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Master of Science in Geography

Small cities, urban environment and the poor A study in Amreli, Gujarat

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« My notion of democracy is that under it the weakest should have the same opportunity as the strongest. »

– Mahatma Gandhi

Acknowledgments

There are more people who rendered this work possible than people who will actually read it. I want to thank all of them, starting by you, brave reader, and hoping that I do not forget anyone.

Even if in India it is unusual to thank friends, I am particularly grateful to Vimal Bhatt and Ashutosh Joshi for managing my stays, and for always keeping a vigilant eye on my safety and comfort. I also want to thank the staff of the Smt. Shantaben H. Gajera Sankul in Amreli for their warm welcome, and I especially thank Dr. Himanshu Bhimani for all the arrangements he made for me since the very beginning of my fieldwork. To Dipak and Tirath, thank you for the friendship and the support you offered me, and for all the good time we spent together. I don't forget the staff of my guest house, who has always been so kind and thoughtful to me at any time of the day and night: Arjun, Hemant, Juli, Nayna, Jitu, Govin, Arvin, and the many others whom I can't name, I thank you from the bottom of my heart. I also thank Rahul and Mehul for constantly cheering my up during my breaks, and providing me great opportunities to meet my future interviewees.

Last but not least, I would give the biggest thanks to my interpreter, Ashish, for all the work he has done for me, for his patience, his efficiency, his understanding and his good will at any time, first in Amreli but also after my return in Switzerland. I am even more grateful for the friendship we built together, though he would never be thanked for that. Many thanks to all his family as well: his wife Bina and her sister Madhuri for their uncountable *chai* and their gujarati lessons, his brother Milan for making me laugh and cheering me up all the time, and his daughter Pari for her constant and communicative smile.

Between India and Switzerland, my biggest thanks to Dr. Anna Zimmer who helped and guided me since the very beginning of my work until the very end of it, with all my field and theoretical interrogations, doubts and fears. Warm thanks as well to Natasha Cornea, for all the theoretical, practical and language support she offered me.

In Lausanne, I want to thank Dr. Swetha Rao Dhananka for her help and support throughout the past two years, and for never forgetting to invite me to interesting events related to my work. Jessica, you who suffered with me all along the advancement of this work, thank you for your always-helpful reviews of my drafts. Last but not least, many grateful thanks to my supervisor, Pr. René Véron, for his guidance, his reviews, his availability and his always-useful hints.

My final thoughts go to my family, Maman, Papa, Eric, Amandine and Aurore for their love and support, no matter how far from each other we are. To Aurore especially, thank you for being yourself at all times, for enduring my absence when I was in India, and for your hopefully never-ending love.

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1. Introductory part

1.1. Introduction

The world has been quickly urbanising during the last decades, and today over 50% of the population lives in urban areas. This fact is acknowledged by most of the international agencies as well as governments and scholars worldwide. According to the United Nations Population Fund, this shift occurred in 2008 when the urban population reached 3.3 billion inhabitants (UNFPA, 2007). According to Jo Beall and Sean Fox, the majority of the world's population has become urban at the very beginning of the 21st century, the "first urban century" in human history to quote their own words (Beall & Fox, 2009). Besides, it is broadly accepted that most of this urban growth occurred in the Global South. The megacities like Rio, Mumbai or Delhi have become the avatar of the developing and emerging countries to the face of the world (Roy, 2011) – with all the issues that are related to such a growth in the collective imaginary: extreme poverty, overcrowded slums, poor living conditions and severe environmental degradations. Mike Davis amongst many others succeeded in depicting the misery of southern cities in his emblematic Planet of Slums (2006). His dramatically pessimist approach of contemporary southern urbanisation is shared by scholars worldwide and nowadays the trend in urban studies is to address the highly visible issues of these megacities, notably by arguing that they illustrate the failure of neoliberalism and/or capitalism (Harvey, 2011).

It is true that megacities of the Global South face critical issues, linked to what can be referred to as the "brown" and "green" agendas within the sustainable development framework; specifically the immediate issues of social and environmental provisioning to the urban populations, especially the poor, and the long-term issues linked to ecological degradation that may have global impacts. It is also true that such issues are of global concern because of the demographical, economical and spatial importance of these cities. Their role in the world economy cannot be neglected; neither can be their ecological footprint nor the social issues they face. For instance, the Dharavi slum in Mumbai is the home and the workshop of over one million people, producing a 650 million USD turn-over per year, but also providing amongst the worst living conditions on Earth (Konermann, 2010).

As Mike Davis' Planet of Slums illustrates, the attention paid to megacities has led to a mainstream vision in urban studies, which is drawing "apocalyptic and dystopian narratives of the slum" (Roy, 2011: 224) and is making of cities "exemplary dystopias and horror shows of future terror" (Myers, 2011: 24). Even scholars who are not particularly involved in this mainstream approach do not systematically argue that urban studies should shift away from the analysis of megacities, but that they should instead try to reconceptualise their dynamics and representations. This is notably what Ananya Roy highlights when she writes about the 'subaltern urbanism', arguing that slums are not only passive places of misery but also "[terrains of] habitation, livelihood, self-organization and politics" (Roy, 2011: 223). The point is while keeping the focal lens of urban studies on megacities, urban scholars leave aside a vast amount of urban dwellers. This is to some extent what Jennifer Robinson regrets in Ordinary cities (2006). In this book, she notably argues that non-global cities are perceived as insignificant because they happen to be excluded from globalisation networks. She further calls for an increase of interest on these cities, since they have their particular legacies, dynamics and challenges and are not only the 'subaltern' of global cities, but also significant actors of their own. As a matter of fact, the attention of urban studies is today driven away from smaller cities to the extent that there is a knowledge gap on the realities they face (Véron, 2010; De Bercegol, 2012).

1.2. Research rationale

This knowledge gap should be filled, not only for strictly scientific purposes, but also for several reasons that make small cities of global concern. Following René Véron, three main rationales that make the study of small cities heuristic can be identified. The first one is their demographical importance. The UNFPA defines small cities as "urban settlements of less than 500 000 inhabitants" and states that 50% of the urban population worldwide lives in such settlements (UNFPA, 2007: 9). Even if this definition of small cities can be debated because other criteria should be taken into account, it is a useful basis. Besides, if one take a look at the table below (Fig.1), introducing data extracted from the Indian census of 2011, one can see how accurate the statement is. Scholars working on other parts of the world confirm that the demographical importance of small cities cannot be neglected: for instance 57% of the African urban population lives in cities of less than 500 000 inhabitants (Chenal, 2014).

Total Indian urban population	377'105'760	100%
Population of urban agglomerations and cities above 5 lakh ¹	185'364'653	49.15%
Population of urban agglomerations and cities below 5 lakh	191'741'107	50.85%

Figure 1. Distribution of Indian urban population (Census of India, 2011)

The second reason is that small cities have green and brown issues of their own, which arguably make them face a "triple challenge" regarding urban environmental governance,

"that is, they have limited financial and human resources to address growing environmental problems that are related to both development (e.g. pollution) and under-development (e.g. inadequate water supply)" (Véron, 2010: 2833)

This triple challenge remains strong despite the decentralisation process that occurred during the last decades. Notably in India, the 74th amendment to the Constitution was believed to strongly empower urban local bodies. Unfortunately, decentralisation did not seem to have much improved Indian urban governance, for it has been accompanied with neoliberalisation reforms. In other words, decentralisation of tasks and responsibilities occurred, but the financial resources needed to manage them did not come along. Actually, and this is the third reason, neoliberalisation of the world economy seems to have worsened the situation of small cities. "Global cities" (Sassen, 2005) became the growth engine of nations and firms and as such, they now polarise most of public and private investments. Today, they are also prone to communicate between them instead of with their hinterlands as they used to in the past. Consequently, smaller cities seem to be the leftover of the contemporary neoliberal urban development (Véron, 2010).

1.3. Small cities, urban environment and the poor

This master thesis is intended to address the 'brown' and 'green' issues encountered in Amreli, an small city located in Gujarat, India. The urban environment of this city and the role and place of the urban poor within its environmental governance are at the core of the concerns of this work. But before any further writing, and because semantic considerations are required to understand what will be dealt with here, it seems mandatory to define

¹ 1 lakh = 100,000

exactly what the "urban environment" and the "urban environmental governance" are, as well as who the "urban poor" are.

1.3.1. Urban environment

The concept of urban environment for the purpose of this research is broadly defined: it includes the whole built environment of the city, and notably public spaces, parks and water bodies. It also includes the components of what is sometimes referred to as the 'urban metabolism' in urban studies (Zimmer, 2010); namely the environmental inputs required for human life such as drinking water and clean air, as well as the urban outputs returning to the "natural" environment: solid waste and domestic waste waters, including toilet wastes. This urban environment can be seen as a range of services (e.g. water supply) provided by several actors of urban governance: mostly the State, but also private actors and civil society groups such as NGOs or neighbourhood associations.

1.3.2. Urban environmental governance

The term of governance is also broadly defined here, and essentially based on the definition of governance given by Blundo and Le Meur:

"Governance is conceived as a set of interactions (conflict, negotiation, alliance, compromise, avoidance, etc.) resulting in more or less stabilised regulations, producing order and/or disorder (the point is subject to diverging interpretations between stakeholders) and defining a social field, the boundaries and participants of which are not predefined" (Blundo & Le Meur, 2008: 7).

To complete this definition, one can just add that urban environmental governance is this set of interactions applied to the elements of the urban environment as defined above.

1.3.3. The urban poor

Despite the ambiguous nature of the notion of poverty, the term of urban poor has been privileged over several others qualifications to refer to the population group this study will focus on. One could think the term "marginalised populations" would have been more appropriate since it is often encountered in scientific literature. However, the term turned out to be inadequate when confronted to the reality of the field. "Marginalisation" refers to a process, involving actors, structures or institutions marginalising specific population groups. For instance, in India, one can expect that some groups of people are marginalised because of their socio-religious status (i.e. their caste or the fact that they are Muslims). The ratification of several constitutional amendments in the 1990s proves the Indian government to be aware of this socio-religious marginalisation. Indeed, the Constitution 73rd and 74th Amendment Acts were implemented in order to improve the working and living conditions of marginalised castes, especially Scheduled Castes and Tribes² (The Constitution Seventy-Third Amendment Act, 1992; The Constitution Seventy-Fourth Amendment Act, 1992). However their success is mitigated. Since the notion of purity is at the core of Hinduism and since Hinduism is still highly embedded within society, lower "impure" castes and religious groups often remain at the bottom of hierarchy and lack access to education and safe jobs despite the affirmative action undertaken by the government (Astier, 2011). In Gujarat especially, the Muslim minority has a marginalised status. In 2002, religious riots between Hindus and Muslims occurred that caused hundreds of death on both sides. A period of social instability followed, which scars heal slowly. Much debate has been raised on the involvement of government in the riots and on the help it brought to Hindu rioters against Muslims (Berenschot, 2009). Nowadays, communal violence is marginal in Gujarat, but tensions did not completely disappear and some Muslim communities have lost important assets in the process (ibid.). In Amreli however, being a Muslim or a SC/ST does not systematically mean being poor. It is true that one of the low-income areas surveyed, Sindhi Society (see Fig. 3) is almost entirely populated with Muslims, but Amreli also holds a middle class Muslim neighbourhood where inhabitants have very decent living conditions. Besides, most of the SC/ST encountered in the city benefit from the seat reservation system and are employed in high-income governmental jobs. In other words, the poverty of urban dwellers is not systematically, in Amreli, bound to their social or religious status. Therefore, the criteria kept to characterise disadvantaged populations are their educational and income level, as well as their place of living – the urban poor thereby being the groups of people usually poorly educated, working on daily wages, earning very low incomes and living in places they self-define as slums. Following other criteria, and notably the socio-religious one, this group of population is highly heterogeneous.

1.3.4. Map of the general research question

The red thread of the discussion here is to bring the notions of urban poverty, urban environmental amenities and governance together. The master thesis will address the following general research question: to what extent do the urban poor of Amreli access the environmental amenities of the city and what is their place within its environmental governance? According to the urban studies literature specialised on this matter in megacities, one can assume that their access is poor and that they play a very marginal role in environmental governance. This is what David Harvey points out when, building on Henri Lefebvre's notion of 'right to the city', he regrets that "the quality of urban life, just as the city itself, is now a commodity reserved to the richest"³ (Harvey, 2011: 21). This statement finds echoes in the work of urban scholars in India. Notably, Marie-Hélène Zérah shows in her case study of the Sanjay Gandhi National Park in Mumbai that the poor are evicted from urban green spaces, because the middle class claims that they cause environmental degradations by their way of life (Zérah, 2007). Similarly, Susan Chaplin states that middle classes are now monopolising the sanitation services in many Indian metros, leaving the poor unable to benefit from this urban amenity. She further demonstrates how the withdrawal of the State from the provision of sanitation services is aggravating their situation (Chaplin, 2011). But do the poor also have a low access to urban environmental amenities in small towns like Amreli? Such cities follow their own development dynamics and processes, and one can therefore assume things are slightly diverging there. Arguably, the "process of municipality building" (De Bercegol, 2012: 4) supposed to ensue from the decentralisation reforms of the 1990s is emerging slowly, and Indian small municipalities still lack of financial and technical resources to fulfil their new tasks. It seems to impact the provision of urban environmental services to the dwellers of small cities, and especially the poor dwellers (De Bercegol, 2012).

In order to address the matter in a more precise way than this broad assumption, the above-mentioned general research question will be divided into three specific research questions that will constitute the three main parts of this master thesis.

³ « La qualité de vie urbaine, de même que la ville elle-même, est désormais une marchandise réservée aux plus fortunés ». Author's translation.

- 1. What is the urban environment of the poor in Amreli? Or in other words, what are the amenities they have access to? This question is intended to cover the first part of the general research question and to understand the connections between the urban poor and their environment (e.g. their access to water and sanitation or to urban parks). The pre-field hypotheses on this matter were built on the existing literature in India (Chaplin, 2011; Zérah, 2007; Bhan, 2009; Mehta, 2001) and therefore assumed that the poor in Amreli had miserable living conditions. For instance, following the work of Lyla Mehta on water scarcity in Gujarat, one can believe that because *"inequalities often shape access to and control over water"* and because *"water scarcity is not natural, but instead largely due to anthropogenic interventions"* (Mehta, 2001: 2038) the poor have very little access to drinking water. Indeed, water seems to be spoiled by rich farmers over inefficient irrigation systems. Whether the fact that the urban poor have a low access to environmental amenities is actually true or not in Amreli will be addressed in the second part of this work.
- 2. What is the nature of the relationship between the poor and the State? Or in other words, what means are available to the disadvantaged in order to access the State and what kind of expectations do they have when State support is required? Since the neoliberal shift in the 1990s that accompanied the reforms of decentralisation in India, the State has arguably withdrawn from urban governance. Following the Marxist tradition, Erik Swyngedouw talks about "governance-beyond-the-State" to describe this phenomenon and states that new technologies of governance and governmentality emerged in this framework. According to him, these new technologies lead to a democratic deficit and do not tend to benefit the poor (Swyngedouw, 2005b). Focusing on the governance of environmental amenities, the third part of this work will address this matter and try to understand the relationships existing between the State and the poor in Amreli. Assuming these relationships are only one type of institution within the governance networks, this part will also deal with everyday governance and try to map the coping strategies used by the urban poor when they face environmental issues and require help.
- 3. What is the nature of the power relationships between the poor and the middle class? As a growing literature deals with this matter all over India, however mainly in megacities, it appears interesting to address the social conflicts supposed to pit the emerging urban

middle class against the poor. Arguably, a sort of "revolt of the elites" (Harriss & Corbridge, 2010) seems to happen as the new Indian middle class aspires to a world-class way of life, which excludes the sight and the presence of the poor in its urban territories (Udupa, 2013). These new elites seem to have the ability to exercise pressure over urban planners and policy makers, since their aspirations match the ambition of most Indian metros to become 'world-class cities' freed from their slums and tons of garbage. Gautam Bhan (2009) notably shows how the urban poor in Delhi are deprived from their 'right to the city' by the Indian authorities and especially the Supreme Court, who seems to adapt its judgements to the discourse on environmental degradation held by the new middle class. In this discourse, the poor are seen as dirty dwellers polluting urban green spaces (Zérah, 2007). Whether this social conflict can be observed in Amreli or not will be the focus of the third part of this work. The reality behind the discourse of the elites on environmental degradation by the poor will also be addressed in this chapter.

