another key tool for environmental management in the rural area. The plan is currently being drawn up, through a joint effort between local government and civil society organizations. When finished, it will contain an updated map of the Atlantic Forest remnants – one of the most important Brazilian biomes and, yet, the most endangered – as well as priority actions for preserving and recovering the native vegetation. The final document will support the production of the Sustainable Rural Development Plan (PDRS), since the rural area currently concentrates the main fragments of Atlantic Forest in São Paulo. The PDRS will primarily aim at articulating plans and interventions that impact the rural area, having as its backbone the activities of agroecology, sustainable tourism, and environmental preservation.

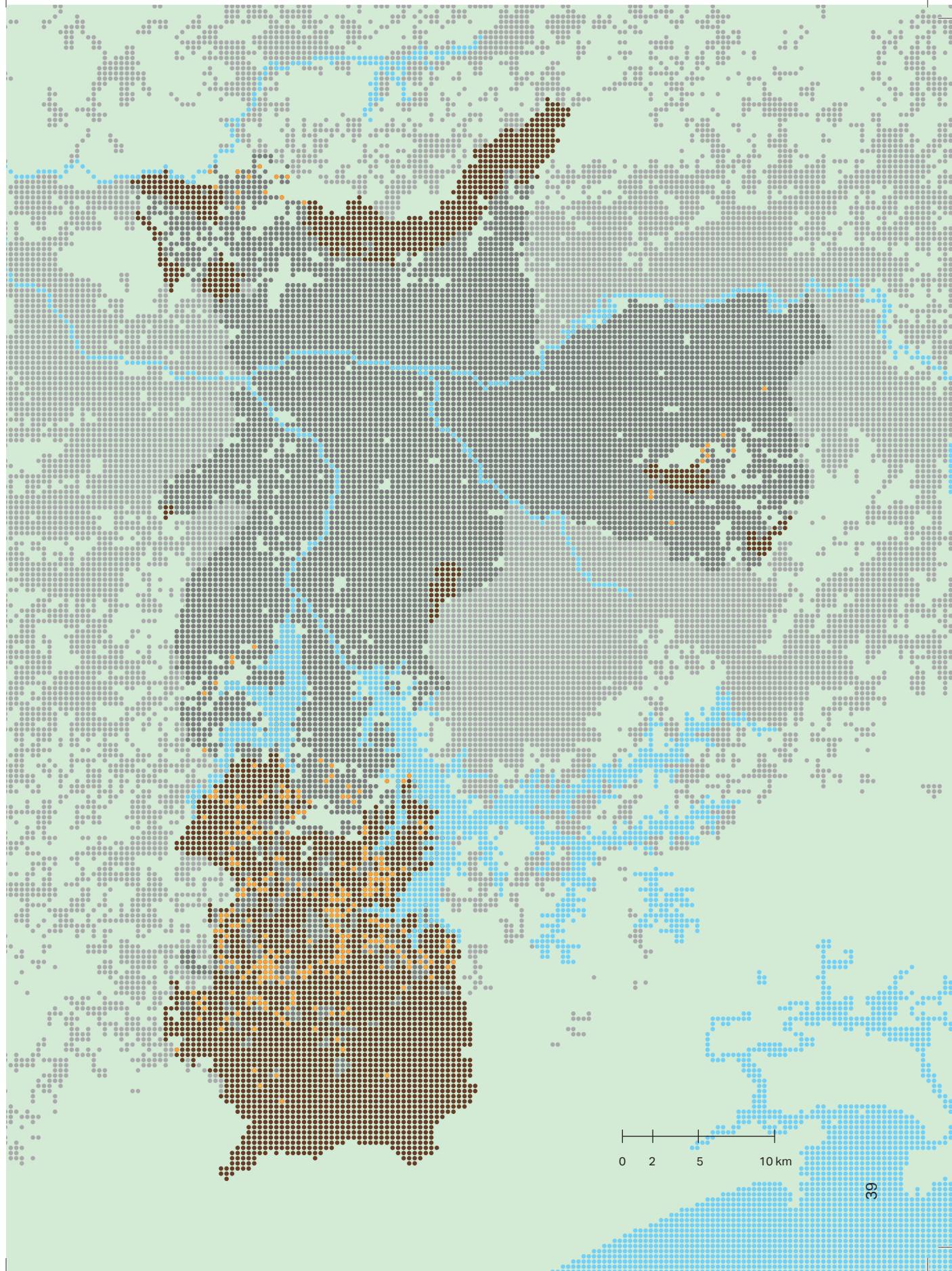
Spatial policy

The spatial dimension plays an important role in the strategy of fostering organic farming activities in the municipality. On the one hand, there are challenges related to the land where food is produced and farmed, especially concerning land regulation. On the other hand, the spaces for selling the produce, from street markets to small food retailers, also need to be considered. Lastly, transportation infrastructure is an essential component to guarantee that food is properly moved from production sites to commercial spaces.

The 2013-2016 administration took on the goal to review the urban policy's regulatory framework, including the Strategic Master Plan (PDE), the Land Use and Occupation Law (Zoning) and the Subprefecture's Regional Plans. During the participatory revision process of the Master Plan, civil society had a very specific claim related to agricultural land: to recover the municipality's Rural Zone. Recognizing the importance and relevance of this request, the Master Plan (Municipal Law no. 16,050, from July 31, 2014) defined the perimeter of a new Rural Zone for the city, valuing the distinct realities present in this territory. Additionally, this specific zoning perimeter facilitates access to lines of credit offered by state and federal financing programs as well as technical

The Rural Zone

-  Urban sprawl within the municipality of São Paulo
-  Urban sprawl in the metropolitan area
-  Rural Zone
-  Registered agricultural producers
-  Rivers and reservoirs





The participation of civil society in establishing the priorities of the Master Plan was crucial to highlight the importance of the Rural Zone, leading to the definition of strategic actions to promote local development. The Rural Roads Conservation Program is currently financing the recovery of 120 km of rural roads and bridges in Parelheiros and Mar-silac, in the south of São Paulo.

assistance for farmers, extending opportunities to develop farming activities and encouraging local farmers to remain in the Rural Zone. The Rural Zone will also expedite the step of geo-referencing rural properties, paving the way to the complex process of regularizing land ownership in the outskirts of the city.

The other spatial dimension associated to farming activity is that of commercial spaces for food retailing. In order to bring farmers closer to its consumer market, the local administration has been promoting many initiatives to guarantee specific spaces for selling organic and local production in municipal markets and street markets. Additionally, the development of a decree to create the Commercial Centers of Social Interest (CCIS) is underway, aiming at diversifying and spreading alternatives of food retailers throughout the city and, at the same time, creating job opportunities closer to poorer residential areas. The decree will allow the implementation of CCISs on the ground floor of social housing buildings. This initiative echoes the food security policy, bringing healthy food closer to the most vulnerable population.

Another important spatial obstacle to strengthening agricultural production is infrastructure. In order to address this issue, initiatives to improve rural roads have been carried out. The roadways in environmental protection areas have to be restored with particular precautions – for example,

they cannot be paved. In order to improve condition of rural roads without jeopardizing the environment, the roadways in the south of São Paulo were graveled, aligned, widened, and drained by means of a recent joint investment from both the municipal and state government. The interventions will benefit many farmers from the extreme south of the municipality, who will be able to move around more easily.

Lastly, regarding the planning system, other ongoing initiatives are worth mentioning, such as the formulation of a Sustainable Rural Development Plan (PDRS), set forth in the PDE, and the Subprefecture's Regional Plans, which will include a vision for articulating public projects aiming at promoting local development. In addition to these initiatives, which fall under the responsibility of local government, there is also the ongoing joint work between several municipalities and the state government to formulate the Integrated Urban Development Plan (PDUI) for the metropolitan area of São Paulo. This opportunity will enable the extension of this strategy, strengthening the agricultural production belt around the entire urbanized area of the metropolis.



Labor and entrepreneurship policy

The importance of rural areas and farming practices have been increasingly catching the attention of urban citizens, both as consumers of these products and services, or due to a growing interest in the social and environmental aspects of the agricultural production system itself.

Concerned with this reality and aiming at developing public policies for the rural areas, the Department of Agriculture and Supply – established within the Coordination of Food and Nutrition Security (COSAN) of the Municipal Secretariat of Development, Labor, and Entrepreneurship (SDTE) – is now responsible for the Urban and Peri-urban Agriculture Program (PRO-AURP), by means of the Municipal Decree no. 51,801, dated September 21, 2010. COSAN has also established, together with the State Secretariats of Agriculture and the Environment, the Protocol for Agro-environmental Best Practices in the municipality of São Paulo, setting forth the rules for sustainable rural production in water source areas, supporting agroecological production, and allowing the sale of fresh vegetables from farms in transition to organic production with proper certification. For implementing these initiatives, the department also relies on two Houses of Ecological Farming, facilities located in the south (Parelheiros) and the east (São Mateus), with experts responsible for providing technical support to local farmers.

São Paulo's Agriculture Program was launched in 2015, encompassing a set of important initiatives to promote local development, supporting the creation of jobs and income in the rural area by strengthening family farming activities.





The images illustrate two important actions promoted by local government to support rural activities: the newly introduced Agriculture Patrol, providing rural equipment for collective use; and the Houses of Ecological Farming, where several training activities are offered to local farmers, as well as technical assistance.

In 2015, the partnerships within the Municipality were extended with the launch of São Paulo's Agriculture Program, bringing together the Secretariats of Labor, Development, and Entrepreneurship (SDTE), of Green and Environment (SVMA), of Services (SES), of Urban Development (SMDU), of Education (SME), of Tourism (SPTuris) and of Coordination of Subprefectures (SMSP). The program aims at promoting local development by strengthening family farming activities and supporting the creation of jobs and income. Within the scope of São Paulo's Agriculture Program, for example, the Agriculture Patrol was introduced in early 2016, providing rural equipment for collective use, such as tractors and backhoes, which facilitates farming production for many family producers in the region.

