

PUTTING URBAN POVERTY BACK ON THE URBAN POLICY AGENDA: UPGRADING AN UNPLANNED SETTLEMENT IN BEIRA, MOZAMBIQUE

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ABSTRACT

In many sub-Saharan African cities, the widespread presence of unplanned areas inhabited by the poor is increasingly being addressed through urban renewal policies, with the consequent demolition and forced eviction of residents, while the creation of new neighbourhoods if not new cities, which are unaffordable for the poor, again leaves the solution to their housing needs to spontaneous processes. Both approaches undermine any prospect of sustainable urban development. The alternative of in-situ upgrading of the settlements of the urban poor, which has emerged at times in recent decades, mainly supported by international agencies and civil society organisations, seems to be increasingly relegated to the actions of the latter and to sporadic forms of bottom-up action. There is a risk that this alternative, i.e. improving the places where people have chosen to live, will disappear from many urban agendas, partly due to administrative neglect if not political will, and partly due to the difficulties this intervention has encountered over time. However, this picture is not homogeneous and varies considerably from city to city. This is why it is important to take into consideration contextual conditions, related to planning practices, to find an alternative way of acting with the aim of recombining the two divergent trajectories of urban development in sub-Saharan Africa. In the case presented in this paper, the upgrading of the unplanned settlement of Macuti in the city of Beira, Mozambique, the following contextual conditions were considered in the design process: (i) the regulatory framework; (ii) the urban planning instruments within the policy of the municipality; (iii) the residents' expectations of the unplanned settlement; and (iv) the spatial characteristics of the unplanned settlement. These conditions are analysed and discussed, outlining how they interacted with the design choices that in turn met the expectations of both the municipality and the inhabitants.

Keywords: unplanned settlement, urban policy, upgrading project, Beira, Mozambique.

1 INTRODUCTION

In sub-Saharan Africa, as in many other parts of the global South, urban development today appears to be the joint result of two increasingly divergent trajectories. According to Rao [1], there is, on one hand, the rapid growth of construction aimed at creating 'spectacular spatial products' and, on the other, the expansion of 'so-called informal spaces of housing and work'.

There are different ways in which these two trajectories manifest themselves [2]–[4]. On the side of 'spectacularisation', there are, first and foremost, urban renewal projects aimed at transforming the image of many central districts, often inhabited by the poor and therefore characterised by dilapidated buildings, into that of a world-class metropolis competing for investment on a global scale. Furthermore, again, the creation of new neighbourhoods, often disconnected from the urban context, is intended to accommodate the emerging middle class. And finally, the construction of new cities, of which Keeton and Provoost [5] paint an effective picture, which is a clear sign of disengagement from the complexity of the existing city and the search for shortcuts to developing functions, such as trade, industry, research,



technological development and even housing, which is believed as impossible to adequately performed by existing cities.

On the side of the so-called informal space, the self-construction of urban space remains the only possibility of integration for a large part of the urban population [6], which still seems to be growing rapidly, not only because of immigration but also, if not mainly, because of the natural increase of the population that is already present in the cities. This integration takes many forms, both through the expansion of unplanned settlements and through their saturation, especially when proximity to the city centre is seen as an undeniable advantage. And, similarly to what is happening on the side of 'spectacularisation', in the self-constructed urban space there is an active role of the middle class, so much so that in many settlements where dilapidated houses predominate, we are increasingly seeing medium-standard dwellings, built by families who want to limit their housing costs.

The growing divergence between these two trajectories appears to be endorsed by the urban policies recently adopted by many cities in sub-Saharan Africa, starting with the investment by those national governments with some of the highest growth rates in GDP over the last two decades [7]. The choice is to redirect the flow of money fuelled by exports, on the one hand, to redesigning cities to turn them into engines of development and, on the other, to using public spending to create a hitherto non-existent middle class, capable of expressing a new demand for goods and services, including housing.

