RAPID FINANCIAL FEASIBILITY ASSESSMENT FOR **PLANNED CITY EXTENSION (PCE)**

WITH EXAMPLES FROM
THE ASUD PROGRAMME

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Iloilo waterfront,Philippines ©Thomas Stellmach, UN-Habitat

Without a financial implementation strategy, a planned city extension will only be a wish list exercise. A financial plan can move the PCE from paper to implementation on the ground.

Rapid Financial Feasibility Assessment begins to develop an implementation strategy showing who will pay how much for what and when. It should have a sources and uses statement, matching the required investments with sources of funding. While this exercise only provides rough estimates of costs and funding availability, it can provide a check to plan feasibility and bring implementing agencies to the table to begin to discuss more detailed numbers. It can also provide information to revise the plan, including giving some decision makers a better sense of the high costs of poor design (ex: low density disconnected development).

Costs (uses) Side

Cost estimates are based on a spatial concept plan showing the approximate quantities and locations of infrastructure, land uses and amenities. The cost of planned infrastructure, services and amenities can be roughly calculated using the concept plan and with cost surveys, and this can be done for multiple planning scenarios, including compact vs. do-nothing/business-as-usual implementation options. The cost estimates from this back-of-the-envelope exercise will initially have a high margin of error; however, they should be updated as the detailed plan is created and comprehensive project information becomes available when implementing agencies undertake their own studies.

Funding (sources) Side

An examination of the local government's budget, financing options and the budgeting process for other implementing agencies will help assign costs. The funding and financing options available may not cover the full array of initially planned costs, requiring adjustment of the physical and spatial plan. Taking immediate steps toward improved local revenues, use of land value sharing, Public-Private Partnerships (PPPs) and creditworthiness can improve the city's capacity to implement the next phases of the plan.

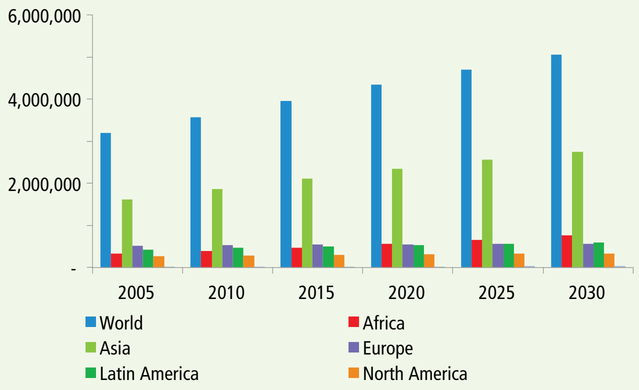
Achieving a Balance between Sources and Uses

Many planning exercises begin as aspirations. Once there is some idea of the amount of funding available from local and outside sources, the plan should be adjusted to be financially realistic under given constraints. There are several things to consider during this adjustment process:

What is PCE?

The world's urban population is growing and becoming concentrated in the less developed regions of the world. It is estimated that by 2017, even in less developed countries, a majority of people will be living in urban areas.

Urban Population and Projections (mid-year)



As cities grow, frequently the pace of urban development surpasses planned and serviced areas and results in informal, unplanned, segregated, and sprawling developments on the urban periphery. It is critical that cities begin to plan in advance of urban growth for urban spatial patterns that reinforce economic efficiency, social integration, and environmental protection. **Planned City Extension** (PCE) is an alternative to unplanned urban expansion, creating a well-planned supply of serviced buildable plots to accommodate population growth without the loss of affordability or the creation of informal settlements. PCE sets the stage for sustainable urban growth.

- **Prioritization:** It may be necessary to forego or change some planned improvements due to their cost. This prioritization process must consider economic, social and environmental goals. Importantly, less than ideal services should be planned in a way to allow for upgrading at a later stage of development.
- **Negotiation:** Nearly all cities will require some external funding to implement PCE, from either central governments, national agencies, donors or the private sector. A critical part of the financial planning process will be the negotiation with these funders. It is important for local PCE advocates to develop their pitch about why the proposed PCE is beneficial so that they can convince the external funders to allocate funding for the project and contribute towards implementation.

UN-Habitat's integrated Three-Pronged Approach to planning and implementation focuses on the three fundamental elements behind sustainable urban management: **urban planning, municipal finance, and legal frameworks**. In order for PCE to be effective in facilitating urban economic growth that is both inclusive and sustainable, planning, finance and legislation must be coordinated in an integrated approach to achieving on-the-ground results. This discussion note focuses on financial considerations; however, these must be integrated with spatial and regulatory approaches for ultimate success.

- **Phasing:** The buildout of infrastructure and services can be spread over time to reduce the initial financial burden and make revenues from the initial phases available for reinvestment in later phases. Some PCE-wide investments will be necessary early on (for example, connector roads or a solid waste facility) while others may be built out at a pace to match population growth and avoid unplanned development spillover. Typically, delineating road and public space reserves for the entire extension is a shrewd tactic to ensure that if unplanned development does occur, public spaces will be protected. It can be legally, financially and socially difficult to reclaim this space later if it becomes occupied.

Looking ahead: Implementation and Monitoring

A rapid financial planning exercise can be used to begin assigning roles and responsibilities for implementation. After rapid financial planning, each implementing stakeholder will further detail their financial planning and roadmap toward implementation. It will be critical for the lead implementing agency to manage coordination and monitor benchmarks to ensure that financial feasibility is on track for realization. It is worth noting that the capacity and structure of the lead implementing agency will be critical to the success of the PCE and should be a consideration during the financial planning process.