Another important achievement linked to the value chain of family farming was the launch of a Family Farming Stand at the East Collection and Distribution Center. This stand not only guarantees a space for selling local produce, but also functions as an important warehouse for family farmers contracted by the School Feeding Program. Initially, farmers couldn't afford the logistics for distributing food to every school in São Paulo, since they had to rent a warehouse. The Secretariat of Development, Labor, and Entrepreneurship (SDTE) made available, then, this storage space in the East Collection and Distribution Center, which greatly facilitates the work

of family farmers in meeting the demands of institutional purchases for school meals.

Thus, the initiatives performed by the department include technical support to farmers focusing on best farming practices and organic farming transition; regularization of environmental, land, and social production issues; rural sanitation and proper solid waste disposal; access to rural credit, institutional purchases, and other federal public policies; support in the setting of urban gardens that provide food for local consumption; training and qualification programs for farmers; fostering production by introducing suitable techniques and correct use of inputs; and support for commercialization by providing specific space for selling the food produced by local farmers.

Encouraging farming within an ecological framework meets the needs of promoting food and nutrition security, guaranteeing access to a healthy diet especially for the population closest to the rural area, which has the lowest Human Development Index in the city. In addition, the policies increase access from the entire population to these products through street and municipal markets. Strengthening the consumer market for these products encourages farmers to remain in these areas and to continue with their farming.

Food and nutrition security policy

The initiatives undertaken by São Paulo's local government related to food and nutrition security are based on the regulatory framework set forth in the Municipal Law no. 15,920, dated December 18, 2013. This law laid down the foundation to implement and consolidate the Municipal Policy for Food and Nutrition Security (SAN), assigning the Municipality the duty to gradually guarantee a suitable and healthy diet to its population.

The law requires that conferences and hearings are held on the topic, and that a SAN Intersecretarial Chamber and a SAN Municipal Council are created. These bodies are the pillars of this policy. The Intersecretarial Chamber (CAISAN) is the body responsible for connecting the municipal secretariats to enable intersectoral actions related to food security. Currently, the Chamber gathers representatives of eight municipal secretariats, and has been focusing on building the First Municipal Food and Nutrition Security Plan, which will establish the main goals within this theme for the next four years. The Municipal Food and Nutrition Security Council (COMUSAN-SP) already existed, but it was restructured in 2015, with an arrangement of 2/3 of members from civil society and 1/3 from the government. Lastly, there is also a Municipal Confer-

Ecological farming close to the city promotes food and nutrition security, ensuring access to healthy and affordable food for the local population.





The initiatives to promote food and nutrition security include the recovery of the social character of public markets, the increase of organic-only street markets, and the allocation of produce purchased from family farmers to the Food Bank, which is then distributed to families in vulnerable conditions.

ence for Food and Nutrition Security; the sixth edition was held in 2015, with the participation of many vsectors from civil society and the government, resulting in the draft of 78 proposals.

Boosting these initiatives, the Municipality, within the scope of institutional purchases, signed in 2013 the Term of Adhesion to the Federal Food Acquisition Program (PAA) to purchase produce from family farming. Purchases under PAA go to the Food Bank, installed in the first Food and Nutrition Security Reference Center, inaugurated in 2013 in the neighborhood of Vila Maria. The Food Bank guarantees the distribution of healthy food to 400 registered social assistance entities, benefiting thousands of people in conditions of social and economic vulnerability.

In order to encourage other types of outlet for local farming production, the Municipality has promoted the launch of new organic-only street markets, as well as increasing the number of exclusive stalls for organic and local producers in conventional street markets. Currently, there are five organic-only street markets and approximately 880 conventional street markets. Added to that is the recovery of the social character of thirty-two municipal markets, as a means to guarantee more affordable food products, gradually including produce from local family farming in these markets through exclusive retail spaces.

In addition, several events, seminars, meetings, and debates have been held to mobilize farmers, organized civil society, and representatives of different governmental areas. Also, a number of initiatives aim at extending training and awareness of the overall population in relation to the issue. The Food and Nutrition Education Program, for instance, is an important strategy to encourage the population to adopt healthy eating habits through education and communication initiatives. Its main focus is to rescue practices that value production and consumption of low cost food with high nutritional value.

Among the program's initiatives are food and nutritional education projects in municipal markets, street markets, and communities, training projects for handlers, and workshops for income generation. Added to that are thirty-two Greenhouse Schools, one per subprefecture; hundreds of School Gardens, so students can learn about farming; and the Community Gardens Program, which currently has over 100 people in social vulnerability conditions registered, who receive a scholarship to attend training and develop their activities in the community.

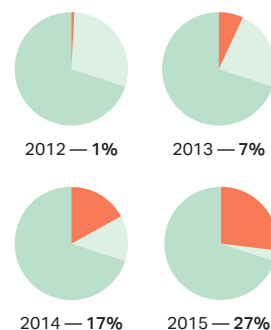
School feeding policy

Rural development can be driven by institutional purchases. In addition to guaranteeing fair prices for family farmers, this policy guarantees quality meals for target stakeholders. Within that scope, since 2012, São Paulo's local government has been operating the Federal Law no. 11,947, dated June 16, 2009, which requires that at least 30% of federal transfers for schools meals are used to purchase food from family farming. Recently, the Municipal Law no. 16,140, dated March 17, 2015, established that the inclusion of organic food in meals served at municipal schools is mandatory, reinforcing the national policy and adding an extra layer to it, concerning organic food. To do so, this law allows the possibility of spending up to 30% more for this product compared to the price of a similar conventional food.

The policy of institutional purchases for school meals is implemented based on three main guidelines. From the food safety perspective, purchases focused on less perishable products, with centralized delivery to make logistics easier. In relation to scale, the acquisition of consumables in a higher volume guaranteed considerable advances right from the start of enforcing the law. Lastly, the principle of universality was adopted, considering that purchases must be able to meet the different educational units' profiles.

Federal transfers for school meals in São Paulo

The Federal Law 11,947/2009 requires that at least 30% is used in purchasing food from family farming



- Total: R\$ 100 million
- (US\$ 25 million) 30% of total
- Percentage of the federal transfer used in purchasing food from family farmers





Besides increasing the purchases from family farming, the school feeding policy comprises the progressive inclusion of organic food and fresh ingredients in school meals, training and motivation of the kitchen staff, and food education activities for the children.

A significant advance was observed in relation to 2012, when a single purchase was made (parabolized rice) amounting to R\$ 564,000 – less than 1 percent of the federal funding transfers and directly benefiting only 29 farming families. In 2013, R\$ 6,053,400 (7 percent of federal transfers) was applied to food purchases from 343 families. In 2014, the amount was increased to R\$ 16,043,120 (17 percent) in contracts that benefited 910 families, and in 2015, the contracts with family farming were raised to R\$ 26,875,500 (27 percent), with 1,747 families connected. The goal for 2016 is to reach the minimum set forth by federal law of 30% of federal transfers in family farming contracts. The goal also considers including purchases from farmers in the municipality of São Paulo, as the current purchases are in most part coming from other municipalities in the state of São Paulo.

The products from family farming used in school meals are very diverse, such as banana, cassava flour, citric fruits, yogurt, grape juice, and orange juice. Today, almost all the rice and beans distributed in the municipal school system come from family farming. With the policy of institutional purchases, local government guarantees the quality of school meals, while supporting and promoting rural development. In this context, many social and economic advances deserve noteworthy mention.

First, institutional purchases presume organization, mainly because of technical requirements. Thus, it leads farmers to

create networks, associations, and cooperatives, bringing them closer together. Organized groups understand that to achieve the volume and quality of food required by these purchases, they need to unite. Therefore, they create a new economic logic, with less competition and more solidarity.

Second, under the perspective of economic development, the amount paid by local government, in some cases, is 100% higher compared to the amount received by farmers in a conventional sale. The amount paid by local government is not excessive. The current economic rationale that values more the capital gains of intermediaries than of farmers. Institutional purchases reverse that situation, guaranteeing a fair market value to farmers.

Lastly, institutional purchases for school feeding can be understood as a policy that entails an entire production process. As part of a value chain, the policy is expanded by introducing this issue in discussions with students at municipal schools through educational activities. Food is also about education, and, in that sense, acquisitions from family farming take on a pedagogical role, involving school cooks and vegetable gardens as tools that disseminate this process.



Solid waste policy

The municipality of São Paulo produces 12 thousand tons of domestic waste daily, over half of which is organic waste. Currently, almost all organic waste is sent to landfills, where it generates significant environmental impacts such as emission of methane, one of the most dangerous greenhouse effect gases, as well as toxic liquid that require major expenditures for its adequate collection, transportation, and disposal so that it doesn't contaminate the environment.

In order to change this paradigm, local government must set the example for the population, separating institutional organic waste at the origin and composting it. That is the objective of the Sustainable Markets and Gardens Project, starting by composting 400 tons of organic waste daily, which comes from street markets (produce waste) and tree and gardening pruning waste (tree trunks, thin branches, leaves, and grass).

These types of waste are the noble part of organic waste, since they are in their natural state, with no contamination. They are also easy to separate at the origin, considering all waste generators are easily traceable and already have agreements with local government. Additionally, waste from street markets and from tree pruning complement each other in the composting

With a network of composting yards, the city can transform more than 400 tons of waste generated daily by street markets and tree pruning services into 50 tons of organic fertilizer.







The first decentralized composting yard installed in the city processes five tons of organic waste from street markets and tree pruning collected daily at Lapa through a low cost composting technology, generating a high-quality compost that is very suitable for organic farming.

process: street markets' waste is wetter and richer in nitrogen while the pruning and garden waste is drier and richer in carbon. That is why the project is called Sustainable Markets and Gardens Project. The First Decentralized Pilot Composting Yard is currently processing five tons of produce waste from the 26 street markets and all pruning and gardening services from the Subprefecture of Lapa, one of the 32 subprefectures of the municipality, housing 305,000 inhabitants.