The transformation of cities is handed over to the know-how, including design, of private and semi-public companies from various countries, which have found a new real estate frontier in the construction boom underway in Africa [8], [9]. The planning that underpins this transformation is aimed entirely at remaking or creating the city for the sole purpose of accelerating economic growth, which implies eliminating what are considered to be the legacies of poverty, first and foremost the self-constructed urban space [10]. The latter, in the context of current urban policies, is seen as a phenomenon ultimately going to disappear, also through punitive measures that undermine some of its cornerstones, such as the fabric of small businesses that guarantee the subsistence of a large part of the urban population. Or, as a phenomenon belonging to a parallel reality, a kind of shadow city that has become invisible because it is able to exist and reproduce itself without the support of public spending.

From this point of view, there is a discontinuity with the past. The approach of in-situ upgrading of the so-called informal space has been a programme present in the urban policies of many African countries since the 1970s [11], [12], thanks in part to the financial support given to this type of intervention by international organisations such as the World Bank, UNICEF, and to the commitment of many NGOs that have worked on long-term programmes in many small urban contexts. However, commitment to this programme by national governments and local administrations of the major cities, has not been particularly strong, so it is not surprising that investment in these types of programmes has recently been reduced, if not eliminated, and that the dominant policies are those previously described.

Today, urban planning is only concerned with one of the two trajectories of urban development. The urban plans, whether based on a comprehensive rationality or on a strategic approach, are interpreters of the prevailing urban policies and, as in the colonial era, ignore the disadvantaged areas [13]. In this sense, the role of proclamations and programmes of international organisations aimed at the eradication of urban poverty also appears distorted when they become an alibi for the eradication of the poor [14].

This trend in urban development in sub-Saharan Africa manifests itself with varying intensity and modalities, depending on local conditions related to planning practices. While the tendency towards 'spectacularisation' depends on the investment capacity of each city, the neglect of the so-called informal space and also of bottom-up forms of organisation of



the local population [15], depends on political and administrative decisions and on the quality of governance, which also varies from city to city. The regulatory and urban planning framework also has a significant impact, particularly with regard to land ownership. It is precisely local conditions that have favoured the continuity of in-situ upgrading [16]–[18].

The case study described in the present work concerns the project for the upgrading of the unplanned settlement of Macuti in the city of Beira, Mozambique, developed by the University of Trento and the University of Zambezi in collaboration with the Municipality of Beira and with the participation of the local inhabitants, with the support of European funding (MUDAR project).

The general assumption of this paper is that the existence of conditions, traceable in each city, related to planning practices, leaves room for alternative actions in line with in-situ upgrading, allowing design choices to interact with urban development. Thus, making it possible to recombine the two divergent trajectories of urban development in sub-Saharan Africa and to put in practice the concept of sustainability in relation to urban development.

In the case of the city of Beira and the unplanned settlement of Macuti, the following contextual conditions were identified both in light of the literature and the authors' previous planning and designing experiences in Mozambique: (i) regulatory framework; (ii) urban policy of the Municipality of Beira and ongoing planning instruments; (iii) expectations of the inhabitants of the unplanned settlement of Macuti; and (iv) spatial characteristics of the unplanned settlement.

These contextual conditions are analysed and discussed below, after a brief description of the development of the city of Beira, outlining how they interacted with the design choices for the upgrading of the unplanned settlement, defining both constraints and opportunities. The aim of the work is to demonstrate the validity of this assumption and its effectiveness, which is confirmed by the outcome of the design process, presented at the end, which has been approved by the municipality and is being implemented.

2 THE DUAL TRAJECTORY OF BEIRA'S URBAN DEVELOPMENT

Beira is the fourth largest city in Mozambique with an estimated population of 643,000 in 2024. The city has been hit by devastating cyclones in recent years, including Idai in 2019, which have caused extensive damage and destruction in the city, to the point of mobilising international donors and attracting the attention of many scientists. While the city lies on the path of tropical cyclones in the Indian Ocean, the morphology, exposure, and soil characteristics of the site on which it was built further exacerbate its vulnerability.

The foundation of Beira dates back to the end of the 19th century. The limited space available did not prevent the Companhia de Moçambique from building a port, which in turn was connected by railway to the English colonies in the interior. The port gave the city an urban development in the following decades [19]. The plan for this urban development, drawn up by the Portuguese administration in the 1940s, at the end of the concession to the Companhia de Moçambique, was implemented over the following decades, while a network of drainage channels was built from the 1950s onwards to protect the city, and still runs through the entire flood plain [20]. With a few exceptions, mainly related to the expansion of the port area, these achievements still coincide with a large part of the planned city.

