

Chapter 14

Perspectives on Green: Recent Urbanisation Works and Measures in Brazil and India



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Abstract The current study intends to explore green infrastructure issues in recent urbanisation works and measures employed in informal contexts and peripheral areas in Brazil, in the cities of São Paulo and Rio de Janeiro, and in climate-vulnerable areas in India, in the cities of Vijayawada and Guntur (Andhra Pradesh), highlighting the difficulties that arise in their implementation process and also considering their social inequalities. In São Paulo, we will focus on urbanisation works that deal with urban drainage, undertaken by the local municipality and the state's government (Tietê Meadows Park). In Rio de Janeiro, we will analyse urban projects for two bus rapid transit (BRT Transoeste and Transcarioca) lines that are a part of the recent works in public transport launched by Rio's municipality in the context of the preparation of the city to host big international events. In India, the selected cities were Vijayawada and Guntur that are strongly affected by the escalation of the social and environmental vulnerabilities tied to climate change, such as cyclones that have great impacts on the low-income population. We approach scales that are often divergent or opposite, typical of cities in developing countries, which underwent a vertiginous demographic and territorial growth in the past century and will continue to grow in the present. We search to envisage aspects and contexts in which concepts of green infrastructure were or are being incorporated, outlining their complexity and the public administration inertia when it comes to intervene in urban spaces. Despite the geographical distance that separates Brazil and India, and all their great sociocultural differences, in what it regards urbanisation works and measures and

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the environment it seems that both countries would be going through similar issues, where there is a foundational gap between practices from the past and discourses towards the future.

14.1 Introduction

Expectations for the twenty-first century consider the widespread urbanisation of our planet, where more than half of the population lives in cities, with an expected increase to 70% in 2050, according to the United Nations. Cities are a complex phenomenon, to which integrated development solutions are being searched in order to allow people to have a better quality of life and well-being. However, besides being places of knowledge, innovation and technology, cities are also full of recurrent inequalities and other challenging social issues. Due to the unavoidable nature of urbanisation, the idea of green infrastructure (Steiner et al. 2016; Mell 2016; Sturzaker and Mell 2017; Benedict and McMahon 2002), where the role of multifunctional landscapes is built in a way to address natural and human needs, gains relevance in the fields of academic and professional practice.

Although it seems that the notion of a green infrastructure has not yet stabilised as a concept, with categorical definition, evaluation methods or management practice we can argue that some common principles in which its conceptual framework is grounded can be identified. The main one is that the infrastructure should collaborate with the protection and restoration of urban ecosystems through the reactivation of environmental tasks done by nature in the urban organism (Schutzer 2012). These tasks can be understood as services that supply an array of beneficial factors in ecological, social and economic terms, along with an increase in local fauna habitat and biodiversity; the preservation of processes proper to the natural landscape that help reduce urban risks such as floods, mudslides, heat islands, water and air pollution, an increase in recreational opportunities, improvements in health conditions and a better connection with nature and a sense of belonging (Benedict and McMahon 2002). Other principles being discussed and that are still under experimentation refer to the notions of 'Adaptive Design' (Lister 2007; Ahern 2007); 'Learning-by-doing' (Kato and Ahern 2008: 548–549); and 'Transdisciplinarity' (Naveh 2001).

Some principles are routinely described in the literature on the theme. Benedict and McMahon (2002: 17) pointed out seven as the most relevant: (i) green infrastructure should be the framework for conservation and development; (ii) design and plan green infrastructure before development; (iii) linkage is key; (iv) green infrastructure functions across multiple jurisdictions and at different scales; (v) green infrastructure is grounded in sound science and landuse planning theories and practices; (vi) green infrastructure is a critical public investment; (vii) green infrastructure involves diverse stakeholders.

Brazil and India, as developing countries in the global south, are still under the pressure of an accelerated urbanisation process that saw a rapid demographic and territorial growth in the past century and that will continue to grow in future. In this

chapter, we target the aspects and contexts in which the concept of green infrastructure is being incorporated in São Paulo and Rio de Janeiro (Brazil) and in Guntur and Vijayawada, (India), outlining their complexity in both contexts. Considering the two countries' common general background of social inequality, we take into account cases of recent urbanisation work done and steps taken in peripheral areas in Brazil and in climate-vulnerable areas in India. Our final considerations highlight the difficulties in acknowledging them as areas where a more sustainable and green infrastructure perspective is needed.