1.4. Theoretical contextualisation

This master thesis builds upon one major theoretical framework: Urban Political Ecology (UPE). Several reasons make this framework relevant to address the issues of urban environment, environmental governance and the poor in a small city like Amreli. However, before enumerating them, it seems important to define what UPE is – or at least what will be referred to as UPE in this work.

Indeed, Urban Political Ecology is a dynamic and broad field of research that gathers various schools of thought. For instance, in a theoretical progress report, Roger Keil (2003) identifies four major schools of UPE that are working on various subjects such as urban water or environmental justice and that focus on several areas, mostly in the Global North. This variety of schools generates theoretical confusion, and it happens to be very difficult to define what Urban Political Ecology actually is. UPE lacks a fundamental and agreed-upon definition, maybe because it emerged from the field of traditional (rural) Political Ecology (PE), which itself lacks such a definition. Yet in an acclaimed attempt at bringing together the knowledge produced on PE, Paul Robbins (2004) gathered additional definitions of it. One of them needs to be mentioned here since it contains close connections with the concerns of this master thesis and can easily be used in urban studies. According to Michael Watts, the aim of Political Ecology is

"to understand the complex relations between nature and society through a careful analysis of what one might call the forms of access and control over resources and their implications for environmental health and sustainable livelihoods." (Watts, 2000: 257 in Robbins, 2004).

Arguably, the nascent field of Urban Political Ecology would need such a definition in order to frame its researches. Until then, a research agenda of René Véron provides a useful attempt of synthesis. According to him,

"UPE views cities as socially and politically produced urban nature and assumes dialectical relationships between urban environmental and socio-political processes – often understood as a metabolic relationship. [...] UPE emphasizes power relations, unequal resource access, politics and the wider politicaleconomic [and governmentality context of neoliberalism] in the analysis of the co-production of urban society and the environment." (Véron, 2010: 2839).

This definition is the one on which this work will be based. By analysing the access of the urban poor to the environment in Amreli, the "dialectical relationships between urban environmental and socio political processes" will be addressed. By discussing the urban environmental governance and especially the power relationships within it in Amreli, the highlights of UPE ("power relations, unequal resource access, and politics") will also be broached. Finally, by framing the analysis of the urban socio-environmental processes of Amreli within the broader Gujarati and Indian political, economic and discursive contexts, the questions of *neoliberal governance and governmentality* will be approached.

Besides, this basis will be extended in order to address several theoretical challenges identified by Anna Zimmer in a recent epistemological article. The first of these challenges is that "UPE should in no way neglect the traditional focus of PE which lies in the so-called developing countries [because it is where] the environmental problems are aggravating dramatically" (Zimmer, 2010: 350). Amreli is in India, an emerging country still belonging to the Global South. The second challenge is that UPE "scholars should demonstrate more clearly the diversity of societal relationships with nature in order to identify winners and losers at the urban level" (ibid.). This is what the fourth chapter of this work is intended to do. By addressing the environmental power relationships existing between the urban poor and the middle class, "Urban Political Ecologies" that take into account the variety of human

relationships with nature will hopefully be identified. The third challenge is close to the second one: UPE scholars should adopt *"an actor-oriented approach"* (ibid.: 351). The focus of the study is a particular group of actors: the urban poor. The other groups involved in urban governance will be taken into account, only considering that they have an influence on or a relationship with the urban poor. In other words, they serve comparative purposes. The last challenge is that *"analyses of political economy have an important share in UPEs investigations"* (ibid.). The role of neoliberalism, as the dominant economic policy of Gujarat and of India, will have an important share in this work. In order to address these challenges, the methodological approach suggested by Anna Zimmer will be followed to some extent: as she suggests, the objects (i.e. water, solid waste management, parks...) of the study will be considered as *hybrids* – which means attention will be paid to the fact that they are coproduced by humans and non-humans. They will also be analysed as embedded within geographically and historically specific processes of environmental governance in Amreli.

Several reasons justify the use of UPE in this master thesis. The first one is quite pragmatic: this work has very close connections in its concerns with a Swiss National Science Foundation research project conducted by scholars from the University of Lausanne and from India. This project is entitled "Small cities, urban environment and governance in India" and uses the UPE as a common research framework. The second reason is because as stated above, the objects dealt with here match the field of Political Ecology studies. The third reason is specific to the critical trend in UPE papers. Neoliberalism is often seen as a hegemonic policy characterized by "deregulation, privatization, and withdrawal of the State from many areas of social provision" (Harvey, 2005: 3), which has been introduced in the Global South by international agencies and especially the World Bank in the early 1980s. UPE scholars tend to argue this policy usually fails to improve human well-being where it is implemented. For instance, Susanna Ghosh Mitra (2008) builds on a case study of urban water supply in Karnataka to get to this point. However, neoliberalism must not only be seen as a broad ideology and I hope to demonstrate through the case study of Amreli that "actually existing neoliberalism" (Brenner & Theodore, 2002) may encounter some success in specific contexts of implementation. In that sense, I wish to join the work of UPE scholars who proved neoliberal environmental governance to be, to some extent, socially and ecologically acceptable (Brand, 2007).

Finally, UPE will be used as a broad analytical framework. Because some particular thematic cases require more precise concepts to be explained or interpreted, finer theories such as Bourdieu's social capital or Sen's entitlements will be used in the following chapters. Since they deserve to be detailed, each one of them will be addressed in required time.

1.5. Empirical contextualisation

Amreli has not been selected by chance for the field study. Indeed, the city presents relevant socio-economical characteristics regarding the Swiss National Science Foundation research project. It also belongs to a specific geographical area that makes it interesting to study regarding the galloping neoliberalisation of India.

Amreli belongs to Gujarat, a state of Western India populated with 60,383,628 inhabitants according to the Census of 2011. Gujarat has experienced a demographical growth slightly stronger than the Indian average in the last decade (19.2% compared with 17.6% between 2001 and 2011) and is also more urbanised than the Indian average (42.6% compared with 32% in 2011). It is a highly industrialised state, with major shares in diamond, chemical, textile and maritime trade sectors. The Gujarati authorities consider Gujarat to be the growth engine of India (Government of Gujarat, 2013), notably because the Delhi-Mumbai Industrial Corridor – also called the "golden corridor" – runs through the state from North to South (Fig. 2, below). It is a highly urbanised area equipped with advanced infrastructures that has an international clout: it is aimed at attracting investors and firms worldwide, as well as members of the Gujarati diaspora (ibid.). Gujarat is believed to have implemented the neoliberal reforms of the 1990s with a lot of enthusiasm (Dixit, 2010). This is suggested by the polarisation of growth and infrastructures around the major urban centres of the state, mostly within the golden corridor. In the international context of competition between cities, Ahmedabad, Surat and Vadodara especially benefit from all the attention of the state government and are gradually granted with world-class infrastructures (Government of Gujarat, 2013; The Economic Times, 2014). Gujarat authorities build on the urban model of world-class cities which is oriented towards economic growth, beautification, international attractiveness and the emerging middle class to develop this area through (neo)liberalisation. For instance, the major communication infrastructures in the golden corridor, notably the highways and several bus companies, have been privatised in order to gain efficiency. Electricity is also provided throughout the state thanks to a public

private partnership. To some extent, it seems that smaller cities of the golden corridor benefit from the amenities provided to urban centres by trickle-down⁴. However, it remains to assess whether the benefits do actually trickle down to Amreli – a city that is rather far from the golden corridor (Fig. 2). Arguably, neoliberalism has contributed to unbalance the share of public funds and it seems that 'performant' actors (i.e. here, cities) tend to receive more investments than the ones lagging behind (Swyngedouw, 2005b; De Bercegol, 2012).

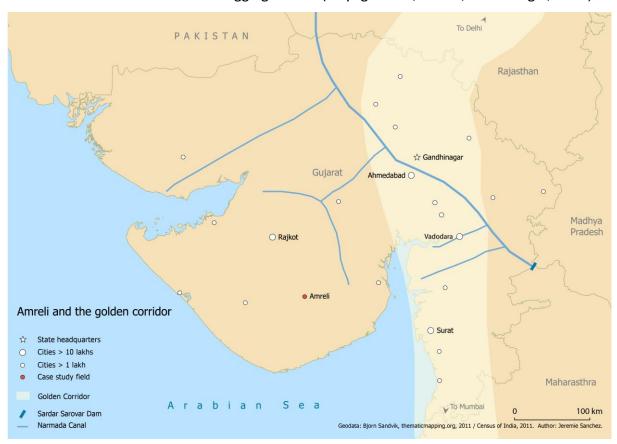


Figure 2. Amreli and the golden corridor

Gujarati dwellers use to say that Gujarat is divided into three parts: Kutch in the North, "Gujarat" in the East and Saurashtra in the Southwest. The Saurashtra peninsula, where Amreli is located, is a geographical entity in itself. It is a rather rural area that experiences strong seasonality. Severe droughts periodically affect it during summer (from March to June) while violent floods occur during monsoon (from June to October). Since cultivation of extensive irrigated cotton crops is the major activity in Saurashtra, one could argue that it has a fragile economy: crops often either dry up or drown. In the 1950s, the Gujarati authorities launched the Sardar Sarovar Dam (SSD) and the Narmada Canal projects,

⁴ On this matter, see the forthcoming work of Anna Zimmer on Bharuch and Navsari, two small cities of the golden corridor.

two gigantic infrastructures aiming at providing drinking and irrigation water throughout the state. These projects were highly controversial and raised much debate in both the political and academic spheres. Lyla Mehta (2001) notably pointed out their absurd social and environmental costs. As the height of the dam is raised throughout the years, more and more people living upstream in the reservoir area have to be displaced and as the Narmada canal downstream carries water on 750 km through drought-prone areas (Fig. 2), an important amount of the resource is spoiled because of evaporation. Mehta also highlighted the inequalities generated by the SSD. Most of the electricity produced benefits industrial lobbies and cities in the golden corridor, while the amount of water supposed to reach the Kutch and Saurashtra areas is far lower than what authorities claim - and it essentially benefits large landlords and farmers instead of the urban and rural poor. Mehta wrote against the SSD in 2001, and thanks to a 2014 fieldwork, my viewpoint would be more nuanced. For instance, 50% of Amreli's population and 58 out of 70 villages of the Amreli taluka would not have access to drinking water without the SSD and the Narmada Canal. Since 2007, the whole peninsula of Saurashtra also has 24/7 electricity supply, seemingly thanks to the hydropower of the SSD. As a matter of fact, it is true that inequalities are still strong in Saurashtra but one cannot only point out the negative impacts of such governmental projects, since they also generate important social improvements.

Amreli city is a municipality (*Nagar Palika*) populated with 118'059 inhabitants according to the census 2011. Amreli district has a rather homogeneous social structure compared with the Gujarati and Indian standards⁵. 93.8% of its population is Hindu (while the state average is 89% and the national average is 80.5%) and less than 6% is Muslim (while the state average is 9% and the national average is 13.5%). There are very few scheduled castes and tribes in Amreli: 8.5% compared with 21.8% in Gujarat and 24.4% in India. There are also very few migrants, and Amreli district has experienced a slow decadal growth (6,5%) between 2001 and 2011. 88.9% of the city dwellers are literate which is close to the Indian and Gujarati urban averages (Census of India, 2001; 2011). Ordinary urban functions (shops, construction, rickshaws, schools, civil servants) occupy most of Amreli's population which is not a highly specialised city. However, since it is surrounded by cotton fields, the cotton industry remains an important sector of employment for many of the

⁵ Social data concerning castes and religion are not available for 2011, and are only available at the district level for 2001. The reality today might be quite diverging and one must therefore remain careful with these data.

(poor) urban dwellers. As a district headquarters, Amreli also gathers *taluka* and districtwide commanding functions such as the *Mamlatdar* and *Talati Kam Mantri* offices⁶.

Amreli benefits from ordinary urban services regarding the Gujarati standards. It is at the confluence of two rivers, Vadi and Thebi, which run from the North to the Arabian Sea in the South. However, Amreli's water supply is not retrieved from these rivers. The two dams, Thebi (destroyed in 2010, currently under reconstruction) and Kamnath, built on the Thebi river serve irrigation purposes and the water of their lakes is unsafe to human consumption. Amreli is supplied in water thanks to a tertiary branch of the Narmada Canal and to another dam, Khodiyar, located in the South of the district near the village of Dhari. Groundwater aquifers are also exploited through public or private bore wells, and water is collected and stored on the roofs during monsoon. During this period the Vadi and Thebi rivers happen to overflow, causing more or less severe floods depending on the neighbourhoods. In summer, the population faces water scarcity since the surface water dries out and the groundwater depletes. In order to remedy to that phenomenon, the government of Gujarat is currently implementing a scheme aimed at improving the water supply and sewerage system in Amreli and Bharuch – a city of the golden corridor – at the same time (Gujarat Infrastructure Development Board, 2014)⁷. The actual drainage system in Amreli is almost non-existent. Very few neighbourhoods have covered drains and most of the waste waters are simply thrown on the streets. The situation is similar regarding the waste management: very little is done. Twelve municipal rickshaws, one for each ward, collect the garbage in random neighbourhoods and drop it at the border of the city in a vast open dump. Consequently to this lack of public services, many dustbins of the city overflow and their content is regularly burnt in order to gain additional storage. The urban cattle also takes care of the waste recycling. Finally, there are two parks in Amreli. Gandhibag, a recently built municipal park, is at the centre of the city and holds the Nagar Palika headquarters. Since it just opened, it is too early to assess its role in Amreli's daily life⁸. Kamnathbag is a NGO-owned park located at the southern border of the city, next to one of its main temples: it is a very popular area where various urban dwellers like to come on Sundays to play with children and to rest.

⁶ Administrative offices in charge of executive, land and revenue function.

⁷ This scheme somehow invalidates the hypothesis that cities from the golden corridor receive more attention from the State. However, I have not found sufficient evidence on this matter to make a point.

⁸ Some dwellers I interviewed did not even know this park was existing.

