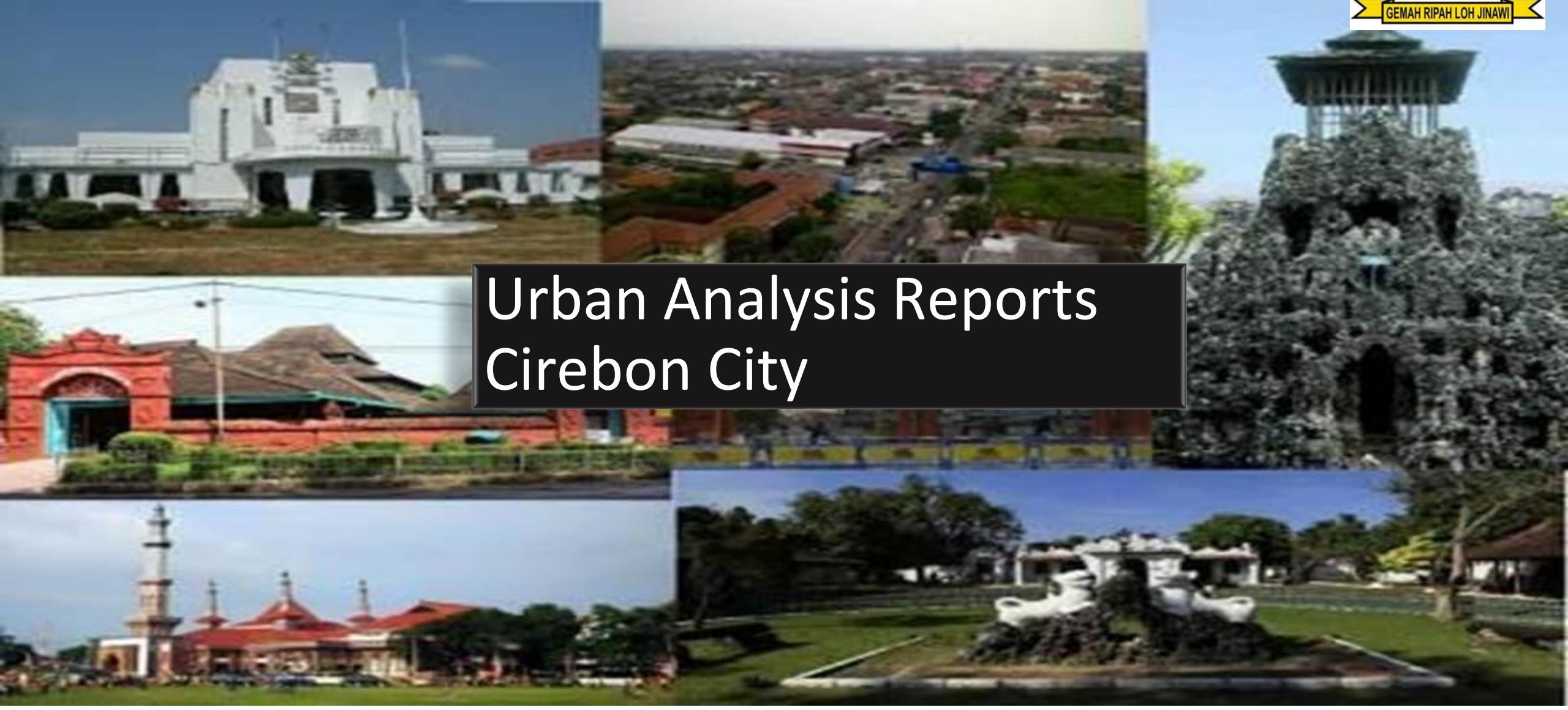




GEMAH RIPAH LOH JINAWI



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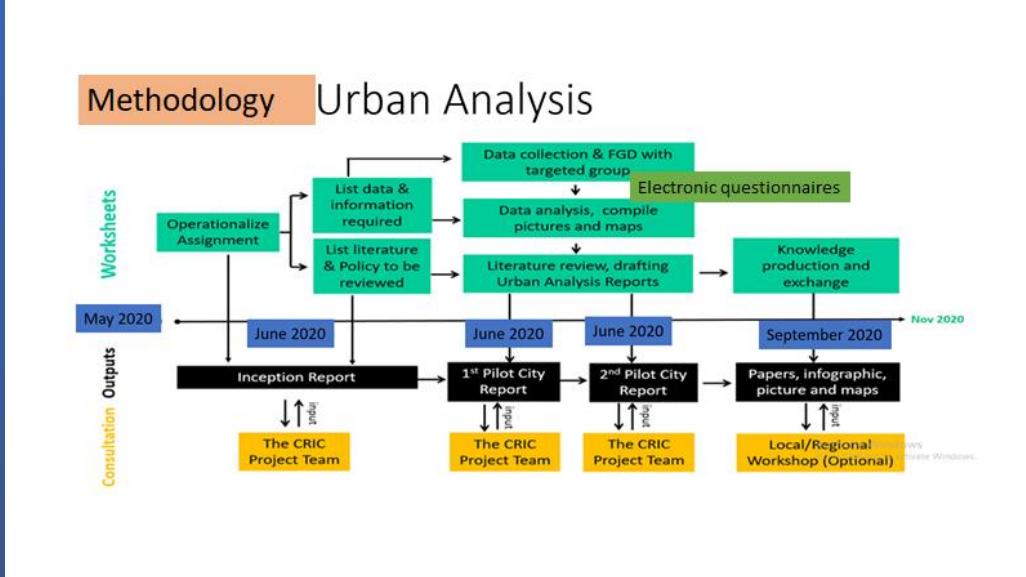
Urban Analysis Reports Cirebon City



1. **Introduction of the expert, team and methodology**
2. **What makes the pilot city different?** (salient features)
3. **Summary report of the main findings and challenges of the city**
4. **General Remarks and recommendations for the local action plan**

Introduction of the expert, team and methodology

The expert and team:
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What makes the pilot city different?

- Cirebon is one of the economic axes of Ciayumajakuning
- Cultural and religious melting pot
- The main route of transportation from Jakarta to Central Java through the north coast (pantura)
- **the City of Cirebon decide that city management must adapt the concept of a smart city**

Summary report of the main findings and challenges of the city

Main Findings

Cirebon City is located in a very strategic position between cities or regions such as Jakarta, West Java and Central Java.

Cirebon City is at high risk from natural catastrophe and natural hazards such as extreme waves/tides, flooding/inundation, landslide, fires and drought

In meeting the needs of cities and residents in the energy sector, namely electricity and gas, the level of service coverage has reached rates above 80%. All parts of the city have electricity networks available and at every appearance of housing and settlement activities

The increase in population every year coupled with the rapid flow of urbanization that occurs in the city of Cirebon is not matched by the readiness of the availability of land and infrastructure.

The condition of residential areas in the densely populated Cirebon City is difficult to place sewerage and septic tanks in accordance with health requirements.

Garbage, water pollution, air pollution, B3 waste pollution, and land damage are the problems faced by the City of Cirebon