Brazilian scientists, focusing specifically in urban environments in tropical climates, developed the technology chosen for this pilot experience. It is a low cost composting process (minimum use of labor, equipment, power, and water), with high control of environmental risk (small statically cultivated plot with natural or passive aeration and temperatures above 55°C). It also guarantees high-quality compost that is certifiable even for organic farming. These characteristics enable the decentralization of compost to sites close to the waste origin, thus decreasing the costs drastically, as well as decreasing greenhouse gas emissions caused by the daily transport of waste to landfills.

In the coming years, four other Composting Centers will be implemented, with mechanized operation and a capacity of processing 50 tons/day each, as well as 27 Decentralized Composting Yards, with manual operation and a capacity of processing 3-10 tons/day, solely for organic

waste from street markets and pruning and gardening services.

With the consolidation of this network of Decentralized Yards and Centers, the city of São Paulo will be able to produce approximately 50 tons/day of high quality organic compost, which will be destined to institutional purposes in landscaping and environmental recovery of degraded areas, but mainly as an incentive to sustainable organic farming production of healthy food in the municipality's Rural Zone. This destination will shorten the distance between production and consumption, thus creating an area of sustainable development that recovers the natural fertility of soil, sequesters carbon, regulates water flow, and acts as a fence for protecting forest areas that preserve biodiversity, springs, and rivers.

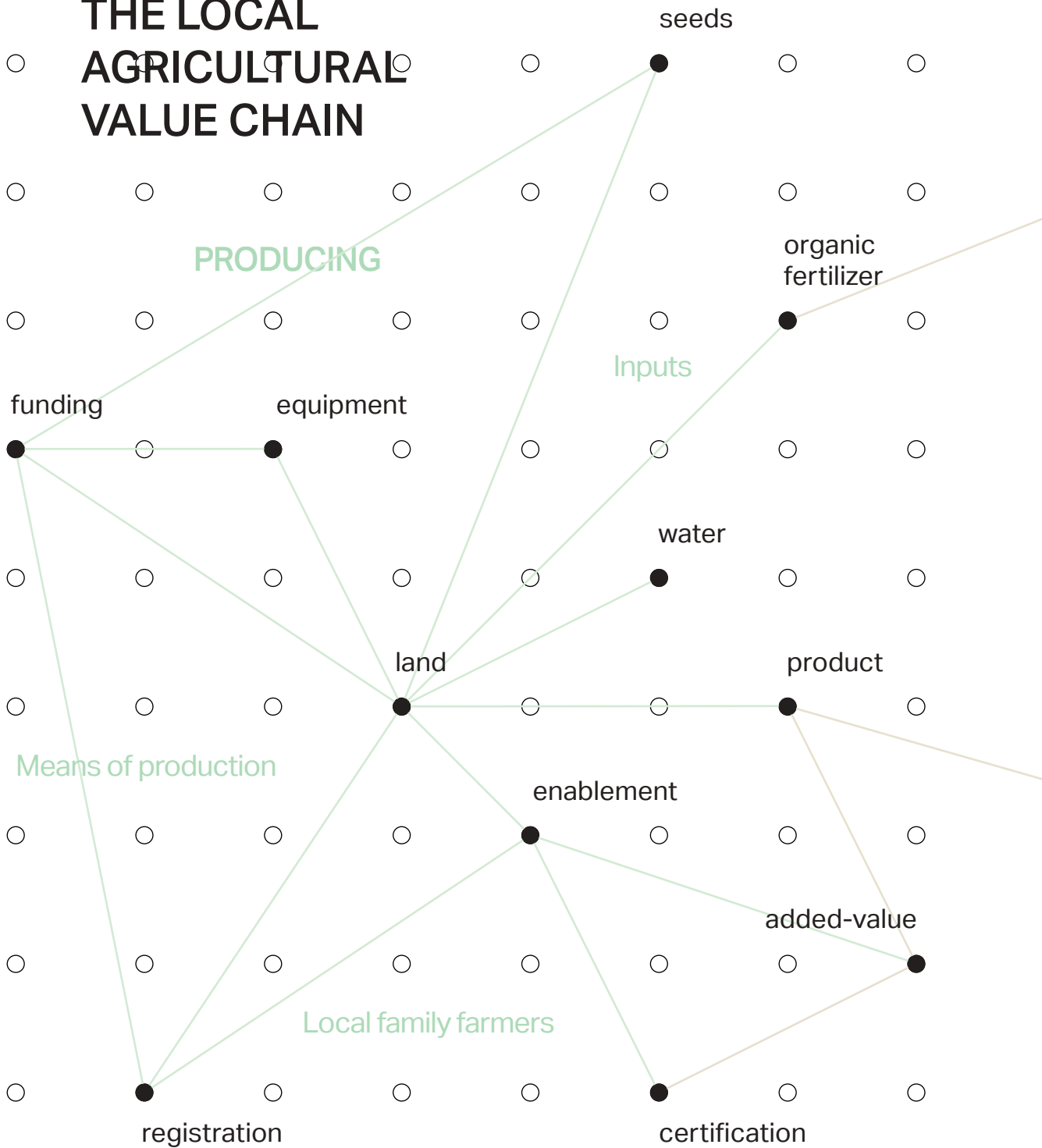


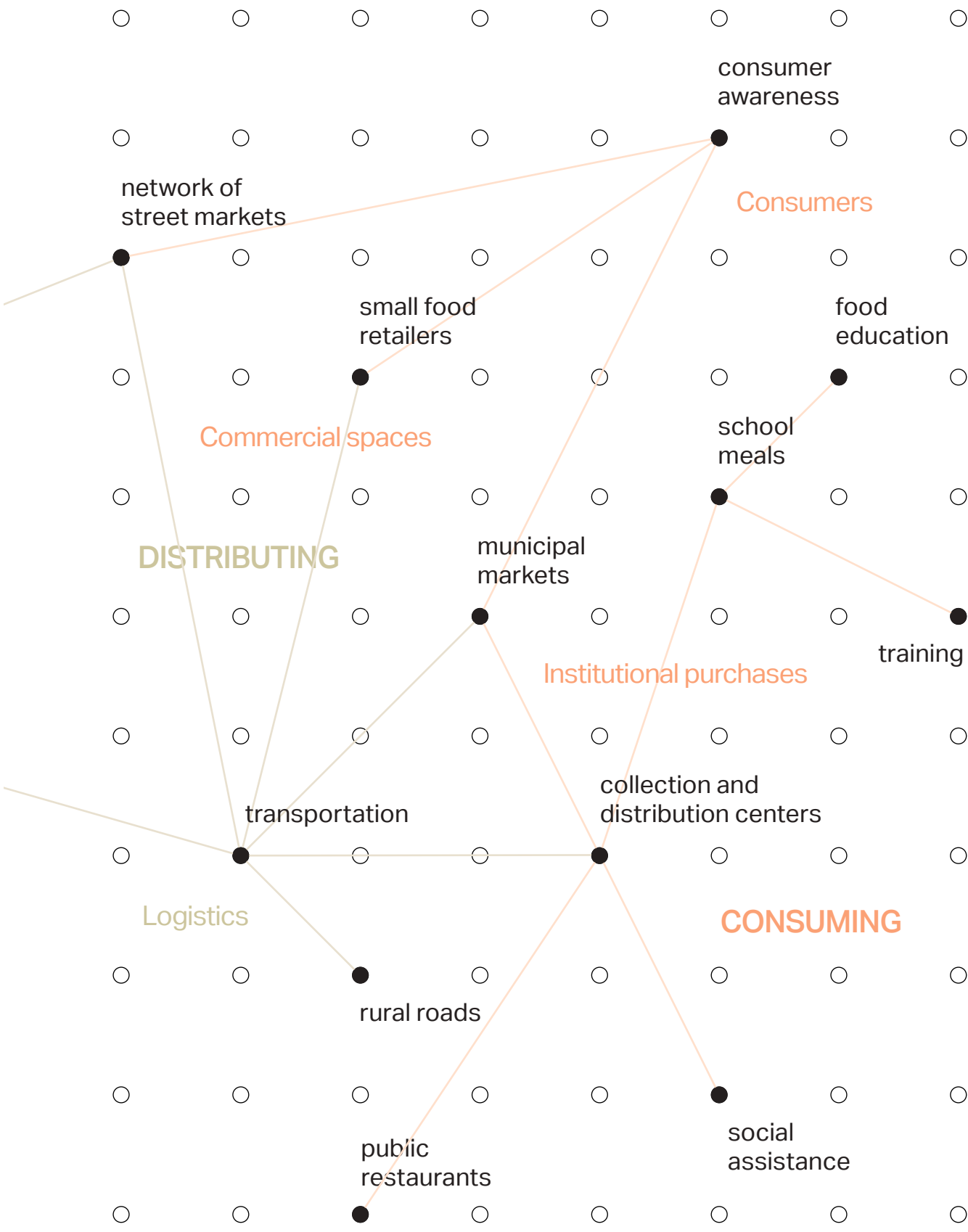


LOCAL AGRICULTURAL VALUE CHAIN

Linking multilevel
government programs,
regulations, and projects

THE LOCAL AGRICULTURAL VALUE CHAIN





funding

National Program for Strengthening Family Farming (PRONAF)

This federal funding program offers lines of credit with very low interest rates to family farmers. After discussing with the producers, a specific and appropriate line of credit is recommended for each situation. There are several possibilities: defrayal of harvest; investments in machinery, equipment or production infrastructure; seeds; and agricultural or non-agricultural services. In order to be able to access this funding program, it is necessary to obtain a Declaration of Aptitude to PRONAF (DAP).

