

Adenauer Young Researcher's Report

# Between Setbacks and Ambition: How a new urban mentality can put Philippine cities on track towards sustainability

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The Adenauer Young Researcher's Report is a series of short articles and opinion pieces on the state of Philippine politics and democracy from the perspective of the youth.

The publication aims to foster political participation and cultural exchange among the Filipino and German youth by providing them a platform to publish their own research work, opinion piece, or commentary containing their intellectual perspectives on issues related to the Philippines.

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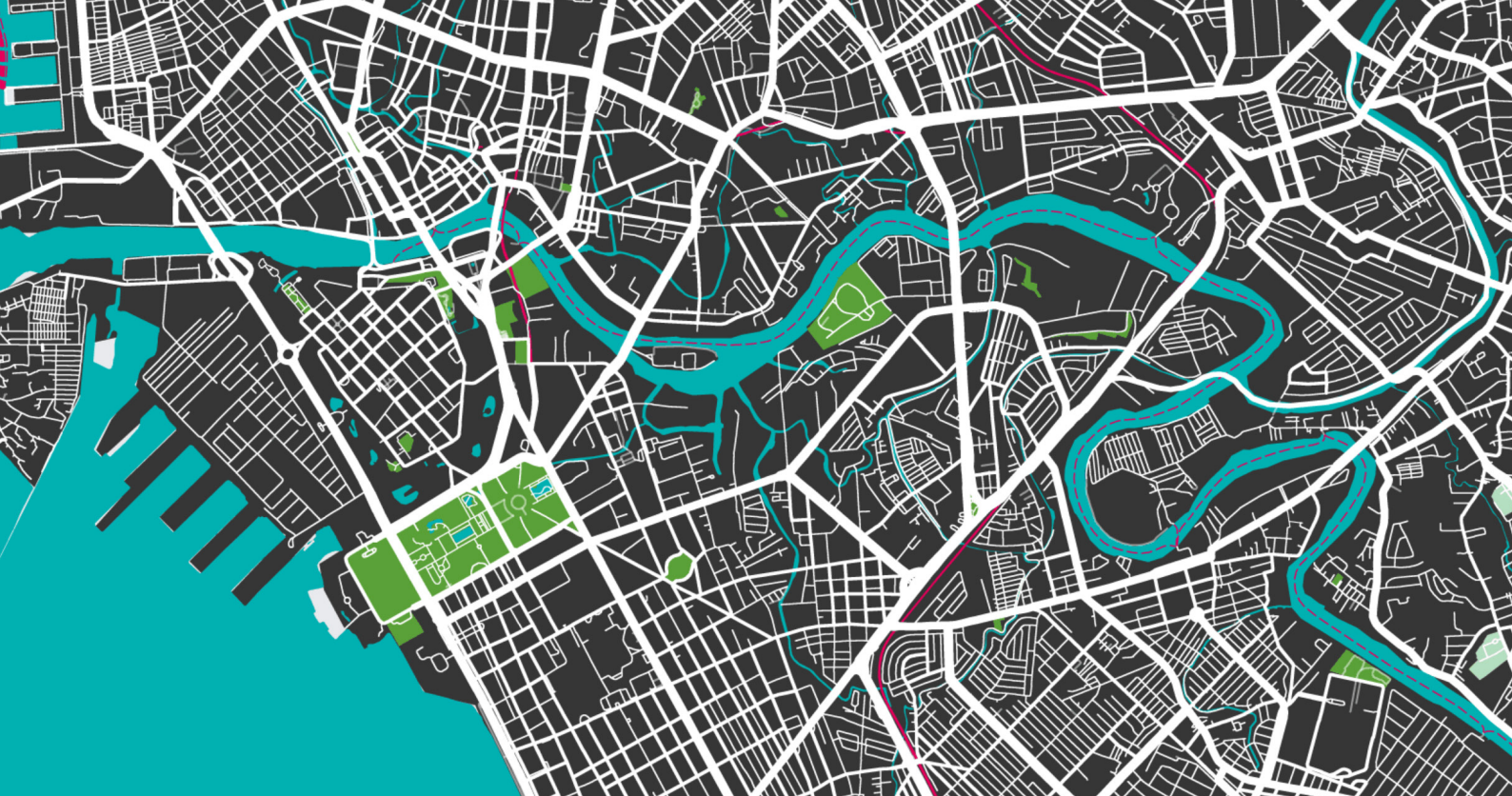
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# Between Setbacks and Ambition: How a new urban mentality can put Philippine cities on track towards sustainability

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Cities have always been the epicentre of human exchange and progress. They are strongholds for economic and social development as well as innovation and renewal, offering an unmatched diversity of lifestyles and perspectives. Thus, urbanisation is one of the progressing trends that can be observed everywhere around the planet. The Philippines is no exception to this phenomenon.