Challenges of the City

- ✓ Urbanization towards Cirebon City has resulted in many slum areas, especially in coastal areas and commensurate with rivers
- ✓ Lack of green space/watercatchment area because most of it is built area
- ✓ Has no raw water source
- ✓ Do not have an early warning disaster system
- ✓ Declining agricultural land and declining agricultural productivity
- ✓ IPAL has not functioned optimally, especially IPLA Kesenden and Ade Irma so that it has not been able to serve all regions in Cirebon City
- ✓ The decreasing air quality index of Cirebon City in 2019 compared to 2014
- ✓ The city of Cirebon is a bulk coal stockfile from Kalimantan, whose dust reduces the quality of the surrounding air (causing respiratory diseases)

General Remarks and recommendations for the local action plan

- 1.Cirebon City needs to develop more integrated an early warning system and add more the Warning Receiver System (WSR) in the entire city
- 2.Cirebon City needs clean water supply or technology for water supply as PDAM is still relying on clean water sourced from springs in Kuningan District.
- 3.The city government needs to find best solutions to overcome the fact that some people in Cirebon City are easily dispose their waste into the drain/river
- 4.Improving the quality of the environment of slums in Cirebon City by structuring and providing basic facilities and utilities, as well as rehabilitation.
- 5.Increase public awareness of Cirebon City to sort household waste from organic, inorganic and B3 waste and provide education to change the behavior of the people of Cirebon City throwing garbage in the river, environmental drainage or receiving water bodies of the city that are still widely seen.
- 6.Improve quality of Cirebon City public transportation as it is one of solution to overcome transportation problems
- 7.Provide the program to enhance the School Participation Rate (APS) in Cirebon City as for the high school and tertiary levels is still relatively low.