FEDERAL DECREE 1,946/1996

Special Fund for the Environment and Sustainable Development (FEMA)

This municipal fund, established in 2001 and operating since 2004, aims at supporting projects developed by civil society that promote sustainable use and recovery of natural resources, environmental research and activities, and agroecological production. In 2014, the fund earmarked R\$ 1.5 million to finance projects encouraging agroecology and permaculture practices.

MUNICIPAL LAW 14,887/2009

MUNICIPAL DECREES

52,153/2011 AND 52,388/2011

equipment

Agriculture Patrol

The Municipality recently acquired tractors, excavators, and other farming equipment for collective use in the rural area. The Agriculture Patrol will enable small local farmers, who can't afford proper machines, to improve infrastructure, terracing, and soil handling, as well as facilitate the work involved in operations such as planting seedlings and the reforestation of areas of environmental protection with proper techniques.

land

Environmental and Land Regularization Program

The program is based on a federal and municipal partnership involving the National Institute of Colonization and Agrarian Reform (INCRA). It aims at facilitating and providing proper registration and regularization of rural properties, which is one of the major barriers for accessing funding or lines of credit, as well as municipal and federal incentive programs for rural production.

Payment for Environmental Services

This environmental management tool is featured in the new Master Plan. It aims at inducing the preservation of areas with water production and fragments of Atlantic Forest through financial or other types of compensations. Agroecological farming is one of the activities that enable the preservation of natural resources. The extra

income encourages the most vulnerable producers to stay in the rural area and to invest in agroecological farming.

MUNICIPAL LAW 16,050/2014

Protocol for Agro-environmental Best Practices

Under the Sustainable Guarapiranga Project from the state government, this agreement is signed by both the municipality and the state and it aims at encouraging agroecological practices in areas of water source protection – specifically around the Guarapiranga reservoir, which supplies about 3.9 million people in the metropolitan area. The protocol enables farmers in transition from conventional to organic production (a costly process that lasts 3 to 5 years) to access the consumer market, selling their produce under a special certified condition of “farmer under agroecological transition”.

Rural Zone

The Rural Zone had been extinguished since 2002. During the participatory process of reviewing the Master Plan, the organized civil society requested the return of the Rural Zone, since it would allow access to national lines of credit for family farming. The demand was incorporated in the new Master Plan and a specific zoning perimeter was demarcated, comprising areas of environmental preservation, ecotourism, and production of food and water.

MUNICIPAL LAW 16,050/2014

Georeferenced Environmental and Agricultural Information System

This forthcoming system will be comprised of a database that can guarantee robust information about the rural area, which is now one of the most important challenges

to overcome in the design of appropriate public policies. The georeferenced data of rural properties, rivers, and forest remnants will be collected through the same partnership with INCRA under the Environmental and Land Regularization Program.

Municipal Plan for Sustainable Rural Development

The Master Plan sets as one of its main guidelines the formulation of a Municipal Plan for Sustainable Rural Development (PDRS). The plan is currently being drafted, based on a multifunctional understanding of the rural territory as a space of production and diverse economic activities; social and cultural manifestations; and natural resources and biodiversity. It will contain guidelines for the economic, social, and spatial development of the rural zone.

organic fertilizer

Sustainable Markets and Gardens Project

The first pilot experience from this project is a composting yard at the Subprefecture of Lapa. Since 2015, the facility receives 5 tons of organic waste daily from all 26 street markets within this borough and from tree pruning. In 2016, another 4 composting yards will be launched in the city. The technique used is low-cost and produces an organic compost with high quality and free of pathogens. The resulting organic fertilizer can be used in local gardens and parks, as well as donated to local organic family farmers, who have difficulty in producing or accessing good quality organic fertilizer.

registration

Rural Environmental Register (CAR)

Established in 2012, CAR is a national system of georeferenced information of rural properties, with data regarding areas of environmental, social, and public interest. Its main goals are to control deforestation and allow environmental and economic planning of rural areas. In São Paulo, a Citizenship Room from INCRA was installed at the House of Ecological Farming in order to facilitate the registration of local producers.

FEDERAL LAW 12,651/2012

Declaration of Aptitude to PRONAF (DAP)

DAP is a document issued according to the annual income and the activities undertaken in a rural property, directing the farmers to specific lines of credit to which they are entitled. This document allows access to PRONAF's lines of credit. The Ministry of Agrarian Development is responsible for supervising the DAP emission process. By 2016, 119 DAPs had been issued in the city of São Paulo: 88 were active and 31 inactive.

enablement

Technical Assistance and Rural Extension Program (ATER)

Coordinated by a department within the Ministry of Agrarian Development, the services of technical assistance and rural extension aim at orienting and guiding small farmers. This continued non-formal educational service intends to improve family farmers' production systems, processes, and management through workshops with local stakeholders. The agents who provide technical assistance also indicate alternatives to family farmers for accessing resources.

FEDERAL LAW 12,188/2010

National Program for Education in Agrarian Reform (PRONERA)

PRONERA is a federal program aimed at supporting educational projects that focus on issues related to the development of rural areas. Through partnerships between INCRA and social and union organi-

zations, education institutions, and local and state government, PRONERA implements high school, technical or higher education courses, besides training local educators.

Houses of Ecological Farming

There are currently two Houses of Ecological Farming in the city, one at Parelheiros and another at São Mateus. These municipal facilities are located close to where family farmers are concentrated (in the south and east), and they operate as centers of technical assistance to farmers, as well as a facility to support the implementation of PROAURP's policies.

MUNICIPAL DECREE 51,801/2010

Urban and Peri-urban Agriculture Program (PROAURP)

PROAURP is a municipal inter-secretarial program aimed at supporting local agricultural

production, both in the rural zone and in the city. The program facilitates the organization of family farmers, encourages small food retailers and street market vendors linked to local producers, and provides technical assistance for implementing vegetable gardens and orchards in the city.

MUNICIPAL LAW 13,727/2004

MUNICIPAL DECREE 51,801/2010

Local Development Agents

Municipal program developed by the recently created São Paulo Development Agency to select people with extensive knowledge of local economic dynamics in each Subprefecture. The goals of Local Development Agents are to improve the connection between the community and public policies, considering local potential and demands, and to ensure an open and participatory process in developing local economic development policies.

Support from civil society organizations

Several civil society organizations work alongside local farmers. Most of them subscribed, in 2012, an important document called Platform to Support Organic Farming in the City of São Paulo: Assoc. de Agricultura Orgânica (AAO), Assoc. Biodinâmica (ABD), Agricultura Natural de Campinas (ANC), Assoc. de Produtores Orgânicos de São Mateus (APOSM), Assoc. Holística de Participação Comunitária Ecológica (AHPCE), Casa do Rosário, Centro Paulus, Cooperativa Agroecológica dos Produtores Rurais e de Água Limpa de São Paulo (Cooperapas), Fundação Mokiti Okada, Instituto de Defesa do Consumidor (Idec), Instituto Alana, Instituto 5 Elementos, Instituto Kairós, Instituto Pedro Matajs, Instituto Pólis, Instituto Refloresta, MOA International Brasil, Slow Food São Paulo, Campanha Permanente Contra os Agrotóxicos e Pela Vida, and Movimento Boa Praça.