14.2 Brazil and India—An Uneven Urban Growth

In Brazil, the annual population growth rates have been declining rapidly in the past decades, getting closer to standards typical of developed countries. In 2010, they were at 1.01%, with an expected growth of 0.41% in 2030 (IBGE 2017). Moreover, despite the tendency of the growth rates to halt, the demand for urban growth and dwellings will keep rising at a fast pace, due mainly to the reduction of the size of the families. That is why the estimates for the next 25 years are that Brazilian cities will have an increase in their housing units equivalent to approximately half of the current rate (Magalhães and Izaga 2017).

São Paulo and Rio de Janeiro are amongst the 20 biggest cities in the world. The metropolitan area of São Paulo consists of 39 municipalities holding 21 million citizens, 12 million (IBGE 2017) of them living in the core municipality—São Paulo. In Rio de Janeiro, 12 million people live in the metropolitan area, of which 6.5 million are in the city of Rio de Janeiro, the largest of the 21 municipalities that make the metropolitan area. These are the two biggest Brazilian cities and the most developed metropolises of a developing country, examples of cities that, quoting Milton Santos (1990) on the 1990s São Paulo, best represent a situation of 'incomplete modernity', as it holds '*traces of opulence due to the economic prowess and its material manifestations*' as seen in some sectors of these cities, '*and signs of a collapse, due to the misery of social and political structures*' (Santos 1990, p. 13), seen as overlapping and intertwined. This condition was reinforced in the last 20 years, where the most modern things might be found. However, one might observe, hand in hand with striking needs, still unattended.

According to the World Bank (2015), Indian urbanisation has increased more rapidly than predicted, a trend that will continue and could reach its peak by 2050. The annual growth of the urban population was of 2.76% for the 2001–2011 period. The national level of urbanisation rose from 27.7% (2001) to 31.1% (2011) (Bhagat 2011). Currently, India has 29 states (New et al. 2017) (Fig. 14.2), and the majority of the states have seen record of urbanisation growth rates. In addition, most of the rural villages are becoming a part of the large towns and because of that green spaces are being converted into urbanised spaces. Due to these circumstances, the climate conditions in India have been changing rapidly and becoming more prone to natural disasters such as cyclones, floods and erosion, as shown in 2013 (Uttarakhand),

2014 (Andhra Pradesh), 2015 (Tamil Nadu), 2016 (Uttar Pradesh, Bihar, Uttarakhand, Rajasthan and Madhya Pradesh), 2017 (Tamil Nadu and Maharashtra) (Rao et al. 2014; Ramuje and Rao 2015; Prakash and Anand 2016; Halgamuge and Nirmalathas 2017). Cumulatively, the rapid urbanisation, along with the reduction of the green areas and the changes to the climate, is adversely affecting India in different magnitudes.

Vijayawada is one of the cities most at risk in India to floods, cyclones, landslides and earthquakes, and heat waves. More than 30 cyclonic events reached over 150 km in Vijayawada between 1877 and 2013 (City Disaster Management Plan 2015). On average, a cyclone every 5 years is a highly likely event in the city. With the expansion of urbanisation and the reduction of green areas, the city is more susceptible to climate change and its associated risks. Several flood events devastated the city and severely damaged the local economy, with a high death toll, as was the case in 2009, 2011 and 2016. In Guntur, cyclones and floods are also frequent, as in 2001, 2009, 2014 and 2016 (Sharma et al. 2009; Ratna and Mohanty 2017). Fast urbanisation, particularly in the last decades, also made it vulnerable to new impacts associated with climate change, due to reduced green spaces, deforestation and the precarious nature of the urban infrastructure around new occupations.

14.3 Case Studies

The case studies in São Paulo and Rio de Janeiro in Brazil, and Vijayawada and Guntur in India are examples of the contradictions of accelerated urban growth. With great social inequalities and historical deficiencies in the implementation of urban sanitation works, urban draining systems, urban mobility, social health, and education facilities, which are conditions that reinforce the environmental degradation. As a result, public initiatives for urban and socio-environmental adequacy of the territory happen in complete lack of synch with the needs, and time, and quantity. Along with that, we should point, in most cases, to economic shortcomings and low technical capacity of the city and state administrations in the implementation of projects, which generally happen with no synch, tainted by a strictly sectorial vision.

