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### Facing up to sustainability in Lisbon and Tokyo

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# Introduction

Planners in many major urban areas are facing new challenges affecting their city's lasting wellbeing. Lisbon and Tokyo are in many ways very different cities, but both continue to be based on traditional values and both are the unrivaled socio-economic centres of their countries, which face a no- or low-growth economic future with huge debt loads and risks of destructive earthquake disasters. The similar situations make it possible and interesting to compare these cities with particular attention to whether or not the two cities share emerging sustainability-related characteristics and offer resilient features. The focal scale of the study is local community, which enables us to compare the cities despite their different sizes.

We discuss planning issues in Lisbon and Tokyo in order to compare how the two cities have approached planning for a more sustainable future at a community scale, with particular attention to five illustrative and emerging features: sense of place, urban farming, vicinity, safety and learning. The comparison rests on the application of the five features as a framework that recognizes the noteworthy sustainability-related issues facing the two cities, as identified throughout field research, literature reviews, and dialog among the researchers. The comparison also integrates attention to all of the generic requirements for progress towards sustainability (Gibson et al 2005). The framework is applied in analyses of the main forward-looking planning documents for each city. Then the results are compared to identify similarities and differences, strengths and gaps, and implications for future planning in Lisbon and Tokyo, and for other cities facing similar challenges.

# Why Lisbon and Tokyo?

Even though the downtown Tokyo (the 23 Special Ward Area, formerly City of Tokyo) has as big a population as the whole of Portugal (around 9 million), the cities share the following characteristics that make comparison possible and interesting:

- Vulnerability to seismic disturbances The most recent and destructive earthquake disaster happened in 1755 in Lisbon and in 1923 in Tokyo.
- Long histories History as a city began in Lisbon around the VIII-VII century BC and Tokyo started to form its urban area in late 12th century.
- Traditional values Both cities poses cultural heritages while old values often turn to be unwillingness to challenge established practices.
- An assumption that the economy is a "bottomless-box" Unjustifiable levels of public spending have been persistent, even though they have not demonstrated net benefit to the residents' lasting wellbeing.
- Urban sprawl Lenient controls on growth have resulted in unclear urban borders.
- Ageing population People over 65 years old are expected to constitute about 40% of the urban population by 2050 in Tokyo and surrounding prefectures and 35% in Lisbon by 2060.
- Community-scale functions and identities Many community-scale livelihood activities, such as grocery shopping and schooling, are accessed by walking or biking,

Overall, both Lisbon and Tokyo have maintained characteristics as collections of neighbourhood scale communities that are based on traditional values and have ageing populations, despite the history of uncontrolled urban growth. They also share unjustifiable levels of public spending (continuous large-scale urban redevelopment projects) that have not been significantly challenged by the local residents, even though this spending focus has neglected community-scale activities and not demonstrated net benefit to residents' lasting wellbeing.

#### Method

We have undertaken literature reviews and field research in both cities before starting dialog among the researchers. At least one visiting researcher walked with a local researcher through the communities in both cities. The literature reviews focused on planning documents from government organizations of the cities, and journal articles featuring sustainability criteria. The researchers had a dialog based on the three kinds of

information (first-hand knowledge from the field research, issues recognized by the local planners, and sustainability criteria) in order to narrow down the focus with insights. A framework based on emerging features and sub features was created and applied to enable comparison of the two cities.

# Why focus on the community scale? Emerging and illustrative sustainability-related features

While identifying similarities shared by Lisbon and Tokyo, we found value in focusing on the community scale, wherein people can feel sense of place and belonging, moving by foot, bike or other kinds of soft transportation. Community emphasizes human-scale setting of a sense of place, which is highly relevant for discussions of planning for sustainability. The scale also features more similarities than differences when comparing sustainability-related characteristics in cities of different sizes, based on an understanding of a city as a collection of communities. Overall, the community scale provides useful and effective basis for considering the sustainability of cities.

The following five key features and related sub features were repeatedly identified in the literature and field research:

- Sense of place sense of belonging, individual feeling of autonomy, social-ecological integration (linked to livelihood activities such as local commerce, artisan production, local public amenities and life support services, inclusive activities)
- Urban farming food (including aquaculture), flowers, markets, ecological services (protected, for example, by retaining permeable surfaces)
- Vicinity– physical and mental accessibility, less commuting (walk, bike, trams and other soft transportation), feeling that desired amenities are close by
- Safety reduction of seismic and flooding risks, crime prevention, traffic safety
- Learning capacity building, community deliberation.

The list of sustainability-related emerging features and sub features provides a framework as a new entity. It was applied to the reviewed plans from both cities to obtain implications throughout comparison.

# Lisbon

The shift to prioritizing long-lasting wellbeing is recent in Lisbon municipal planning, and the latest master plan, adopted in 2014, reveals increasing focus of concern, attention and

investment on the following features:

- Higher quality public space, with shaded resting areas, major urban riverfront restoration, reduction of traffic lanes and introduction of more street trees and green road dividers, to enable walkability and livability, as well as the possibility of enjoying the public place
- Green spaces for recreation and production originally to promote urban farming and recreational activities, they are now accounted as means to increase ecological services (namely by allowing better water infiltration through increased permeable surfaces)
- Neighbourhood regeneration and improving quality of life, for example by improving the proximity of services, facilitating soft mobility (foot, bicycle), creating walkable streets with no traffic, promoting local commerce and the sense of community
- Promotion of space multi-functionality, including
  - Day care centres, residential housing, nursing homes and multifunctional spaces for seniors
  - Sport facilities and activities (open runs, marathons, etc.)
  - Local commerce
- Increased seismic resistance of buildings
- Innovative forms of public engagement, including participative budget design, programs for social innovation and start-ups to enable community learning processes, and attempts to mitigate unemployment, but also to engage the youth in creative activities.