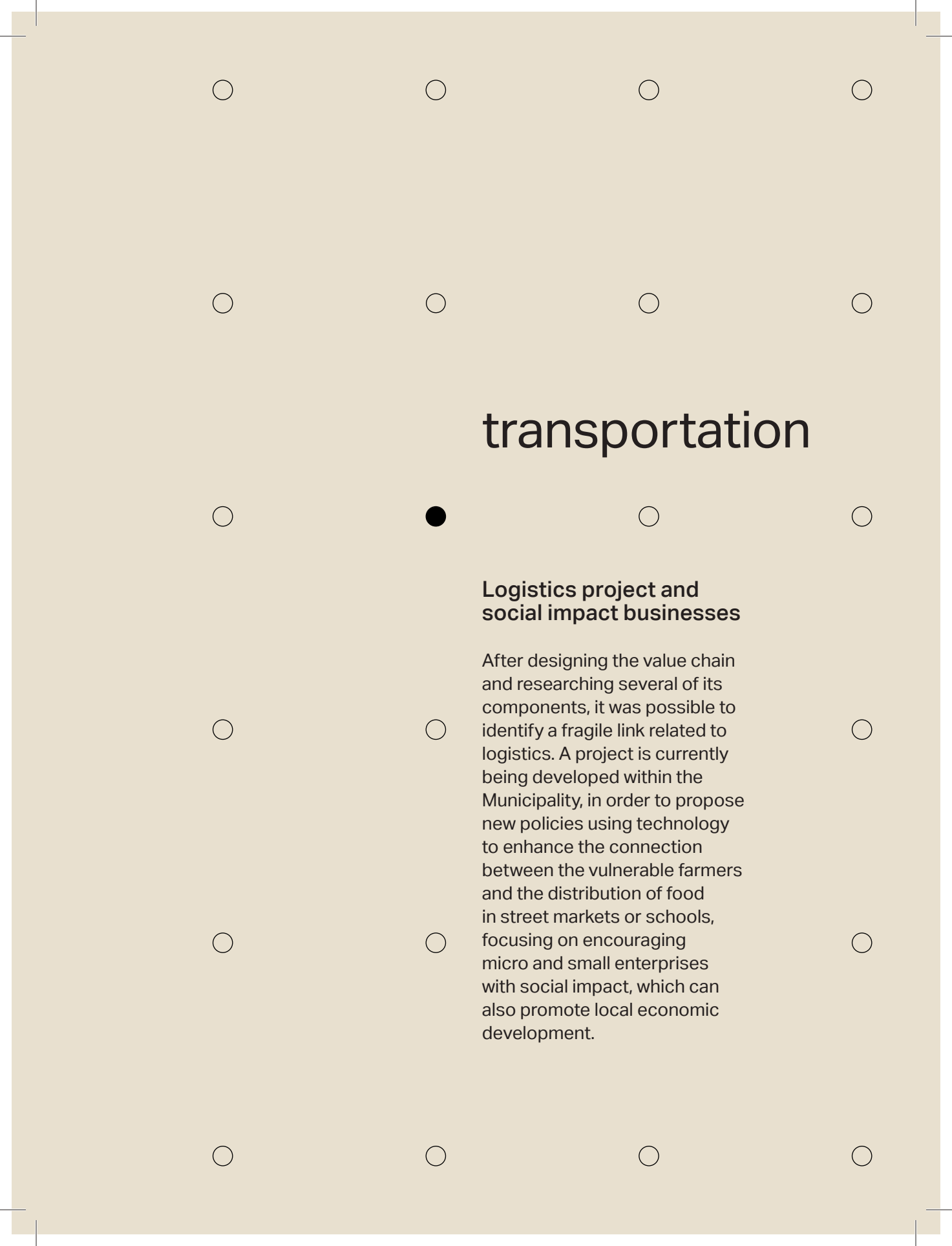
certification

National Register of Organic Producers

In Brazil, organic farmers must be registered at the National Register of Organic Producers in order to be able to sell their products with the label “organic” in supermarkets, shops, and restaurants. The producer usually requests a certification by audit, but the annual cost for that is considerably high, making it difficult for family farmers to access this type of certification. Alternatively, for direct sales in street markets or institutional purchases, producers can ensure that the production is organic through procedures of social control, such as Organizations of Social Control or Participatory Systems of Guarantee.

FEDERAL LAW 10,831/2003

FEDERAL DECREE 6,323/2007



transportation

Logistics project and social impact businesses

After designing the value chain and researching several of its components, it was possible to identify a fragile link related to logistics. A project is currently being developed within the Municipality, in order to propose new policies using technology to enhance the connection between the vulnerable farmers and the distribution of food in street markets or schools, focusing on encouraging micro and small enterprises with social impact, which can also promote local economic development.

rural roads

Better Road Program

This state program enables joint efforts between the state and local governments for recovering unpaved rural roads. Recently, the Municipality of São Paulo signed an agreement with the State to finance the recovery of 13 km of rural roads between Embura and the State Park of Serra do Mar, in the south, where most of the family farmers are concentrated. The condition of the roads is crucial to enable the logistics of transporting the production from the extreme south of the city to its urban center.

STATE DECREE 41,721/1997

Rural Roads Conservation Program

Municipal program that promotes the conservation of rural roads within the municipality, in order to preserve natural resources, prevent soil erosion, and ensure safe transportation for farmers. The program is currently financing the recovery of 120 km of rural roads and bridges in Parelheiros and Marsilac, in the south of São Paulo.

MUNICIPAL DECREE 55,361/2014

network of street markets

Organic-only street markets

Currently, there are around 880 conventional street markets in São Paulo. The goal is to increase the number of organic-only street markets, as well as decentralize them throughout the city, especially closer to vulnerable areas. Most of the existing organic-only street markets have been installed inside municipal parks, as a joint effort between SDTE and SVMA.

Exclusive stalls in conventional street markets

Besides expanding the network of organic-only street markets, the Municipality also has a policy focused on making more exclusive stalls for organic production available in conventional street markets. In 2013, 32 spots were opened, prioritizing family farmers. In 2015, there was a second public call for 161 spots for organic and family producers in 9 different street markets. The policy aims at facilitating direct opportunities for local farmers to sell their produce to consumers in the urban area.

small food retailers

Commercial Centers of Social Interest (CCIS)

A municipal decree is currently being drafted to allow the installation of small businesses and food retailers on social housing buildings. These spaces, which will be called Commercial Centers of Social Interest (CCIS), will facilitate access to healthier food by the most vulnerable population, offer decent work opportunities closer to where people live, and promote mixed use in the city.

Small social impact food retailers

Several initiatives by the civil society focusing on fair trade have appeared in the city recently. They promote new types of social businesses based on economic solidarity by selling organic products for the price set by the producer, establishing a horizontal relation between producers and retailers.

A decorative grid of circles is overlaid on the page. It consists of 16 empty circles arranged in a 4x4 grid, with one solid black circle at the intersection of the second row and second column.

municipal markets

Exclusive spaces in local markets

The local municipal markets play an important role in social policies of food security, since they provide access to healthier food with lower prices. The Municipality has been fixing spaces in these markets exclusively for local and organic family producers, guaranteeing a space for direct sale to consumers. Through partnerships with civil society organizations, the Municipality has also been promoting initiatives in local market for raising awareness about organic food and gastronomic diversity.

collection and distribution centers

East Collection and Distribution Center

Opened in 1995 in an area of 7,600 m², the collection and distribution center works as a wholesale with food retailers, as well as a warehouse. In 2015, the Municipality inaugurated a special space exclusively for family farming products from co-ops. This space also works as a warehouse for school feeding purchases, since the farmers couldn't afford a place for logistics in São Paulo, where the food could be stored and then distributed to the schools.

South Collection and Distribution Center

The Municipality is looking to implement a project similar to the East Collection and Distribution Center in the south, where most of the agricultural production is concentrated. This distribution center would be even more focused on local and family production, offering spaces to help farmers organize to meet the demands of institutional purchases and housing the collective farming equipment provided by the Municipality, among others.

social assistance

Food Acquisition Program (PAA)

Coordinated by the Ministry of Social Development and Hunger Alleviation, this federal program addresses one of the main obstacles for family farming: commercializing the production. Through federal funding, the program enables states and municipalities to purchase produce from family farmers without a bidding process. The food is then distributed to vulnerable families and social assistance organizations, food banks, and popular restaurants. The contract with PAA recently signed by the Municipality of São Paulo, for the amount of R\$ 3.2 million, was the largest yet realized by this program.

FEDERAL LAW 12,512/2011

FEDERAL DECREE 7,775/2012

Food Bank

The Food Bank is a municipal facility that welcomes products donated or purchased through the PAA, and allocates the

food to social assistance entities, which then distribute to vulnerable families. The main goals of the Food Bank are fighting nutrition insecurity and food waste. Currently, São Paulo's Food Bank works at the Reference Center for Food and Nutrition Security, in Vila Maria neighborhood.

MUNICIPAL LAW 13,327/2002

MUNICIPAL DECREE 42,177/2002

Municipal Plan for Food and Nutrition Security

According to the National System of Food and Nutrition Security (SAN), each municipality must establish an Intersecretarial Chamber of SAN, promoting cross-cutting policies. One of the most important actions is drafting a Municipal Plan for Food and Nutrition Security, which should contain integrated guidelines for local policies in this field. Currently, a working group with members of eight secretariats is developing the plan for the city of São Paulo.

FEDERAL LAW 11,346/2006

school meals

National School Feeding Program (PNAE)

PNAE is a federal program that aims at increasing the availability of healthy food in schools. The program is based on federal transfers to states and municipalities according to the number of students enrolled in public schools. It also promotes several initiatives to inform and educate the population and public officials about healthier school meals.

RESOLUTION FROM THE NATIONAL FUND FOR EDUCATION DEVELOPMENT 26/2013

National School Lunch Act

This federal law from 2009 determines that at least 30 percent of the federal funds received through PNAE by states and municipalities should be used for purchasing


products from family farming. It also establishes that the government should prioritize institutional purchases from local farmers, as well as from producers from agrarian reform settlements and traditional indigenous communities when possible.

FEDERAL LAW 11,947/2009

Municipal School Lunch Act

The municipal law regarding school meals mirrors the federal law, prioritizing institutional purchases from family farmers, but also establishes the progressive inclusion of organic food in school meals in São Paulo. In order to enable this policy, this regulation allows the Municipality to pay up to 30 percent more for organic products compared to a similar conventional product.

MUNICIPAL LAW 16,140/2015

A decorative grid of circles is overlaid on the entire page. The grid consists of 20 circles arranged in 4 rows and 5 columns. The circles are light gray with thin black outlines. One circle, located in the second row and third column, is solid black, serving as a focal point for the text.

training

Training for School Cooks and Staff

Buying healthier food and products from family farmers is not enough to provide a healthier meal for students. The Coordination of School Feeding also promotes workshops with school cooks on topics such as nutrition, health, and food preparation techniques. By inviting local chefs for the workshops and promoting competitions for the best healthy recipes, the Municipality is able to keep school cooks motivated and prepared to provide nutritious food for the kids.

consumer awareness

Reference Center for Food and Nutrition Security

This municipal facility provides support for educational activities and research among different areas of knowledge related to food and nutrition security. It aims at promoting innovation and monitoring policies, as well as creating social awareness about the issue. São Paulo's first Reference Center for Food and Nutrition Security, which also houses the Food Bank, was established in Vila Maria neighborhood in 2015.

Public awareness campaigns

Several municipal campaigns focus on combating overweight and obesity. One of the most significant initiatives, launched in 2014, is called Health Beyond

the Table, undertaken by the Secretariat of Health. The program articulates all basic health units, specialized units, and hospitals in campaigns to promote healthier food habits and encourage the practice of physical activities.

Home Composting Project

Under a broader policy of integrated management of solid waste in the city, this municipal pilot project focuses on enabling composting of domestic organic waste, aiming at reducing the amount of waste going to landfills. Through a partnership with civil society organizations, the project distributed 2,000 composters to several households to test this alternative, gather information and evaluate the population's engagement in the process.


food education

Greenhouse School Project

There are currently thirty-two municipal greenhouse schools, one in each Subprefecture, where people can engage in free and open courses about vegetable garden preparation techniques, planting methods, and how to make compost. One of the main goals is to stimulate urban agriculture and community gardens in the city.