According to the Philippine government's 2020 census, almost 59 million Filipinos (54%) lived in urban barangays.<sup>1</sup> Economically, the National Capital Region (NCR) alone accounted for 31.3% of the Philippines' Gross Domestic Product (GDP), therefore offering promising economic perspectives.<sup>2</sup> Nevertheless, there exists considerable rates of poverty and homelessness. But beyond the never-ending excitement of Metro Manila, cities seem to maintain almost "magnetic" properties. Many Filipinos have already moved to cities; many others will prospectively follow them.

As a result, the country's future will be substantially shaped in urban areas. However, climate change exacerbates the challenges cities face already today. Skills and knowledge of urban development are therefore crucial in designing the Philippines of tomorrow. Regrettably, urban development has not been a story of remarkable success. Instead, a short-term oriented mentality and uncontrolled urban sprawl have negatively impacted the lives of many urbanites. As such, many cities in the Philippines have lost control of their own development. Coherent visions are painfully missing and many local stakeholders have adopted a

counterproductive mindset that is reactive instead of preventive.

But that is only one side of the story. In recent years, more and more urban communities have begun to set milestones. As we will see, a change of mentality is currently in progress. It is driven by ambitious local stakeholders that work to implement sustainable solutions to growing urban problems.

This paper tries to assemble cues for that shift. We will first assess the counterproductive mentality of the past. For that purpose, we will examine the fate of land use plans and public green in Manila. But beyond analysing the past, we will also dare a look at the future. A sustainable future, to be precise. As we will see, local communities actively redesign their cities to prevent climate change or enhance their resilience. Looking at their examples, we will see what sustainability could mean *in concreto* for the average urban Filipino. In virtue of its brevity, this paper can merely spotlight a handful of innovative approaches. But they alone may show the potential of sustainability, once it has found its way into the toolboxes of our cities.

### Of land use plans and land use chaos

Land use plans are the foundation of controlled urban development. Cities use them to designate a specific type of use for every area within their jurisdiction. Ideally, land use plans determine where we live, work, do our shopping or relax. They include where our schools and libraries are located and also where our cities remain undeveloped.

Many problems of Filipino cities can be attributed to the lack of planning or enforcement of existing land use plans. Even in big urban centres, urban planning is often incoherent, incomprehensive, or outdated. "Of the sixteen cities and one municipality in Metro Manila, only five cities have updated CLUPs [Comprehensive Land Use Plans], while in Cebu [C]ity, the CLUP has not been updated since 1980", reported the World Bank in 2017.<sup>3</sup>

Land use plans are an idealistic vision of a city and rarely a hundred percent accurate. But their total absence or persistent lack of enforcement indicate a problematic mentality within town halls and mayors' offices. A mindset between capitulation and carelessness appears to be strikingly prevalent. Decision makers often seem

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these plans envisioned the creation of extensive green spaces – spaces that were supposed to link and permeate the city to raise quality of life and foster exchange beyond social classes.

But history turned out differently. Land speculation limited the ability to transform the city according to the plans. Then, in the last weeks of World War II, fierce fighting made Manila's once legendary splendour vanish to dust and ashes.<sup>4</sup> Furthermore, especially after the war, considerable rural-urban migration led to the emergence of informal settlements that blocked wide areas and made planned development impossible. Attempts to relocate or forcibly evict these settlers often failed or resembled a Sisyphean task. Between 1948 and 1963, Manila observed a 20 percent annual rate of growth of informal settlements. Apprehensively, authorities tried to remove settlers from Intramuros to the countryside in 1963. But only three years later, half of the settlers had returned to the city, mostly due to the relocation areas' lack of economic perspectives or insufficient traffic connection to the city.<sup>5</sup> And finally, the rising star of Makati added further competition to the development of Manila and Quezon City by attracting investments instead of them.

