



# CDIA VIRTUAL CLINIC 1

## WRAP-UP REPORT

Date: 19 - 20 May 2021



Federal Ministry  
Republic of Austria  
Finance



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra  
Swiss Confederation  
Federal Department of Economic Affairs,  
Education and Research EAD  
State Secretariat for Economic Affairs SECO



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Our goal at CDIA is simple: to help secondary cities in the Asia Pacific region develop bankable infrastructure projects in line with global sustainability agendas. As an organization, we are excited to offer these Virtual Clinics as a way of continuing our direct support of cities during these challenging times of no travel and changing funder priorities. We believe that after attending, cities can better navigate the current context and pursue real, bankable projects.

**Neil Chadder**  
CDIA Program Manager

## About City Clinics

CDIA Virtual Clinics are a unique capacity development initiative to help city managers credibly prioritize bankable and climate-focused infrastructure projects that are in line with funder priorities. The clinics are not a typical training activity where discussions are on what other cities have done; instead, they are more focused on finding concrete solutions for the development issues that each city participant is facing.

The cities of Naga and Dagupan in the Philippines attended Virtual Clinic #1 on 19-20 May, 2021.

1

### Naga, Philippines

The city of Naga is centrally located in the province of Camarines Sur, about 377 kms south of Manila. In 2015, Naga City had a population of 196,000 residents with a density of 2,320/km<sup>2</sup>, the highest population density in the Bicol Region. Nestled at the foot of Mt. Isarog and trisected by the creek-fed Bicol and Naga rivers, the city is highly susceptible to flooding caused by heavy rainfall. Naga came to Virtual Clinic with the expectation to receive CDIA's intensive consultation on the Bicol River Esplanade Project - a greenfield development which envisions to establish flood control structures, public walkways, bike lanes and a river park and urban forest in the city.

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### Dagupan, Philippines

The city of Dagupan is located in the province of Pangasinan, on the northern part of Luzon Island, where it stretches along the southern shores of Lingayen Gulf. The city is a commercial, financial and educational center located approximately 212 kms north of Manila. As of 2017, Dagupan had a population of 174,000 residents. Due to its location, the city is highly vulnerable to earthquakes, liquefaction, and flooding. Dagupan joined the Virtual Clinic hoping to share with CDIA its ambition to initiate comprehensive flood mitigation projects and hear recommendations from the CDIA urban development experts on how to address the risks and hazards the city is facing.

## Key Takeaways

- Checklist of what a Project Preparatory Study (PPS) contains.
- Prioritized list of sectors to focus on.
- Draft application for potential PPS support and advice to bring the project forward.

## Attendance

### CDIA experts:



**Neil Chadder**  
Program  
Manager



**Fabienne Perucca**  
Urban  
Development  
Specialist



**Chee Anne Roño**  
Urban  
Development  
Specialist



**Brian Capati**  
Urban  
Development  
Specialist



**Kathleen G. Jovellanos**  
Capacity  
Development  
Specialist



**Analyn Rubenecia**  
Communications  
and Outreach  
Specialist

### City Representatives:



**Nelson S. Legacion**  
City Mayor, Naga



**Reuel Oliver**  
Investment  
Board, Naga



**Engr. Odilio Nate**  
City Planning &  
Development  
Office, Naga



**Alec Santos**  
Arts, Culture &  
Tourism Office,  
Naga



**Vladimir Mata**  
City  
Administrator,  
Dagupan



**Emmanuel Palaganas**  
City Planning and  
Development  
Office, Dagupan

## Key Learning Objectives:

- How to conceptualize urban infrastructure projects from initial ideas and how to integrate climate resilience into projects.
- The basic principles to make a project match with funders' priorities and how to package bankable projects.
- The importance of identifying existing strengths and weaknesses of cities' human resource personnel and how to enhance their capacity and institutional strength for effective project development and management.



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The open, transparent and friendly discussion we had during the Clinic has been very similar to what we would usually do during a CDIA's scoping mission. We learn from each other and we try to find a pragmatic way forward to address the city's issues. It was an excellent dynamic that all participants enjoyed.

**Fabienne Perucca**  
CDIA Urban Development Specialist

# Naga, Philippines

## Project Brief Info

A tourism hotspot that attracts thousands of tourists every year, the city of Naga is facing several urban development issues related to riverbank erosion and a lack of recreational spaces for its residents. As part of a collective effort, the city government is planning to develop a green infrastructure project in the districts of Tabuco and Mabulo, comprising of a

1.6-km Bicol River Esplanade (with multiple access points to the riverfront area, flood control structures, soft mobility facilities and public spaces) and a 2.1-hectare People's Park and Recreation Center that will serve as a major urban green space for all residents.

## Barriers & Hurdles

- Lack of green, public spaces for recreational activities.
- Soil erosion along riverbanks and liquefaction risks.
- Communities at risk of flooding on the eastern riverbank, including lower-income residents looking for economic opportunities.
- Need to identify project funding sources (currently insufficient central government funding)

## Steps taken for Implementation

1. The project has been included in the City Development Plan and the Comprehensive Land Use Plan. It is also in line with the national objectives regarding sustainable mobility, the addition of green spaces for urban centers, and economic development with priority for recreational and business tourism activities.
2. The city is working with both national and regional government entities, including the Department of Public Works and Highways, Tourism Infrastructure and Enterprise Zone Authority, the National Economic and Development Authority, the Bicol Regional Development Council and the Naga City Planning and Development Office to develop the entire project plan.
3. The cost for the project has been estimated at approximately USD 13.4 million. The city has applied for regional infrastructure development program funding and plans to seek additional national funding.
4. The city intends to use nature-based solutions and green technologies for bike lanes, pedestrian paths, on-street parking and the riverbank infrastructure. The city also plans to develop a People's Park as a public green space, where it will apply the "Miyawaki" method for its afforestation objectives.
5. The city has received several land donations for the project from private sector actors.