School Gardens Project

There are currently hundreds of municipal vegetable gardens installed in public schools. The activities developed are part of a set of actions related to food and nutritional education with students. There are several initiatives, from the produce gardens at the Unified Centers of Education (CEUs) to the federal-funded project Educating with School Gardens and Gastronomy (PEHEG).



Designing value chains, connecting sectorial actions

Transforming, renewing, and incorporating alternative methodologies for public policy design are great challenges to be faced by local government. In increasingly complex cities, mastering technical and spatial aspects in the design process is no longer enough. The city calls for the capacity to build agreements, articulate stakeholders, and integrate actions within common territories, shifting design to new fields of interests following social demands.

Connecting the dots according to the multiple components and flows of a value chain can be a useful approach to structuring public policies. It also enables a framework for dealing with the urban economy through design. The virtue of this experiment is precisely that of operating a set of ongoing initiatives, revealing a previously hidden potential that is much more far-reaching than the scope of any fragmented element.

The proposal of strengthening the family farming value chain creates the conditions for renovating the relation between rural and urban territories, while recovering the dignity of farm life in a sustainable development perspective. A myriad of actions, regulations, and programs conducted by different levels of government and organizations of civil society address issues related to agriculture and food.

In order to deal with such complexity, this experiment relies on the understanding of the food value chain as a framework for integrating these initiatives. This methodology allowed the recognition and translation of connections among multiple elements in an understandable and dynamic design, which further reveals the opportunities and fragilities of this structure.

The idea of the value chain is based on a systemic understanding of food production, distribution, and consumption processes. This structure can be unfolded into components such as inputs, means of production, logistics, retail spaces, and institutional purchases, involving multiple stakeholders, like family farmers, carriers, retailers, and final consumers. By mapping the necessary elements and flows for this value chain's functioning, a basic framework can be established for uncovering connections among public policies from different sectors, such as environmental, spatial, entrepreneurship, solid waste, and educational policies.

From the production side of the value chain, access to proper equipment and raw materials (seeds, fertilizers, water), as well as funding and financing alternatives, should be facilitated. For such, the new Rural Zone set forth in the Master Plan gives

farmers the possibility to access federal lines of credit whereas the Agriculture Patrol acquired by the Municipality provides appropriate equipment to improve farming procedures.

Additionally, capacity building programs enable local farmers to transition into organic production, increasing the protection of natural resources, which is particularly important in water source areas. Initiatives by civil society organizations – many of them feasible due to FEMA's funding opportunities – are combined with the training offered by experts from the Houses of Ecological Farming to provide technical assistance to vulnerable farmers.

In order to give recognizable added value to organic produce, farmers must have production accreditation. For so, it is important to support procedures of social control among the farmers, in compliance with the Federal Law of Organics, which allow them to sell organic products through direct sale, such as for institutional purchases.

Then, the food distribution stage requires suitable infrastructure and access to warehouses. The Houses of Ecological Farming together with the East Collection and Distribution Center currently play the role of providing spaces where the

local production can be stored and, then, distributed, while the recent public investment in recovering rural roads in the south, with the necessary environmental attention, facilitates the process of distribution.

On the consumption side, institutional purchases for school meals assure a stable and predictable market for family farmers, while also pushing the conditions for production organization. The dimension of such purchases – almost two million meals served daily, and 2,300 tons of vegetables and fruits consumed monthly – represents an expressive consumer market, scaling up the entire value chain.

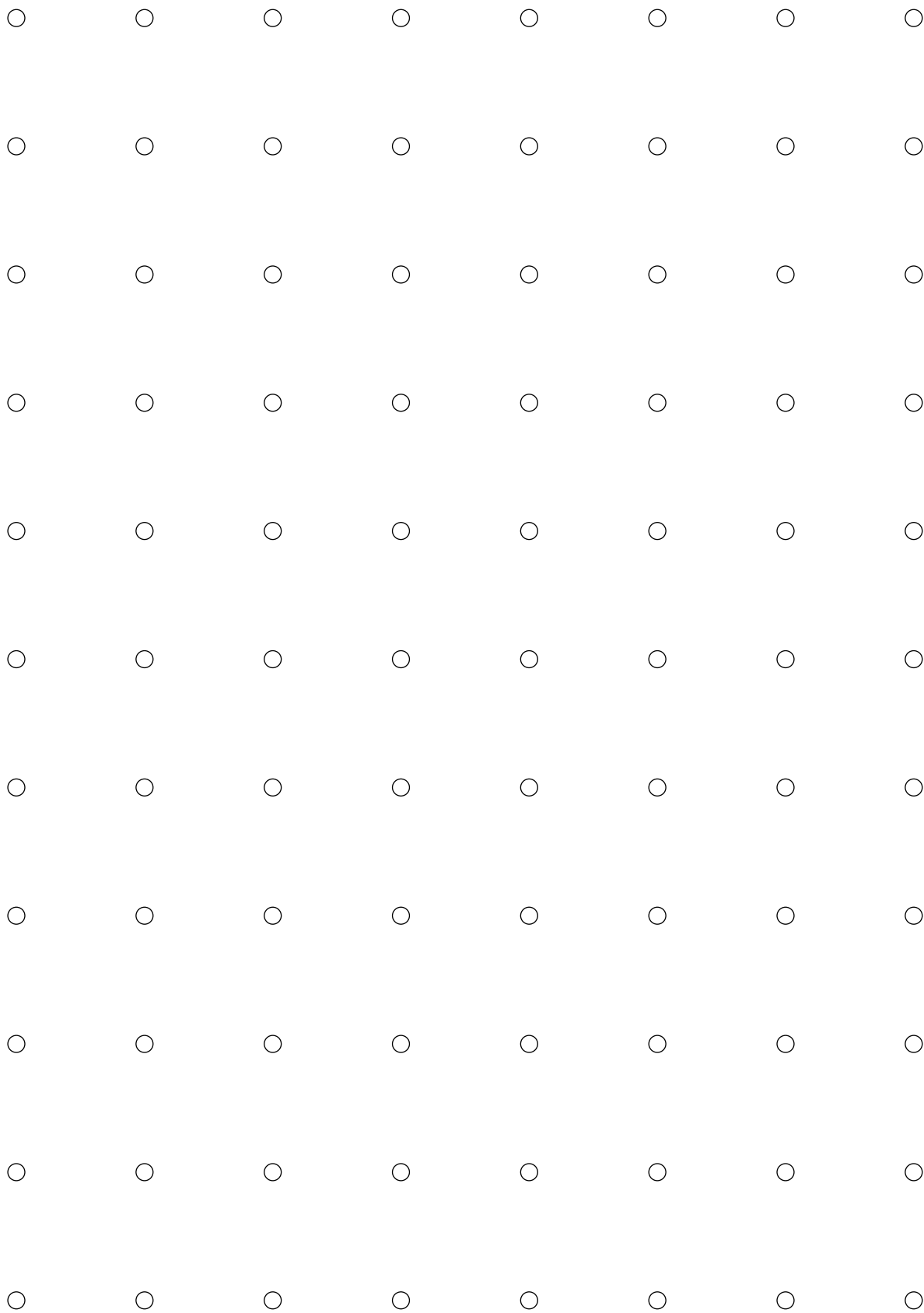
In addition to institutional purchases, locally produced organic food also reaches final consumers through several commercial spaces, such as the network of street markets, municipal markets, and small food retailers. The increase in organic-only street markets, exclusive organic stalls in conventional street markets, and stands for organic and local production in municipal markets expands the alternatives of distribution.

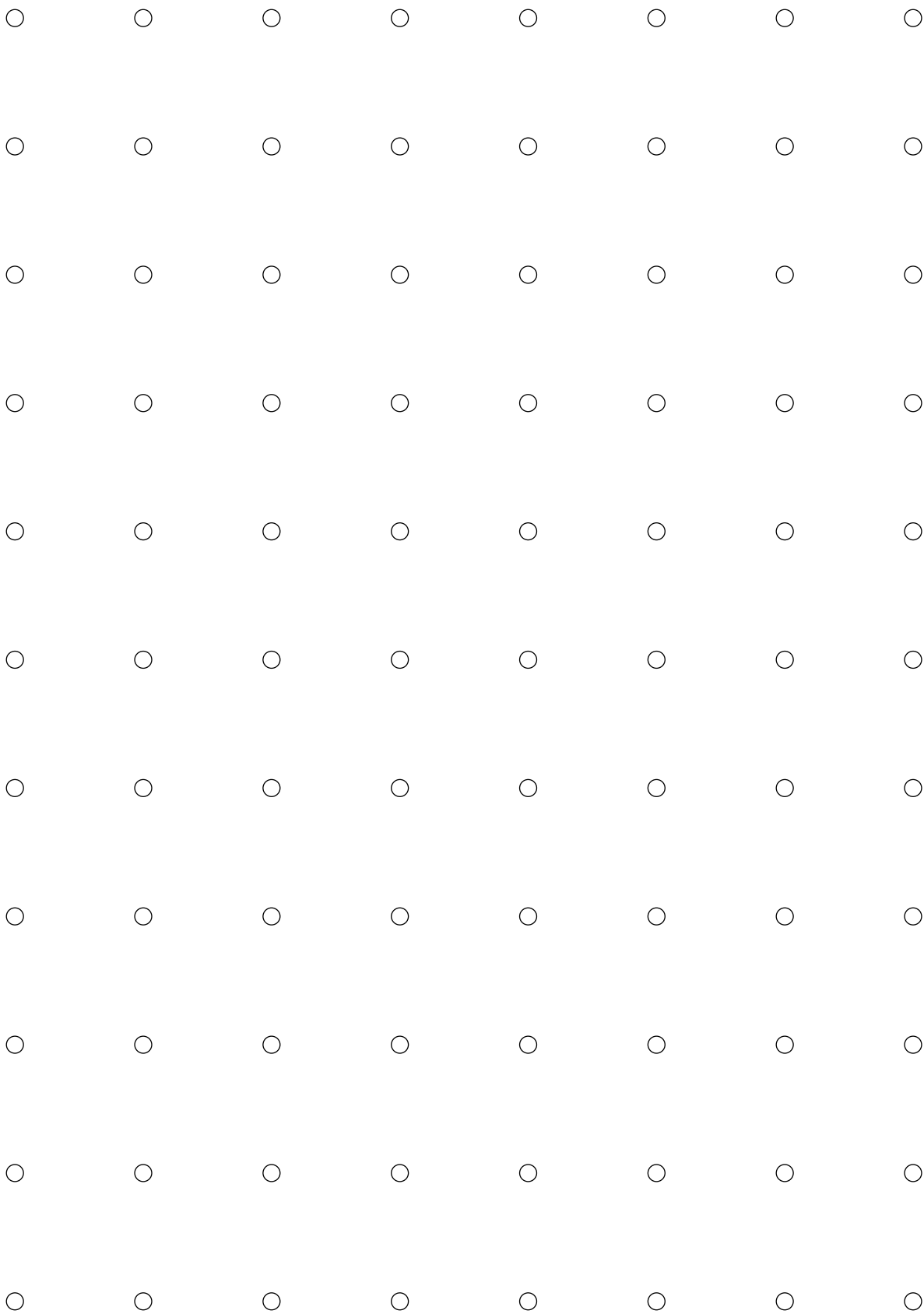
The cycle is completed with the destination of organic waste from street markets as well as from tree and gardening pruning services to composting yards. The resulting organic fertilizer can return, then,