Overwhelmed by these challenges, stakeholders constantly changed their agendas. Soon, this led to the formal or factual abrogation of the aforementioned plans, signing the death sentence of a green vision of Manila. As a result, both Manila's Rizal Park and Quezon City's Memorial Circle are merely an accidental byproduct of untamed urban evolution. As Filipino sociologist Saloma and Ateneo de Manila professor Akpedonu put it, "[i]t is ironic and indicative that what today is the most famous public park anywhere in the Philippines was never planned as such".<sup>6</sup>

The Arroceros Forest Park next to Manila Central Station, dramatically dubbed "Manila's last lung" by former Secretary of Education A.R. Roces,<sup>7</sup> faced similar pressure since its creation in 1993. On several occasions, the city either constructed public utility facilities or attempted to do so, cutting down thousands of its once 8,000 trees.<sup>8</sup> The disillusioning record of this reads as follows:

to override previous plans for short-term gains instead of harvesting the benefits of their integral implementation. This is short-sighted because insufficient enforcement causes discontinuity and inconsistency in urban design and it makes cities prone to stifling urban dynamics. Subsequently, urban development often does not look like the plans; planners rather hopelessly try to manage whatever the unrelenting natural force of "urban evolution" holds ready for them. To grasp the consequences of this lack of enforcement, we will take a look at the telling story of green spaces in Manila.

### The lack of enforcement of land use plans and its impact on city green

The fate of parks and public green areas in Metro Manila is a good example of the need-oriented mentality of decision makers on the one hand and of uncontrolled growth and development on the other hand.

In 1905, the famous American city planner Daniel Burnham presented a masterplan for a grandiosely revised Manila under U.S. colonial rule. Four decades later, in 1949, American planner Frost and famous Filipino architect Arellano revised a plan for the newly founded Quezon City. Both

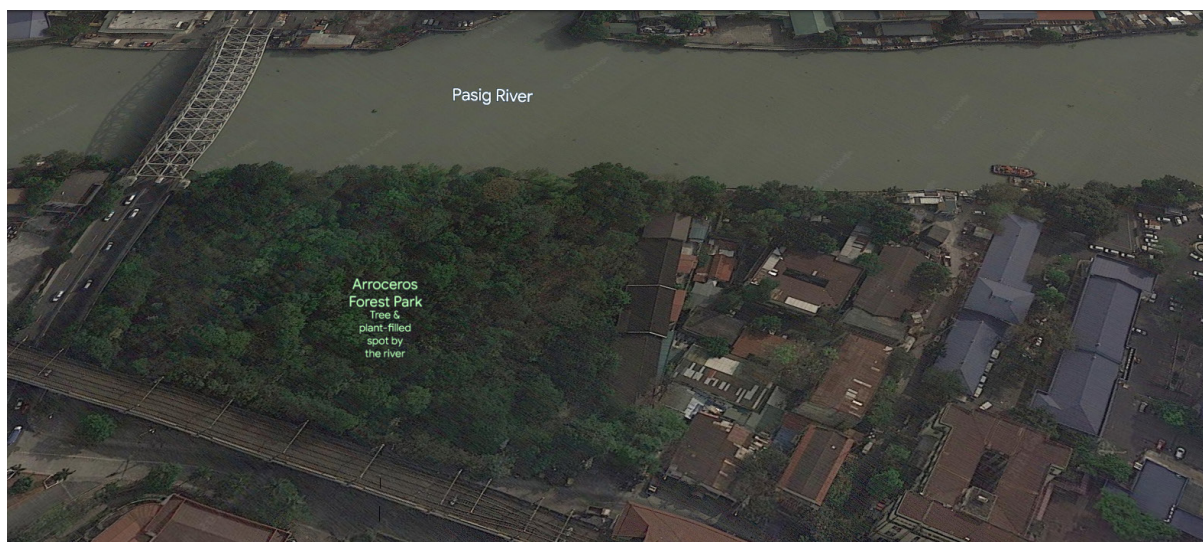


Image via Google Earth Pro

public green spaces constitute only 0.03% of Manila's land area and even these are scattered and disconnected.<sup>9</sup>

This indicates two things: Firstly, a short-sighted mindset of implementing landmarks and managing acute challenges instead of solving them on a structural level has led to an erratic pattern of urban progression in the past. Secondly, the supervisory authorities seem to be structurally incapable of enforcing both the adoption and the realisation of land use plans.

In short, the fate of green spaces demonstrates the existence of a counterproductive mentality and insufficient institutional capacities in years past. The future, however, is still unwritten. Or better still: it is being written just now. This paper assumes that an essential shift in mentality is possible. More so, it is already taking place.