## Key recommendations:

- A comprehensive review and analysis of flood risks, land use and planned projects such as the Mabulo-Almeda Bypass Road is necessary before any formal recommendations are made.
- A resilient approach should be taken for all components of the project and will provide long-term sustainability and contribute to the overall objective of improving the livability of the city and fostering its economic development. (Some ideas can be found at <https://cdia.asia/climate/>).
- CDIA advises that the city identify the immediate stakeholders in need of project implementation support and to establish a dedicated project management office. This is the first step to improve the city's capacity development.
- Community engagement with a specific emphasis on training programs and potential job creation should be a significant component in project planning.

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Naga has a firm grasp of their proposed project, particularly the related complexities of each sub-component and their potential to be financed through different sources within the Philippine Central Government. Moreover, the potential benefits and overarching objective of improving city interconnectivity and pedestrianization which has a co-benefit of improving city livability is well recognized by the city representatives who attended the CDIA virtual clinics.

**Brian Capati,**  
CDIA Urban Development Specialist

“The virtual clinic allowed us to gain access to a wider network and gave us the opportunity to seek crucial guidance despite the limitations set by the pandemic. Thanks to the sharing and consultation from CDIA, we were able to dissect the crucial aspects of our plans and look at them through the lens of resiliency and sustainable urban development. Leaving the clinic, we are more equipped to solve our city's problem through our proposed projects.

**Alec Santos**  
City Tourism Officer  
Arts, Culture & Tourism Office - Naga

## Sectors of concern



Flood/ Drainage Management



Urban Renewal



Transport

## Development impact pillars



Climate Mitigation and/or Adaptation



Environmental Improvement

# Dagupan, Philippines

## Project Brief Info

Dagupan, Philippines is a climate-vulnerable city hosting many low-income workers. The city has to deal with frequent flooding along its rivers due to rising sea levels, and a high concentration of silt in the river puts the ecosystem at risk. Additionally, recent changes in land-use along the rivers, which include transforming fish ponds into residential and commercial areas, have

prevented floodwaters from naturally flowing down to the shoreline. Hence, there is a need to (i) conduct catchment-wide review of the river management systems and identify key actions to be taken; (ii) develop a long-term flood prevention scheme for Dagupan City in order to identify priority sub-projects for subsequent implementation.

## Barriers & Hurdles

- Landslides and rising sea levels contribute to high silt load in the river; City sinking at a rate of .25 meters per decade.
- Frequent and more intense flooding due to extreme weather conditions, geography and anthropogenic factors.
- Informal settlements along the river have complicated critical infrastructure projects.
- There is a need to engage multiple stakeholders along the catchment's river systems.



## Steps taken for Implementation

1. The city is ready to begin a project and it has already prepared some technical assessments and summary documents of its current programs.
2. A zoning ordinance to regulate and manage land use especially in vulnerable areas that require flooding mitigation measures has been approved but is not yet fully implemented. Conversion of fishponds to built-up areas (commercial, residential) is becoming more prevalent.
3. River embankments and dikes are in place for strategic areas where there is a natural and increased tendency of inundation. Some pumping stations and floodgates are under construction.
4. Multi-agency coordination is critical to effectively manage the flooding issue of Dagupan City. There is an ongoing effort to establish institutional coordination across municipalities within the city.
5. At the provincial level, the Department of Environment and Natural Resources established the Sinocalan-Dagupan River System Water Quality Management Area in 2011. Dagupan is a part of the project area, along with neighboring cities and municipalities. In parallel, the Department of Public Works and Highways supports regular dredging and silt removal operations.

## Key recommendations:

- CDIA recommends conducting a catchment-wide review of the river management systems which includes a broad analysis of the key sources contributing to city flooding, including the main upstream and downstream areas of silt generation. The city also needs a review of the social issues including land-use changes and the in-migration of people settling in flood-prone areas. This will inform the identification of the priority investment areas that will help mitigate flooding in Dagupan City.
- A coordinated approach from the local governments in the Sinocalan-Dagupan River System Water Quality Management Area catchment level could help Dagupan generate a long-term investment strategy that prioritizes flood prevention and climate mitigation measures.
- A capacity development assessment and roadmap would help identify city officials' specialized technical skills at the operational level.
- Perform a review of examples of nature-based solutions for flood control in urban environments; i.e. [www.landprocess.co.th](http://www.landprocess.co.th).



The clinic allowed me to see how the city, and the fish industry they are best known for, is in reality facing the constant threat of flooding. Because the city is naturally located in floodplains, a programmatic approach involving upstream municipalities is a key step in identifying projects that can provide integrated and long term flood mitigation measures. The city is very determined to work towards building a climate-resilient future

**Chee Anne Roño**  
CDIA Urban Development Specialist

Our City and our LGU Team in Dagupan City benefited a lot from the initial conversation via the CDIA clinic. Meeting a very impressive team of professionals who are frank yet accommodating; firm yet open and generous to share insights was truly meaningful and a welcome opportunity for us.

**Vladimir T. Mata**  
City Administrator - Dagupan

The meeting was a multidisciplinary undertaking to a diversified research challenges and our vulnerability to geohazards from present to the next decade. With CDIA, we discussed creating solutions combining many approaches in a systematic method.

**Emmanuel Palaganas**  
City Planning and Development Officer  
City Planning and Development Office

## Sectors of concern



Flood/ Drainage Management



Urban Renewal

## Development impact pillars



Climate Mitigation and/or Adaptation



Poverty Reduction



## GET IN TOUCH WITH US

Email: [cdia\\_info@cdia.asia](mailto:cdia_info@cdia.asia)



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