Should the PCE be Self-Financing?

The idea of planned city extension is to invest in critical infrastructure in advance of anticipated urban development and rapid population growth. Ideally, urban development will eventually generate revenue, which can pay for infrastructure and service improvements. However, there is a timing problem with investment funding needed before revenue streams materialize. The role of debt financing is to overcome this timing problem. Unfortunately many of the world's fast growing cities most in need of PCE face barriers to borrowing to finance PCE:

- Low financial management capacity, lack of ability to manage debt and legal barriers to borrowing
- Lack of ability to collect revenues resulting from urban development
- Uncertain timing with urban development possibly lagging behind infrastructure in some areas
- Low income status of rural to urban migrants and high urban poverty in general

To overcome these problems, it is likely that national and donor partners will be needed to invest in Phase I of PCE implementation while simultaneously building local financial capacity for later phases. Endogenous revenues can be supported by pairing the PCE with economic and livelihoods development efforts. Land-based revenues can also be leveraged to fund the PCE particularly if it attracts some higher income households or if the city cross subsidizes the PCE with more established neighborhoods (with the rationale that the costs of informal and unplanned development would impact these neighborhoods). In cities with high rates of poverty across the board, local economic development planning should be paired with planning for city extension.

In the short term, PCE will likely not be self-financing, but as the economy and municipal management capacity grow, PCE should begin to generate revenues.

The idea of planned city extension is to invest in critical infrastructure in advance of anticipated urban development and rapid population growth.


Nacala Porto, Mozambique ©Liz Paterson Gauntner, UN-Habitat

The Public-Private Division of Responsibility

public sector point of view, at its most fundamental level, the PCE is intended to provide basic infrastructure to keep pace with development. This includes roads, drainage, water, sanitation, electricity, and solid waste management. However, services such as public schools, health clinics, recreation centers, will have huge economic and social benefits and relatively low costs when compared to basic infrastructure. Therefore, these should be included in the rapid financial feasibility plan if such services are the responsibility of the municipality.[1]

If some services are managed completely by independent utility companies (such as water in some cases) or even by public agencies independent of the municipality (such as public safety in some cases), a conversation should still be had to ensure that these independent entities are able and willing to provide services to the PCE. However, specific sources and uses amounts are not necessary (see for example, the sources and uses statements for PCEs in the Philippines below).

There may also be some major investments such as large hospitals, universities, or industrial parks which should be

1 Which agencies, organization or other entities are responsible for specific types of infrastructure and services is a critical question that will need to be answered near the beginning of the financial assessment process.

PCE team in Silay, Philippines ©Liz Paterson Gauntner, UN-Habitat

analyzed separately from the PCE's rapid financial feasibility assessment due to their complexity. However, some basic gauge of implementation likelihood is still prudent, especially if the PCE design or projected revenues depend on it

In assessing basic infrastructure and services, there is an assumption that the public sector will take the lead in financing and implementing what is outside the private plots, and that the private sector will lead development within the private plots. However, in cities with higher rates of poverty, the government may choose to support private housing and businesses through subsidies or assistance programs. These programs can be critical to ensure that the PCE serves the function of informal settlement prevention by providing an affordable alternative. Where this is the case, such subsidies should be reflected in the financial feasibility assessment.

Conversely, in cities with a strong economic base, private sector developers may be sophisticated enough to play the lead role in implementing some infrastructure and services in the PCE. The private sector can be involved through classic Public-Private Partnership (PPP), Private Finance Initiatives (PFI) or concession agreements for delivery of fee-based services. Additionally, private real estate development can be profitable enough that developers can contribute to infrastructure or social housing in kind, or by way of financial or land contributions.

In negotiating a mutually beneficial agreement with developers for contributions to the PCE, it is useful for the municipality to have undertaken a preliminary assessment of the real estate markets so as to better understand real estate profitability which affects how much developers can afford to contribute. For this reason, private development can be assessed during the rapid financial planning process, separately from the public sources and uses statement.

Whatever the level of involvement of the private sector, it is imperative that the city will be able to enforce plan compliance on the part of developers as well as individual households and businesses, particularly when it comes to core plan elements including density, connectivity, protection of public space, social mix and mixture of uses.

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Beyond Rapid Financial Feasibility Analysis

After an initial assessment of the financial feasibility of the conceptual plan, additional financial and economic analysis will be necessary. Each implementing agency will do a **detailed financial feasibility assessment** to ensure that income and funding sources can cover expenses and debt service.

A **benefit/cost analysis (BCA)** also goes beyond rapid financial planning with the goal of quantifying all the benefits (including nonfinancial ones) associated with the plan. These benefits may include improved health, reduced travel times, improved business environment, broader access to education, etc. BCA helps decision makers assess whether the social benefits of plan implementation would outweigh the costs, even if the plan does not produce enough monetary revenues to cover those costs. BCA requires many assumptions and a highly technical approach. Qualitative evidence of the social benefits of plan implementation may be an adequate substitute for BCA in some situations.

The Potential of Land Value Sharing

Land value sharing refers to the idea that land values frequently rise in response to public actions to improve a city or neighborhood, and that the gains to private landholders can be used to pay for public services and investments. Land value sharing instruments are well-suited for PCE, where public investments are needed to improve an urbanizing area. They can serve as the link between public investments and public revenues, enabling financial sustainability. There are many instruments that can be used for land value sharing, including value-based annual land taxes, capital gains/value increment taxes, sale of development rights (for example height exemption fees), and many others.[2]

Rubavu District has designed a planned city extension (PCE) which connects sectors along a transit backbone, implements a well-connected street grid, provides linkages to rural areas and the economically significant lakefront and increases urban density.