The unplanned city was born along with the planned city. This happened when African workers began to flank and then replace the Asian workers brought in by the British, first to do manual labour at the port and railway station, but also in the service sector.

However, while the Asian workers were allocated land on the outskirts of the city, the African workers occupied land some distance away, in the north, with de facto recognition from the authorities, since this labour was key to the city's economy. The 1940s plan



provided for a neighbourhood for African workers, which was then built in the suburban area of Manga and supplied with a minimum of infrastructure. At the time of independence, the African population living in the urban area of Beira was estimated to be around 75% of the total [19].

After independence, urban growth occurred under the pressure of an immigrant population that saturated existing unplanned settlements and created new ones, almost entirely occupying the floodplain. Today, the expansion of unplanned settlements is still the engine of the city's growth, while planned land is mainly benefiting from the expansion of the port and the adjacent area where manufacturing and service companies operate.

The unplanned settlement of Macuti was one of the first to be created after independence, from the mid-1970s. The subsequent expansion took place firstly by saturating the areas less prone to flooding and water stagnation and then by occupying any available space, including an area used exclusively for family farming due to the particular depression of the land. The unplanned zone highlights all the problems of this type of settlement, exacerbated by a high density of buildings and particularly critical environmental conditions, since a large part of the settlement is located on alluvial land.

3 THE REGULATORY FRAMEWORK

The regulatory framework is the first contextual condition taken into consideration, since a fundamental aspect of planning and design choices, namely land tenure, depends on it. The regulatory framework was analysed: (i) by examining successive laws at the state level; (ii) by interviewing Beira municipal technicians on how the laws are applied; and (iii) by examining previous applications of the law, both in Beira and in the province of Sofala. The most relevant outcomes of this analysis are briefly presented below.

According to the *Lei de Terras*, passed in 1997, land in Mozambique belongs to the state and cannot be sold or otherwise alienated. At the same time, the law guarantees access to land for every Mozambican citizen, man and woman, both through the recognition of the right of use, even collective and therefore extended to the local communities that occupy it according to customary law, and through an access procedure that is also open to foreigners. In this access procedure, the law distinguishes between areas covered by an urban plan and areas not covered by an urban plan, assigning the authorisation of the right of use in the first case to the municipal councils and district administrators, and in the second case to the provincial governors and the central government.

In rural areas, authorisations are more often required at the provincial or state level, depending on the size of the areas for which a concession for agricultural use is requested, and this is at the end of complex procedures that must also involve traditional leaders, who are supposed to guarantee the integrity of the parts of the territory where the communities live. These authorisations include large agricultural concessions, mainly requested by foreign investors, leading to well-publicised cases of land grabbing.

In the urban context, the distinction in practice is not so much between areas with and without urban plans, but rather between areas within the urban perimeter, usually identified with the central area, and the surrounding areas. In the case of Beira, as in other Mozambican cities, the latter were in fact considered outside the urban jurisdiction, first by the *Companhia de Moçambique*, then by the Portuguese colonial administration and finally, by the municipality. Their occupation, therefore, followed forms that can be defined as customary, since they were derived from the rural world from which the immigrant population also came. In sub-Saharan African cities, this is often a source of conflict. In Mozambique's cities, this conflict is less pronounced because, the fact that the *Lei de Terras* recognises the hereditary right of the population, wherever it is settled, to use the occupied land, both to live there and



to carry out an activity, is very deeply rooted in the inhabitants. Even the fact that the law refers in this recognition to a minimum of ten years' permanence at the time of its entry into force is completely irrelevant, since in the absence of a cadastre in unplanned areas, no one is required to prove anything.

With regard to land registration, a decree adopted in 2006, the 'Regulamento do solo urbano', assigns to the 'plano de pormenor', a detailed plan provided by the 'Lei de ordenamento territorial', the task of formalising land use rights by allocating land to individuals and entering it in the land register. To date, only one 'plano de pormenor' has been drawn up in Beira.