Given that the notions on urban sustainability have been used as an argument in some of these projects, sometimes in a more effective and others in a merely illusionary level, it is necessary to investigate to what extent the guiding elements for a green infrastructure are applied or whether that serve only to justify new processes of gentrification or even engineering works that follow the traditional patterns of urban intervention.

In São Paulo, the projects selected correspond to recent interventions under the influence of integrated urbanisation guidelines established by global financing institutions (World Bank and IBRD), in slopes, valleys and floodplains which have been under development since 2016. In Rio de Janeiro, the two bus rapid transport lanes—BRT Transoeste and BRT Transcarioca, the first going through fragile ecological territories and the second laid on top of consolidated areas which were

expropriated—received both the same transportation system model as part of the scope of works done for the city to host major events (2014 World Football Cup and the 2016 Olympic Game) and are in full operation today. In Guntur and Vijayawada cities (Andhra Pradesh, India), an accelerated densification and loss of green spaces are discussed in a scenario of low capacity of the public administrations in the domains of urban planning and the implementation of urban infrastructure.

14.3.1 Case Study—São Paulo, Brazil—Drainage Works in Floodplains and Valleys

The urbanisation works in valleys and floodplains studied in São Paulo have a wide structural impact on river basins that have already been urbanised. They include operations that are not only relative to macro- and micro-drainage, but require the effective participation of other public institutions, whose actions have consequences, with the urbanisation of the areas and an improvement of the quality of life. In this sense, roads, sanitation, the construction of linear parks and eviction of people affected by the constructions, amongst others, are included.

The map in Fig. 14.1 shows the location of the creeks and rivers we mention. Figure 14.2 shows the dimension and complexity of the urban works, planned and ongoing, and Fig. 14.3 outlines the social dimension of the urban impact on the valley areas, highlighting the number of families that are subjected to involuntary resettlement, in order to ‘vacate construction sites’, as engineering teams put it. A total of 16,956 low-income families will be affected by the evictions, totalling almost 60,000 people in a condition of vulnerability, from poverty to extreme poverty (Fig. 14.4).

According to Brazilian legislation and the requirements of international financing bodies such as World Bank (WB 2001), International Finance Corporation (IFC 2012) and the Inter-American Development Bank (IDB 2018), co-financers of the projects, the urban works include social assistance actions for the populations affected. The scope aims to restore the quality of life of the families affected by the construction works, minimising the negative effects caused on their lives, besides giving them assistance so that they can restore or improve their activities, housing conditions and social life. Nevertheless, asymmetrical and top-down forces are used through a technocratic discourse that favours the clearing of the land to set up the construction sites.

The solution for the social tension needs investment to build new housing units, hiring consulting agencies to carry out social work, and monitor the resettled families during their transition to their new housing, and also the families that will remain living around the construction sites but will still suffer the negative effects during the above stages before, during and after the works. This process usually lasts from 2 to 5 years, depending on the existing offer of housing units for relocation, the resistance of the local population to move, especially if there are social movements in the area, and the frequent project alterations due to these conflicts.

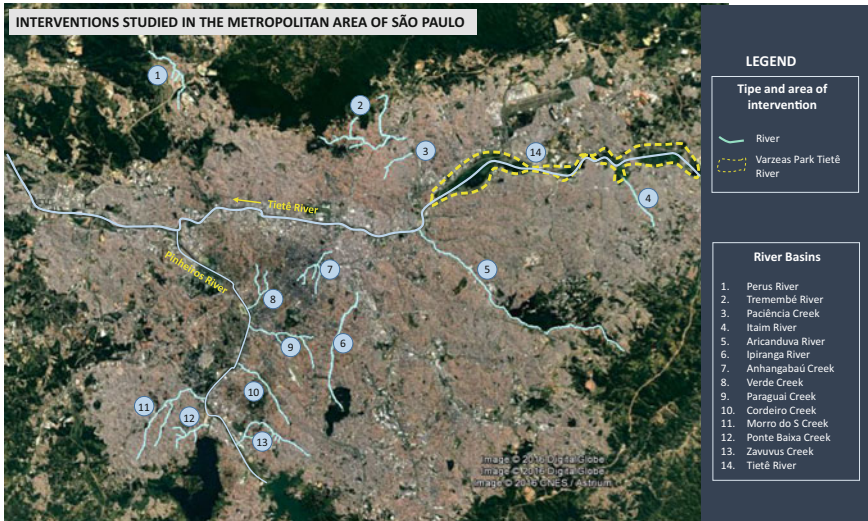


Fig. 14.1 Location of urban works in the river basins of São Paulo. Adapted from Schutzer, 2017