In the following section, we will attempt to find cues to back up this hypothesis as we explore green areas and its role against one of nature's most devastating threats: flooding.

### **Preventing flooding and increasing quality of life by restoring nature in our cities**

With sea levels rising and heavier rainfall to be expected, cities will need to develop their resilience to floods. Cities are particularly prone to flooding as they often exhibit high rates of impervious surfaces. Research shows that impervious surfaces

lower the infiltration rate of water considerably while diminishing the rate of evapotranspiration. While only 10% of rainwater remains as runoff water on natural ground cover, cities with a rate of imperviousness above 35% already face 30% of precipitation as runoff water.<sup>10</sup> Albeit their proximity to the sea and seasonally recurring heavy rain, many Filipino cities are highly sealed. Take a look at the City of Iligan for example, where the rate of impervious soil is about 53%.<sup>11</sup> Meanwhile, Manila, as we have mentioned before, has virtually no open green spaces.

In response to this, researchers and planners advocate for innovative ideas like the sponge city. As explained by Dr. Jay Gonzalez III, of the University of Science and Technology of Southern Philippines (USTP), "[t]he Sponge City Design is a principle based on a sponge that has the capability to absorb and store water. It absorbs water during heavy rain and can be used during times of drought or whenever needed."<sup>12</sup> Artificial drainage systems may go hand in hand with the edification of wastewater purification plants. But most such systems reach their limits in extreme weather situations. Therefore, sponge cities promote the purposeful restoration of smaller ponds everywhere in the city. They also prefer water courses such as rivers to meander (instead of straightened artificial waterways), because this slows down water movement. Alongside open green spaces offering pervious spaces and drainage, this can effectively reduce the risk of harmful flooding.<sup>13</sup>

Returning green and water areas to our cities would also have other positive impacts. Research suggests that land surface temperature and artificial impervious surfaces ratio are related.<sup>14</sup> Less green therefore means hotter cities, an unpleasant prospect given the current heatwaves. Pervious surfaces such as parks, vegetation, and waterbodies can therefore help improve urban climate, foster biodiversity, and enhance overall quality of life. Safely storing and reusing rainfall water instead of simply draining it could also help solve the rising scarcity of drinkable water that has even occurred in Metro Manila.<sup>15</sup>

Certainly, sponge cities are an unorthodox approach against floods that is still in its infancy, even more so in the Philippines. Still, officials from Metro Cebu have recognised the problem and began to change their mindset. There are plans to establish “water impounding lagoons”, though their implementation still needs to be coordinated with the impacted barangays.<sup>16</sup> Meanwhile, Mandaue City technicians, for example, assessed a correlation between high-danger zones for flooding and rubbish-based clogging in waterways, thus urging citizens to follow disposal guidelines.<sup>17</sup>

As we can see, the moment officials start to see the water as a manageable resource, they start to think preventively, not reactively. This ultimately leads to a change in design. Meanwhile, a sustainability-based mentality can help find solutions and designs that use synergetic effects, producing gains in the long run. For example, as mentioned above, there seems to be a link between flood risk and waste disposal. Addressing both of these problems at once has remarkable potential.

### **Tackling waste disposal and management issues at their source**

Because beyond flooding, unsustainable waste disposal and subsequent management can have other harmful effects. The World Bank concisely summarised the terrifying list of problems that improper waste management may cause. “Poorly managed waste is contaminating the world’s oceans, clogging drains and causing flooding, transmitting diseases, increasing respiratory

problems from burning, harming animals that consume waste unknowingly, and affecting economic development such as through tourism.” Aggravatingly, predictions show that global waste generation will increase significantly in the future.<sup>18</sup>



Image via Unsplash/Sian Labay

As Ericson Coracero points out, waste is also a growing problem in the Philippines, particularly due to growing population, increased urbanisation, and better living standards. Despite having comprehensive legislation since the “Ecological Solid Waste Management Act of 2000” (R.A. 9003), he identifies a lack of sanitary landfills, improper methods of disposal (burning, littering, or illegal rubbish dumps) as well as a lack of enforcement as main causes for widespread rubbish-related pollution.<sup>19</sup> Local government units (LGUs) have difficulties implementing R.A. 9003 due to a “lack of resources, low capacity and [a lack of] citizens’ awareness.”<sup>20</sup>