This decree also defines the modalities of expropriation for public purposes, but the municipality also prefers to use the instrument of expropriation very cautiously. The result is a situation that is, on the one hand, completely fluid, since only the part of the population that lives in the planned zone of the city has formal titles to the land, and, on the other hand, completely paralysed, since the right of land use, instead of configuring a possession, in fact configures a property. Therefore, when planning public works, the municipality prefers to use individual negotiations rather than expropriation to acquire land. On the other hand, the absence of an urban cadastre and the equation of the right to use land with the right of ownership have effectively created a land market, albeit an illegal one.

As a result, unplanned settlements in Beira and throughout Mozambique, must be considered legal settlements, with the inhabitants being granted land use rights. For the purposes of planning and design choices, therefore, these unplanned settlements must be handled in the same way as planned ones, that is, as integral parts of the urban fabric.

In this regard, it is entirely inappropriate to define them as informal, alluding to their illegal nature. Likewise, it appears ambiguous to define them as 'slums' since, according to Gilbert [21], this term is often used to support their removal. Hence the use of terms such as unplanned, spontaneous or self-constructed settlement.

4 URBAN PLANNING INSTRUMENTS WITHIN THE POLICY OF THE MUNICIPALITY OF BEIRA

Urban planning instruments are the second contextual condition taken into consideration, as they implement the municipality's urban policy and address detailed planning and urban design. Urban planning instruments were analysed: (i) identifying the main factors that have influenced and continue to influence urban development, both through literature and census data; (ii) considering the municipality's policy in relation to major urban issues; and (iii) examining the ongoing urban plans and projects, i.e. the Plano Diretor Beira and the Plano de Estrutura Urbana da Cidade da Beira' (PEU). The most relevant outcomes of this analysis are briefly presented below.

Until independence Beira experienced a slow urban development. In the following, we briefly refer to three factors that have influenced, and continue to influence, both urban development and urban policy since independence.

First, the growth rate of the urban population increased from the mid-1970s onwards. It remained high until 2000. However, during this long time, the city experienced a period of economic stagnation due to the destruction of the railway lines which occurred during the civil war. In other words, it was the urbanisation of a rural population that had fled the war and had to adapt, with its own means of subsistence, to a weak urban economy and, as a result, to totally inadequate public spending, also due to the limited state resources that flowed at the same time to the capital, Maputo. As a result, Beira has retained, and to some extent still retains, the same image of the city that it had after the independence.

Secondly, the rehabilitation of the railways in the first decade of this century, particularly the Sena railway linking the port of Beira to the Moatize coal mines, has revitalised the urban economy. The Port of Beira, the real economic engine of the city, is the terminal of the Beira Corridor, one of the most important logistics corridors in Southern Africa. Cornelder de Moçambique has been operating the port since 1998, with a concession for terminals other than the oil and coal terminals. It is not only an important economic player on the Beira scene. In fact, its presence has led to close cooperation between the city of Beira and the Dutch government in the field of urban development.

Thirdly, the frequent occurrence of ocean cyclones drew the attention of international organisations and donors to Beira. This has resulted not only in reports and pledges of aid but also in a number of important projects, particularly to protect the city from flooding and water stagnation. This has increased the weight of international aid on the city's economy.

As a result, the combination of these factors has placed and continues to place the Municipality of Beira in a challenging position, where economic opportunities exist alongside two evident structural weaknesses. On the one hand, there is widespread poverty, which is reflected spatially in the size of unplanned neighbourhoods, most of which are environmentally vulnerable. On the other hand, there is a lack of investment capacity, partly due to the reluctance of the central government to invest in the city, which exposes it to outside interests and decisions. In this complex situation, the municipality appears to be in a position to dialogue with the many external actors, trying to get the maximum contribution from each of them, while maintaining a unified vision of urban development. This is also reflected in urban planning.

The PEU [22] approved in 2023, has replaced the previous plan, the 1999 'Plano de estrutura Beira-Dondo'. However, the PEU was preceded by a strategic document, the 'Plano Diretor Beira' [23] which was developed in 2013 by a consortium from the Netherlands on behalf of the government of the same country, in collaboration with the Municipality of Beira. It is this document that, for a decade, has been the instrument through which the municipality has made and continues to make its urban planning decisions.