1.6. Genesis and methodology

In order to conclude the introductory section, it seems useful to provide details on the methods used to build this thesis. The project has somehow changed since its beginning: the early aim was to work on slums in India, with no specific concerns beyond this. During the first year of my master degree, I gathered secondary data such as scientific articles and literature from the Indian government to become more familiar with the Indian urban issues. The writings of urban Marxist scholars such as Mike Davis and David Harvey have had a particular influence on my work at this moment. Thanks to the courses I attended, I shifted to the work of urban scholars specifically working on Indian megacities: Marie-Hélène Zérah or Gautam Bhan for instance. By the end of this first year, I decided to frame my work within the *Small Cities* project's concerns and therefore became interested in urban political ecology. My understanding of this framework has increased thanks to writers such as Roger Keil, Erik Swyngedouw and Anna Zimmer. At this point it was clear that neoliberal environmental governance in a small city of India was going to be the core of my thesis. Which one exactly remained to be decided. Amreli came out quite quickly though, notably thanks to the analysis of census and geospatial data.

In summer 2013, I carried out a first field visit, which did not allow me to gather data but rather to begin to understand the Indian everyday governance and also to build an acquaintance network. This network has been useful in winter 2014, when I left Switzerland to carry out the second phase of material collection: the gathering of primary data. The fieldwork in Amreli lasted two months and allowed me to conduct seven open interviews, seven semi-structured ones and six participative ones with public, private and civil actors of the urban governance. I notably used the mind mapping method with urban dwellers and municipal councillors in order to address their understanding of their environment. Many informal meetings with urban dwellers also brought meaningful information. However, the main source of field data remains the survey we conducted with my interpreter, Ashish, in 60 households belonging to middle class and low income population groups. We selected 3 wards (number 1, 2 and 11) out of the 12 that Amreli contains and identified one middle class area and one low income area in each one of them (Fig. 3). The criteria used to identify these areas were the quality of the built environment (i.e. if the neighbourhood is made of concrete houses with gardens and formal roads or of tents scattered on informal soil) and the definition the inhabitants gave of it. For instance, "slums" were considered as such if the people living there said they were living in a slum. Once the clusters were identified, we surveyed 10 households in each one of them, trying to follow a systematic pattern as far as possible. In low income areas however, we mostly had to settle for the households that were willing to answer. The same questionnaire has been proposed to the 60 households: it consisted of 30 questions related to their access to the urban environment and the governance networks they activate – or not – in case of necessity. The questionnaire itself has been designed by the *Small Cities* project team (Natasha Cornea, Anna Zimmer and René Véron). Very interesting outcomes emerged from this survey.

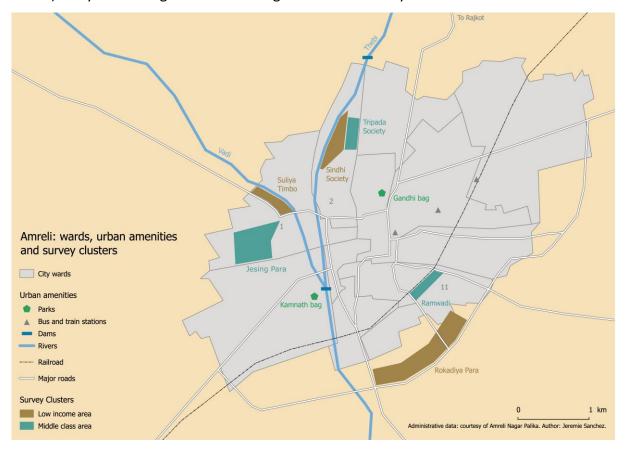


Figure 3. Amreli: wards, urban amenities and survey clusters

Back in Switzerland, field data have been treated in several manners. Formal, open and participative interviews have been systematically transcribed into synthetic sheets. Participative interviews (mind-maps) have been digitized and inserted into the interview sheets. Quantifiable survey results have been recorded into a table in order to be easily accessed and sorted. Qualitative survey results (e.g. answers to open questions or extra information provided) have been recorded and sorted by question in order to be usable. Useful pictures taken during field observation phases have been gathered into a database. During the writing phase, information has been triangulated as much as possible: statements made in the following chapters and sections usually rely upon a cross-analysis of the abovementioned primary data. When it is not the case, the specific source is generally mentioned.

Still, several weaknesses limit the field methods I employed. The first and most important is, of course, the language barrier. Apart from some interviews with municipal officers or well-educated urban dwellers, most of the interactions were in Gujarati. Despite the qualities and good will of Ashish and my attempts to stay focused during meetings with locals, I assume some information may have been poorly translated or understood. Besides, Ashish was a NGO worker used to conduct surveys and interviews in the water and sanitation sector. It was a chance for me, since he knew the right persons to talk to, but I also assume he took some shortcuts during the interviews when he thought he knew the answers to my questions. Moreover, the Gujarati culture is very proud of its hospitality and its friendly reputation. Most of the interviewed often put forward the good relationships they had with their neighbours or with other population groups, sometimes certainly hiding a more complex truth. Since I was the first stranger most of them saw in many years, the people I met often wanted to impress me and to show how shining their society was. This is also a sort of bias in the information they provided. In the municipal offices finally, it was sometimes hard to break through the official governmental discourse and to assess what was true or not – especially in the context of the upcoming national legislative elections. The pro-Modi campaign was raging during my fieldwork and it seemed like every single Gujarati dweller, even Muslims, subscribed to the ideas and political views of his Bharatiya Janata Party. Despite these limitations, I gathered some relevant data regarding the place of the poor within Amreli's environmental governance. It is now time to present and to discuss them.

2. On access to environmental services

This chapter is intended to cover the first part of the general research question: to which extent do the urban poor access the environmental amenities of Amreli? In other words, the aim is to understand the connections between the urban poor and their environment and to assess whether they benefit from environmental services to achieve decent living conditions. In order to do so, this chapter will first identify the urban poor of Amreli. Drawing upon the concepts of Amartya Sen, it will then analyse the access of this population group to several environmental services: drinking water supply, sanitation systems, solid waste management, urban parks, and urban water bodies. The chapter will be concluded with a few remarks on the realities and discourses behind the issue of environmental services access by the poor.

2.1. The communities of Rokadiya Para, Sindhi Society and Suliya Timbo

Identifying the "urban poor" in a city like Amreli is a difficult task. The notion of poverty is relative. For instance, many so-called high wages in Amreli are lower than the minimal income in Switzerland. Indeed, the cost of life in India is far lower than in Switzerland and even with what would be considered as very low wages in western countries, some population groups in Amreli do achieve decent living conditions. Given the relativity of poverty, the urban poor have been identified through a comparison of the various communities living in the city; a comparison carried on with local dwellers. The three communities of Rokadiya Para, Sindhi Society and Suliya Timbo have been identified as "poor" regarding Amreli's standards and following traditional socio-economic criteria: their level of income, their access to education, their security of tenure and the general quality of their immediate built environment. Indeed, the three communities are not strictly homogeneous and a deeper analysis of their inner structures could be carried on. However, the purpose here is to bring into light the relationships between the "urban poor" and the environment. Thus the intra-community specificities are not of primary concern.

2.1.1. Poverty as lowness of income

First, the workers of the three identified communities generally occupy low income and unsafe positions. In Rokadiya Para, most of the men work as waste resellers: they collect goods abandoned on the streets or in public dustbins by middle class households, then repair and sell them on wooden carts around the city. The wages of this type of unskilled work are highly erratic since the income is earned on a daily basis, and is generally very low. Some women in the area also buy and sell vegetables on the same type of cart and other men occupy ordinary jobs such as shopkeepers or masons. None of these businesses generate sufficient income to allow the dwellers of Rokadiya Para to afford more than the minimum required for a living. In Sindhi Society, men occupy more skilled positions: most of them work as truck, rickshaw or governmental bus drivers. If governmental jobs are secure, only a few men occupy them. The others, as rickshaw and truck drivers, do not have regular contracts and usually work on demand: once again, it is a type of daily income. In this area some dwellers occupy ordinary urban functions such as shopkeepers or construction workers. Finally, in Suliya Timbo the community works in the sand sector. Men drive tractors or trucks and un/load the sand on construction sites where it is used to make cement. They are hired on demand and often face long periods of unemployment, while earning very little income when they actually work. For that matter, some respondents of this area even mentioned begging as a main source of income.

2.1.2. Poverty as a low access to education

While middle class respondents to the survey were often high school graduates or more, many of the low-income settlement dwellers were illiterate and almost all of them did not attend school further than the 6th standard. As Amartya Sen points out, there is a close connection between low income and low education levels setting a vicious circle: low education deprives a person from accessing high-income positions; low-income positions deprive parents from sending their children to school (Sen, 2000). It seems that this is what happens in Rokadiya Para, Sindhi Society and Suliya Timbo. Even if public schooling is free, side costs such as school supplies or private tuitions are unaffordable for most of the urban poor. In Sindhi Society for instance, the inhabitants have gathered into a trust and collect money in order to support families with children and to buy school supplies for them. Without this trust, most of the children of Sindhi Society would not attend school.

2.1.3. Poverty as hazardous security of tenure

The three poor communities are settled on governmental land and none of the dwellers have property or rental rights to live here: the fear of eviction is constant. Some

inhabitants do pay taxes for water or electricity, but they only are a handful. However, most of the communities have settled for decades (e.g. the Suliya Timbo neighbourhood was built when the community moved from Rajasthan more than 60 years ago) and the municipality of Amreli never evicted nor even threatened to evict them. The feeble attractiveness of the city keeps the land pressure low, ensuring a temporary and *de facto* security of tenure for the urban poor. To some extent, this appears to be a positive outcome of the decentralisation processes: small municipalities have not been empowered enough to react like megacities and evict the poor in the name of environmental conservation or in order to implement world-class projects on former slum sites (Bhan, 2009; Udupa, 2013). Besides, even if it was not up to the municipality, little reason could be found to evict the urban poor of Amreli.

2.1.4. Poverty as unfavourable living sites

The three communities are located on unfavourable living sites. Rokadiya Para is far from the city centre and some respondents mentioned this was a problem for their daily routines. For instance waste resellers have to cover long distances on foot to find useful materials. Besides, the Amreli bypass, with its heavy traffic, cuts the area in two. The road is a danger for children and causes denotable noise and air pollution in its direct surroundings. Suliya Timbo and Sindhi society are closer to the centre of the city but located near the Thebi and Vadi rivers that tend to overflow during monsoon. The communities are regularly forced to temporarily move away and sometimes even have to rebuild their houses. The riverbanks are also epidemic prone areas where mosquitoes happen to be a severe issue. Besides, Sindhi Society is poorly connected to the main road network: highly damaged soil paths lead to the neighbourhood, which makes it difficult to access for rickshaws and bikes.

To briefly summarize, the communities of Rokadiya Para, Sindhi Society and Suliya Timbo face traditional issues related to economic poverty. One can legitimately assume this status restrains their access to environmental amenities – but to what extent can one actually encounter environmental poverty among these communities?

2.2. Environmental entitlements and low-income communities

For Amartya Sen, poverty cannot be limited to economic poverty and therefore development should not be limited to economic growth. According to him, economic growth

is rather a mean to achieve greater ends, such as "the expansion of people's entitlements" and the capabilities that these entitlements generate." (Thirlwall, 2008: 39). For Sen, the capabilities are everything human beings can have or be. They are the combination of freedoms – i.e. the range of choices human beings have when confronted to social and economic constraints or opportunities; and *functionings* – i.e. the actual assets they have access to (Glossaire "les mots de Sen... et au delà", 2009). According to Sen, the final aim of development is to improve the capabilities of populations in order to "free" them from poverty (Sen, 2000: 89). This can be achieved through the expansion of people's entitlements, which are "the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces" (Thirlwall, 2008: 39). Anthony P. Thirlwall highlights that the entitlements of human beings essentially depend on what they can retrieve from the State, the spatial distribution of resources and power relationships in society (ibid.). In other words, the concept of entitlements can easily be applied to urban environmental amenities. Scholars in development studies have forged the notion of 'environmental entitlements' and define it as follow: "alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being" (Leach, Mearns, & Scoones, 1999: 233). For example, the access to water is an environmental service and is necessary for well-being. Thus, it is an environmental entitlement. Besides, water accessibility is actually shaped by its natural spatial distribution, and the extent to which it is provided by the State or monopolised by different social groups.

The upcoming sections are intended to assess one by one the various environmental entitlements of the urban poor in Amreli. Building on the existing literature, one can assume the poor do not have an enviable situation (De Bercegol, 2012). However, the field results tend to show that low-income communities of Amreli do have some environmental entitlements and that municipality does neither systematically fail as an environmental service provider nor systematically marginalise them. Arguably, one can state the urban poor of Amreli are "not-so-poor" compared to the middle class, which does not mean that nothing can be undertaken in order to improve their environmental entitlements.

2.2.1. A glass half full or half empty: the erratic drinking water supply

The access to water at the household level can be measured in terms of quantity and in terms of quality (WWAP/UNESCO, 2012). In other words, one must answer two questions if it is to assess whether a population group has a decent access to water or not: 1) is there enough water, anywhere at any time? And 2) is the water available safe to human consumption? Both quantity and quality are an issue for the urban poor of Amreli since they have an erratic access to water and especially to safe drinking water. As an environmental resource, water has natural properties that shape its availability and its quality. In Gujarat, water is characterised by seasonality (Mehta, 2001) and un-drinkability. Abundant amounts of the resource are available during the monsoon and winter seasons, while summer droughts are more or less severe depending on years. Besides, most of the water reservoirs located in the open or underground suffer from contamination, both natural (e.g. seaweeds, salinization) and human (e.g. defecation, garbage dumping). Thus water from these reservoirs is not safe for human consumption without treatment. A priori, each population group in Amreli is equally affected by seasonality and the poor quality of water. The survey results confirm this statement to some extent. Middle-class households complain their water tanks run empty during summer while many low-income households confirm they regularly suffer from water scarcity. Both groups stress out the pollution of the water bodies they have access to. The table below shows the importance of the phenomenon.

Neighbourhood	Share of survey respondents that consider water quality or quantity as a major ⁹ environmental issue
Rokadiya Para	70 %
Sindhi Society	40 %
Suliya Timbo	100 %
Ramwadi	70 %
Tripada Society	70 %
Jesing Para	50 %

Figure 4. The importance of water scarcity and poor quality according to survey respondents

⁹ "Major" means they identified either water quality or water scarcity as the first or the second of the environmental issues they face within a set of 10 choices that were presented to them.

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As a hybrid though, water is not only an environmental item but also a social construction (Zimmer, 2010) that is more and more treated as an economic good in the neoliberal context (Swyngedouw, 2005a). Because water is necessary to human life and a powerful means to development, the distribution of the resource is a major stake of urban governance. This anthropogenic dimension of water availability, unlike the natural one, does not allow every population group to stand on an equal foot regarding their water entitlements. Indeed, the urban poor generally struggle more than the middle class households with their daily access to water. However, the situation in Amreli is heterogeneous and sometimes surprising. As far as the municipality is concerned, water is supposed to be provided to every household equally. The official supply announced by municipal officers is currently of 110 litres per capita per day and will likely be raised to 150 litres by 2015, notably thanks to the implementation of a scheme from the Gujarat Urban Development Corporation (Gujarat Infrastructure Development Board, 2014). According to UN standards, this amount is sufficient to achieve decent living conditions (WWAP/UNESCO, 2012). In practice though, the 110L are not reached for everyone. All over Amreli, water flows through the governmental infrastructures every three days during winter and randomly – generally every two weeks – during summer. 60% of the households surveyed in Rokadiya Para and 100% in Suliya Timbo do *not*¹⁰ receive municipal water, "because they do not pay the taxes for it" according to the municipality. Considering this argument, it is surprising to note that many households of Sindhi Society do receive in-house municipal water even if they do not pay for the service¹¹. On the other hand, some middle class taxpaying households do not receive municipal water because their neighbours located upstream on the pipeline pump and store all the water available as soon as it flows. This was notably the case for an interviewee in the Brahman Society, an upper middle class area. The constant fear of water scarcity and the lack of control from the municipality over the quantity of water retrieved from the pipelines seem to explain this phenomenon, according to a municipal officer. As a matter of fact, one can assume that governmental water is not shared equally amongst all the urban dwellers. Instead, obscure political arrangements and neighbourhood relationships influenced by the fear of scarcity and a certain socio-economic rationality seem to shape the access to the resource. As a result, several urban poor

¹⁰ Some households in Rokadiya Para have managed to hijack municipal pipelines and get water illegally.