Being the third biggest polluter of plastic into the oceans in 2015 (with a further aggravation since), the Philippines carries responsibility beyond its domestic interests. The magnitude of the problem is easily discernible when seeing plastic-filled rivers, individually plastic-wrapped vegetables in supermarkets, or the massive use of plastic sachets at every imaginable occasion. However, as of May 2019, only around 40% of LGUs had adopted solid waste management plans as required by R.A. 9003.<sup>21</sup>

Encouragingly, several cities have implemented approaches of zero waste management, going an inspiring new way. The City of Alaminos has successfully reduced total waste production and enforced widespread proper treatment through meticulous redesigning of urban waste management. Meanwhile, public education to encourage a shift in mentality and a firm commitment to a “no-segregation, no-collection” policy have complemented this.<sup>22</sup> Moreover, more

and more individuals in the Philippines decide to actively reduce their own rubbish footprint, adopting a so-called "zero-waste lifestyle".<sup>23</sup>

Economic incentives can also participate in waste reduction and behavioural change. That has been proven by Bayawan City. The medium size city has implemented a pay-as-you-throw policy (PAYT) that obliges households to buy a sticker for every 25-litres bin liner. Albeit its minimal pricing below actual costs (\$0.05 per sticker), significant effects have been measured. Organic waste appears to be composted considerably more, and more waste is sold on the formal waste market, thus strengthening the circular economy of the city. The system also encouraged the city to fully analyse the costs of its waste management, detecting budgetary potentials and inefficiencies.<sup>24</sup> However, despite its laudable success, enforcement remains important to avoid that PAYT leads to increased illegal and unsustainable dumping by households. Bayawan teaches us an interesting lesson: it can be worth it to stick to a systemic approach and change one's mentality instead of always ever fixing the shortcomings of the existing system. In Bayawan's case, this new mentality means that officials as well as individuals try to reduce waste altogether, thus tackling the issue at its roots, instead of focussing solely on managing it.

Looking at the larger picture, we can see that both waste management and flood control can highly benefit from systemic approaches that focus on prevention instead of reaction. However, preventing the occurrence of a problem is not always possible. In transportation for example, prevention is hardly imaginable: the flow of people and goods can only be usefully managed, not suppressed. Nonetheless, transportation might be one of the easiest fields to reach systemic change.

### **How public and railway transportation remain the Cinderella of development policies**

Currently, infrastructure development in the Philippines focuses on building new roads to ease congestion. In the meantime, the state of public and cargo rail transportation leaves a lot to be desired.

The Philippines relies heavily on road-based transportation with 98% of passenger and 58% of cargo traffic realised on the roads in 2012. Nonetheless, the road network suffers from insufficient maintenance as well as insufficient financial capacity and capability of local authorities that oversee 85% of the road network.<sup>25</sup> Two causes make it imperative for cities to develop public solutions for transportation: the widespread and growing use of private vehicles with only modest increase in road length on the one hand; and overburdened city centres due to a mismatch of initially planned capacity and population growth on the other hand.

Regrettably, the mentality of public developers remains highly road-centred. A government-friendly commenter lamented the "sad story of our rail transportation: from being so expansive just before the war, to being so small and rickety to its present-day version. [...] Now, PNR operates only on a very small scale [and] [t]he existence of "modern" train lines – [Manila's urban LRT & MRT] – is but a small consolation to the ever-harassed train-riding public."<sup>26</sup> This is even more astonishing as Manila once had an envied tramway that transported over 35 million passengers at its peak in 1925 but was sadly lost in the war.<sup>27</sup> Despite the commenter's manifest optimism in the following

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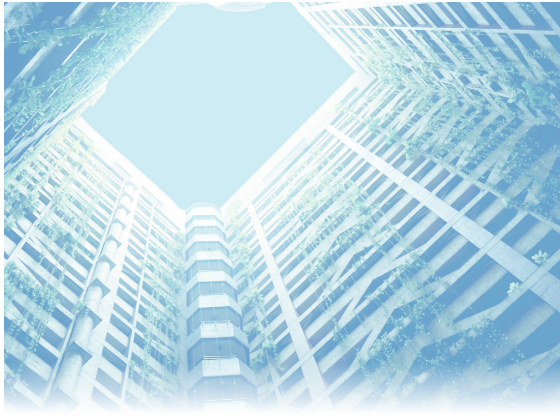