- 8.Increase the city government program to access to clean water and proper sanitation as there are still almost 3.84 percent of households in Cirebon City that have not been able to access clean water, and almost 10.32 percent of households have not enjoyed proper sanitation.
- 9.Find integrated solutions to overcome the decreasing air quality index of Cirebon City in 2019 compared to 2014 as the city of Cirebon has also a bulk coal stockfile from Kalimantan, whose dust reduces the quality of the surrounding air (causing respiratory diseases).
- 10.Increase the green space/water catchment area because most of it is built area in the city of Cirebon.
- 11.Create a restoration program to enhance recovery of ecosystems that have been degraded, damaged, or destroyed in marine coastal ecosystems
- 12.Strengthening policies in the regions related to the environment, maximizing collaborative activities between the government and the private sectors in dealing with adaptation & mitigating the impacts of climate change
- 13.Improving the quality of human resources and improving integrated cross-sectoral coordination
- 14.Make development program planning by involving all levels of stakeholders and also providing transparency of the information

CLIMATE MITIGATION AND ADAPTATION



1. The garbage bank

- Administratively, there are 66 waste banks but only about 28 are active
- Waste is separated between plastic and organic waste
- Plastic waste is resold to collectors or made handicrafts and then sold
- Organic waste is turned into compost and then sold

2. Women Farmers Group

- Utilizing yard land
- Empowering mothers
- Processing of agricultural products: sale or consumption

3. Waste Recycling Center

- Cirebon has just received assistance from the Waste Recycling Center from the Ministry of Environment and Forestry in July 2020.
- Expected to help manage up to 10 tons / day of waste.

4. Public road lighting with solar energy sources

5. Make green open space

6. Inventory of greenhouse gases

7. The establishment of the Cirebon City Smart City Master Plan (SCMPC)

Disaster preparedness, prevention and resilience



1. Pre-Disaster Events

- Cirebon City has disaster early warning system
- Cirebon City resilience towards disaster is still considered low → Community tends to act passive; Lack of facilities and infrastructure

2. During Disaster Events

- Provision of disaster evacuations for city-scale disasters are directed to Stadium Bima Sunyaragi, the Government's Office and Public Prosecutor's Office in Panjunan Urban Village, Lemahwutut Urban Village, and Parking lot

3. Post Disaster Events

- Emergency Call Single Number Service (NTPD) 112 for handling various emergencies for on-going and post disaster events.

AIR POLLUTION OR OTHER MAIN POLLUTIONS



1. Air Pollution

- Motor vehicle fumes are the biggest contributor to air pollution in Cirebon City.
- Dust Pollution due to coal loading and unloading activities at Cirebon Port.

2. Water Pollution

- Water pollution and land damaged caused by coastal silting due to continuous sedimentation which results in land formation due to excessive accumulation of garbage, soil and chunk of buildings by coastal communities.

WASTE MANAGEMENT



1. Solid Waste

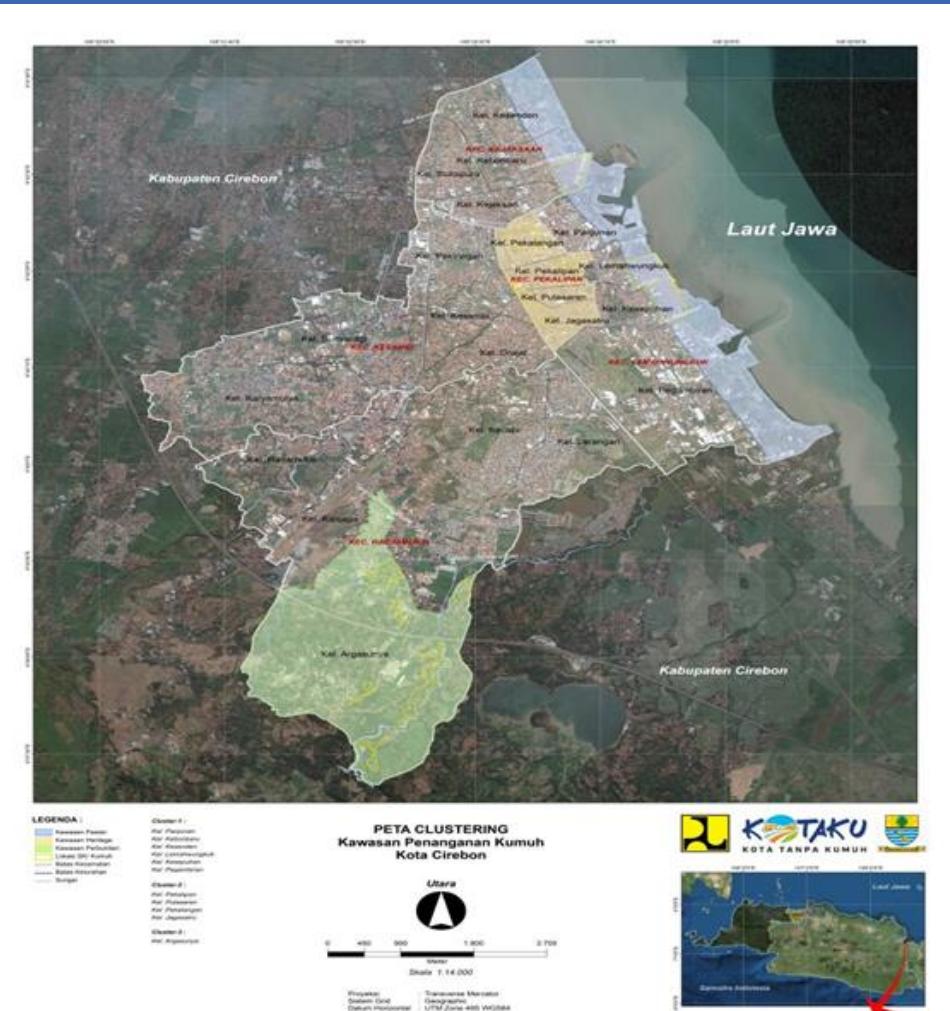
- Sold to collectors
- Processed into handicrafts
- Discarded in a landfill