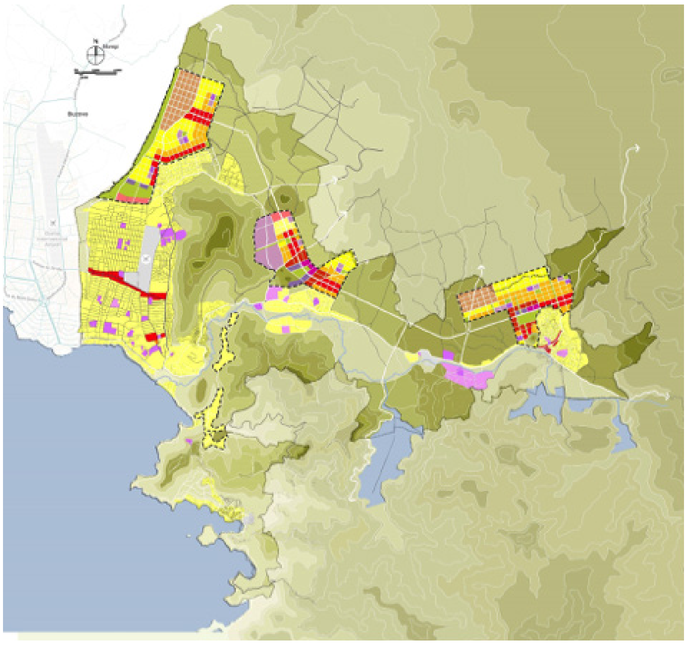
Case #1 Rwanda: Rubavu District Planned City Extension Phase I Financial Plan[3]

Background: Rubavu district is projected to grow rapidly over the next 30 years. The district will be one of the main hubs of Rwanda's urbanization process and play an important role in the country's transition to middle income status. Rubavu District has designed a planned city extension (PCE) which connects sectors along a transit backbone, implements a well-connected street grid, provides linkages to rural areas and the economically significant lakefront and increases urban density.

The plan: The plan defines three phases of implementation to 2045. Phase I is 2015-2025:

- "The deviation of the National Road will be developed by 2025. It will become the new axis of the city.
- From 2015 to 2025, urban size will increase from the old towns to the surrounding area.
- Besides providing basic public services for residential area and commercial area, the first phase industry parks will also be constructed in Rubavu sector and in Mahoko. This should provide employment opportunities for local people.
- Rugerero sector will be more focused on higher education, job training, and culture & art functions."

2015-2025 Proposed Land Use



Source: Rubavu Master Plan, UN-Habitat

2 For more detailed information on land value sharing policy and implementation, see UN-Habitat & GLTN. (2011). Land and Property Tax: A policy guide, or UN-Habitat & GLTN. (2016). Leveraging Land; Land-based finance for local governments, [training package].

3 For more detailed analysis, see "Rubavu District Planned City Extension Phase I (2015-2025) Financial Plan." Liz Paterson, Miquel Morell, Marco Kamiya & Joost Möhlmann. Nairobi: UN-Habitat. Note that the above financial plan has not been approved by the District or MININFRA.

Rubavu's financial situation: Rubavu District, similarly to most districts in Rwanda, is dependent on central government transfers, which comprise 83% of its budget. These transfers have been increasing, year by year, at a pace which should accommodate the increased operating expenditures that will accompany the population growth forecasted for the next 10 years.

Table 1: Rubavu District Budget Sources of Income, FY 2013-14

Government transfers	83.3%
Donor funds	4.1%
Fixed asset tax	0.1%
Rental income tax	1.1%
Land lease	3.5%
Public cleaning fees	2.6%
Trading license tax	1.2%
Market fees	1.7%
Other fees	2.4%

However, Rubavu District must enhance local revenues if the PCE is to be financially sustainable. Growth in population and economic development should reflect in the revenues from the Fixed Asset Tax and Rental Income Tax as land becomes more valuable. The District must improve tax administration in order to share the value created by economic and urban development. Nationally led tax policy reforms will assist in this process.

The sources and uses statement: The following table shows one financial scenario for Phase I implementation. The original plan far exceeded the financial capacity of the district to pool funding and was in the range of USD 180M even before contingencies or soft costs. These planed costs have been reduced by planning to pave only half of Phase I roads, switching to subsidies for on-site household sanitation systems instead of sewerage and a wastewater plant, and reducing the planned construction of social housing, with a land provision alternative.

A rough developer proforma suggests that there is significant potential for contributions to public services. Additionally, UN-Habitat has worked with Rwanda's water authority to define a tariff structure to cover both capital and operating costs of a water system. This could make a concession agreement feasible under the right legal structure.

Table 2: Phase I Financial Implementation Plan Scenario for Phase I (2015-2025) (USD)

	Cost	Central transfers	Private developer	Water concession agreement
Land acquisition	807,000	807,000	-	-
Land acquisition for social housing	689,000	689,000	-	-
Social housing	8,373,000	8,373,000	-	-
Administrative and public facilities	2,457,000	1,457,000	1,000,000	-
Educational facilities	3,259,000	759,000	2,500,000	-
Health facilities	1,244,000	-	1,244,000	-
Transit parking	3,000	-	3,000	-
Recreation facilities	406,000	-	406,000	-
Streets and drainage	16,904,000	8,404,000	8,500,000	-
Electricity network	6,712,000	3,212,000	3,500,000	-
Water plant	2,002,000	-	-	2,002,000
Water network	2,141,000	-	-	2,141,000
On-site sanitation facilities	7,280,000	7,280,000	-	-
Public lighting	3,388,000	1,688,000	1,700,000	-
Solid waste facility	836,000	836,000	-	-
Cemetery	7,000	7,000	-	-
TOTAL	**56,508,000**	**33,512,000** **(60%)**	**18,853,000** **(33%)**	**4,143,000** **(7%)**

Key takeaways and recommendations: Rubavu's capacity for raising own-source revenue is limited, and there is a weak connection between development and taxes and fees. Currently, Rubavu's entire capital budget comes from central transfers. This must change as the city grows and develops, with strengthened capacity and renewed authority to collect land-based taxes.