Besides the social aspects that shape the urbanisation works in time and space, it should be noted that the projects and works studied, even if they present a green infrastructure rationale of linear parks, tend to present traditional channelling solutions that radically change the borders of creeks and rivers, making them artificial and restricting the relationship between the population and the water, even if only at a visual level. On the other hand, and in general, the proposed linear parks do not have adequate formal and functional characteristics; i.e. they do not promote a continuity with the existing urban space, and some green and leisure areas are built on top of water-storage reservoirs roofs, trees in insufficient numbers, the absence of



Fig. 14.2 Characteristics of the valley with urban works in São Paulo. Photos: Schutzer, 2017

Type of urban works	Families affected by evictions	Region of the City of São Paulo
Mobility, Hillsides	3,655	Extreme South
Hillsides	1,157	East
Hillsides	2,309	North
Hillsides	206	Southeast
Mobility, Hillsides, Drainage, Linear Parks	4,129	South
Macro drainage and Linear Parks	5.500	Tietê Meadows Park – São Paulo (5,000) and Guarulhos Municipality (500)
Total number of families	16,956	Approx. 60,000 affected people

Fig. 14.3 Families affected by evictions—involuntary resettlement linked to urban works in the urban river basins, São Paulo. *Source* Prepared by Schutzer, data for São Paulo (2011, 2012, 2014, 2015a, b, 2016a, b) and DAEE (2011)

possible relations with the water streams and the water network, all enclosed within avenues, some of them with intense traffic, amongst other problems.

Some important aspects of the dissemination of the green infrastructure of the Brazilian public management can be highlighted in this scenario. One of them is



Fig. 14.4 Social assistance (a) and the situation of the illegal houses on the floodplains of the Tietê River (b). Photos: Schutzer, 2017

the still low appropriation of the concept of green infrastructure by the technical body responsible for the design and implementation of the works of such integrated solutions. The second one is the persistence of a sectorial vision of the engineering and construction fields responsible for conducting the design process, licensing and bidding of the works, which, induced by the strength of the hydraulic engineering tradition or by financial imperatives, hinder the implementation of more holistic and sustainable solutions (São Paulo 2011, 2012, 2014, 2015a, b, 2016a, b). A third important aspect to consider is the social complexity of the interventions, which often justify their cancellation with the financial shortages of some city governments, producing in turn the worsening of social conditions and the loss of opportunities for the regeneration of the environmental resources of the city.

14.3.2 Case Study—Rio de Janeiro, Brazil—Bus Rapid Transport Lanes Transoeste and Transcarioca

Between 2004 and 2011, Brazil saw a trend for strong development based on economic growth and stability. A significant proportion of public funds was allocated to urban works, along with investment in the infrastructure of cities, especially through the PAC (Growth Acceleration Programme). In this scenario, the city of Rio de Janeiro, marked by many natural and beautiful features, affirms itself as a place to host big events such as the ones that culminated with the 2016 Olympic Games. In the transport area, Rio's city administration planned many improvements, amongst them the implementation of a network of express exclusive bus lanes (bus rapid transit, BRT), distributed in four lines: Transoeste, Transcarioca, Transolímpica and Transbrasil (Fig. 14.5).

According to some authors (Cervero et al. 2013, apud Gwilliam 2003: 12), 13% of all the greenhouse emissions on the planet come from transport flows, and three-quarters of this are produced by road transport, varying widely and depending on the city. In Brazil, the first generation of exclusive bus transport lanes dates from the 1970s and 1980s and was initially implemented on the old avenues of the central regions of the cities. In pre-existing contexts, the prioritising of road-motorised transport had two urban and environmental impacts on urban life quality: the reduction of the public spaces of pedestrians and the elimination of pre-existing green spaces (Suzuki et al. 2013). In the new urbanisation contexts, it very often did not lead to urban density as expected, even though the design often considered more space for green infrastructure. More recently, proposals such as linear parks, bio-valves, rain ponds, permeable floors, intense afforestation and landscaping started to integrate some transport exclusive lane projects. However, there are still contradictions between the green infrastructure proposals and its implementation. The BRT Transoeste and Transcarioca case analyses focus on their insertion in the urban environment, considering the quality of the public space and its rationale towards