¹¹ The municipality obviously refused to answer our questions on this matter.

communities lack of water to fulfil basic needs such as drinking, cooking and maintaining a minimum level of hygiene, while some middle class households publicly spoil water in order to show they have reached a certain standard of living and income – at least according to a middle class survey respondent. Showing to the neighbours that one is not worried with water seems to be a way to demonstrate that one has high incomes. Since the public water supply is failing in Amreli, the safest means to get drinking water at the household level are private and expensive. Thus, middle class households build their own bore wells in their courtyards, set up systems of rainfall collection and storage on their rooftops or under their houses, buy filled water tanks from private firms, and invest in hi-tech reverse osmosis devices to purify water at the household level. If such systems and devices are the pride of several middle class respondents have a private bore well in their courtyard, while only two dwellers in Sindhi Society gathered to build a well for the community.

To briefly conclude on water one can state that the urban poor in Amreli generally struggle accessing the resource. In other words, they have poor water entitlements because they lack financial resources to deal with water scarcity and un-drinkability. However, they do not systematically have worse water entitlements than the middle class since poverty is not the only factor that shapes the access to this environmental service. Instead, particular governance networks, institutions and practices determine whether the various dwellers of Amreli have access to municipal water or not. For instance, a municipal councillor admitted he had obtained water for his neighbourhood thanks to his connections with local influent political leaders.

The situation regarding water supply seems to be rather blocked at the moment. Despite the decentralisation reforms, the municipality does not have enough technical and financial resources to supply every urban dweller as expected. Hopefully, the soon to be implemented scheme of the GIDB will broaden the access to water for the poor and the other urban dwellers. One can already note that during the last decade, the situation has greatly improved. Both middle class and low-income respondents acknowledged that water is flowing far more regularly and in greater quantities now than ten years ago. For instance, Sindhi Society had no water at the time and almost every household has a connection to the municipal pipelines today. Besides, obscure and criticisable water governance processes are

not the only processes that can be observed on the field. It was surprising to learn that the dwellers of Jesing Para, a middle class neighbourhood, freely share their water on a daily basis with the dwellers of Suliya Timbo, the low-income settlement of Rajasthani migrants. The anti-poor state of mind that apparently characterises the middle class of megacities (Bhan, 2009) seems to have spared Amreli until now. Thus, the urban poor of Amreli do not uniformly have worse water entitlements than the middle class dwellers. Much can be done to improve and regulate the access to water of both populations groups, but the municipality is currently powerless regarding this matter.

2.2.2. "Excreta matters¹²": the challenges of urban sanitation

The management of urban wastewaters is a major issue in cities around the world and especially in their informal and low-income settlements. The neglect of polluted waters and excreta in open gutters – or sometimes in streets – is an important cause to the spread of pathogens amongst urban dwellers and an important factor of environmental degradation (Lüthi, 2011). The situation in Amreli is quite worrying on this matter, which can be assessed at three scales: the municipal level, the neighbourhood level and the household level.

When considering sanitation as an environmental service at the municipal level, all the communities appear to stand on an equality foot. The municipality does not directly provide sanitation to most of the households, nor does any other actor of urban governance. The drainage infrastructures of Amreli are partial and mostly uncovered. The government manages a primary network of pipelines and gutters that follows the layout of the major city roads, but does not reach most of the neighbourhoods. At the moment, the secondary network that connects households to the primary infrastructures is almost non-existent. Seemingly, this network will be extended thanks to the sewage scheme of the GIDB (Gujarat Infrastructure Development Board, 2014). The interesting point regarding this scheme is that it will primarily be set up in Sindhi Society where the work has already started. According to the municipality, this low-income settlement is the one where improved sanitation is the most urgently required. However, according to survey results, sanitation improvement is more urgent in other parts of the city – notably in the middle class area of Tripada Society.

¹² Title borrowed from a report of the Centre for Science and Environment, Delhi (Centre for Science and Environment, 2011).

Neighbourhood	Share of survey respondents that mentioned sanitation as a negative aspect of their environment	
Rokadiya Para	10 %	
Sindhi Society	50 %	
Suliya Timbo	40 %	
Ramwadi	0 %	
Tripada Society	90 %	
Jesing Para	40 %	

The table below shows how urgent the sanitation matter is for the dwellers of the various communities.

Figure 5. The importance of sanitation according to survey respondents

At the neighbourhood level, the sanitation entitlements of the various population groups are similar to their water entitlements. The access of communities to improved sanitation systems relies on their ability to manage their wastewaters by themselves. Indeed, middle class communities have the best financial assets to achieve this goal. In several streets of Ramwadi and Jesing Para for instance, the neighbours have gathered to build their own connections between the households and the primary pipelines. The inhabitants have collected money and hired a contractor to do so. In Tripada Society and some streets of Jesing Para however, the communities did not bring their assets together. Instead, some households have built their own septic tanks, others private pipes towards the primary gutter and some just throw their wastewaters on the street or bring them manually to nearby open drains. In low-income settlements the situation is more homogeneous and not drastically worse than it is in middle class settlements, unlike what one can expect. Since the urban poor of Amreli seem to have better organisational assets despite their lower financial resources, they manage sanitation at the neighbourhood level with better coordination. The three communities of Sindhi Society, Suliya Timbo and Rokadiya Para have respectively gathered to build open drains by themselves, or have delegated the task to a member of the community. As a result, they have relatively efficient drainage networks at the community level even if the drains they build are open-air and still cross most of their streets or even their courtyards. Besides, the worst sanitation issues brought into light by the survey were encountered in a middle class area. A municipal primary open drain crosses Tripada Society. In this neighbourhood, inhabitants face sanitation related issues on a daily basis (e.g. overflow of polluted waters, stenches, mosquitos' invasions and their corresponding diseases).

At the household level finally, the sanitation entitlements of the poor are at the same time better and worse than the sanitation entitlements of the middle class. This paradox comes from the definition of entitlements as a set of *rights* and *opportunities*. The middle classes have better financial assets and opportunities to build and maintain individual proper toilets and wastewaters evacuation systems. Consequently, sanitation is not considered as a developmental issue for them and they do not receive any kind of support from the government: they do not have the *rights* to access State support. In most of the cases, financial help is not necessary since their sanitation systems are actually good. However, the survey has revealed that that middle class dwellers of Jesing Para go in the open to defecate on a daily basis. State help would also be urgently required in Tripada Society. On the other hand, the urban poor generally lack the financial and technical assets to build sanitation facilities. As a result, they benefit from a sanitation scheme (Nirmal Bharat Abhiyan or Total Sanitation Campaign, NBA/TSC) co-financed by the central government and the government of Gujarat. The scheme is reserved to households below poverty line and to some households above poverty line responding to specific criteria (Ministry of Drinking Water and Sanitation, 2014). It is rather efficiently implemented in the neighbourhoods of Rokadiya Para, Sindhi Society and Suliya Timbo: several dwellers met through the survey have toilets thanks to this scheme only. In many cases however, the NBA/TSC toilets do not work. They are either too small to be used, or not connected to evacuation pipes which makes them useless.

Considering sanitation beyond the notion of entitlements and therefore observing what actually happens on the ground, one cannot help but notice the mediocrity of access to safe sanitation systems, both for the middle class and the poor. Just as for water, the poor are "not-so-marginalised" regarding their sanitation entitlements to the extent that the middle classes of Amreli do not have a better access than them. Both groups would have a great need of governmental support, be it from the national state, the regional state or the municipality. Currently, the State as an environmental service provider is very distant. The implementation of the TSC scheme at the local level for instance is not efficient, because of its inherent technical challenges and administrative lengths. The municipality, even if closer

to the citizens, is not helpful either: municipal officers lack financial resources and technical competences to address the complex challenge of urban sanitation at the municipal, neighbourhood and household levels.

2.2.3. Overflowing dustbins and dirty streets, the challenges of solid waste management

Solid waste management may be one of India's major urban issues, if not the most prominent. As Shuchi Gupta states, *"the collection, transportation and disposal of municipal solid wastes (MSW) are unscientific and chaotic. Uncontrolled dumping of wastes on outskirts of towns and cities has created overflowing landfills, which are not only impossible to reclaim because of the haphazard manner of dumping, but also have serious environmental implications in terms of ground water pollution and contribution to global warming*" (Gupta, 1998: 137). Amreli is not spared by the phenomenon, which affects both the poor and the middle class in similar manners. Once again, the municipality is relatively powerless regarding the matter.

The collection of MSW and the sweeping of streets and public spaces in Amreli is erratic, regardless the type of neighbourhood concerned. In Rokadiya Para and Suliya Timbo, almost nothing is done to remove the waste. Only one dweller in Rokadiya Para mentioned a dustbin cleared once in a month, and one in Suliya Timbo mentioned that municipal workers were randomly taking the garbage off the main street. In Sindhi Society however, for an unidentified reason, a municipal rickshaw pays a door-to-door visit to all dwellers and collects the waste on a daily basis. Within the middle class neighbourhoods, the situation is highly heterogeneous. In Ramwadi, some dwellers stated not having access to any MSW management service while others see their dustbins cleared regularly. In Tripada Society, some dwellers benefit from the municipal rickshaw going to Sindhi Society daily, while others have access to a community dustbin cleared every two weeks. Most of the dwellers of the neighbourhood do not receive any service though. In Jesing Para finally, a municipal rickshaw comes regularly – daily or twice in a week, depending on the streets – but often leaves before the dwellers have the opportunity to reach it. Consequently, most of them throw their wastes in a field nearby, randomly cleared by the municipality. Only the main streets of Ramwadi and Jesing Para benefit from the municipal sweeping service, provided more or less regularly: a dweller in Ramwadi stated that he had to call the municipality to

force the workers to come and clean the street. The absence of municipal cleaning does not systematically mean that the streets are dirty though, especially in the low-income communities¹³.

The general trend of MSW management in Amreli is obviously a lack of service, once more caused by a lack of resources of the municipality. Only twelve garbage collection rickshaws are available: one for each ward, which is indeed not sufficient. However, it appears that the poor quality of the service is also due to a misuse of the financial resources available. In Amreli, MSW management is one of the few sectors where the government has concluded a public-private partnership with a subcontractor. The municipal landfill on the outskirt of the city is managed by a private company whose mandate could be put to better use than it currently is. The company's mandate is not to recycle or eliminate the garbage. Instead, it is in charge of moving the dump slightly further from the main road, "so people arriving in the city cannot see it" according to the municipality. The MSW of Amreli are still dumped on the existing landfill though, making the process somehow irrelevant.

To summarize, several points can be made on MSW. First, there is no clear distinction of entitlements between the poor and the middle class. Once again, the situation is mediocre for both, regardless their wealth. Unlike the amenity 'water', living in a clean and garbage-free area is a service that cannot be bought by a single household: it requires coordination at the neighbourhood level or a municipal intervention. Second, the municipality of Amreli seems to target the poorest places of the city as priority zones for garbage removal, according to a municipal officer taking Sindhi Society as an example. Despite what he says, other reasons – such as the political connections of the municipal councillor belonging to the society – seem to shape the good access of Sindhi Society to MSW management. It is still interesting to notice the pro-poor discourse behind his statement. Third, the lack of service does not have only social consequences but also strong environmental and health-related impacts that spread over the city borders. Within Amreli, the uncollected garbage is left in the streets and is often eaten by urban cattle. According to local biologists, the cows especially feed with the cellulose contained in paper, but also eat plastics and other materials that are harmful to their health. The pollutants contained in this

¹³ Since the hypothesis regarding this phenomenon do not belong to the field of environmental servicing but are rather linked with environmental conservation, they will be addressed in the third chapter.

type of "food" end up in their milk, which is drunk by the urban dwellers. The garbage not eaten is burnt *in situ*, which emits greenhouse gases. In the municipal landfill finally, since the garbage dumped is not treated, farmers from the surrounding villages come to load tractors with wastes: they filter the organic elements contained in the garbage to produce fertiliser, and dump the final waste in the open. Consequently, the urban non-organic wastes progressively spread into the countryside of Amreli.

2.2.4. Going to the park, an unshared privilege

A major inequality of functionings can be noticed if one looks into the practices of the Amreli dwellers related to green spaces. Theoretically, the entitlements of the poor and the middle class are equal regarding the access to urban parks. In practice however, things differ.

There are two parks in Amreli: Gandhibag, located in the centre of the city, and Kamnathbag, located on the outskirt (see Fig.3, above). Gandhibag has been built by the municipality less than 8 months ago and is hardly used at all: some of the urban dwellers do not even know it exists. The temporary offices of the Nagar Palika are currently set up in the park, while the permanent offices are under renovation. Consequently, many municipal servants and officers can be met among the trees, but very few ordinary citizens. The other park, Kamnathbag, has been built about 15 years ago by the Rotary Club of Amreli along with the whole Kamnath area, including the dam. The park is managed by the club ever since and is opened to the public every Sunday. It was designed to be a free resting area for the people going to the Shiva temple located next to it, as well as a playground for children and a biodiversity conservation zone. It is one of the only green areas of the city where migrating birds can settle, according to the president of the Rotary Club. There are other green spaces in town, but they are neither considered nor used as parks (e.g. some riverbanks or city fringes used as open toilets). There are also other private parks, located in the gatedcommunities at the North of the city. However, they only benefit to the inhabitants of these communities and most of the urban dwellers, no matter their social class, do not know they exist.

To sum up, Kamnathbag is the only green space that all dwellers can potentially access, and it is interesting to note that the municipality is not the service provider responsible for it. They only collaborated with the Rotary Club to build the road leading to the Kamnath area and have not intervened since. Despite the absence of an entrance fee to the park, Kamnathbag encounters a mitigated success. According to the survey results, the middle class frequently uses it whenever they go praying at the Shiva temple, while the poor hardly ever visit it, as the table below show.

Dwellers of	Regularly visit Kamnathbag		
Rokadiya Para	0 %		
Sindhi Society	20 %		
Suliya Timbo	10 %		
Ramwadi	80 %		
Tripada Society	100 %		
Jesing Para	90 %		

Figure 6. Kamnathbag, a park unequally visited

The main reason seems to be its location: it is far from all the housing neighbourhoods, and only the middle class appears to have enough time and resources (i.e. motorbikes or cars) to reach and use it. Underlying reasons may exist too: 'casticism' or the unwillingness to mix with other social classes, though they have never been mentioned by the survey respondents: all castes, including SC/ST, seem to invariably pay visits to the Shiva temple.