An increase in planned density will contribute to efficient public services and help to keep Rubavu's current expenditures from increasing on a per person basis even as the urban area expands.

The capital investments in the original plan were not financially feasible. These costs were reduced by changing the plan to include on-site sanitation instead of a piped system, some road reserves instead of paving all roads, and providing more subsidized land but less built social housing.

The potential for private sector contributions to infrastructure and services is significant. However, the government must develop the capacity to attract a large developer, negotiate exactions and manage PPPs.

Major recommendations are as follows:

- Leverage the potential of the private sector.
- Improve own-source revenues, particularly related to land values and development
- Monitor population growth to appropriately phase public investments

Rubavu, Rwanda ©Liz Paterson Gauntner, UN-Habitat

Case #2 Mozambique: Nacala-a-Velha District Planned City Extension, Phase I Financial Strategy

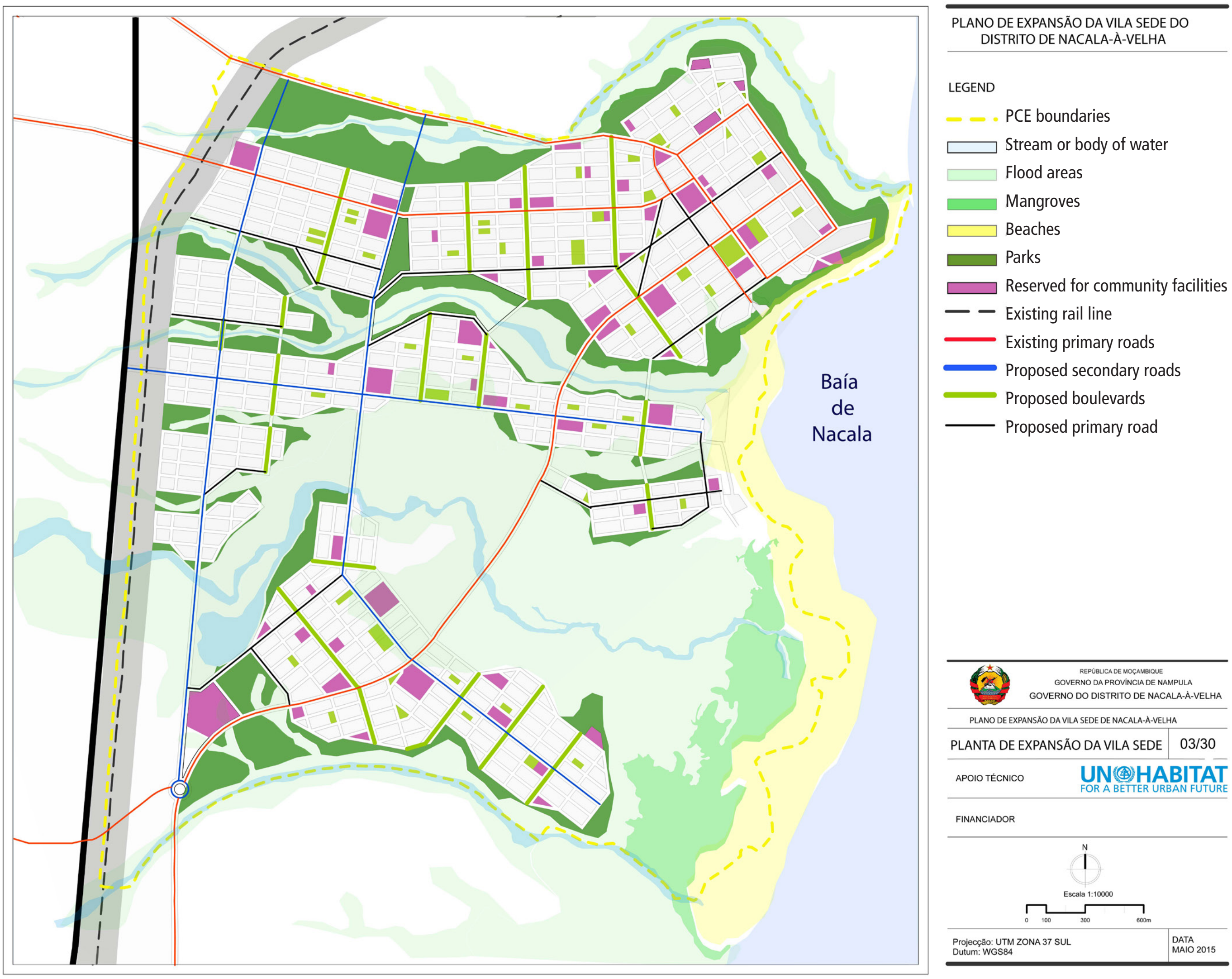
Background: Nacala-a-Velha District is on the west side of the Bay of Nacala in northern Mozambique, situated adjacent to the deepest natural port in Southern Africa. Nacala-a-Velha and Nacala Porto on the east side of the bay form Nacala. Most people live in Nacala Porto, while most jobs are found in Nacala-a-Velha, thus many people commute between the two towns on a daily basis (approx. 30 minutes by bus). The town of Nacala-a-Velha is small with a population just over 100,000 (2014), but is projected to grow to between 250,000 and 360,000 by 2045. This population growth is in accordance with the Nampula region where urbanization is in part fueled by mega industrial projects, particularly on the east side of the bay.