The 'Plano Diretor Beira' is, above all, a set of projects that fit into a strategic framework aimed at addressing some of the most challenging issues of the city. It proposes solutions based on a development perspective that takes advantage of the commercial port and the flows generated by it, based on the railway and the main road arteries. The focus is therefore on improving access to the city and strengthening the port facilities, which will be expanded together with logistics and the industrial zone. For the city as a whole, projects are planned that include drinking water facilities and water supply systems, sewerage, stormwater drainage, municipal solid waste system, coastal protection and road rehabilitation. Urban development is planned through the creation of new residential zones on rehabilitated land, while the improvement of spontaneous settlements is left to municipal initiative.

The general objectives of the PEU, in line with the 'Plano Diretor Beira', include the strengthening of port activities and their access infrastructure, as well as the optimisation of land use for different urban activities and the defence of settlements against climatic events. The main difference between the PEU and the 'Plano Diretor Beira' is the emphasis placed by the PEU on living conditions in the most deprived areas. One of the main objectives of the plan is to eliminate 'social asymmetries' and privileges through the distribution of infrastructure and services. The progressive improvement of areas characterised by disorderly occupation should be carried out through an inclusive process capable of transforming the irregular urban fabric, typical of this type of occupation, into an urbanised area with its own identity in an urban context. The PEU also stands out for its focus on urban

agriculture, considered an important economic tool, as well as its efforts to protect the existing ecological structure and coastal ecosystem.

From the analysis of these two instruments, it emerges that despite being different in many aspects, both in inspiration and approach, they do not envisage a divergent urban reality, but on the contrary a complementary one. However, while the 'Plano Diretor Beira' can count on international investments, the PEU risks being ineffective because it cannot count on them. In any case, the complementarity of the two instruments leaves ample space for urban upgrading interventions, for which, however, funding is still lacking.

5 THE EXPECTATIONS OF THE INHABITANTS OF THE UNPLANNED SETTLEMENT OF MACUTI

In recent years, there has been a growing conviction that the so-called informal space is not at all the result of a distorted urban development and as such destined to be reabsorbed by what is considered to be the normal growth of the city, but rather a structural component of the global South city [24]–[26]. This conviction is not only based on a simple observation, namely the size of this urban space which is still massive despite the fact that interventions to eliminate it have been taking place for decades, but also on the fact that the inhabitants are rooted in the places where they live, where they are able to create not only modes of survival that have continuity over time, but also forms of sociality and inclusion that are often unknown elsewhere. Moreover, the so-called informal space cannot be considered an accident of modernisation, since, according to Diamantini and Patassini [27] it was born with the African city.

It is necessary to start from these roots in order to design any policy aimed at improving self-constructed urban space. It is clear that the interventions aimed at its removal, with the consequent displacement of the inhabitants, represent first and foremost a violation of ways of life and social ties, as the interviews conducted by Panizza Kassahun [28] in Addis Ababa well illustrate. But even much softer interventions, such as in situ improvement, pose problems, as there is now a widespread suspicion among the inhabitants of the self-constructed urban space of any change that might affect their lifestyle, place of residence and work, even if it affects a small part of the community. It is therefore essential to interact with the inhabitants in any case, both to understand their needs and to involve them in the design decisions.

The expectations of the inhabitants are therefore the third contextual condition taken into consideration, as the feasibility of design choices that affect their living conditions depends on them. These expectations were highlighted through the active participation of inhabitants and stakeholders in the preparation phase of the project by completing: (i) 800 questionnaires addressed to households of the Macuti unplanned settlement, also intended at obtaining a feedback on their living conditions, with particular reference to environmental conditions; and (ii) 200 interviews addressed to some households, stakeholders, municipal administrators and technicians and civil society organisations. Some of the results of the questionnaire survey are summarised below, with particular reference to the issue discussed here, i.e. the expectations of the residents.

First of all, it should be noted that the vast majority of respondents (77%) appreciate living in the unplanned zone of Macuti, since it is adjacent to the city centre and connected to it by roads with continuous public transport. This provides easy access to services, such as schools and the nearby hospital. The ease with which it was possible to access the land – over 75% on the recommendation of relatives and friends – and build a house is another factor of appreciation, in addition to the fact that the settlement is the place where many residents work. In this respect, the fact that it is adjacent to the planned zone and therefore to the large



beach overlooking the sea has influenced the choice of fishermen to live there. Furthermore, neighbourhood life is generally appreciated, characterised by community relations and the presence of religious institutions.