As a matter of fact, there is an obvious inequality of entitlements regarding the access to urban green spaces: everyone has the formal right to visit the public parks, but only a few dwellers actually have the opportunity to use this right, and only the most fortunate dwellers can access the private parks.

2.2.5. Useful rivers, hazardous rivers

Urban water bodies have an ambiguous role to play in the urban everyday life: they can be amenities and dangers at the same time, especially in countries of the global south that experience strong seasonality and therefore regular floods (PEDRR, 2011). Thus, urban ponds may be used for washing and laundry purposes or as social gathering spots for women on one hand, while they may also attract mosquitoes or contain pathogens that cause the spread of water related diseases (Lüthi, 2011).

The two main water bodies of Amreli are the Thebi and Vadi rivers that run from North to South through the city. They host two dams: one within the city borders and the other, currently under reconstruction, is located upstream. The northern dam was destroyed in 2012 due to a major flood, causing important material – and certainly also human – losses on the riverbanks downstream. The second dam has not caused any disaster yet, though its reservoir is filled with seaweed pollutants harmful to health. Urban dwellers use both rivers and other wet sites in the city for multifarious purposes. The middle class communities tend to use the riverbanks and the dam sites for walking and relaxing. The dwellers of Suliya Timbo use the Vadi river stream for bathing, washing clothes and marginally for recreation, while using the riverbanks as open toilets. The dwellers of Sindhi Society use the Thebi river for washing clothes, recreation and marginally for fishing. The dwellers of Rokadiya Para finally happen to use a pond in the area for religious purposes, but most of them avoid it since it is highly polluted with wastewaters. At first sight, the various uses of the water bodies do not seem compatible with each other (e.g. toilets *versus* bathing or recreation). However, on the one hand, survey respondents never mentioned those points as an issue. On the other hand, the high exposure of low-income settlements to disaster risks seems to be of major concern for the urban poor.

Disaster Risk is defined as a calculation taking into account the hazard, exposure and vulnerability factors. According to the United Nations, a hazard is "a dangerous phenomenon" caused by human or natural events, such as floods or landslides; the exposure is defined as the "people, property, systems, or other elements present in hazard zones that are thereby subject to potential losses"; and vulnerability is defined as "the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard" (UNISDR, 2009). If one assesses the exposure and vulnerability of the communities of Suliya Timbo and Sindhi Society, one can observe they face severe disaster risks. First, the Vadi and Thebi basins are hazard prone areas: natural floods occur on a regular basis during the monsoon, generally every two to three years. An exceptional human induced flood occurred in 2012 when the gates of the northern dam broke, unleashing the whole reservoir at once. Second, the two poor communities are highly exposed since their living sites are entirely located in the hazard zone. Other poor settlements are located between the two rivers, thus facing even greater exposure (see Fig.7). Third, their vulnerability is strong: no security infrastructure exits to protect them; their houses are not resistant to floods because of the materials used; their use of the rivers expose them to sudden rises of the water level. Fourth, they are not *resilient communities* (PEDRR, 2011): they do not have the capacity to fully recover in case of losses caused by any potential disaster. Some respondents in Sindhi Society mentioned that when a flood occurred, they had to leave and return after the water level dropped to rebuild the best they could – but always without help. Some middle class areas are located within the flood prone area too. However, as pictured on Figure 7, they do not face disaster risk the same way the poor do: their vulnerability is far lower. On the riverbank, a dike has been raised that follows the path of the ancient city wall, still existing. Seemingly, the households protected by the dike and the wall never encountered any flood related issue.

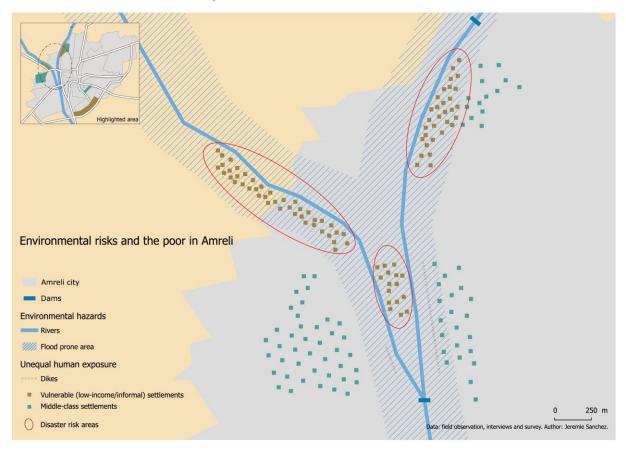


Figure 7. Environmental risks and the poor in Amreli

To summarize, the urban water bodies are assets for everyone but present risks for a certain population group only: the poor. Thus, the matter is not an entitlement issue but rather a *freedom* issue. The poor do not freely choose to settle on hazardous living sites, but do so because such sites mitigate their lack of environmental entitlements. For instance, the proximity of a river provides water, eased sanitation and other basic amenities. As a result, the poor benefit from the environmental amenities provided by the water bodies, but also suffer from the risk induced by living close to them. Since the middle classes are freer in their housing choices, they do not face equally the risks and can retrieve only the benefits from the urban water bodies of Amreli.

2.3. Summary

2.3.1. Findings from the field

Drawing a conclusion on the access of the poor to urban environmental amenities is necessarily simplistic. As this chapter tried to depict, the functionings of the poor communities in Amreli are quite complex. One can observe that they generally struggle with access to water, sanitation, solid waste management and parks while they are also exposed to environmental risks. The interesting point is that their struggle is not systematically harder than the struggle of the middle class. In several cases, both social groups have equally poor environmental entitlements.

The municipal government remains the main environmental services provider in Amreli: neoliberalism has not trickled down this far into Saurashtra yet and almost no amenity is privatised at the moment. Thus, the injustices that seemingly characterise the access to environmental services in cities where they are privatised (Mitra, 2008) remain relatively low in Amreli. Since the public actor is the main provider, all population groups are supposed to be supplied fairly with environmental services – even if in practice, the public supply is insufficient. According to the municipality, affirmative action towards the poorest communities is even undertaken in order to build socio-environmental justice. For instance some municipal officers interviewed mentioned that the municipality spends more than 20%¹⁴ of its budget in the "social sector" – i.e. the help to the disadvantaged. If one looks at the situation in Sindhi Society, which is rather well positioned in terms of access to environmental amenities, this statement is believable. However, in the other low-income settlements and even in some middle class neighbourhoods, the government generally fails to provide environmental services. Consequently, only the households that can privately mitigate the governmental failure are able to access quality environmental amenities. In other words, middle class dwellers can often afford decent environmentally related functionings while the poor do not.

¹⁴ 20% of the overall budget is the legal minimum that all Indian municipalities are supposed to spend in the social sector. Indeed, the municipal officers interviewed did not prove that Amreli spends more than 20% of its budget in order to help the poor.

2.3.2. The failure of the government

Arguably, neoliberals would say the State is failing to provide in Amreli. The weakness of the municipality, both in terms of financial resources and managerial abilities, appears quite clearly to be the cause of this failure. One of the first interrogations of this work was to assess whether Saurashtra cities are left behind by the Gujarati government or not, since the state of Gujarat arguably focuses its developmental efforts on the metros of the golden corridor (Government of Gujarat, 2013; The Economic Times, 2014). As Rémi de Bercegol suggests, Indian small cities highly rely on the "financial decisions of the regional government for important infrastructure investments, like drinking water systems" and are currently "poorly endowed" to address the tasks that fell to them under the 74th Amendment (De Bercegol, 2012: 4). Obviously, Amreli lacks the financial resources to address its environmental governance issues. However, no evidence could be found on the field of whether it comes from a lack of investments from the state government or not. When questioned on this matter, municipal officers answered imbalance in the share of public funds is impossible, since cities in Gujarat receive money on the basis of their demographical size and developmental needs. Since the notion of "needs" is fuzzy, the distribution of funds seems to be left to interpretation, political arrangements and inequalities.

What appears even clearly at the municipal level is that available resources seem to be poorly managed. Several authors point out that inefficient municipal management shapes the quality of urban services provided by (small) municipalities in India. For instance, human resources problems such as mutual distrust between the elected and administrative bodies can cause inefficiency in the decision-making processes (De Bercegol, 2012). In very small cities, the municipal engineers hired are often unqualified and thus municipal infrastructures lack of proper maintenance (ibid.). Within the various departments of metros such as Ahmedabad, the share of financial resources sometimes leaves no money for the department functioning, because all funds are spent in salaries for instance (Sekhar & Bidarkar, 1999). In Amreli, the somehow irrelevant public-private partnership concluded in order to displace the municipal dump is an example of poor managerial decisions municipalities happen to make. It also proves that without improving the municipal incomes, much can already be done in order to ensure decent environmental entitlements to urban dwellers. A longer fieldwork could have revealed other weaknesses of management, notably the ones described by the authors mentioned above, though no evidence on these matters is available at the moment.

2.3.3. What do the poor think? The discourse on urban entitlements

Assessing the failure of an Indian municipality from a western point of view is not the same thing as assessing it from the viewpoint of an Indian urban dweller, directly concerned by the lack of environmental services. One aim of the survey was to give a voice to the poor, and to hear how they assess their own living conditions. The outcomes on this matter are rather surprising. First, it is quite interesting to notice that not all the urban amenities are a matter of concern for the urban poor. Parks, trees and water bodies do not seem to be important to their eyes: several respondents that had no access to water or sanitation happened to laugh at the survey questions regarding their access to parks or rivers, before answering that they did not care about it. Second, the respondents in Rokadiya Para and Sindhi Society uniformly consider their living conditions as better than they were ten years ago. They notably salute the urban growth that brings them new neighbours¹⁵, as well as the increase in urban services they receive: regular water in greater quantity, in-house sanitation facilities, permanent electricity, better roads, and improved access to education facilities. The viewpoints in Suliya Timbo are more mitigated, even though several dwellers point out improvements such as access to electricity and a reduced distance to cover in order to access water pumps. The respondents of the three middle class areas surveyed highlighted the same improvements. This indicates that the government tries to increase the quality of life everywhere in the city in a relatively fair manner. Second, the dwellers of Sindhi Society and Rokadiya Para generally do not consider their environment as worse than the rest of the city; although they live in areas they themselves define as slums. Many respondents highlighted the fact that their "neighbourhood is a brotherhood", or that they prefer to live in a disadvantaged area far from the centre of the city because the air is cleaner here. Only a few dwellers mentioned middle class neighbourhoods were better endowed with environmental amenities than them. Surprisingly, more respondents in the low income area

¹⁵ Nearly all the urban dwellers interrogated primarily understood the notion of environment not as an ecological entity but rather as a human structure. Explanations had to be given in order to make them understand that the study was about the non-human environment as well. Consequently, spontaneous answers were very often focused on the quality of the human environment, the « people living around ».

Dwellers of	Better	About the same	Worse
Rokadiya Para	60 %	20 %	20 %
Sindhi Society	80 %	0 %	20 %
Suliya Timbo	20 %	20 %	80 %
Ramwadi	60 %	40 %	0 %
Tripada Society	60 %	20 %	20 %
Jesing Para	60 %	40 %	0 %

of Sindhi Society were happy with their immediate environment than in some middle class settlements.

Figure 8. Answers to the survey question 14: "Is the environment of your neighbourhood better or worse than the rest of the city?"

As a matter of fact, the failure of the government should be nuanced: certainly much can still be done in order to improve the access of the poor to the environment, but a lot has already been done in the past decade. Besides, what can be considered as tough living conditions from an external viewpoint is not systematically perceived as such by the dwellers themselves. This does not mean the urban poor accept their fate passively: they do act in order to improve their living conditions, and are do especially claim better access to water, sanitation and cleanliness facilities. Who do they turn to when they have needs? Especially, what are their relationships with the state when they ask for better environmental entitlements? These will be the concerns of the next chapter.

3. On environmental governance and governmentality

This chapter is intended to cover the second part of the general research question: what is the place of the poor within Amreli's environmental governance? It will focus on the relationships between the poor and the State, essentially at the municipal level. These relationships will be addressed through the lens of environmental services provisioning, which is detailed in the second chapter. The aim of this chapter is to establish a critical analysis of the environmental governance and governmentality at work in Amreli.

Thanks to the decentralisation reforms of the early 1990s, local governments in India were supposed to become major stakeholders in urban governance. The 74th Amendment to the constitution notably granted them with the power and the duty to address everyday urban issues (Constitution of India, 1992). In practice, decentralisation waves have encountered a moderate success all over India. In some cases, decentralisation has even failed and led to recentralisation (Johnson, 2003). Twenty years after the reforms, the process of municipality building is still under progress in many cities: much more remains to be done to empower urban local bodies (De Bercegol, 2012). In Gujarat, despite the enthusiasm shown for decentralisation by authorities, the process is not completely achieved and national as well as regional state actors still frequently interfere in urban governance. Besides, along with the administrative reforms, the Gujarati government has implemented a vibrant neoliberal policy (Dixit, 2010), leading to a withdrawal of the state from several sectors of urban services provisioning. Arguably, in many developing and emerging countries, such political-economic shifts have generated negative outcomes for the disadvantaged groups of population, such as a more expensive basic services access (Swyngedouw, 2005; Chaplin, 2011). Yet it remains to assess whether the urban poor of Amreli have also suffered from such outcomes or not: analysing the governmentality of Amreli may bring some clues on this matter as well.

This chapter will be divided into three main sections. The first will establish a Foucauldian framework of analysis that will further be used to address environmental governance processes and power relationships. This theoretical framework will also be used in the fourth chapter. The second section will empirically address the relationships between the poor and the State apparatus in Amreli. The third section will focus on the strategies the urban poor adopt when they face environmentally related issues in the neoliberal and decentralised context.

3.1. Governmentality and political society in Gujarat

The Foucauldian approach of *governmentality* can often be encountered in Urban Political Ecology studies since it allows a deeper understanding of the power relations at work in urban governance rather than strict governance approaches (Zimmer, 2011). It is also a powerful tool to critically examine the rationalities underpinning the neoliberal State (Lemke, 2000). However, such a complex approach requires the definition of several concepts before it can be used. Foucault himself provides various insights on the notion of governmentality, and so do scholars building on his work. In short, governmentality is usually referred to as a 'technology of governing' (Foucault, 1989) or as a 'governmental rationality' (Hunt, 1996; Zimmer, 2011). Blundo and Le Meur provide an extended definition of the notion, quoting Foucault himself:

"by this word I mean [...] the ensemble formed by the institutions, procedures, analyses, and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security." (Foucault, 2002: 221 in Blundo & Le Meur, 2008: 9).

The definition implies that governmentality is a way of governing populations through the exercise of a specific knowledge, seemingly in order to ensure their welfare and security. However, nothing is specified about who is supposed to govern or who is supposed to be governed, the idea of population being confused. Yet the concept of governmentality emerged in the late work of Foucault, which dealt with the links existing between the State and the subject: those two entities are the primary focuses of governmentality analyses.