Nacala-a-Velha has a coal terminal that extends out into the bay, linked by rail with Malawi and Tete province to the west. As rapid population growth occurs, there are risks of informal urban development and its associated problems such as poor connectivity and lack of adequate services. Additionally, there is severe flood risk in parts of the region that necessitates the inclusion of environmental planning in the urbanization process.

At present, a high percentage (approximately 75%) of the population lives in informal settlements. If the anticipated population growth continues to be accommodated in these informal settlements, the spatial structure of the town could threaten its economic viability, social wellbeing and environmental safety.

The plan: UN-Habitat prepared a set of city extension plans for the region around the Bay of Nacala, including Nacala Porto on the eastern side and Nacala-a-Velha on the western side. These extension plans focus on accommodating the anticipated population growth up to 2045 in a connected, compact and integrated urban grid.

Streets are a particular focus in Nacala-a-Velha since the government does not have strong control over land use, and prioritizing the protection of space for streets will serve as the foundation for the area's spatial development trajectory in the long term. The plan also includes catalytic projects intended to facilitate economic development. These include a market, school expansion, a technical/vocational school, and a social recreation area.



Nacala-a-Velha's financial situation: Nacala-a-Velha is not classified as a municipality; therefore it has no authority to collect taxes and land leases, despite the stated willingness of international export companies to pay land leases. The vast majority of the District's budget is dependent on central transfers and amounts to less than USD 1.9M (2014), or less than $19 per person per year.

An assessment of capital funding available for plan implementation within the budgets of relevant agencies revealed that very little is committed for 2016 (see table below), with approximately USD 326,000 available from the District and national-level infrastructure funds. The *Fundo de Fomento de Habitacão* (Housing Fund) plans a large investment in the district of $4.8 million which would cater for the provision of 1000 hectares of housing outside the planned city extension area; but with no budget for the associated infrastructure requirements. This presents a problem on the financial side, but more importantly presents a threat to the compact and socially mixed development vision set forth in the city extension plan.

Private sector potential is high in the district's industrial sector, with the majority of development occurring in conjunction with large foreign export companies. A private sector consortium (CLN) led by the coal company Vale as well as the national agency managing industrial development (GAZEDA) has the potential to contribute significant funding to PCE implementation. Such contributions have yet to be specified.

Table 3: Capital Investment Funds Available for PCE Implementation in 2016

Institution, Agency or Firm	Instrument	Activities	Budget
District government	Annual capital budget		$220,000
FIPAG *(Fundo de Investimento e Património de Abastecimento de Água)*, a water fund	District-level programming	Reservoir of 100 m³; 30-40 m³ electric pumps; Extend the network 15 km within the expansion area; Construction of a service desk; 7 public fountains 200 new home connections	$60,000
Road Fund	Allocation from central level		$40,000
Fundo de Fomento de Habitacão, Housing Fund	District-level programming	1000 hectares outside the expansion area; 267 Type II homes (65 m²) without budget for associated infrastructure	$4,806,000
UCODIN, provincial development agency	Own-source funding	Markers for road demarcation	$6,000
GAZEDA, industrial development agency		Negotiated concessions from industrial companies	Unspecified
CLN (Nacala Logistics Corridor consortium, led by Vale)	Social investment plan	Initiatives under the District government	Unspecified

Source: UN-Habitat

Table 4: Phase I Costs, Funding, and Unfunded Gap (Examination of First Year) (USD)

INVESTMENT	Year 1 Cost : Phase I basic scenario / 8 years	Available Funds	Funding Source	Funding Gap
Secondary streets	134,800	134,800	District	0
East-West axis road	246,400	40,000	Road Fund	206,400
North-South axis boulevard with greenway connections	300,160	55,200	District	244,960
Primary streets	904,400	6,000	UCODIN	898,400
Central park	71,813			71,813
Six blocks of social housing (5 floors)	648,000	648,000	*Fundo de Fomento de Habitacão**	0
Eight blocks of social housing (4 floors)	648,000	648,000	*Fundo de Fomento de Habitacão**	0
Electrical substation	250,000			250,000
Sewage treatment plant	500,000			500,000
Market	157,500			157,500
School expansion	30,625			30,625
Social recreation area	161,219			161,219
Water holding tank	750,000	60,000	FIPAG (Water Fund)	690,000
Fire station	56,250			56,250
Technical/vocational training school	65,625			65,625
Municipal office	30,000	30,000	District	0
TOTAL	**4,954,791**	**1,622,000 (33%)**		**3,332,791 (67%)**

Source: UN-Habitat

*Assuming *Fundo de Fomento de Habitacão* (Housing Fund) money can be reallocated to social housing projects inside the PCE; however, this may require a change to the Fund's current operational model.