This is happening at the same time that tourism is exploding with levels of demand never seen before. Historical built heritage is being rehabilitated and conserved and new business development conditions are created to attract people and promote wealth generation activities. But no doubt there are also visible signs of the emergence of the five features listed above.

#### Tokyo

The plans for Tokyo still retain the long-standing assumption that economic growth can continue forever and will automatically deliver wellbeing (e.g., development of more efficient road system including three ring-road expressways overarching the region for the 2020 Olympics and engineering-centred disaster prevention), but the plans are also now:

- Promoting community farmlands, and planting greenery on buildings
- Encouraging working from home (or elsewhere) and/or fewer work hours to reduce commuting time, improve system modularity of businesses, and let people spend more time off work
- Concentrating public facilities around train stations and networking them
- Improving landscaping, schools and other cultural facilities, urban parks, healthcare and welfare facilities, as well as abandoned farmlands
- Promoting government-led programs to build the capacities of NPOs (non-profit organizations) and individuals (MLIT 2014, TMG 2014).

It is evident that the official plans recognize community-scale characteristics that are related to sustainability. However, the focus of the plans is still large-scale growth-oriented construction projects and the plans lack attention to their possible impacts on lasting wellbeing in communities. Because it is highly questionable that such large-scale development projects are appropriate for a city with an ageing and declining population, change towards more community-based and sustainable lifestyles is increasingly crucial. Thus, the five features have just started to show signs of emergence in plans for Tokyo.

# Similarities and differences

The plans for Lisbon and Tokyo commonly recognize the benefit of attention to community-scale characteristics, and show intention to promote small-scale farming on community lands with improved physical accessibility as well as a sense of belonging to a place. However, in both cities, people's unwillingness to challenge established practices is still visible, preserved over-confidence on engineering solutions and over-spending of public money relating to them. Also due to the same attitude, community learning has been largely government driven rather than community-based and independent. Overall, governments in both cities, rather than community organizations, have so far led initiatives to strengthen sustainability-related community-scale characteristics.

The differences include particular distinctions between the existing transportation systems in the two cities, as well as people's overall degree of passiveness to government initiatives. For example, Tokyo is planning for concentrating public facilities around existing communities' train stations that are accessible by walking, bicycling or bus links, thus creating a vicinity space, while Lisbon addresses streets and districts for placing multi-functional facilities close to people. On the other hand, the residents in Lisbon have better chance to participate in urban decision making, for example through participative budgeting, better access to information on municipal planning and strategies, while those in Tokyo seem to demand less on such crucial means to engage more actively and effectively in urban decision making.

Features	Similarities	Differences
Sense of place	Unwillingness to challenge established	Changing work style promoted in Tokyo
	practices	
Urban farming	Promoting small-scale farming on	Possible radioactive contamination in
	community lands	Tokyo
Vicinity	Improved physical accessibility,	Solutions are different
	belonging	
Safety	Over-confidence on engineering	Accessibility to information (maps etc.)
	solutions	in Lisbon
Learning	Government-driven community learning	Campaign for volunteer work in Tokyo;
		Participative budgeting in Lisbon

Table 1. Similarities and differences between Lisbon and Tokyo over the emerging features

### Strengths and gaps

An evident strength of both Lisbon and Tokyo is that community-scale livelihood activities still remain there, so people in these cities maintain a sense of place and would well understand the notion of a city as a collection of communities. Another strength is that governments have started to initiate projects and programs that feature sustainability-related characteristics at the community-scale. But people are not willing to challenge government initiatives. Because the government decisions in both cities have predominantly engaged engineering-centred solutions, it is crucial to help them change their thinking, behaviour and understanding of development, learning to appreciate and apply non-engineering solutions and to engage the community effectively in dealing with complex issues and options. It is important also to encourage the community to develop and apply their capacity to engage with the government decision-makers even when that engagement may challenge the established practices. The challenge is how to encourage such behavioural changes for lasting wellbeing both among the government decision-makers and in the community.

# Conclusions: implications for future planning in Lisbon and Tokyo (and for other cities facing similar challenges)

Throughout the study, we have observed signs of change in Lisbon and Tokyo, particularly in terms of promoting community farming and improving the quality of public space and physical accessibility to public service facilities. These changes suggest a shift in values from basic economic priorities to more sustainability-related initiatives. But such actions have not been mainstreamed yet. Thus, our study also suggests continuing challenges that call for needs to encourage:

- People's confidence and sense of independence to participate in community deliberations;
- More innovative behaviour by decision-makers, planners and community residents; and
- Greater emphasis on initiatives and public engagement at the community scale.

Sustainability-related initiatives are promising and often attractive but also challenging. They involve matters of great complexity and require significant changes in thinking and behaviour. In Lisbon and Tokyo, and probably in many other cities, mainstreaming sustainability-related initiatives requires mutual willingness of the community residents and government decision makers to work together, even if it controverts past conducts. The community scale, highlighting human-scale setting, offers an attractive base for innovative initiatives.

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