Image from Unsplash

of his article, former president Duterte's *Build, Build, Build*, programme did not accomplish its full potential. While high officials praise themselves for having built or maintained almost 30,000 km of roads as well as thousands of bridges, air- or seaport projects,<sup>28</sup> many railway projects have been delayed, are stuck in the planning phase, or are not financially secured. In addition, both realised and planned railway projects focus almost exclusively on Metro Manila and its surrounding areas. Meanwhile, railway and public transportation in other cities seem to be painfully disregarded.<sup>29</sup>

This unsatisfying state of public transportation can be observed in Metro Cebu. Metro Cebu's planned Bus Rapid Transit (BRT) would not have been able to satisfy demand already in 2017. Given Cebu's growth since and its expected population of 5 million by 2050, the system that recently finally held its groundbreaking<sup>30</sup> can merely be a partial remedy upon completion. However, like other major cities, Cebu could highly benefit from rail-based transportation, both in reducing congestion and in supporting the emergence of growth poles as proposed by its metropolitan plan.<sup>31</sup>

To put it in a nutshell: transportation remains a deadlock field when it comes to renewing its underlying mindset. That is especially unfavourable as rerouting traffic streams away from individual to public transportation solutions is more sustainable and cost-effective. Add to this the urgent need for decarbonisation and one thing becomes clear: rethinking transportation as we know it is almost inevitable, lest our cities do not collapse one day. But transforming the lifelines of our cities may suggest an even bigger endeavour: reinventing our cities themselves. Sure, this will not be easy. But possible it is, nonetheless. Using

## Between Setbacks and Ambition: How a new urban mentality can put Philippine cities on track towards sustainability

the example of Baguio City, we will peak at what urban reinvention could look like. And lastly, we will look at New Clark City, a city in the making.

### Aiming beyond: inventing and reinventing a new urban reality

Baguio, the hill station that had virtually been built overnight following the arrival of the U.S. colonizers (another one of Daniel Burnham's intriguing projects), nowadays faces the same challenges as other urban centres in the Philippines. Between 1988 and 2009, it saw rapid soil sealing and an almost explosive population growth.<sup>32</sup> As a result, the city "breached the carrying capacity of solid waste collection in 1994 [...], water supply in 2002 [...], and wastewater treatment in 2007".<sup>33</sup>

Baguio's incumbent mayor, Benjamin Magalong, has therefore begun to fight against urban decay, "which is deemed irreversible by 2030 if we are not going to do anything about it now."<sup>34</sup> Aiming for decongestion, the city will develop six growth nodes that will combine touristic, agricultural, transportation and commercial services. All these projects align with environmental and liveability objectives.<sup>35</sup> Since 2021, the city also operates a Smart City Command Center in a public-private partnership where sensory data from all over the city is used to enhance flood risk systems, minimise congestion, process more rapidly citizens' health and security emergencies, and measure air quality.<sup>36</sup> Throughout the next years, Baguio will thus undertake its own overhaul, reinventing itself in a way.

Roughly a hundred kilometres north of Manila, an even more ambitious invention takes shape. Since 2016, the Bases Conversion Development Authority (BCDA) monitors the construction of an entirely new city: New Clark City.<sup>37</sup> Initially dubbed as a "crazy idea", the city shall be developed into a home for 1.2 million as well as a workplace for 800,000 by 2065. According to former BCDA head Arnel Casanova, the new city shall endorse public transportation and feature no gated communities "because these keep people from sharing roads, and therefore contributing to the traffic".<sup>38</sup> This claim has been retained by his successor, Vivencio Dizon who stated that "[w]hen we build this city, we are building for people, we're not building for

cars. It's a big difference." Meanwhile, the design focuses particularly on disaster resilience.<sup>39</sup>

If realised correctly, the project can be highly beneficial for the Philippines. Creating housing and opportunities outside of Metro Manila could decongest the capital by diverting domestic migration to another economic stronghold. Still, it remains important to develop attractive cities all over the country to avoid the unhealthy preponderance of the capital region. Furthermore, while founding a new city may help cope with rising urbanisation, it is important to note that such a solution can merely mitigate the pressure on existing cities, not replace their necessary reinvention. New Clark City is therefore a supplement. A welcome one at that. But it should not be treated as more than a beacon to inspire a shift in mentality elsewhere.