The sources and uses statement: The planned city extension in Nacala-a-Velha has three planned implementation phases, with Phase 1 lasting 8 years. Comparing the cost of implementation with the available funding demonstrates a severe funding gap. If Phase 1 costs were divided by 8 to represent costs in a single implementation year, there would still be a funding shortfall of 67%, even if the Housing Fund contributed to implementation instead of funding social housing that is not in line with the plan (see table above). This assumes that committed funding would remain the same in all 8 years of Phase I, but this will likely not be the case except for District funds. Funding agencies must be convinced to maintain and/or increase funding allocated to Nacala-a-Velha. One hopeful aspect is the potential of GAZEDA and CLN to contribute funding.

Key takeaways and recommendations: In order to address the funding shortfall and the need to coordinate implementation of the PCE, stakeholders developed an action plan (below).

Action Plan for Addressing the Funding Gap

Stakeholders also identified needs for improved District capacity in order to continue PCE implementation:

- Improved capacity to work with the private sector, including ability to create PPPs, negotiate concessions, involvement in the planning process, and training for private sector implementation partners
- Policy changes allowing for District-level collection of land-based taxes and fees
- Enhanced financial management capacity
- Improved District coordination with investment projects and utility companies to align funding toward achievement of strategic development goals

Table 5: Action Plan for Addressing the Funding Gap

Major Activities	Responsible Party	Deadline (Quarters)			
		1	2	3	4
Establish an implementation working group (GAZEDA, UCODIN, UN-Habitat, etc.)	UCODIN (Economic Development Agency)	X			
Complete a detailed inventory of the existing sources of funding in each sector in the district	District Government	X			
Conduct a legal assessment to identify existing potentials for revenue generation by the District	UCODIN/UN-Habitat		x		
Hold a fundraising conference	UCODIN/ GAZEDA/ District Government			x	
Begin implementation of infrastructure and urbanization plan	UCODIN/ District Government	x	x	x	
Coordination of Housing Fund initiatives (social housing construction) with District plans	Governo Distrital/ *Fundo de Fomento de Habitacão*	x			
Contact GTS (electricity company) to discuss a potential thermal power station	Governo Distrital	x			

Source: UN-Habitat

Stakeholders also identified needs for improved District capacity in order to continue PCE implementation:

- Improved capacity to work with the private sector, including ability to create PPPs, negotiate concessions, involvement in the planning process, and training for private sector implementation partners
- Policy allowing for District-level collection of land-based taxes and fees
- Enhanced financial management capacity
- Improved District coordination with investment projects and utility companies to align funding toward achievement of strategic development goals
- Expanded use of local materials and appropriate technologies in order to better leverage local potential

Case #3 Philippines: Phase I Financial Strategies for Planned City Extensions in three cities: Cagayan de Oro, Iloilo and Silay.[4]

Background: Three cities in Philippines worked with UN-Habitat to design planned city extensions to accommodate expanding populations in sustainable ways. Cagayan de Oro envisions its PCE as a growth node that will trigger development in the underserved areas of the city. The urban core of Cagayan de Oro is increasingly congested and characterized by unplanned development. Iloilo City has been experiencing rapid urbanization alongside an economic boom as it endeavors toward achieving its goal as a Premier City in 2015. The city faces serious issues and challenges brought about the need to keep pace with rapid urban growth. Silay City has grown slowly, serving primarily as a suburb of Bacolod City, the provincial capital and major commercial center. However, development of inexpensive land and a loss in competitiveness of sugarcane is transforming the city, which has potential to become its own tourism and agribusiness hub if development is managed correctly.

The Plans: The PCE in Cagayan de Oro (CDO) is designed to respond to a need to develop in a high elevation area safe from the increased threat of flooding. The PCE will be a compact and mixed area that will provide public services and generate socio-economic opportunities. Thus, the PCE aims to support the relocation of some civic and urban activities from the central business district's flood risk areas to the new neighborhoods in a planned, rational manner. CDO will, at the outset, construct the major roads that will provide connectivity of the PCE to the rest of the city and neighboring municipalities, and the specific projects that will drive growth in the area.

Iloilo City confronts the reality of increasing population and massive rural-to-urban migration, evident in the worsening vehicular traffic congestion, unguided urban development and increasing demand for jobs. The City Government sees the PCE as an opportunity to address the rapid urbanization issues and to bring about orderly and sustainable urban development. The city extension site is located on the northeastern part of Iloilo City, 6.5 kilometers from the city core.

Street in Silay city,Philippines ©Flickr/Brian Evans

4 For more details, see full reports on Achieving Sustainable Urban Development, Philippines: "Cagayan de Oro Planned City Extension (2015)", "Iloilo Planned City Extension (2015)" and "Silay Planned City Extension (2015)". UN-Habitat, Fukuoka.

In Silay, currently, the growth is largely unguided and may in the long-run create new, or worsen existing urban problems such as informal settlements and disconnected gated developments. There are concerns that the city is developing into a maze of inefficiently and incompatibly utilized lots, putting pressure on environmental sustainability and subsequently diminishing property values and discouraging investors. The PCE, therefore, is seen as an opportunity to guide Silay's further urban growth in an orderly and sustainable manner.

Financial situation in the three cities: Central government transfers and local taxes are the two main sources of revenue in these three cities. The cities all collect property taxes successfully, with higher rates for commercial establishments than for residential uses. Tax collection is well-linked to development and can provide a reliable source of revenue to repay development loans; however, local governments face borrowing limits with total debt payments not to exceed 20% of average annual regular income (including central transfers). Private sector investments have recently become a favored form of financing by Philippine municipalities. The cities of Iloilo and Cagayan de Oro have strong private sector groups that have expressed interest to participate in various infrastructure development projects in the cities. Silay City is beginning to attract private landowners to join the development efforts of the city and the region as a whole.