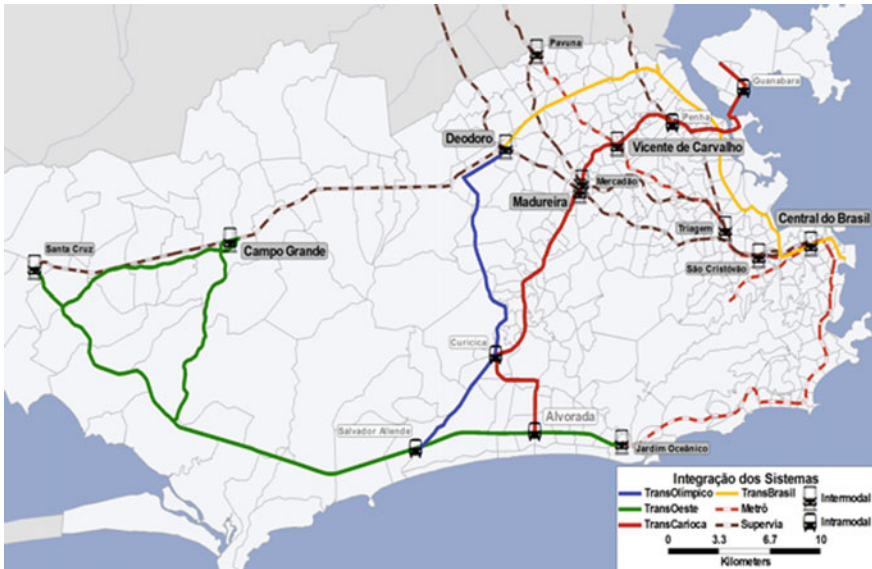


Fig. 14.5 BRT network map, Rio de Janeiro *Source* Transportation Department, City Administration of Rio de Janeiro (appud Izaga, 2014)

green infrastructure principles, and mobility and accessibility, as arguments towards a sustainable urban mobility (Herce 2007; Marea et al. 2014; Cervero et al. 2013).

The Transoeste Bus Rapid Transit (TO-BRT) is 57 km long with 58 bus stops/stations, going from the Alvorada Bus Terminal in Barra da Tijuca to the boroughs of Santa Cruz and Campo Grande, on the west side of town (Fig. 14.6). Since its inauguration, in 2012, the overcrowded buses are commonplace, especially during the rush hour, as they move through low-density areas, making their use primarily a trip from one extreme of the line to the other. There have been frequent records of car accidents and pedestrians being run over, as pedestrian access points were built exclusively where the stations are located which range in some cases, from 1200 to 2000 m. One particular area draws attention, Barra de Guaratiba, with a smaller number of inhabitants, located on a river basin with fragile ecosystems, and defined in the City Plan as a zone with conditional occupation, due to its insufficient infrastructure and environmental vulnerability.

The Transcarioca Bus Rapid Transit (TC-BRT) has 47 stations and is 39 km long, going through the old industrial areas of the city and linking the Alvorada Bus Terminal in Barra da Tijuca to the Galeão International Airport in Ilha do Governador (Fig. 14.7). The unique urban design model of the TC-BRT is based on a spatial concept that does not integrate pre-existing areas and their uses. It cuts the public space into two, preventing pedestrians from crossing the streets and drivers from turning, separating the street space into even and odd sides. There are no bicycle lanes or parking spaces. The tunnel effect provides continuity to the pavements, but

there are almost no rest areas. The few squares that existed along it were transformed into stations, and some of them were erased to give place to bus terminals, evidencing a global aspect with scarce green areas, and a fragile contribution to the rights those boroughs might have and to the landscape.

The two Transoeste and Transcarioca BRT lines, despite having offered a new and organised option for public transportation by bus, seem to point to conflicting urban growth strategies—expanding and consolidating—missing the city of Rio de Janeiro in an unavoidable metropolitan scale. Thus, regardless of the updated technical debates and the available legislation instruments, public policies have been guided by the rush to fulfil political agendas, with sector-guided technical approaches that are not articulated.