to the beginning of the value chain as input for local production.

Beyond the concept of circular economy, the design reveals a value chain that is characterized by a number of multifaceted connections, much more complex than a straightforward circle. This condition allows for a resilient strategy that is not sustained by a single player or policy, but is rather strengthened through multiple associations.

The action of connecting the dots allows figuring out relations and revealing common grounds that foster synergies among the several ongoing public policies. Each sectorial initiative plays a particular role whereas connecting them based on the food production chain constitutes a single strategy, extending the reach and transformative potential of these actions. Ultimately, as they are mutually reinforced, the association between these initiatives also consolidates the possibility of their continuity beyond the current administration, guaranteeing a long-term development strategy for São Paulo.







IABR-2016– THE NEXT ECONOMY

In half a century, twice as many people will live in cities as do now. The city will then truly be the motor of the global economy. What does this urban Next Economy have in store for us?

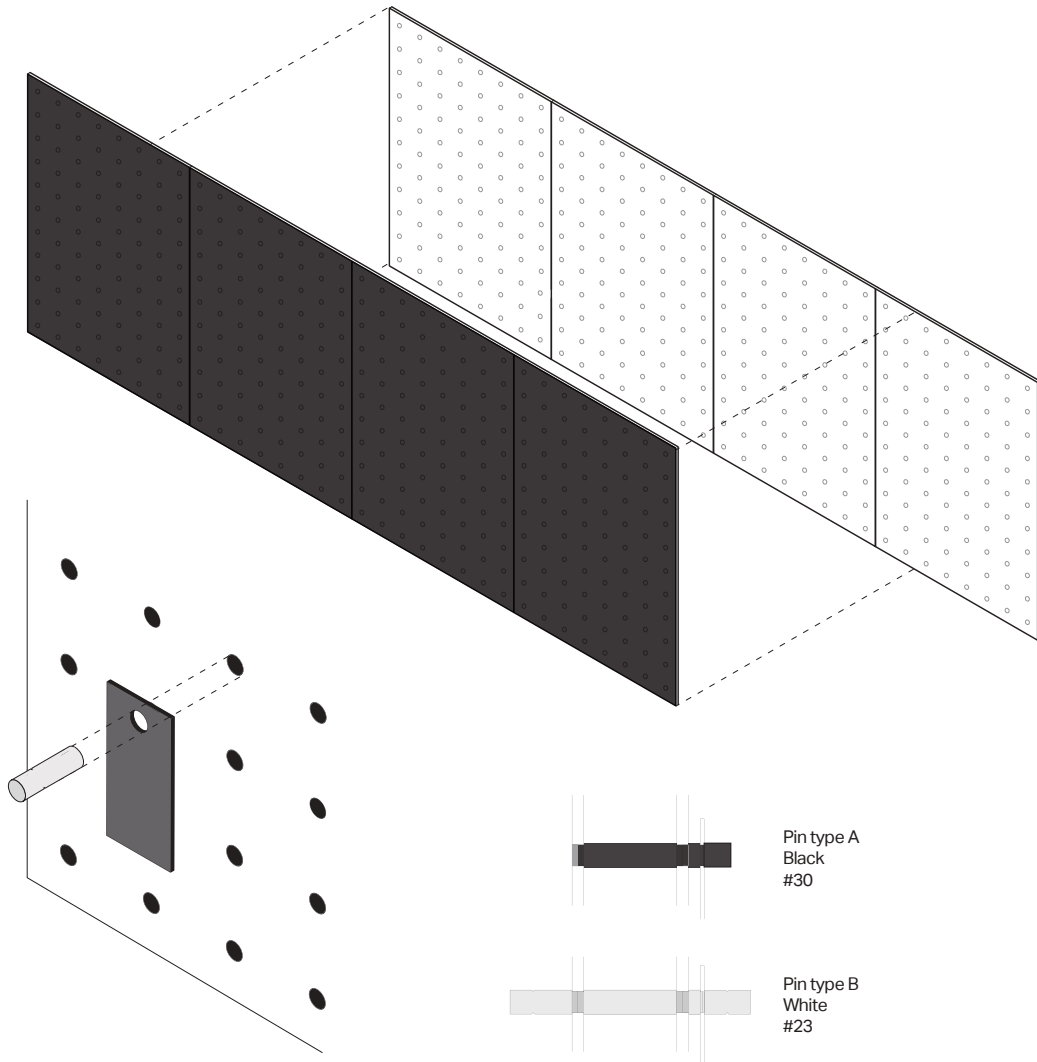
No one can predict what the future will hold, but one thing is certain: more of the same is no longer a viable option. Climate change, global urbanization, emerging new technologies, increasing migration, and growing inequality urgently demand real solutions. We have to rethink the way in which we live, work, and learn, and where and how we consume and produce. We will have to redesign the balance between system and individual, between rich and poor, between young and old, between sustainability and growth. How should we design and govern our cities?

Although we are not prophets, we can investigate and imagine tomorrow's city and research it by design. IABR-2016–THE NEXT ECONOMY takes the main challenges of the twenty-first century as its starting point. It explores the Next Economy and imagines the city of the future: the healthy and socially inclusive city, the productive city, and the sustainable green city. The city in which public space once again takes center stage.

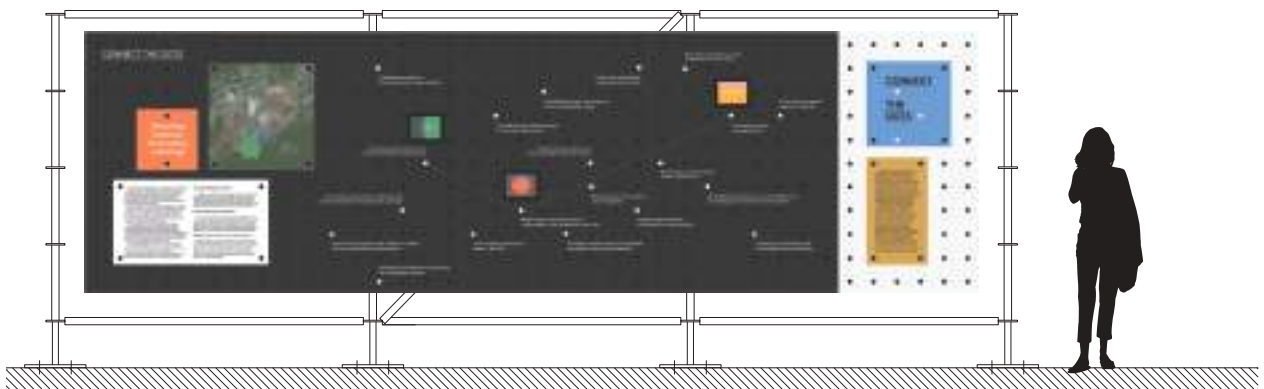
The Curator Team of IABR-2016–THE NEXT ECONOMY presents a perspective on the city that we want, and looks forward to enter into debate about it. The exhibition is therefore designed as a work space that provides room for reflection, debate, and exchange, for conferences, lectures, and workshops. Everyone is welcome to join in the discussion and to become involved. After all, where the city is concerned, everyone is an expert and everyone can contribute.