A large proportion of those who work – 65% of the respondents – do so on a self-employed basis, even in their own homes, mainly in the commercial sector but also in craft and fishing. A further 30% work as employees in private companies and public offices, while only a small percentage (5%) do domestic work for families. More than half of workers have incomes below or close the poverty line, which is USD 2.15 per day.

The disadvantages of living in the unplanned settlement of Macuti can all be traced back to environmental factors or critical infrastructure issues. The first is exposure to flooding, cited by 65% of respondents, followed by the lack of adequate roads, then the lack of a functioning waste collection system, and finally soil erosion. However, when asked what the municipality's priority intervention should be, the answer is the improvement of the drinking water supply system, which is lacking throughout the city, followed by interventions to improve the criticalities described above.

The rootedness of the population living in the self-constructed urban space has been mentioned. In the case of Macuti, this rootedness seems to be particularly pronounced, as there is no rejection of their living conditions on the part of the inhabitants. The disadvantages, especially the critical issues related to environmental conditions, are not perceived as such as to call into question the decision to continue living in the neighbourhood. Hence the above-mentioned suspicion of any intervention, even the least impactful, that might jeopardise this continuity. It is only in the case of certain results, such as the creation of an infrastructure that does not jeopardise their permanence in the neighbourhood, that residents say they are ready to get involved. In other words, what in the eyes of many may appear to be an unliveable condition, given the absence of roads, an aqueduct network, sewerage and a surface water drainage network, becomes a condition of discomfort that could be remedied without compromising the benefits of having a job, a home and social relationships.

6 THE SPATIAL CHARACTERISTICS OF THE UNPLANNED SETTLEMENT

The spatial characteristics of the unplanned settlement of Macuti are the fourth contextual condition taken into consideration, as the type of solutions to be adopted in a specific environment, depends on them. These spatial characteristics were analysed through: (i) Google Earth Pro satellite images; (ii) field surveys, through observations and gathering information, carried out throughout the preparation phase of the project; and (iii) examination of the pre-existing mapping of the places. The most relevant outcomes of this analysis are briefly presented below.

On Google Earth Pro satellite images (Fig. 1), the structure of the Macuti's unplanned zone may appear chaotic. However, the field survey carried out during the preparation of the project revealed a different picture, which corrects the initial aspect of spatial disorganisation. The urban fabric seems to be regulated by an elementary system of streets. This system is made up of four types of routes, all unpaved: (i) roads and streets, approximately 4 m wide, used by both pedestrians and vehicles; (ii) narrow and irregular streets, whose course is often diverted by the construction of some new house or fence, 2 to 3 m wide; (iii) alleys with frequent bottlenecks and numerous obstacles, 1 to 2 m wide; and (iv) irregular alleys and footpaths, which are difficult for pedestrians to use because of their narrowness, sometimes less than a metre, but which are necessary to reach their homes.



Figure 1: Macuti neighbourhood in the city of Beira, Mozambique. Photos characterising the streets of Macuti taken between the years 2022 and 2024.

The system of streets overlaps in some sections with the old colonial infrastructure of for aqueduct, sewerage and surface drainage, which was built in view of the expansion of the neighbourhood to the north. This old infrastructure is still in such good condition that it can be reused in medium-term.

This hierarchy of accesses refers to a spatial organisation that responds to its own rationality. The streets that cross the neighbourhood from south to north provide access to the spontaneous settlement. They also form an infrastructure that supports numerous small craft and commercial activities. These activities are particularly concentrated to the west, along a road that gradually loses its function and becomes a narrow and irregular street between stalls selling various products. The primary school is a kind of central point in this system and benefits from a large public space in front of it. The public spaces are mainly located along the streets that form a fringe between the planned and unplanned zone. These spaces, left over from the colonial grid, have all the characteristics to become a space of interaction between the planned and unplanned zone of the neighbourhood, reinforcing a situation that is already characterised by permeability rather than separation. The same can be said of the public green spaces, which are spread throughout the planned zone of the neighbourhood but scarce in the spontaneous zone.