Table 6: Per Capita Budgets and Major Sources of Revenues

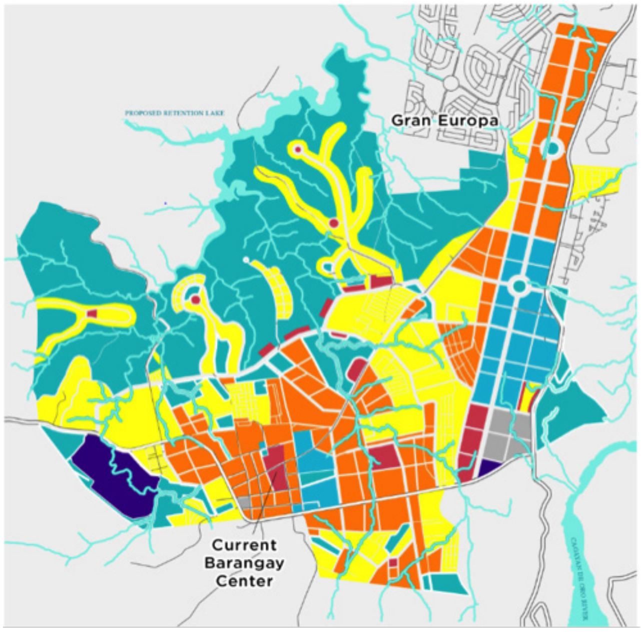
	Cagayan de Oro	Iloilo	Silay
City expenditure per capita (USD)	61	75	83
Intergovernmental transfers (%)	48	42	81
Local taxes (%)	41	28	13
Land-related tax and fee revenue (%)	13	20	

Source: City Statements of Income and Expenditures

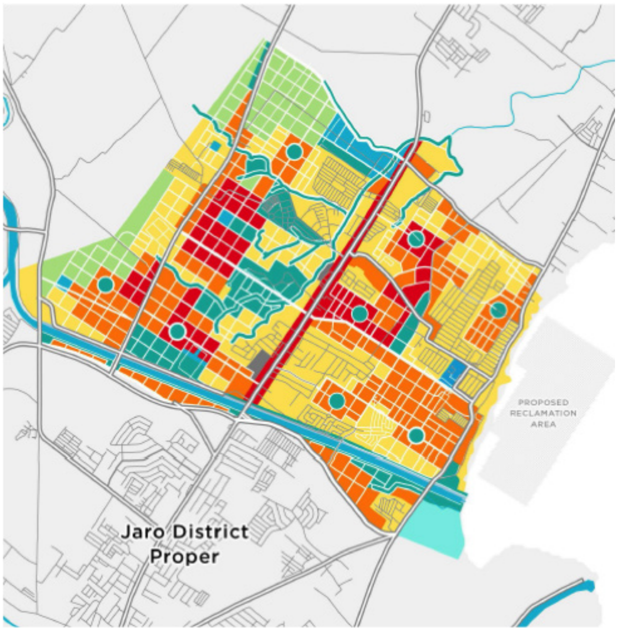
Iloilo City confronts the reality of increasing population and massive rural-to-urban migration, evident in the worsening vehicular traffic congestion, unguided urban development and increasing demand for jobs.