### **Conclusion: towards cities that work for everybody**

Leading Filipino cities into a successful future is certainly no simple task. Growing challenges like climate change, appalling inequality, budget constraints, insufficient means of enforcement: the list of obstacles is long and opaque. Public officials therefore need to be ambitious and determined to push through what they aspire for their communities. But even more important is a democratically active and engaged community that demands progress of their elected representatives. Participation and democracy on a local level are the best tools we have to design homes for the people, with the people and of the people. In the end, we need cities that work. Not only for some, but for everyone.

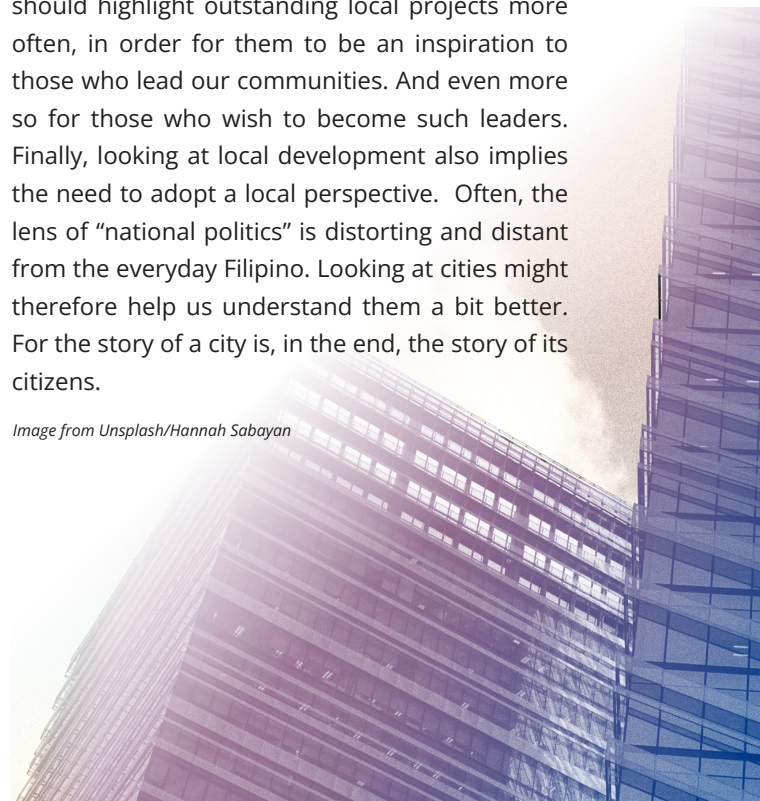
Structurally, the enforcement of land use plans must become a priority. Firstly, local officials must refrain from preferring short-term remedy and landmark projects over long-term planning and consistency. Patience is a virtue and planning is an art. Secondly, the actual powers of supervisory authorities over urban development must be drastically enhanced. Certainly, municipalities determine their own development (and rightfully so), but someone must watch over them and hold them to their commitments.

Mentally, stakeholders at all levels must assess the real needs of urban populations. This includes especially the poorest, informal settlers and squatters, the informal workforce. Otherwise, the divide we observe will only deepen and controlled development will ultimately fail. We often associate smart city with fancy technology to register every last phenomenon. The smartest city, however, could simply be one that listens. One that listens to all people, regardless of their social position.

And finally, sustainability must be established as the standard way to solve urban equations. For too long, we have understood eco-friendly concepts as fancy yet somewhat disconnected visions. Instead, we should frame game-changing innovations as something that can be actively achieved by implementing courageous policies. In the end, the road from vision to reality is very much shorter than we think. It is called decision.

On a positive note, it may be said this: beyond soap-box oratory and dulcet yet often vague visions, hardworking local officials industriously go new ways in their respective communities. Change is pursued, implemented, and perfected by local officials everywhere, aspiring to make the Philippines a safe and functioning place for every Filipino. The technocrats' hail for "best practices" often submerges in the background noise of everyday challenges. It is therefore important to give life to it, show that the implementation of groundbreaking ideas is actually possible. We should highlight outstanding local projects more often, in order for them to be an inspiration to those who lead our communities. And even more so for those who wish to become such leaders. Finally, looking at local development also implies the need to adopt a local perspective. Often, the lens of "national politics" is distorting and distant from the everyday Filipino. Looking at cities might therefore help us understand them a bit better. For the story of a city is, in the end, the story of its citizens.

*Image from Unsplash/Hannah Sabayan*



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## About the Author



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