In his *Lectures at the Collège de France* of 1978-1980, Foucault examined the notions of power, government, domination and subjectification. These notions deserve to be individually addressed, since they shape the existing link between the State and the subject in the Foucauldian approach. *Power*, says Lemke, is the determination of the conduct of others through the exercise of "ideological manipulation, economic exploitation or rational

argumentation". However, power is not necessarily "bad" and can be exercised in the interest of the governed (Lemke, 2000: 5). *Government* is, in Foucault's vocabulary, the "conduct of conduct" (Zimmer, 2011: 31) or in other words the exercise of power by following a specific rationality, more or less regulated and systematized (Lemke, 2000: 5). *Domination* finally is a particular and "asymmetrical power relationship in which the subordinated persons have little room for manoeuvre" *(ibid.)*. This power relationship is the result of a particular governmental rationality – i.e. a particular governmentality –, which considers individuals as subjects in the feudal sense. However, for Foucault, *subjects* of the modern State are not only such traditional targets of domination but also "*active agents*" (Blundo & Le Meur, 2008: 10). Arguably, the emergence of the modern State shaped new processes of *subjectification* leading to the constitution of active agents. Along with it, the emergence of the neoliberal ideology seemingly led to new forms of government, such as individuals governing themselves without the State (Lemke, 2000: 4). Foucault calls these new forms of self-conduct the "techniques of the self" (ibid.).

Building on the above cited concepts, Partha Chatterjee analyses the Indian postcolonial era through the lens of the Foucauldian approach. According to him and others, the governmentality at work in modern India contributes to deny the poor citizenship (Chatterjee, 2004; Rao Dhananka, 2013). For Chatterjee, the Indian postcolonial State is "securing its legitimacy not by the participation of citizens in matters of State but by claiming to provide for the well-being of the population" (Chatterjee, 2004: 34). In other words, today's governmentality in India implies that most of the inhabitants are not treated as citizens, neither by neoliberal nor developmental measures. Citizens, Chatterjee argues, "inhabit the domain of theory" (ibid.) while *populations* inhabit the domain of reality. In his vocabulary, citizens constitute an indivisible entity: the civil society, which participates in the sovereignty of the nation state while populations belong to the *political society*, a divided entity, located at the interface between the governed and the governing. The political society is an empirically grounded "site of negotiation and contestation" (Rao Dhananka, 2013: 6) while citizens represent a constitutional ideal disconnected from reality. In other words, the political society is, according to Chatterjee, the way State-society relations actually happen in India. As he points out:

"Most of the inhabitants of India are only tenuously, and even then ambiguously and contextually, rights-bearing citizens in the sense imagined by the constitution. They are not, therefore, proper members of civil society and are not regarded as such by the institutions of the State." (Chatterjee, 2004: 38)

Following this definition, most of the inhabitants of India are subjects in the feudal sense. If they do participate in the decision-making processes through elections, they are still dominated by the *government* exercised by the State and its political intermediaries, and have to develop extra-constitutional strategies (such as building political networks) in order to access their rights.

This rather pessimistic analysis of Indian governmentality appears to be particularly accurate when applied to the governance of Gujarat, as the next sections will try to demonstrate. Today, the governmentality of Gujarat in general and of Amreli in particular implies the exercise of context-specific and historically rooted forms of *power* and *domination*, notably allowed by the holding of a particular knowledge. Urban dwellers in Amreli do not play an equal role in its political society. On the one hand, the poor are mostly feudal subjects of urban governmentality that, like many other poor, "have to negotiate for [their environmental] entitlements, rather than [their] rights" (Rao Dhananka, 2013: 6). On the other hand, a minority of middle-class dwellers succeed in behaving as *active agents,* thus clearly playing a role in the political society and almost hauling themselves onto the sphere of the "elite society" (ibid.). The journeys of several urban dwellers that will now be presented illustrate this unequal nature of relationships between the poor and the State on the one hand, and the elites and the State on the other.

3.2. The State against the poor?

Regarding the stories told by several urban dwellers that will be presented in this section, it appears legitimate to question the intentions of Amreli's urban local bodies. Despite the challenges that the municipality faces, such as the lack of resources and the possible lack of competent agents, and despite the fact that the community living in Sindhi Society has rather good environmental entitlements, the authorities of Amreli still seem to purposely neglect the urban poor. Thus, one can legitimately wonder if decentralised governmentality in Gujarat is not exercised "against the poor".

3.2.1. From the poor to the State

The dwellers of the three low-income communities surveyed all have their personal stories to tell when it comes to the matter of accessing the State. Such stories happen to unveil whether they take part in the political society.

Dayabhai is the informal leader of the Rajasthani community living in Suliya Timbo. His position is, according to what he says, a duty more than a privilege: neither did he claim it, nor is he proud of it. It came to him *de facto* when he decided to improve the living conditions of his community by building a bore well. Even if today the well is still not working - it seems that the soil has not been dug deep enough - his neighbours have decided that Daya should be the leader, "because at least he tried". He is now the person of reference when an issue arises in the community. Daya is the designated negotiator sent to the municipality of Amreli whenever a member of the community has a claim. Those claims are always identical: the community wants an eased regular access to water, preferably at the household level. Each time, the process of accessing the State is the same: Daya goes to the municipality to ask for water and is answered that something will be done soon, but nothing ever happens. Seemingly, the situation has been frozen for months, if not years. Daya can barely read or write, be it in Gujarati or in Hindi. He did not attend school, like all his neighbours, and is not politicised: he does not belong to any party or movement. He is aware of his rights though, and knows the municipality is supposed to meet his needs. But he has neither the power to claim his rights, nor the understanding of why the municipality fails to provide his community water.

The municipality does not seem willing to respond to his requests. When questioned about the Suliya Timbo community, the municipal officer interviewed provided interesting answers. He was obviously aware of the matter and seemed to know a lot more than what he revealed. His first statement was that Suliya Timbo was out of the municipal borders, which makes the municipality unable to do anything for the community. After he received a map proving him wrong, he said he had never met any member of the community. His hypothesis was that when Daya was coming, the officers he talked to misled him. When the officer learned that Daya could barely write, he concluded that nothing could be done for his community's water connection. Indeed, the procedure required to claim for an urban municipal service is to fill a written form – and Daya is unable to fill such a form. Recently, a

local municipal councillor decided to come with Daya when he goes to the municipality¹⁶. However, even with his help, Daya has not succeeded yet in bringing any change regarding the attitude of municipal officers.

Broader insights can be drawn from this. First, because he is not educated, Daya is unable to maintain a relationship with the State as equals. Foucault would call the link between him and the local government a *domination* relationship: Daya and his community have very small room for manoeuvre. Second, the municipality does not seem to be willing to help the Rajasthani community: resources or competences are not even taken into account, municipal officers stick to the official procedure no matter how absurd this may seem in this particular case. Third, it is obvious that the municipality is not sharing parts of its knowledge: if nothing can be done nowadays, one can wonder why municipal bore wells have been implemented in Suliya Timbo in the past. Chatterjee would argue that Daya and his community are denied of their citizenship rights. They have to struggle for their environmental entitlements on a daily basis and are unable to play an active role in the governmentality of Amreli. Consequently, they progressively give up on claiming their citizenship. They are turned into feudal subjects, condemned at passively waiting for mother India, "mabar Sarkar", to take decisions and actions towards their entitlements. They also constitute themselves as feudal serfs because they are ashamed of having neither the knowledge required to access the State (e.g. they are not able to read or write; they do not know who is doing what within the municipal bodies) nor the resources to do so (e.g. money is required to pay intermediaries who would fill the forms for them) nor the legitimacy (i.e. the formal rights of settlement) to behave as active agents in the political society of Amreli. The subjectification process at work in this particular governmentality structure progressively leads to the rupture between the dwellers and the State: Daya mentioned that he kept going to the municipality without any hope, and that he would probably give up soon. Very similar stories shape the relationships of the dwellers of Rokadiya Para and Sindhi Society with the municipality: they almost never see their requests fulfilled when they access the State by themselves, or through their informal leaders.

¹⁶ The sudden interest of the councillor for the Rajasthani community is difficult to understand. He was barely aware of their existence when I interviewed him in January. According to the data available, one can only assume a patronage relationship has been established, and thus hope that Daya and his neighbours now play a certain role in Amreli's political society. But considering the absence of improvement, one can also fear that the community has been instrumented and turned into a vote bank.

For comparison purposes, the story of Rasikbhai is interesting. Rasik lives with his family in the middle class area of Tripada Society, along with many other Scheduled Castes members. Rasik holds a diploma in engineering: he is graduated, speaks English fluently and is politically educated. His father used to work for the government, in the revenue department. Thus, Rasik knows how the administrative and political bodies work, and he knows exactly who he can turn to when he has claims. According to him, the most helpful person when it comes to the matter of environmental services provisioning is his ward municipal councillor. The reason is simple: "we can put voting pressure on him if he does not help. We can ask our family and neighbours not to vote for him again". Rasik is an active agent of the political society. He can access the State and is anything but a feudal subject: he would never accept a passive *domination* relationship with the State, and consequently takes care that both the entitlements and the rights of his household are guaranteed.

Daya and Rasik live less than one kilometre apart from each other, but have very different relationships with the State, and therefore very unequal environmental entitlements. In theory, both are supposed to be treated as equals by the State since both are Indian citizens. Because he is below the poverty line, Daya should even receive special support from the State. However, in practice, Daya does not have the means and the knowledge to claim State support like Rasik. He maintains a *dominated* relationship with the municipality, and is treated as a feudal subject rather than a *citizen*. Thus, he feels more and more abandoned by the State, and in return starts to give up trying to access it. The current governmentality of Amreli is, if not against his interests, not in their favour. As a matter of fact, one can observe that if decentralisation seemingly did not worsen the situation of the poorest in Amreli, neither did it bring them closer to the State.

3.2.2. From the State to the poor

Analysing how the State accesses the urban dwellers also questions the pro-poor nature of decentralised governmentality. Two kinds of State agents wander into the lowincome communities of Amreli on a regular basis: local and regional officers working for schemes such as the Total Sanitation Campaign (TSC); and political candidates (such as ward councillors) during electoral campaigns. The urban poor happen to confuse them with one another. As several authors have highlighted, disadvantaged populations tend to identify their personal experiences with particular governmental representatives to the State in general (Corbridge, Williams, Srivastava, & Véron, 2005). The aims of the various State agents are very different though, and the governance structures and processes bred by their relationships with the poor are dissimilar.

First, governmental agents that manage developmental schemes exercise the power of the State. They establish governmental rationality at the local level, especially in slums and low-income communities, officially to improve the living conditions of the urban poor. The way the Total Sanitation Campaign¹⁷ has been implemented in Amreli illustrates such power imposition processes, and unveils non-democratic functionings. Several dwellers of the three communities benefit from the TSC. In order to be eligible for the subsidies, they have to be identified as "poor" by the TSC officers during their field visits. In order to do so, they notably have to show their ration card. However, many urban poor in Amreli do not have this card because the officers delivering it are highly corrupted and often ask for unaffordable payments As Rémi De Bercegol points out, corruption is "quasi institutionalised" in small towns (De Bercegol, 2012: 6). Thus, only a few dwellers in Amreli actually access the subsidies or the toilet materials granted by the TSC. Even then, subsidies are often insufficient to build decent systems, and the toilets constructed by TSC engineers are regularly unusable. For instance, a dweller in Sindhi Society showed that his toilet had been built without any evacuation pipe or septic tank. The top-down nature of the TSC scheme deprives the urban poor from claiming environmental entitlements to the State: it is a one-way relationship. Besides, the poor can only benefit from the TSC thanks to a random combination of factors, which happen to be context specific (e.g. having the ration card when TSC officers come to survey; finding a way to bypass corruption or meeting honest officers). Foucault would call the implementation process of the TSC a *power* relationship to the extent that the scheme is still aimed at improving the living conditions of its recipients. No room for negotiation is left though, and the urban poor depend on the good will of the State as feudal subjects as far as their environmental entitlements are concerned. Nevertheless, the undemocratic nature of this scheme cannot be ascribed to neoliberal governmentality. Even in Gujarat where neoliberalisation has been strong, some elements of

¹⁷ See chapter two for details about this scheme.

the developmental and centralised era remain. The Total Sanitation Campaign is one of these elements.

Second, the politically elected representatives of the State also access the poor, but for electoral rather than welfare purposes. Members of Parliament, Members of the Legislative Assembly, local party workers and sometimes even Chief Ministers come into low-income neighbourhoods during electoral campaigns and meet households individually or through public rallies to earn their votes. The process has a major role to play in urban governance: many respondents to the survey have already been approached by such techniques. The process of vote gathering has several features. The first and most common is the transformation of environmental services into 'political currency', which is a way to buy votes (Rao Dhananka, 2013). Elected bodies promise urban services to the poor in order to get votes, and never actually bring these services once elected. More rarely, candidates come and build infrastructures, or roads, or bring electricity. These are the only kind of services provided though, because they are "the most visible, which is electorally very useful" (De Bercegol, 2012: 6). Both these strategies consider urban services as political currency, and thus imply that urban dwellers must be kept in a state of need. This raises major governmentality issues. On the one hand, the poor give up on claiming basic environmental services, because they start to think services are objects of political bargain rather than rights. Since they distrust political powers, they consider the cause lost and turn themselves into an "undemanding electorate" (De Bercegol, 2012). On the other hand, most of the political candidates consider environmental services as a cheap and efficient means to achieve power since they are quite "visible" (De Bercegol, 2012; Brand, 2007). However, politicians do not consider power as a means to provide environmental services in return. As a result, the access to basic services becomes a feature of urban governmentality and an object of political debate rather than a fundamental right, both in the minds of the governing and of the governed. There is no constitutional right to water in India for instance, and the environmental rights of the urban poor seem to be frequently questioned or even denied by the Supreme Court (Bhan, 2009). The second feature of the vote gathering process is a consciousness rise amongst the dwellers approached by elected bodies: they seize the opportunity to put pressure on politicians by exercising their right of vote so they fulfil their needs. However, as the stories of Daya and Rasik have shown, only the elite usually use this power properly while the poor lack the confidence to do so. Once again, this feature implies two diverging subjectification processes: one that constitutes the elites into active political society members, and one that turns the poor into feudal and passive subjects. In other words, Chatterjee's analysis appears to be too optimistic to be applied to the reality of Amreli. In this city, even the middle class do not haul themselves onto the sphere of citizens, but remain bounded to the struggling political society. The third feature is related to the second one: the discourse held by party members sustains the cult of political leaders, just like in pre-colonial States where the cult of the prince was maintained. This feature may reveal the less democratic aspect of Indian politics: the policies and governmental rationalities of political parties are hidden behind the glorification of political leaders, and popular perceptions are manipulated. Arguably, "these tactics shift the focus from what is important to what is negligible" (Kumar & Pathak, 2012: 17). Unfortunately, such strategies seem to be broadly implemented in the low-income communities of Amreli. For instance, in Suliya Timbo, a child was wearing nothing but a tee shirt printed with the face of Narendra Modi.

To summarize, when the State reaches the poor, it is not systematically in the interest of the latter. The characteristics of Indian politics and the reminiscences of the developmental State – i.e. central state schemes such as the TSC – ensure the sustainability of an unbalanced relationship between the governing and the governed. Thus, the State may not be acting against the poor, but in many cases it does not seem to be acting for them either. It mostly exercises its power through *domination* processes, when it could arguably exercise 'government as guidance' to achieve better ends (Lemke, 2000). To some extent, this shows the limits of the decentralisation reforms. One of the intentions of the 73rd and 74th amendments was a democratic improvement: it does not seem to be achieved, at least in Amreli. The distrust bred by this long-lasting lack of democracy seemingly leads the urban poor of Amreli to move away from the State, and to develop 'techniques of the self' in order to ensure their everyday livelihoods.