The TC and TO-BRT establish a new public space morphology that is arid and segmented. In the end, they do not meet the conceptual image disseminated in technical and in publicity, of an environmental requalification of the landscape (ITDP 2008, pp. 384–385), as they do not qualify as green infrastructure for a social, ecological and environmental integration of the boroughs they cross. They also fail to act as regenerators of the effects of urban heat islands, much less the permeability of the urban soil to attenuate the constant floods that even prevent the flow through them. Thus, a decisive step was taken to improve the transport system in the city of Rio de Janeiro, but regrettably the strength of a sectorial vision of traditional transport engineering projects remains very much alive and in effect.

14.3.3 Case Study—Vijayawada and Guntur, India

In the last 10 years, Guntur and Vijayawada cities had population and infrastructure growth higher than predictions. Currently, the city of Vijayawada has 1,048,240 people and 231,759 homes. For the 1970–2011 period, the city grew by 3.68% and this rising trend is set to continue. More than 30% of the population is living in informal areas, and those areas are gradually becoming urban slums, due to the lack of government focus on these areas, along with a very poor infrastructure, especially green infrastructure, particularly on the outskirts of the city, where informal areas are



Fig. 14.6 BRT Transoeste Photo: Fabiana Izaga, 2017



Fig. 14.7 BRT Transcarioca Photo: Fabiana Izaga, 2017

growing and accordingly many illegal constructions have been established. While these informal settlements and infrastructure are not recorded in government figures, subsequently these areas become prone to natural hazards such as cyclones and flooding. More than 140 informal areas have been identified in this city, and the majority of these are in environmentally and socio-economically underdeveloped areas. Approximately, 68% of the people who are living in these informal regions did not earn the minimum wage to cater for their daily needs.

There are a number of informal areas located across the city of Guntur, mainly on the outskirts, because of the rapid population growth in the last 10 years, with an average 2.9% per decade of growth from 1990. There are 187 slums with 197,920 slum dwellers, with 37,932 slum households (Figs. 14.8 and 14.9) in both formal and informal areas.

Because of the sudden rise in the development of informal areas, Guntur has become more exposed to cyclones, landslides and floods as seen in 2009, 2014 and 2016. Eight people died during a 2016 flood, and most of them fell ill because of the quality of the water, which was highly polluted during that event. Another natural disaster, i.e. heat waves, is also common in Guntur. More than 30 people died of heat strokes in 2016, and predictions indicate that these natural disasters will have grown significantly in numbers by 2013.

In this context of a growing informality, with the worsening of social and urban problems, the application of the concept of a green infrastructure loses importance within the technical-bureaucratic apparatus of the public administration, whose focus is first directed on the pressing needs of investment in basic sanitation, housing, urban

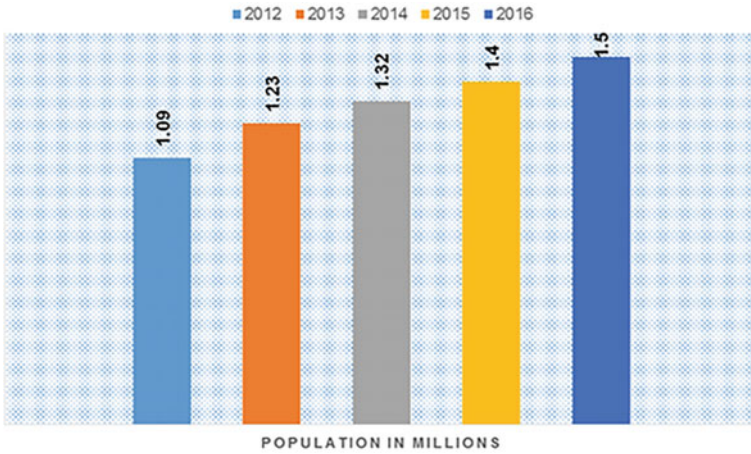


Fig. 14.8 Population trends in Vijayawada city for the period of 2012–2016

drainage and mobility infrastructure (road and transport systems), and power systems. Thus, these investments always follow the movement of an uncontrolled urban expansion, caused by the expanding population dynamics and the poor financial capacity and urban planning of the municipalities, which reinforces the implementation of sectorial projects, little articulated amongst themselves and without an environmental perspective. This is aggravated by a lack of understanding of the concept of green



Fig. 14.9 Flood water in residential areas in 2016. *Source* Skymetweather (2016)

infrastructure by the technical bodies in city governments, which associate it only with investments in parks and green areas.

