

■ LOCAL REGIONAL STUDIES NETWORK

# RECOMMENDATIONS ON BAGUIO CITY'S CARRYING CAPACITY

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## SUMMARY

This Policy Brief offers reflections on the discussions during the two open fora on Baguio City's Carrying Capacity. Interventions to date have been focused on infrastructure and strategies at the level of the Local Government Units (LGUs). It proposes reframing the discussions more inclusively and presents recommendations for community-based interventions to complement existing strategies. A grassroots approach draws on strengths inherent to the region, such as the presence of indigenous people and practices, and engages various stakeholders as active participants.

"A Public Forum on Baguio City's Urban Carrying Capacity" was held on September 11, 2024 with guest speaker, Architect Donna R. Tabangin, a City Planning and Development Officer from the Baguio City Planning, Development and Sustainability Office.

It was followed by a second activity, "A Public Forum on Baguio City's Carrying Capacity and Its Impact on Neighboring Municipalities" which took place on October 18, 2024. Its guest speaker was Mr. Jose H. Dado Jr., the Chief Economic Development Specialist of NEDA-CAR.

Proceedings documentation from both activities are available.

## INTRODUCTION

Baguio City is faced with many problems relating to urbanization. Anecdotal experiences from locals and tourists regarding traffic congestion, the number of tourists, and garbage are consistent with the analysis presented by Ar. Tabangin and NEDA-CAR: traffic congestion reflects the limitations of road expansions and infrastructure systems, while water shortages and poor air quality can be traced to the degradation of national parks, forest reservations and heritage parks, and the increasing conversion of land. There is overall declining livability in the city and increasing social vulnerability. The analysis indicates that Baguio City already exceeds its urban carrying capacity. The carrying capacity is understood as the maximum population or level of economic activity that an urban area can sustain without degrading the environment, overburdening infrastructure, or harming social systems (Cohen 1995). This has been true for several critical thresholds as early as 1985 (Dado 2024).

Baguio City's challenges are well-known, as are its limitations in addressing them. As such, it has been established that a regional approach is necessary. The Baguio, La Trinidad, Itogon, Sablan, Tuba, and Tublay (BLISTT) Inter-local Cooperation Program was established in 1994 (NEDA-CAR 2020) as an effort to develop a regional strategy to address needs relating to population, transportation, solid waste management, water supply, housing, tourism, infrastructure, and natural hazards (Dado 2024). This was followed by similar efforts such as the BLISTT Master Plan for Sustainable Urban Infrastructure Development (NEDA-CAR 2020), Baguio 2043, and other efforts around Smart Sustainable City Management (Diwas n.d.). All these examples are focused on infrastructure and policy and are led by LGUs. Other efforts from non-government and civil society organizations are implementing supporting programs like regreening, adopt-a-park projects, and ridge-to-reef projects.

## AREAS FOR INNOVATION

Efforts to address these challenges at the level of LGU administration and through infrastructure are necessary and cannot be replaced. However, these efforts have inherent limitations. Infrastructure is expensive and may be dependent on the political landscape. Additionally, it may not always be possible to build infrastructure; and where infrastructure may be built, it still needs to be complemented by behavioral changes that are best supported by community-based approaches. Integrating community-based approaches ensures a holistic approach to policy development and implementation.

## DECENTERING BAGUIO AND CENTERING BLISTT IN RISKS AND OPPORTUNITIES

Much of the conversation has been focused on the challenges for Baguio City and the need for a regional solution given Baguio City's limitations. There remains a need to discuss risks and opportunities for Baguio's neighbors. The nature of the relationship between Baguio City and the greater BLISTT region needs to be better understood from the perspective of the BLISTT municipalities. Javier and Alangui (2025) share some of these concerns, noting that agricultural lands are likely to be converted to real estate, which will be profitable in the short term but will decrease agricultural production in the long term. A holistic approach highlights the challenges not only for Baguio City, but for the wider

community, as well as offer the opportunity to navigate these developments with greater purpose and in alignment with the differing development priorities in each municipality.

## BUILDING ON GROWTH NODES WITH A COMMUNITY-CENTERED APPROACH

Growth nodes or growth centers were discussed during the public fora in the context of a polycentric development strategy. Certain services could be concentrated in some areas, which could be linked by efficient public transportation and non-motorized transportation systems.