Market in Cagayan de Oro,Philippines ©Liz Paterson Gauntner, UN-Habitat

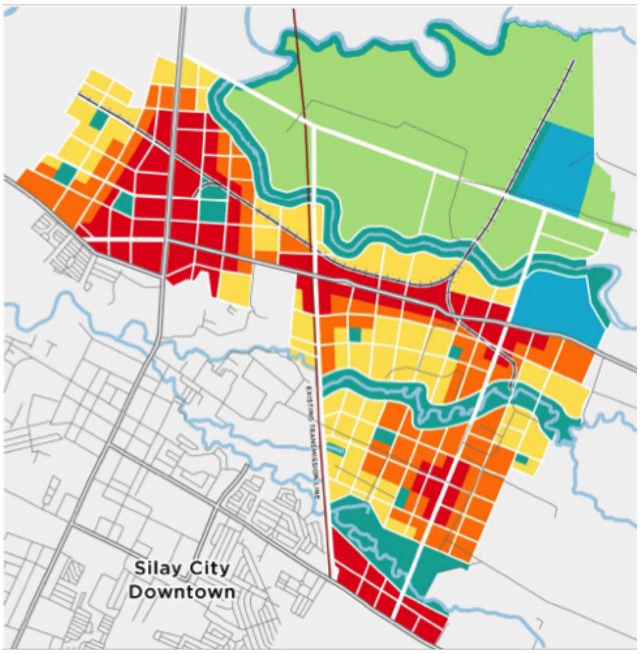
Cagayan de Oro City Extension Plan

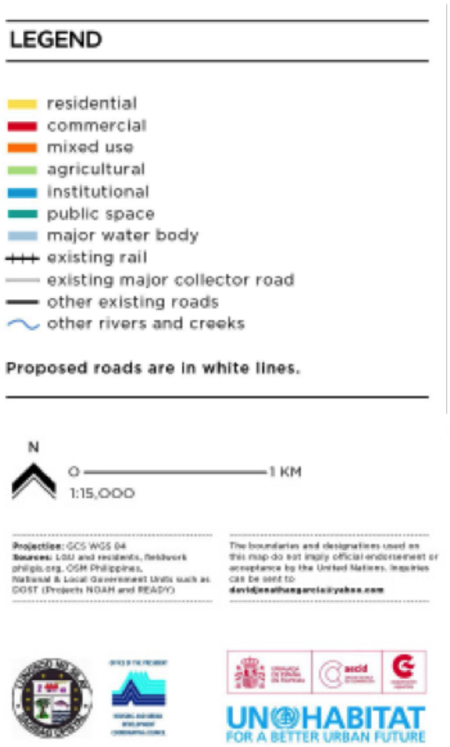


Iloilo City Extension Plan



Silay City Extension Plan





Source: UN-Habitat

Cagayan de Oro envisions PCE as a growth node that will trigger development in the underserved areas of the city. The urban core of Cagayan de Oro is increasingly congested and characterized by unplanned development. Iloilo City has been experiencing rapid urbanization alongside an economic boom as it endeavors toward achieving its goal as a Premier City in 2015. The city faces serious issues and challenges brought about the need to keep pace with rapid urban growth. Silay City has grown slowly, serving primarily as a suburb of Bacolod City, the provincial capital and major commercial center.

Sources and uses statements: For these three cities in Philippines, PCE will follow a phased implementation strategy spanning a period of 20 years, with Phase 1 covering the first five years (2016-2020). A mix of resources coming from private investors, PCE land owners, city appropriations of their Development Funds, national government grants, incremental real property and transfer taxes from change in land values, and donor agencies will finance the PCE. The cities will have to commit a percentage of the annual Development Fund allocation for the PCE until all the proposed public infrastructures are constructed.

Table 7: Financing Plan for Cagayan de Oro PCE: Phase 1 Implementation (Million Pesos)

Item		Potential Funding Source				
	Base Cost	City		National Government	Private sector	Private Utilities
		Development Fund	ODA Loan			
Roads	2,233	254	313	1,401	266	
Road right of way	137	60	-	48	28	
Government Center	163	-	163	-	-	-
Easement	86	86	-	-	-	-
Public space	159	-	-	159	-	-
Agro-industrial	3	-	-	-	3	-
Commercial	31	-	-	-	31	-
Mixed use	194	-	-	-	194	-
Residential	36	-	-	-	36	-
Transport terminal	38	-	-	-	38	-
Water supply	-	-	-	-	-	c/o Water District
Power supply	-	-	-	-	-	c/o Electric Cooperative
Total	3,080	400	476	1,607	596	-
Percentage	100%	13%	15%	52%	19%	-

Source: UN-Habitat

Table 8: Financing Plan for Iloilo PCE: Phase 1 Implementation (Million Pesos)

Item		Potential Funding Source				
	Base Cost	City		National Government	Private sector	Private Utilities
		DF Allocation	Borrowings			
Commercial	210	-	-	-	210	-
Hospital	13	-	-	-	13	-
Institutional	11	-	-	11		-
Mixed use	461	-	-	-	461	-
Public space	292	-	292	-		-
Residential	477	-	-	-	477	-
Road Network	3,591	382	40	169	1,367	-
Road right of way	355	-	-	-	146	-
Water supply	-	-	-	-	-	c/o Water District
Power supply	-	-	-	-	-	c/o Electric Cooperative
Total	5,409	382	332	2,022	2,674	-
Percentage	100%	7%	6%	37%	49%	-

Source: UN-Habitat

Table 9: Financing Plan for Silay PCE: Phase 1 Implementation (Million Pesos)

Item		Potential Funding Source					
	Base Cost	City		National Government Cost Share	Private Developer	Land Owners	Private Utilities
		DF Allocation	Borrowings				
Commercial	212	-	-	-	212	-	-
Mixed use	80	-	-	-	80	-	-
Public space	113	25	88	-	-	-	-
Residential				-	-	-	-
Road Network	1,078	12	182	777	119	-	-
Road right of way	23	2.5		6		2.5	-
Water supply	-	-	-	-	-	-	c/o Water District
Power supply	-	-	-	-	-	-	c/o Electric Cooperative
Total	1,506	40	270	783	411	3	-
Percentage	100%	3%	18%	52%	27%	0%	-

Source: UN-Habitat

For these cities, user fees may be charged from the use of facilities and access to services; however, any policy for cost recovery should start with full cost accounting of such facilities and services. This preliminary activity is important to provide a basis of the charges that will be imposed, and assign costs fairly and equitably to various users and beneficiaries of the PCE.

Final recommendations for Cagayan de Oro:

- Conduct social marketing and advocacy for the PCE among full range of stakeholders, including those that will be affected by land acquisition and resettlement
- Brief the members of the City Development Council (CDC) and the City Council on the project and importance of ASUD principles
- Explore co-funding with national government
- Provide tax incentives for medium-rise development
- Include housing guidelines in CLUP that are aligned with ASUD standards
- Adapt housing guidelines to ASUD principles
- Allow low-intensity commercial use in residential blocks

Final recommendations for Iloilo:

- Capacitate the committee on Urban Planning, housing and Land Use Development, Zoning expropriation, Assessment & Land Acquisition on the ASUD principles
- Integrate the PCE in the updated CLUP
- Provide more than required PD957 and BP220 prescriptions on street requirements
- Integrate PCE in the ongoing transport plan

Final recommendations for Silay:

- Explore/ prioritize negotiated sale, by donation and/or by expropriation
- Update local census on population (birth rate, mortality rate, migration and immigration etc.) to come up with an accurate density data
- Identify or tap real property estate management experts to suggest on what developments to introduce best
- Draw up the master plan for the area along with the promulgation of an ordinance before a political change in leadership overtakes its completion
- Offer alternative sites adjacent or proximate to the PCE area
- Develop marketing strategies to convince investors on viability of site

Cover Photos: Liz Paterson Gauntner, UN-Habitat

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