The project "Connect The Dots", developed by the Municipality of São Paulo, is an IABR-PARTNER PROJECT. IABR-2016–THE NEXT ECONOMY is the seventh edition of the International Architecture Biennale Rotterdam, held between April and July 2016.

isometric



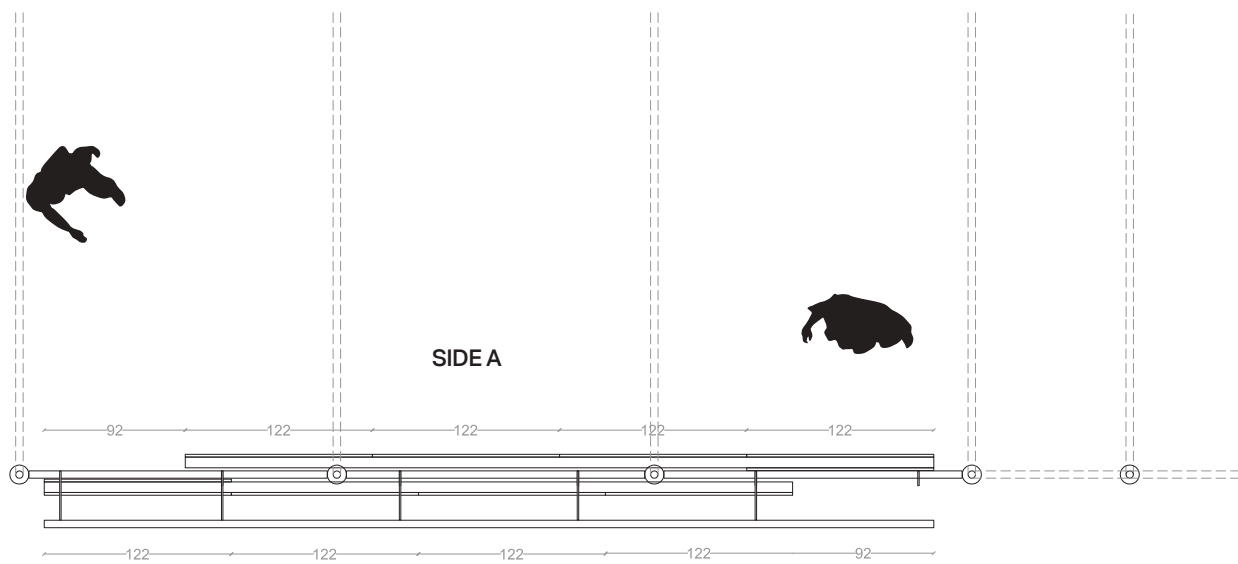
technical drawings by 51N4E



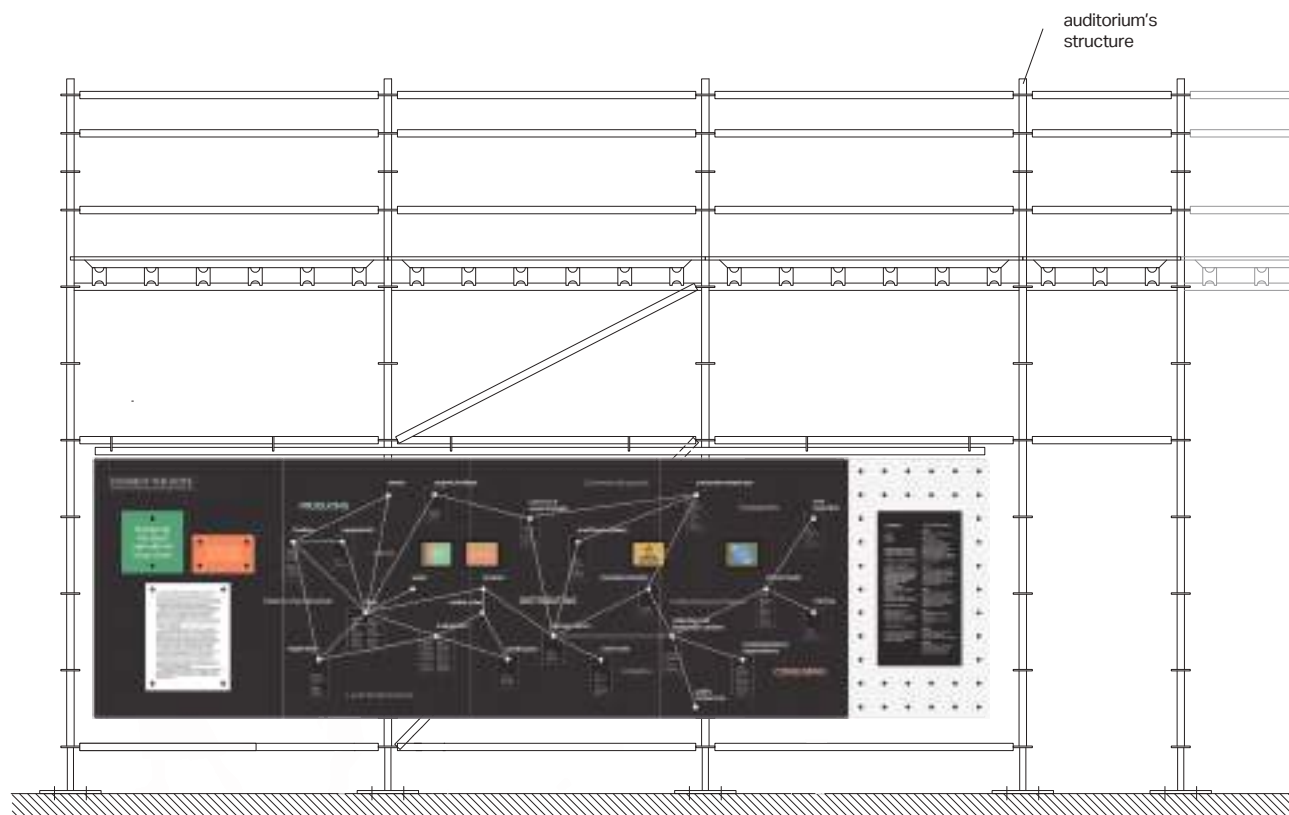
side A

1 : 50

plan



SIDE B



side B

PRODUCING

seeds

organic fertilizer

funding

equipments

Inputs

water

land

added-value

enablement

registration

Local family farmers



er

urce

alu





Municipality of São Paulo

Municipal Secretariat of
Urban Development (SMDU)

Municipal Secretariat of Development, Labor,
and Entrepreneurship (SDTE)

Municipal Secretariat of Education (SME)

Municipal Secretariat of Services (SES)

Municipal Secretariat of
Green and Environment (SVMA)

Municipal Secretariat of
International and Federative Affairs (SMRIF)



Cooperation



Brasilia
Office

Support



Collaboration

IABR—



Connect The Dots

Organization

Applied Research and Advisory Body,
Municipal Secretariat of Urban
Development

Texts

Anna Kaiser Mori,
APAF/SMDU
Antonio Oswaldo Storel Júnior,
Amlurb/SES
Fernando de Mello Franco,
SMDU
Giselle Kristina Mendonça Abreu,
APAF/SMDU
Leandro Costa Cuebas,
COSAN/SDTE
Luiz Henrique Bambini de Assis,
CODAE/SME

Data sources

- Brazilian Institute of Geography and Statistics (IBGE)
- State System of Data Analysis Foundation (SEADE)
- Ministry of Agrarian Development
- Ministry of Health
- Municipality of São Paulo
 - Amlurb/SES
 - CEInfo/SMS
 - CODAE/SME
 - COSAN/SDTE
 - DEINFO/SMDU
 - Habisp/SEHAB
 - SVMA

Photography

Archive SMDU/PMSP: pp. 40
(bottom right), 56 (top)
Archive SME/PMSP: pp. 12
(bottom left), 52
Archive SDTE/PMSP: pp. 44 (bottom),
48 (top)
Archive SECOM/PMSP: pp. 40 (bottom
left), 44 (top left), 56 (bottom left)
Archive SP-Urbanismo/PMSP: pp.
21 (top and bottom left), 22, 35, 36
(bottom), 40 (top)
Arpad Spalding: pp. 24, 25, 36 (top)
Fabio Knoll: pp. 8-9, 12 (top left), 13 (top
right and bottom left), 20, 26, 27, 28, 29
(left), 30-31, 43, 44 (top right), 47, 51
Lalo de Almeida: pp. 13 (bottom right),
18, 21 (bottom right)
Luciana Ferrara: pp. 12 (top right)
Mily Mabe and Luisa Prat: pp. 13 (top
left), 29 (right), 48 (bottom right), 55, 56
(bottom right)
Paola Ornaghi: pp. 12 (bottom right),
48 (bottom left)

English version

Marisa Pacheco Lomba

Proofreading

Giselle Kristina Mendonça Abreu

Graphic design

CAMPO
Paula Tinoco and Roderico Souza
Caterina Bloise, Assistant

Acknowledgments

Agnes Hanashiro
Adolfo Sormani
Alessandra Iturrieta de Souza
Ana Lidia Moreira Cavalli
André de Freitas Gonçalves
Arpad Spalding
Artur Henrique da Silva Santos
Claudia Lopes Macedo
Cristiano Mendes
Danuta Chmielewska
Darlene Aparecida Testa
Domingos Leoncio Pereira
Erika Fischer
Eugenia Gaspar da Costa
Hélio Soares da Silva
Jair Medeiro
José Benedito de Freitas
José Cordeiro
Leandro Costa Cuebas
Livia da Cruz Esperança
Luis Henrique Marinho Meira
Marcelo Mazeta
Maria Lúcia Bellenzani
Marta Bogéa
Marcelo Corrêa Ayres
Mauro Spalding
Miguel Matteo
Miguel Menechini Camargo
Olga Maria Soares e Gross
Otávio Cury
Patricia Marra Sepe
Romildo de Pinho Campello
Simão Pedro Chiovetti
Tomás Cortez Wissenbach
Vitor Cesar Vanetti

Special thanks to

All the family farmers who openly received us to present their way of life and production

Cooperation

This publication was developed under the Technical Cooperation Project 914 BRZ 5015 between UNESCO and SMDU/PMSF, which aims at developing innovative methodologies to promote participatory urban planning in the city of São Paulo, focusing on institutional development and on improving strategies for information and knowledge management. The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

Support

The translation for this publication in English was supported by the Consulate General of the Kingdom of the Netherlands in São Paulo

Collaboration

This project was developed in collaboration with the International Architecture Biennale Rotterdam in the context of IABR-2016–THE NEXT ECONOMY

Printing

Gráfica Cinelândia
São Paulo, Brazil
2016

Format: 180 x 240 mm
Typography: Aktiv Grotesk
Paper (core): Alta Alvura 120 g/m²
Paper (cover): Triplex 350 g/m²
Number of pages: 96
Circulation: 400 copies