The growth nodes presented were as follows: La Trinidad could be developed as a center of commercial activity. Sablan would take the lead in residential expansion. Tublay would take the role of agro-industrial center and different areas in Tuba-Itogon would lead in industrial activities and waste management (Dado 2024).

It is important that these growth nodes allow municipalities to identify areas of growth and development that are most relevant for them. This strategy must also consider the concerns of the community as well. Waste management is a key issue, since there is currently no waste management facility in the BLISTT area. Garbage increases substantially during peak tourist seasons in Baguio City, such as the Christmas holidays and the annual Panagbenga. Currently, solid waste is transported from Baguio City to a landfill in Tarlac in exchange for payments (Tabangin 2024). Solid waste management is necessary; however, it must be done sustainably and without detriment to the community in which waste management will be localized.

A community-centered approach requires the establishment of solid waste management facilities, allowing garbage to be processed, usable materials to be retrieved, reused and channeled correctly, and unusable materials to be safely disposed. Such facilities require substantial investment in construction and technical knowledge and will ultimately benefit the local community and BLISTT. The ability to effectively process solid waste ensures sustainability, addresses environmental concerns, and will generate jobs and income for the community in the long term.

Inclusion of community perspectives ensures that investments in economic development will address community needs and build growth nodes sustainably. This further allows areas of specialization where needed, from larger infrastructure such as solid waste processing facilities to more experience-based targets such as curating unique tourist activities. It allows duplication where needed, such as with services like hospitals.

It also ensures that the infrastructure connecting the different growth nodes takes local needs into account, such as connections to trading posts for vegetables or transportation options for people traveling to Manila. At present, transportation is concentrated in bus terminals along Governor Pack Road in Baguio City. Considering these everyday needs in planning is essential.

## **DATA GATHERING MUST INCLUDE ALL BLISTT MUNICIPALITIES**

The focus on Baguio City is reflected in the analysis presented by Mr. Dado of NEDA-CAR. A participant in the public forum, Ms. Lorelei Gaco from the City Planning Office, asked about carrying capacity information for the other municipalities in BLISTT, and NEDA confirmed that none was currently available. BLISTT-wide interventions should be informed by BLISTT-wide data.

## **PLANNING TO REFLECT THE NUANCES OF MOVEMENT IN AND OUT OF BLISTT**

The data shared during the fora reflects several trends that are worth noting. First, tourism brings about substantial fluctuations in the population. Second, many people come to Baguio in the morning to do business or go to school and leave the city in the evening; students or businesspeople move differently from tourists, and students who live in Baguio during the semester and travel home during the holidays are different from tourists who visit Baguio during the holidays. Planning should reflect these nuances, and on that basis allow better prediction of these movements to improve preparation for accompanying demands on city services. In addition to the Panagbenga or the Christmas holidays, planning can also include school calendars, long weekends, and other activities that substantially influence movement to, from, and through BLISTT.

## **INDIGENOUS PEOPLE AND CULTURAL PRACTICES MAY OFFER SOLUTIONS TO CURRENT CHALLENGES**

The BLISTT area is home to several ethnolinguistic groups, each with a wealth of indigenous knowledge that may offer novel solutions to current challenges. Including indigenous peoples in the conversation allows policy to draw on these bodies of knowledge, facilitating alignment between policymakers, LGUs and indigenous people. It also ensures that any measures taken will consider concerns specific to indigenous peoples, such as ancestral domains.

During the forum, a question on landscape ecology was raised by Prof. Zenaida Baoanan of UP Baguio. Many municipalities have forest areas with native plants, which could help substantially raise the quality of urban green spaces in reforestation plans. Ms. Anceno, Senior Economic Development Specialist at NEDA, confirmed during the second forum that while infrastructure connectivity such as internet cables had been considered, ecological or vegetation connectivity was not yet considered. Mr. Dado and Ms. Anceno welcomed Prof. Baoanan's suggestion and hopes that it can be taken up by the Metropolitan BLISTT Development Authority. The BLISTT project is ultimately one of resource sharing and management. With this, it should be remembered that indigenous people have a wealth of knowledge that can be used to craft meaningful and culturally informed solutions.