3.3. Governance without the State: the self-governing techniques of the urban poor

3.3.1. Governance without the State

Erik Swyngedouw talks about 'governance beyond the State' to analyse the structures of *government* (in the Foucauldian sense) of the neoliberal era. As far as Amreli is concerned, one can arguably talk about 'governance without the State'. Disadvantaged urban dwellers in Amreli have very tenuous relationships with the State, when they actually do. The story of Daya does not represent the behaviour of all poor Amreli dwellers. Most of them do not even try to turn to the State when they face environmental servicing issues. For instance, only 40% of the urban poor interviewed¹⁸ actually turned to the State for water related issues in the past, 23% for solid waste management issues, and 30% for sanitation issues. The distrust in urban local bodies is so strong that the poor usually bypass the State in order to access environmental amenities. They try to find servicing through self-governing practices, which mostly rely on what Pierre Bourdieu calls the 'social capital'. He distinguishes several forms of capital and defines the social capital as follows:

"It is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group [...]. These relationships may exist only in the practical state, in material and/or symbolic exchanges which help to maintain them." (Bourdieu, 1986: 51)

In Amreli, many environmental governance relationships are not institutionalised. They exist in the *practical state*, which does not mean they are not strong and sustainable. They are part of the everyday life of urban dwellers to a far greater extent than their relationships with the State. The poor especially strongly rely on them to access environmental amenities: families, neighbours, acquaintances, clubs and community members are immediately and easily accessible to them when the State is distant.

¹⁸ Survey data, 3 low-income communities aggregated. « The State » includes here municipal officers, regional and state officers, and all politically elected representatives.

3.3.2. Everyday governance in low-income settlements

In low-income settlements, the State is mostly absent. Not only its interventions are rare, but also the dwellers have little trust and will to turn to it unless it is necessary. Even the ward municipal councillors, who yet are supposed to be close to the populations, seem to be trusted and used to a rather small extent. The poor turn to them to solve very specific problems (such as streetlight) but do not spontaneously think about them when they need support. For the greater part, the urban poor barely use their potential political weight to behave as active agents and join the political society. Consequently, most of the daily environmental issues are solved without the State. The analysis of Dharavi made by Mathias Echanove and Rahul Srivastava can be applied to the low-income settlements of Amreli: "People have learned to respond in creative ways to the indifference of the State" (Echanove & Srivastava, 2009). Three concrete examples of everyday governance processes illustrate the absence of the State.

The first takes place in Suliya Timbo, where most of the dwellers ask Daya when they need water. If he sometimes goes to the municipality to claim for support, he generally asks the owner of the farm next to the community whether he can retrieve water from his bore well. The farmer systematically accepts, since in return Daya and his neighbours are used to help him taking care of his cattle. In this process, the State does not intervene at all: the relationship is informal, not institutionalised and works perfectly. Both the farmer and the community rely on their social capital to reach their respective aims: taking care of the cattle and accessing water. The second example takes place in Sindhi society, where dwellers tend to rely on the leader of the trust, or a local religious leader, or a rich patron who belongs to the community when they face sanitation related issues. They place their confidence in such persons because they provide immediate and concrete help (e.g. money or physical assistance to build sanitation infrastructures) while the municipality only gives forms to fill. Informal networks of acquaintance are faster and more efficient than State procedures. The last example comes from the final question of the survey, which was aimed at identifying the most helpful persons of environmental governance according to the respondents. Interviewees were asked who the most helpful person is when they face environmentally related issues. The aggregated answers to the question, as displayed below, show how important the social capital is for the urban poor.

Dwellers of	Member of the community (e.g. leader or neighbour)	State agent (local or regional)	Politician (local or regional)	No answer
Rokadiya Para	50 %	0 %	30 %	20%
Sindhi Society	30 %	0 %	20 %	50%
Suliya Timbo	60 %	0 %	10 %	30%
Ramwadi	50 %	30 %	10 %	10%
Tripada Society	0 %	0 %	40 %	60%
Jesing Para	0 %	10 %	60 %	30%

Figure 9. Answers to the survey question 32: "You have mentioned a number of people who can help solve problems regarding your environment. What do you think, who is giving the best help?"

One can observe in the table that State agents are hardly ever mentioned as the most helpful actors of environmental governance, excepted by a few middle class dwellers. Politicians are often mentioned, but the individuals who are referred to generally have an ambiguous status. For instance, the helpful politician of Jesing Para, cited by 60% of the respondents, is the ward municipal councillor and also a member of the community. Thus, Jesing Para dwellers use his political position as an advantage to achieve their goals, but ask his help first because he is a neighbour. Eventually, it is interesting to notice that the social capital seems to be of greater importance for the urban poor than for the middle class, who seemingly can afford other ways (such as political bargain) than mutual help to solve their environmental issues.

3.3.3. Self-governance

Without the State, in their everyday practices, urban dwellers develop techniques aimed at *conducting their conduct* and mitigating the lack of State government. The trust of Sindhi Society is the best example of such techniques. According to its vice-president, the trust was spontaneously created by two educated members of the community. The trust pursues several purposes: providing education for children, helping with community marriages, and giving a framework to existing mutual help networks. Each member of the trust pays a small monthly fee, which is used to buy books for children or to financially assist widows. Each member has a card where the name, phone number and profession of all the other trust members are noted. If one requires help, one can call a neighbour that will provide it for free. Thus, mutual help is almost institutionalised in the community of Suliya Timbo. Interestingly, the State is not the governing actor in this case: dwellers themselves conduct their behaviour by choosing whether to get involved in the trust or not. Indeed, almost every household in Sindhi Society belongs to the trust. Such a *government* technique implies neither domination nor power relationships. The only leading rationality is the welfare of the community. Yet, not every low-income neighbourhood has its own trust. It is a highly context-specific practice, which appears to be quite exceptional. In many cases, governing techniques in the absence of the State differ.

According to Marxist analyses of neoliberalisation processes (such as Harvey, 2005), one can expect the governing techniques developed by non-State agents to follow economic profit rationalities. In other words, one can expect that private actors will seize the opportunity created by the absence of the State to sell environmental amenities. Seemingly, this hardly happens in Amreli. Private actors in the service sector are few, and their role is marginal. For instance, there are only four drinking water supply plants in Amreli. Three of them provide their services to around 300 households and one to around 2000 households, but all of them do so on a highly irregular basis. They are mostly active during summer and droughts, when the municipality fails to provide water. According to the owner of one of the plants, only a handful of dwellers rely on private water supply on a regular basis. In other words, privatisation at the urban scale is not prominent. If some of neoliberalisation logics have actually trickled down to Amreli, this can hardly be observed in the environmental services sector. The withdrawal of the State has created chinks, which are filled by everyday practices and social interactions rather than intervention of private corporate actors.

3.4. Summary: the urban poor, at the outskirts of environmental governance

The urban poor of Amreli play a relatively marginal role in the environmental governance of the city. Besides, environmental governance in Amreli is not exactly pro-poor, despite the fact that corporate private actors do not play an important role in it. First, it is clear that environmental governmentality in Amreli is shaped by processes of domination. Interactions between the State and the poor, no matter which form they take, tend to establish the latter as feudal subjects rather than Foucauldian active agents. Only some middle class dwellers of Amreli and a handful of urban poor succeed in playing an active role in environmental governance and haul themselves onto the 'political society' depicted by

Partha Chatterjee. The 'elite society' of citizens can hardly be found in the city. Consequently, the claims of the urban poor are generally marginalised and often remain unheard when it comes to environmental services provisioning. Second, despite decentralisation, urban governance in Amreli remains top-down and the main decision makers are still non-local State agents. Especially, central State welfare schemes that target the poor take little consideration of their actual needs and grant them little room for manoeuvre. As Rémi De Bercegol has highlighted, the decentralisation process is partial and this seem to be a major cause of the failure to provide that characterises the municipality of Amreli. As a result of this failure, the local State is generally absent from urban daily life, which leaves the poor on their own to address environmentally related issues. Besides, unlike in metros, the chinks left by the withdrawal of the State in the urban services sector are hardly filled by private actors or through public-private partnerships. Instead, highly context specific structures of environmental governance, which rely on the social capital of individuals, emerge in the daily life of urban dwellers. Such structures are nowadays the most prominent forms of environmental amenities provisioning in Amreli. Most of them, as showed in the example of Jesing Para dwellers providing free water to Suliya Timbo dwellers, are not characterised by conflictual power relationships, but rather by mutual help. Yet, do conflicts around environmental amenities completely spare Amreli? Arguably, relationships between the poor and middle classes deteriorate in metros on the matter of environmental preservation. The final chapter will try to assess whether this is also an issue in Amreli.

4. "The poor are dirty people": conflicts, discourses and practices regarding environmental degradation

The final chapter is intended to re-examine the second part of the general research question: what is the place of the poor within Amreli's environmental governance? This time, the focus will be put on environmental degradation rather than environmental services provisioning and the chapter will address the relationships between the poor and the middle class at the municipal level. The aim of the chapter is to assess whether specific environmental power relationships exist in a small city like Amreli. Arguably, in Indian metros, urban environmental amenities such as parks are a matter of dispute between the emerging middle class and the poor. In Mumbai for instance, the former have been claiming the Sanjay Gandhi National Park as a recreation site while the latter are using it as a housing place. Since the uses of the park do not seem compatible, a conflict emerged between the two social groups (Zérah, 2007). Even if open struggles like this one cannot be observed in Amreli, this does not mean the city is free from any environmental conflict.

The analysis will build upon the Foucauldian framework developed in the third chapter. Indeed, governmentality as an analytic tool may also be used to address power relationships existing within society itself, and not only between State and society. Arguably, social groups such as middle classes or upper castes can be perceived as governing bodies in Indian society. They actually exercise a form of *domination* towards other groups located below in the socio-religious hierarchy. The struggle for the use of the Sanjay Gandhi National Park, as depicted by Marie-Hélène Zérah, illustrates the exercise of this domination. In this case, a middle-class association initiated and won a lawsuit against the poor occupying the park, thus forcing them to relocate elsewhere. By this procedure, they have imposed their rationality, and the poor ended up with no choice but leaving their houses and resettle in the periphery (ibid.). Similar processes seem to be observable in Delhi (Bhan, 2009). In Amreli too, discourses of urban dwellers have a certain impact on the management of environmental amenities. However, here, the middle classes seem to be less powerful and also less concerned with environmental conservation. Facts even tend to show that in this small city, the practices of wealthy groups happen to be more harmful towards the environment than the practices of the poor. This particular point will be the concern of the second section of this chapter. First, the nature of the socio-environmental power relationships at work in Amreli will be examined.

4.1. Discursive conflicts, actual conflicts

4.1.1. The rich against the poor?

According to Marie-Hélène Zérah, environmental conservation is only the pretext of the conflict in the Mumbai Park. She argues that the case also unveils the spreading rationality of Indian elites regarding "what and whom should be inside or outside the city" (Zérah, 2007: 123). The poor seem to be increasingly considered as dirty, environmentally harmful and thus generally unfitting dwellers for Indian metros (Zérah, 2007; Bhan, 2009; Udupa, 2013). In a small city like Amreli, nothing as obvious as what happens in Mumbai can be observed. Only a few tenuous facts and elements of discourses held by local elites tend to show that the state of mind of Amreli's middle classes is not pro-poor. First, only two persons out of all the interviewees and survey respondents openly stated they despise the poor. Both belong to high castes, and they identified the urban poor to lower castes, thus confusing their "dirtiness" and their so-called religious impurity. For instance, one of them stated the poor had no "humanity", and were "filthy, because they are Scheduled Castes [members]". In other words, these two persons do not strictly consider the poor as environmentally harmful, but rather as religiously impure. Second, the discourse held by the municipal officer regarding the location of Suliya Timbo (cf. chapter 3) could be interpreted as unveiling. He stated the community lives outside of the municipal reach, which is incorrect according to the municipal boundaries map. As Marie-Hélène Zérah has shown, the poor "should be outside the city" according to the elites. Just like this officer, some of the elites seem to pretend the poor are not there, even when it is not true. Finally, the measures undertaken by the municipality of Amreli seem to reinforce this state of mind. The only municipal resettlement colony of Amreli is currently under construction at the very edge of the city, far from its centre and far from the middle-class neighbourhoods. However, practical and financial reasons (such as municipal ownership of the land, lower cost of the land, proximity of a water tank and thus reduced infrastructure implementation costs) may have influenced the choice of this location as much as the potential will to see the "dirty poor" out of the city.

As a matter of fact, it seems that environmental conflicts are not raging in Amreli, and that middle classes do not exercise any explicit domination over the poor. Neither do they criticize them for their behaviour regarding environmental conservation. The discourse of middle classes does not hold much sympathy towards the poor, but the practices of both groups do not show any actual socio-environmental tension. For instance, all types of dwellers peacefully share the use the two parks, Kamnath bag and Gandhi bag. Still, in a notso-distant future, conflicts may arise around the use of another environmental amenity: water. Several authors have shown that groundwater reservoirs are depleting in Gujarat, and that the privilege of retrieving groundwater becomes increasingly reserved to the richest (Mehta, 2001; Bhatia, 1992). Following these analyses, it seems legitimate to wonder whether water scarcity will end up generating socio-environmental tensions, especially in the absence of State regulation on the matter.

4.1.2. The rich with the poor?

Today, no evidence of open conflicts over the conservation of environmental resources can be observed in Amreli. On the contrary, the discourses and practices of middle classes and urban poor appear rather converging on the matter. First, 100% of the survey respondents answered they never faced any dispute over environmental amenities when they were asked who they would turn to in case of such a conflict¹⁹. Besides, interviewees in Suliya Timbo brought forward an interesting example of cooperation between them and the dwellers of Jesing Para. According to them, Jesing Para's middle classes freely provide them with drinking water on a daily basis. It could be argued this relationship is an unequal power relationship, since the Jesing Para dwellers can unilaterally decide to cut the supply. However, both communities seem to rely on their social capital for other services than water (such as household construction or cattle keeping for instance), and thus have a shared interest in maintaining sustainable relationships. Second, the immense majority of Amreli dwellers – no matter their social rank or their educational level – holds a similar discourse on environmental conservation that can be summarized in a sentence once pronounced by a doctor met in a street: "since no one else is taking care about the environment, why should

¹⁹ Survey question 31: "Have you had disputes over environmental resources with other people? Who helped you sort them out?"

I?" Individualism and disinterest in environmental preservation seem to characterize equally all populations groups in the city. The self-governing and conscious "green citizen" identified by Peter Brand in his analysis of neoliberal urban environmental governance (Brand, 2007) can nowhere be encountered in Amreli.

In other words, the boundary between the rich and the poor happens to be blurred when it comes to the matter of environmental conservation in the city. Both populations groups have similar negligent discourses, but at least no social tension arise on the matter. Unlike in Mumbai, no conflict between the middle class and the disadvantaged populations can be observed in Amreli yet. However, daily practices of middle classes and the urban poor do not have the exact same impact on the environment.