2. Water Pollution

- Liquid → processed at the Communal Waste Water Plants

Cirebon City does not yet have statistical waste information

INFORMAL SETTLEMENTS



- The regulation for handling slum settlements, namely Cirebon City Regional Regulation Number 9 of 2017 concerning Prevention and Quality Improvement of Slum Housing and Slum Settlements.
 - Slum settlements in the Cirebon City covers an area of 315.91 hectares.
 - Panjungan Coastal Area is the priority of slum handling activities by constructing Rusunawa (flats), arranging environmental facilities and infrastructure and providing green open spaces.
 - Prevention of the growth and development of slum housing and new slum settlements is carried out through:
 - a) Supervision and control (permits, conformity with spatial planning and integration of public utility plans with applicable regulations); and
 - b) Community empowerment (assistance and information services)
 - The Cirebon City Government and KOTAKU (Kota Tanpa Kumuh or City without Slums) are working together to prepare several other planning documents related to the management of slums. The stages of implementing KOTAKU Program are data collection on baseline conditions

PARTICIPATION OF CIVIL SOCIETY AND GOVERNANCE



1. Kotaku program will address slums by building a collaborative platform through increasing the role of local government and community participation.
2. The implementation of community-based waste management with the 3R concept has been carried out in Larangan Sub-District starting around 2009 and Kecapi Sub-District
3. Enhance community participation in order to build city's resilience towards disaster and climate change.

CHALLENGES

1. Land Use

- Agricultural lands in the outskirts of the city are changed into residential area due to urbanization and the increase of population

2. Spatial Planning

- The absence of integrated sustainable planning in terms of climate adaptation, mitigation, water sanitation, city development, and integrated public transportation, make it difficult to draw up investment to city's development

3. Housing Provision

- The rapid flow of urbanization that occurs in the city of Cirebon is not matched by the readiness of the availability of land and infrastructure, especially in the field of water supply and sanitation, resulting in the increase of slum neighborhood.

4. Green Spaces

- Water catchment areas are decreasing

Articulation with the national policies

The development policy in the 2005-2025 RPJPN provides a challenge for the Cirebon City Government to increase regional competitiveness through competitive economic advantages, human resources, and high science and technology capabilities. Furthermore, in the 2020-2024 RPJMN Technocracy Design, 7 (seven) national development priorities have been set for the next five years, namely:

- Strengthen economic resilience for quality growth.
- Develop areas to reduce inequality and ensure equality.
- Improve quality and competitive human resources.
- Build national culture and character.
- Strengthen infrastructure to support economic development and basic services.
- Build the environment, increase resilience to disasters and climate change.
- Strengthen political, legal, defense and security stability and transformation of public services.

The seven national development priorities are used as a reference in the preparation of the 2018-2023 Cirebon City RPJMD.

BEST PRACTICES AND CHALLENGES OF THE MUNICIPALITY

1. Cirebon City government are starting from improving the welfare and quality of Human Resources through the development of facilities and infrastructure in education and health sectors.
2. Community participation and support from local government need to be enhanced in order to build a resilient city.
3. Lack of information and knowledge about climate change → impact on the low awareness of society's community behavior → increases disaster risk that is not aligned with disaster preparedness.

GHG MAPPING

- The Government of Cirebon City is currently at the stage of carrying out a GHG inventory but has not yet carried out the calculation of GHG emission reduction.
- Reason: lack of funding and knowledge in calculating the emission baseline.

Conclusion



- Cirebon City is located in a strategic position between Jakarta, West Java, and Central Java which enables it to attract
- Cirebon City faces a high risk of natural disaster such as tidal waves, flooding, landslide, fires, and annual drought.