## **STAKEHOLDERS MUST BE MORE BROADLY IDENTIFIED**

Participants at the public forum identified different parties that could be engaged and mobilized as stakeholders. Key examples that arose include the indigenous people and related agencies such as the National Commission on Indigenous Peoples (NCIP). The BLISTT area is home to several indigenous groups, and some infrastructure projects may affect ancestral domains. During the fora, the NCIP welcomed the opportunity to be included in discussions given the importance of considering the welfare of indigenous communities in urbanization. Ms. Grace Batanes of the NCIP shared that there were several road construction projects that could not proceed because the owners of ancestral domains were not consulted. It was also

noted by another participant that several infrastructure proposals such as Light Rail Transit operations may affect residential houses, including indigenous peoples. Consulting with indigenous groups may contribute to solving these urban problems.

In addition, travel and tour companies can also be engaged because measures that include them trickle down immediately to tourists. Tourism companies can be brought onboard to promote more sustainable tourist activities and programs to manage tourist influx.

Furthermore, political engagement should expand to include barangay level discussions, with a view of encouraging residents to develop solutions to the problem. This participatory approach to policy making allows inclusion at the community-level.

## GRASSROOTS SOLUTIONS TO BE SOUGHT FOR URBAN PLANNING CONCERNS

The sole focus on infrastructure cannot solve every problem brought about by rapid urbanization. For example, emergency services may face obstructions when responding to an emergency, due in part to the mountainous terrain, as well as the emergence of population-dense residential spaces that do not comply with zoning laws and building regulations. An example of a grassroots solution is asking the residents themselves to identify paths for emergency services, which requires a collaborative approach. Applying well-established methodologies such as Participatory Action Research supports this approach and increases the likelihood of identifying practicable and sustainable solutions. More importantly, it establishes that risk is ultimately carried not by the LGU, but by the residents themselves, and encourages them to take ownership of a solution to ensure that they can be reached by emergency services when the need arises.

## PLATFORMS FOR EXCHANGE AMONG STAKEHOLDERS MUST BE PROVIDED

Public forums and similar activities will continue to identify shared concerns, existing resources to solve new problems, new dimensions to existing problems, and new solutions. For example, when the NCIP stressed the need to consider the welfare of indigenous communities

during the first forum, the Department of Environment and Natural Resources (DENR) shared that they are in the process of completing a study on metes and bounds of proclaimed forest reservations and natural parks, which is useful first step towards securing forest lands. This may have similar applications for ancestral lands.

Encouraging exchange between the different stakeholders allows policymakers and stakeholders to learn from one another. Using community-based approaches is innovative and offers valuable lessons across several fields, including policy implementation, indigenous peoples' rights, urban planning, and sustainable development.

## ANTICIPATED CHALLENGES

Forum participants discussed the search for the Chief Administrator for the Metropolitan BLISTT Development Authority (MBLISTTDA). It was emphasized that whoever would fill the position should be a resident of the BLISTT area and should be aware of local concerns such as the challenges of indigenous communities, the need to consult with local stakeholders, and the importance of free, prior, and informed consent (FPIC). It is important that these considerations be taken into account.

The role of this office needs to be considered critically and defined clearly since there are many interests for the office to balance. However, focusing on sustainability, grassroots concerns, and the needs of the community will allow the agency to remain above politics and make a lasting impact.

There were also discussions on an environment fee and income generation for these interventions. NEDA representatives emphasized that such initiatives would be funded by LGUs. Baguio City generates substantial income from tourism, but bigger interventions will require support from the national government. Policymakers are encouraged to seek overlaps between national development plans and the needs and opportunities in the BLISTT area.

## CONCLUSIONS AND FUTURE DIRECTIONS

Infrastructure and policy-level efforts to address the limitations of urban carrying capacity will benefit greatly by adding holistic and participatory approaches to develop solutions to urban challenges. This expands

the conversation of urban planning and includes more diverse stakeholders who will bring different approaches ranging from completely novel interventions to drawing on traditions that have existed for hundreds of years. These efforts also draw on the area's strengths and encourage ownership of policy outcomes among the communities involved.

The second forum closed with a noteworthy point: urban carrying capacity is not fixed and can be increased by various management and technological interventions. Statistical approaches indicate that critical thresholds in Baguio City have been surpassed decades ago, but urban carrying capacity is a measure of conditional probability that is dependent on human decisions and the feedback loop between communities and the environment (Cohen 1995). Expanding the conversation with the recommendations above will not only address existing problems, but in the process also create new opportunities.

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