4.2. Environmental degradation: a shared reality, diverging behaviours

In Indian metros, the slogan "green city, clean city" is broadly displayed and, to some extent, seems to be successfully implemented. Notably, urban authorities undertake regular actions in order to raise public awareness, such as advertisement campaigns. As a result, the elites of large cities²⁰ appear to be rather educated to the stakes of environmental conservation and happen to behave in consequence: some of them are close to those "green subjects" Peter Brand talks about. In Amreli, and seemingly in many small cities of rural Saurashtra, even the educated dwellers are barely aware of the importance of environmental preservation. Besides, when they actually are aware of it, they mostly behave as if they were not. Thus, it seems incorrect to consider the urban poor of small cities as the most harmful polluters. Arguably, and for two main reasons, the behaviour of the elites in small cities is more harmful towards the environment than the behaviour of the urban poor. The first reason is their attitude regarding public spaces, and the second is their relationship to material goods consumption.

Given the nature of the issues addressed in the following sub-sections, specific methodological limitations will be observable. Indeed, interviewed dwellers often did not take responsibility for their degrading behaviour (which is already a kind of data) and did not answer freely whenever questioned. Thus, further statements are based upon field

²⁰ Or at least, for what I could observe, the elites of Vadodara and Rajkot.

observation, deductions and pictures rather than the primary data used in the previous sections (i.e. interviews and survey).

4.2.1. Private spaces versus public spaces

Private spaces and public spaces are two different worlds for Indian elites. Emma Mawdsley clearly expresses the issue: *"it is simply a question of moving the rubbish out of sight. In effect the households' own premises will be kept clean, while the pavement outside the premises will be used as a dumping ground."* (Mawdsley, 2004: 89). Her statement is particularly true in Amreli. The average cleanliness level of middle class households visited through the survey almost fits western standards. However, once the courtyard fence is passed, hygiene level usually drops dramatically. In the absence of efficient and regular municipal waste management and sweeping services, streets are used as dumping sites. They seem to be perceived as a means to access the household, but a means that does not fit most of the other daily practices of urban dwellers; especially the sociability of women and the games of children. As a result, the middle class neighbourhoods are remarkably quiet and full of garbage (Fig. 10).



Figure 10. Public ground used as a dump site, Brahman Society (middle-class neighbourhood)

On the contrary, low-income dwellers seem to put fewer boundaries between their private space and the public domain. Several reasons may explain this. First, their households are generally smaller, do not have a courtyard, and accommodate more inhabitants than the middle class ones: the space available per capita is low. Consequently, sociability, children games and daily tasks (such as laundry or bike repairing for instance) tend to take place in the public sphere, in the street or on the ground common to several households. Second, the structure of the households themselves is different. If the elites hide their courtyards behind concrete walls, the poor hardly put a wooden fence to keep the cattle inside. In some cases, nothing shows the boundary between the inside and the outside of the household. As a result, streets and public places of low-income neighbourhoods are relatively clean (Fig. 11), and the urban poor appear to be generally more caring about their immediate built environment, since they have to use of it to a greater extent than the elites.



Figure 11. Public ground, Sitaram Nagar (low-income neighbourhood)

4.2.2. Urban consumer society

The second reason that makes the elites of Amreli more harmful towards the environment than the poor is their relationship to material goods consumption. The notion of "conspicuous consumption", developed by Thorstein Veblen in his Theory of the Leisure Class, turns out to be accurate to address the behaviour of the middle classes of Amreli. According to the sociologist, "conspicuous consumption" is the way the elites spoil goods in order to show their social status. Thus, not only do they consume only goods they need, but also goods that have no other usefulness than showing their wealth (Veblen, 1899). Even though the people concerned would never admit it, the lifestyle of several middle class dwellers of Amreli can be qualified as conspicuous. For instance, car owners happen to take their vehicle to cover distances that would be more rapidly covered on foot. Seemingly, they do so just to show they can afford a car: only a handful of elites actually own one in Amreli, and it is a great pride to be seen driving one. The result is a useless consumption of gas and emission of pollutants. Similarly, hosts tend to prepare inedible quantities of food, which generally end up wasted. More than a religious duty to honour the guest, this seems to be a

way to show him that the household is not worried with under nutrition issues; a characteristic issue of the urban poor. When afterwards the remaining food is publicly thrown onto the street, or given to a passing beggar, one's superior status is reaffirmed to the neighbours. The consequence of this behaviour is a hungry household metabolism: more goods are consumed and more waste is produced. Finally, the influence of occidental modernity, and along with it its consuming and polluting society, spreads within the middle classes of Amreli. Because of what urban dwellers know about the western way of life thanks to foreign parents (Non-Resident Indians), television and the internet – now available everywhere on 3G devices –, this lifestyle becomes gradually idealized as the symbol of success. Several middle class respondents proudly mentioned, on the side of the survey, their family member working in the United States. Others were delighted to show the smartphones, tablets and computers they could afford. However, most of them still appeared to be embedded in the traditional Indian lifestyle, seemingly to a greater extent than the urban elites of metros.

4.3. Summary: on the specific environmental subjects of small cities

In urban environmental governance, and especially on the scene of environmental degradation, the urban poor of Amreli seem to occupy a rather different place than the place they would occupy in a metro. First, since social tensions related to environmental amenities appear to be almost non-existent, they do not seem to suffer from eviction threats or oppression. They can retrieve benefits from environmental amenities without having to struggle against hostile middle classes. Second, their practices appear to be less damageable towards the environment than the practices of the upper classes. Unlike in metros, the elites of Amreli seem to be poorly educated to environmental stakes. Thus, if the green conscious subject cannot be encountered in Amreli, the poor are unconsciously closer to him than the middle classes are. However, this does not mean they are irreproachably environmentally friendly. Both populations groups behave in a dramatically neglecting manner, and rely on the behaviour of the masses, the general lack of awareness, and the lack of governmental action regarding the matter not to feel guilty about their behaviour.

These final elements bring into light a new questioning that unfortunately exceeds the scope of this thesis, and will thus remain unanswered for the moment. It has appeared in the last sections that the middle classes of Amreli occupy a relatively ambiguous place in governance regarding the poor and the environment. They are neither "green citizens" nor world-class dwellers looking for urban aesthetics and environmental conservation no matter the social costs. Besides, as the chapter three as argued, neither are these middle classes proper "citizens" in the sense given to the word by Partha Chatterjee. Rather, they appear to be struggling political society members. Given these two facts, it seems obvious that the middle classes of metros and the middle classes of small cities are two very different population groups. Arguably, one can wonder if the notion of middle class itself must not be re-examined if it is to qualify the elites of small-cities. Eventually, this point finds echo in the work of Emma Mawdsley on Indian middle classes and the environment. She argues "that a very wide variety of values, beliefs and behaviours can be found amongst India's middle classes, reflecting regional, linguistic, gendered, ideological and other pluralities" and calls for an "unpacking of [middle-class] groups and identities" (Mawdsley, 2004: 97).

5. Conclusions

5.1. Synthesis

This thesis tried to depict and analyse the urban environment of Amreli, and the place the poor occupy within it. In particular, it has tried to show that the dystopian vision of the poor carried out in the vernacular imaginary (Konermann, 2010) as well as in scientific literature (Davis, 2006) must be nuanced. The urban poor of a small city like Amreli have rather different living conditions than the urban poor of metros. The disparities mainly lie in their particular access to environmental amenities, relationships with the State, and power relationships with other urban dwellers. However, this does not mean that the living conditions of the poor in small cities are satisfactory. Much can be done in order to improve their access to environmental services, give them the opportunity to stand on a more equal foot with other governance actors, and mitigate their ecological impact.

Most of the hypotheses of this work were built upon the existing Indian urban literature and were re-examined after the fieldwork phase. The results of this research, as summarized below, are to some extent unexpected. The first group of research questions, addressed in the chapter two, was the following: what is the urban environment of the poor in Amreli? What are the amenities they have access to? The field data analysed through the lens of Amartya Sen's approach of entitlements have shown that the poor generally struggle with their access to water, sanitation, solid waste management and parks while they are also exposed to environmental risks. However, thanks to comparative analyses with the situation of middle classes, it has also been revealed that their struggle is not systematically tougher than that of the so-called urban elites. Other categories than social classes seem to influence the access to environmental amenities. Thus, in several cases in Amreli, both social groups have equally poor environmental entitlements. If this situation is not surprising, the apparent reasons why the poor have insufficient entitlements are unexpected. According to literature, neoliberal policies are nowadays the main causes of injustice regarding urban services provisioning (Chaplin, 2011; Swyngedouw, 2005). However, in Amreli, and despite an arguably profound neoliberalisation of Gujarat, neoliberal measures hardly affect the environmental services sector. The State remains the main service provider, but it generally fails to provide satisfactory services at the municipal level. Besides, unlike what is commonly assumed, the failure of the municipal State in Amreli does not seem to be caused by a lack of regional state support and investments (that would be inherent to the exercise of neoliberal rationality at the regional state level) but rather by several factors, such as a lack of efficient management of the available funds at the municipal level, and a lack of competent agents to manage the service infrastructures and networks (De Bercegol, 2012).

The second group of research questions was the following: what is the nature of the relationship between the poor and the State? What means are available to the disadvantaged in order to access the State and what kind of expectations do they have when State support is required? The third chapter, building on Foucault's governmentality, has shown that the poor and the State have a rather unbalanced relationship in Amreli. The poor are often dominated by what appears to be a feudal governmental rationality. Governance at the municipal level, despite the decentralisation reforms, is still top-down and led by regional state actors. Generally, the poor often have little room to negotiate with the State and their claims are hardly heard, be it when governmental actors come to meet them or when they wander into the municipal offices to ask for assistance. In terms of political status, the poor are closer to feudal subjects than to what Chatterjee calls members of the political society. Their behaviour is increasingly passive: many of them do not expect State help anymore, and those who still do seem to progressively give up on claiming their entitlements. Discouragement seemingly spreads from generation to generation. Eventually, only a handful of the urban poor appear to be aware of their potential voting weight, but, even collectively, they do not seem to have the confidence to use it. By contrast, a majority of middle-class dwellers are members of the political society, and use their political power to bargain for their entitlements and their rights. However, "citizens" who see their rights fulfilled without having to bargain for them cannot be found in Amreli. Chatterjee's statement that such citizens belong to the realm of theory appears to be especially true in the city. The reason why the situation is as described seems to be a lack of decentralisation. Rémi De Bercegol has observed that in small cities of Uttar Pradesh, the implementation of the 74th Amendment is partial, and that the Amendment itself is not sufficient to empower local bodies. Seemingly, this is also the case in Amreli. The local government appears powerless in many cases, and has no choice but to marginalise the claims of the disadvantaged groups since it does not have the financial, technical and human capacities to answer them. As a result, the poor develop "creative ways" (Echanove & Srivastava, 2009) to govern their daily lives and their environment. These alternative solutions mostly rely on what Pierre Bourdieu calls social capital. Nowadays in Amreli, networks of acquaintance and mutual-help relationships play a far greater role in environmental governance than the State and its welfare schemes. The absence of public actors at the urban level however does not appear to be a consequence of the neoliberal shift undertaken by the state of Gujarat during the last decades. It seems to date back to the pre-reform era, and nothing proves that it has been reinforced by recent regional state policies of focused urban industrial development in the golden corridor.

The final research question concerned the socio-environmental power relationships existing at the municipal level: what is the nature of the power relationships between the poor and the middle class? On this matter, pre-field assumptions based on the existing literature, and particularly the work of Marie-Hélène Zérah on Mumbai, of Gautam Bhan on Delhi, and of John Harriss and Stuart Corbridge all over India turned out to be wrong. The hypothesis of a middle class constituted of "green subjects" (Brand, 2007) hostile to the presence of the poor within the city found no empirical ground. If in Amreli social tensions may arise in the future because of environmental resources scarcity, no conflict can be observed at the moment. However, comparing discourses and practices has revealed interesting similarities and disparities between the two population groups regarding their impact on the environment. Arguably, the elites of Amreli are less caring and have an important negative impact on the environment because of their life habits. If the behaviour of the urban poor is also ecologically degrading, its impact is nevertheless lower. Still, the lack of awareness of both groups to the issues of the brown and green agendas of sustainable development should be urgently addressed.

Eventually, it seems now possible to answer the initial general research question. As a reminder, the red thread of this work was as follows: **to what extent do the urban poor of Amreli access the environmental amenities of the city and what is their place within its environmental governance?** It does not seem daring to state that the access of the poor to urban environmental amenities is limited, particularly because they have neither the opportunity to claim for better access, nor the possibility to confront the other actors of urban governance on an equal footing. The nature of the problem they face is political more than ecological: urban governance dysfunctions rather than a lack of resources deprive them from having the chance to achieve decent life conditions. Much more has to be done to reach Gandhi's ideal of democracy, "where the weakest have the same opportunity as the strongest."

5.2. At the borders of the project and beyond

This work was a rather ambitious project for a Master's thesis, and consequently it is hindered by important limitations that must be acknowledged. First, obvious methodological limits have to be kept in mind if one is to reuse the points reached and the statements made in this work. The fieldwork phase was short (2 months) and complex, and the data gathered during this period is not indisputably reliable. The language and cultural barriers are a common issue in development research and this work makes no exception. The majority of interviews were in Gujarati. When the interviewee was too talkative, my interpreter translated what seemed important to him. Some details or, worse, important information, may have been lost or poorly translated and recorded. Besides, due to the scheduled time available, a certain amount of the data has not been triangulated: information obtained from State agents notably have to be considered as discourses rather than truths, since some of them could not be verified by checking other sources. Similarly, the household survey has only covered 6 areas, and 10 households in each area. If the outcomes of the survey seem to some extent reliable since the data is not extremely heterogeneous, the sample is not fully reliable and different realities may still be observable in other neighbourhoods of Amreli. A longer fieldwork carried out by a more experienced scholar would have certainly produced better data, and notably more significant data that would have led to a more precise analysis of the urban environment of the poor. It must also be acknowledged that Amreli cannot stand for all the small cities of Gujarat, and even less for all the cities of India. Second, certain theoretical limits also appear. Despite the usefulness of urban political ecology, which has underpinned every section of this work, this framework of analysis is broad and is constituted with highly disputed theoretical elements and notions. For instance, the understanding of governmentality that has been developed in this master thesis relies on the work of the scholars cited (such as Erik Swyngedouw, Thomas Lemke and Anna Zimmer). Other schools of thought may develop a rather different but equally argued understanding of Foucault's work. Moreover, UPE lacks a precise and undebated definition and thus only "one" particular understanding and approach of the framework, which can be easily contested, has been used in this work. Eventually, limitations exist that appear to be inherent to the choice of the studied subject. In my opinion, working on the "urban environment" was a too ambitious project for a master thesis, and it unfortunately led to spread the focus of the analysis onto too much research elements. Consequently, I consider that the analysis has not been deepened enough on several points. If it were to be done again, I would focus on the urban liquid metabolism (i.e. water supply and, especially, sanitation) rather than the whole urban environment, for several reasons. First, because it is of far greater concern for the disadvantaged populations: low-income dwellers that had no access to water and no toilets happened to laugh at the survey questions regarding their access to trees and parks. Second, because if an important literature exists on the sanitation matter in metros, nothing has been done yet in small cities. However, as it has been stated at the very beginning of this work, the importance of such cities for global sustainable development must not be neglected, since they accommodate more than 50% of the world urban population. Third, sanitation seems to be a privileged entry point to address the dysfunctions of Indian urban governance at every level. Indeed, dealing with sanitation implies to deal with religious, cultural, technical, ecological, political, gendered, social and economic aspects of governance. Thus, as a final word, I would call for further research on sanitation in small cities.

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