It is in this sense that urbanisation enhances natural disasters (Blaikie et al. 2014; Cutter et al. 2015), and the cities of Guntur and Vijayawada will be more prone to the socially negative effects of floods and cyclones, events that are predicted to become more frequent in future (Ghadei 2017; Bick et al. 2018). While the rapid urbanisation, along with a poor infrastructure, planning and management strategies continue to exist, a poor disaster readiness in disaster-prone areas is the main driving force to speed up social vulnerability, climate change and other associated disasters. The dissemination of the concept of a green infrastructure in the academic and technocratic circles of city governments may therefore be the most relevant initial action at this time in India.

14.4 Conclusions: Green Infrastructure Between Past and Future

In Brazil, urban renewal works are still dominated by a technocrat-based and sectorial perspective, where the weight of the traditional concepts of engineering is significant, be it in the field of urban drainage, mobility or other types, if the infrastructure is linked to environmental sanitation. Therefore, the quality of the urban spaces that are being created, as a result of these interventions, is still something treated as a minor issue in urban renewal projects. In the cases studied, we saw that the elements of a green infrastructure are present in an accessory and residual way, in relation to the traditional concepts of drainage and mobility works. There are no wide-covering and consistent plans for the cities that refer to green infrastructure as a system of ecological and open spaces. In some of the cases studied, urban renewal works made in areas that are already densely occupied, green infrastructure proposals come after the sectorial projects, serving only as means to satisfy environmental regulations and standards linked to international funding entities. As regards the operation of green infrastructures in multiple jurisdictions and scales, the principle of multi-functionality, when present, is often used in an asymmetrical way, considering the quality of the environment and society. It is present as an accessory investment, a residual element in otherwise traditional drainage and mobility projects.

Population involvement rarely occurs, even with the mandatory social work needed for environmental licensing, in the cases that lead to evictions. The projects are imposed top-down, with little participation from the communities affected in their preparation. When it comes to environmental regulations, proposals for delimiting protection areas are defined by public technocrats. All of this leads to:

1. Unsatisfactory results for the communities affected, whether in their leisure options or in the implementation of green areas (replanting of trees);
2. Increase in the number of conflicts during the process of implementation, with actors questioning aspects of the projects that could have been discussed, such

as: trajectory options, evictions, trading (involuntary removals), uses of spaces that have a place of symbolic or sentimental value to the communities;

3. Loss of opportunities for environmental renewal of the city—re-naturalisation—important for the urban ecology and social life and for the revitalisation of the urban spaces, due to the continuous increase of the construction density in vulnerable areas.

The case studies in India show that medium-sized cities such as Guntur and Vijayawada have had a rapid urban and populational growth in the past decades and the urban growth seen in Vijayawada will turn the city into a megacity by the year 2050. This growth has been especially marked by informality, where 35% of the population of Vijayawada and 29% of the population in Guntur live in illegal and/or precarious homes. The result is a considerable increase in deforestation and soil waterproofing in areas under the risk of flooding. This is a scenario that has a cumulative impact on the Indian climate, and consequently, these cities are becoming even more vulnerable to cyclones and floods, as seen in 2009–2016. However, the Indian case seems to be an important laboratory for the introduction of green infrastructure to public urban planning, in anticipation of the sweeping process of urban growth that is expected.

The cases studied in Brazil and in India show that environmental issues seem associated with the urgent needs of survival and disputes for urban space. In Brazil, they are intrinsically linked to the metropolises, in the antagonisms created by inequality and concentration of wealth, and are interpreted in the duality between the formal and the informal city, luminous and opaque spaces (Santos 1990). The prevalence of the interests of the real estate market and the high investments to modernise the spaces of the higher classes is a constant issue in Brazil (Villaça 1998), as opposed to the low investment seen in the fringes of the city, something that the preparation for international events only strengthened. Green infrastructure, when at stake, appeared only as a marketing strategy, and its implementation has questionable sustainability standards.

Despite the geographical distance that separates Brazil and India, and all of their great sociocultural differences, as regards the urban environment it seems that both countries are facing similar issues, where there is a foundational gap between practices from the past and discourses towards the future, as described by Arendt (1975), in which the dissolution of traditional forces present in urban works and interventions that have no regard for the processes of nature over urban life has not yet happened.

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