From the analysis the presence of existing urban elements emerges, which allow to draw up a design proposal capable of minimising the impacts on the urban fabric and therefore on the inhabitants. These existing urban elements are: (i) existing routes to be improved into a street network; (ii) partially preserved colonial grid, starting from the network of old basic infrastructures; (iii) existing open spaces, starting from the public ones; and (iv) the demarcation fringe between the planned and the unplanned zone.

7 THE UPGRADING PROJECT

The analytical framework described above interacted with the drafting of the project for the Macuti's neighbourhood, highlighting both constraints and opportunities. These are described below.

With reference to the regulatory framework, it was a question of taking account of acquired rights, starting with land use. And, at the same time, recognising on the one hand the capacity of the Municipality of Beira to interact with the inhabitants of unplanned settlements in the execution of public works and, on the other hand, the availability of the municipality itself to experiment with forms of negotiation with the inhabitants linked to the formalisation of land use rights, using the possibilities offered by the 'Plano de Pormenor'. The collaboration with the administrators and technicians of the municipality took place through the creation of a committee, the Municipal Accompanying Committee, which functioned in every respect as a planning office.

With reference to the existing urban planning instruments, it was a question of taking account of the lack of detailed plans in the city of Beira, while at the same time taking advantage of the fact that both the 'Plano Diretor Beira' and the PEU had given the municipality the task of intervening in unplanned settlements. In particular, the PEU emphasises the need to draw up detailed plans for unplanned settlements respecting the existing urban fabric. In this regard, the project for the upgrading of the unplanned settlement of Macuti was drawn up following the drafting procedure of the 'Plano de Pormenor', so that it interacted with the existing regulatory framework and facilitated its implementation.

With reference to the expectations of the inhabitants, it was a question of taking account, on one hand, of the limited scope for action, given the rigidity of a spatial organisation sanctioned by land use rights and, on the other hand, of the explicit request formulated by the inhabitants to improve the environmental conditions, with regard to the drainage system. To channel this demand into a decision-making process, two committees, were set up, the Neighbourhood Accompanying Committee and the Youth and Associations Committee, as well as public meetings, which became crucial moments of interaction with the community in the design and implementation of the pilot project and an example of how the whole project could be implemented.

Finally, with reference to the spatial characteristics of the unplanned settlement, it was a question of taking account of a situation that, for various reasons, could not be modified by high-impact interventions. At the same time, the presence of existing urban elements allowed improvements to be made without substantially affecting the existing urban fabric.

By combining these existing urban elements with the expected impact of the upgrading interventions, a scheme emerged that prefigured an overall system of streets and public spaces while indicating the degree of relevance of each possible intervention and its feasibility based on the expected impact. The final result is a project aimed both at improving the street network, including drainage, also with a view to the collection of solid waste, and at creating public spaces, made up of a series of interrelated interventions that could be carried out at different times depending on the availability of investment.

One of these interventions, the pilot project, is currently being implemented. It is an intervention that tackles various problems in an integrated way, from a road, also function of the collection of solid urban waste, to the drainage of surface water which is channelled into retention and detention basins. These basins have been designed as elements that contribute to the creation of green spaces for recreational use, overcoming an approach that is still widespread in many cities, according to which this type of works is intended to fulfil an exclusively hydraulic function.



The significance of the pilot project is not so much that it offers an integrated solution to a number of common problems in the neighbourhood, but that it points the way forward whenever the design and implementation of a project is confronted with the vested rights and will of residents.

8 CONCLUSIONS

The assumption of the paper is that in the current context of radical transformation of cities in sub-Saharan Africa, urban upgrading can find a place in urban policies, allowing the population rooted in unplanned settlements to continue living there. This space is in turn a function of contextual conditions, related to planning practices, such as regulatory framework, urban policy and ongoing planning instruments, expectations of the inhabitants and spatial characteristics of the unplanned settlement.

In the case of the upgrading of the unplanned neighbourhood of Macuti, in Beira, it was the adaptation of the design process to these contextual conditions that ensured its success. It should however be emphasised that the essential prerequisite, which also played a key role in the case described, is the presence of a clear political will on the part of the administrators to work in this direction.

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