



# Analysis of Foreign Cooperation of Makassar and Kawasaki City of Japan Regarding Clean Water Management of Smart City Development in the Ramadhan Pomanto Era

Nur Aliyah Zainal<sup>1</sup>, Armin Armin<sup>1</sup>, Andi Yakub<sup>1</sup>, Adi Suryadi B<sup>1</sup>

<sup>1</sup>Hasanuddin University, Makassar, Indonesia  
nur.aliyah@uin-alauddin.ac.id

**Abstract.** This article focuses on the form of the cooperation agreement between the Makassar City Government in this case the Regional Drinking Water Company and the City of Makassar and implementation of the cooperation. The theory used to analyze the problem is Paradiplomacy, while the research method is descriptive qualitative with a study case approach. While the type of research is library study where the data source comes from books, journals, trusted websites and others. The results highlight there is a problem in drinking water services in Makassar managed by PDAM, namely the frequent leakage of water pipes or non-revenue water (NRW). Non-revenue water in Makassar has been experienced for a long time. In 2016, Makassar City's NRW reached 45% of the 20% set by the government. For this reason, the Makassar City government cooperates with Kawasaki City, Japan, through JICA (Japan International Cooperation Agency). The form of agreement agreed by both parties is a form of Minutes of Meeting (MoM), in 2022 the cooperation agreement was resumed and its implementation starts again in 2023-2025.

**Keywords:** Makassar, JICA, Paradiplomacy, PDAM

## 1 Introduction

International relations are a demand for countries in the world in addition to showing their existence as well as the struggle for national interests that have been determined nationally. Traditionally, the actor of international cooperation is the central government because it is its domain in representing the country abroad. However, along with changes in the world such as the development of globalization, the more complex problems faced by the state in all fields, countries in the world are also increasingly dependent on each other, so that foreign cooperation which was previously dominated by the central government then the regional /city government was given the authority to carry out international relations with local governments / other countries which of course are regulated in the rules set by the

state. Given the authority to carry out international relations with regional governments/other countries which are of course regulated in a set of rules established by the state.

The practice of paradiplomacy in Europe has been going on for quite a long time, which is part of the continuing history of integration in each country. According to Lecours (2008), the paradiplomacy practices they carry out can be categorized into 3 groups, namely, first, relations and cooperation between regional governments or 'substates' which are only oriented towards economic goals such as expanding markets, developing investment abroad, and reciprocal investment. This relationship does not involve complex motives, for example politics or culture. Second, paradiplomacy which involves various fields in cooperation or 'multipurposes', between economy, culture, education, health and technology transfer and so on. The concept of this relationship refers to a decentralized model of foreign cooperation or 'decentralized cooperation'. The third category is complex paradiplomacy involving regionally specific political motives and nationalist identities. They seek to establish international relations with great enthusiasm to express the national identity of their specific and autonomous region which is different from most regions of their country. Kuznetsov's (2015) study shows that paradiplomacy policies or politics generally feel looser in federal countries, but paradiplomacy practices in unitary states show that regional governments also carry out extensive international relations activities.[1]

The city of Makassar, as one of the big cities in Indonesia and leading in Eastern Indonesia, continues to develop and when the autonomous law was implemented, this city tried to find ways to develop its territory. Ramdhan Pomanto, when he first became mayor, launched the development of a "smart city" for Makassar City. This concept is based on efforts to solve various problems faced by every city, so that in the future it is hoped that a city will be suitable for living, harmonious relationships will be created for everyone and life will be better than before. A developed and developing city is characterized by a high level of social welfare, an evenly distributed population, quality and competitive human resources, the use of technology in various sectors, science is used as the main capital to improve the quality of life, lots of job opportunities for everyone, equitable infrastructure development, industry and business world developing well, quality public services from government administrators, creating justice and a sense of security for everyone and increasing the quality of education and health services.

This article focuses on cooperation between Makassar City and Kawasaki Japan. Started On September 18 2019, Acting (Pj.) Mayor of Makassar, Iqbal Samad Suhaeb received a visit from representatives from JICA and Kawasaki to communicate regarding the cooperation that will be carried out by the two cities, namely cooperation related to infrastructure in Makassar, then continued in the era of Dhany Pomanto in 2022. Representatives from JICA, Ryo Ogawa and Kenji Niwa, offered assistance to Makassar City to collaborate in dealing with underground pipe leaks in Makassar. This collaboration in the form of providing grant funds in dealing with underground pipe leaks makes it very possible for the City of Makassar to continue at the level of sister city cooperation. [2] The

purpose of this paper is to explain the form of the cooperation agreement between the Makassar City Government in this case the Regional Drinking Water Company and the City of Makassar and to analyze the implementation of the cooperation. This article will focus on answering the problem formulations above.

## **2 Research Method**

The theory used to analyze the problem is Paradiplomacy and sister city, while the research method is descriptive qualitative with a study case approach. Case studies involve the investigation of a case, which can be defined by an entity or an object that is delimited or separated for research in terms of time, place or physical boundaries. It is important to understand that a case can be an individual, a group, a program, an activity etc. So that its data collection methods such as interviews, field observations and documentation. [3] While the type of research is field study where the the data collection methods used are interviewed the Head of the Subscription Relations Section of the Public Relations of the PDAM, and supported from other sources/data such as books, journals, trusted websites and others. To limit this research, the scope is only from the beginning of the agreement until now, 2019-2023. The data analysis technique in this writing is qualitative data analysis technique, where the problem is described based on existing facts and then connected between one fact and another, then a conclusion is drawn.

## **3 Discussion**

In drinking water services, the term non-revenue water (NRW) is known. NRW is the amount of company production that does not provide income to the company. The proportion of NRW compared to total production can be very significant, even according to McIntosh (2003) NRW in various Asian cities can reach 50-65 percent. As a result of NRW in the short term, consumers are harmed by paying for unsatisfactory service, wasting valuable water, and wasting resources. In the long term, this water revenue should be used by the company to invest in new networks and at the same time provide wider water services, provide a wider range of clean water services. McIntosh (2003) states that the causes of NRW can be divided into three groups. The first group is NRW that is given by the company for free. The second group is NRW due to the use of water by those not entitled to receive (water theft) and due to inaccurate customer meters. The last group is due to the poor operation of the PAM so that a lot of water is wasted, for example in transit through leaky main pipes, leakage of reservoirs, or leaks between the main pipe to the customer's meter. [4]

Non-revenue water in Makassar has been experienced for a long time. In 2016, it was recorded at a level of 45% or still far from the tolerance limit for water leakage set by the government of 20%. President Director of PDAM Makassar Haris Yasin Limpo at that time said that this condition was not only caused by water theft but also triggered by leaks in the company's pipelines or installations. [5] In 2022, NRW cases were still high, reaching a level of 54%, but this has decreased to 49%. For this reason, the Makassar City government cooperates with Kawasaki City, Japan, through JICA (Japan International Cooperation Agency). International cooperation at the local government level is also called *paradiplomacy*.

*Paradiplomacy* or foreign cooperation carried out by local governments, including provinces, districts and cities, is still a relatively new phenomenon in Indonesian governance practices. *Paradiplomacy* refers to the behavior and capacity to conduct foreign relations with foreign parties by 'substate' entities, or regional/local governments, in pursuit of their specific interests. [1] Within the national legal framework, several laws that have been implemented as a foundation for foreign activities undertaken by local governments. The framework the national legal framework is divided into two regarding foreign relations cooperation and technical implementation of foreign relations. This is also divided into two, namely from the perspective of the central government and the local government itself. perspective of the local government itself. Application of national law national law is driven by the trend of globalization which is increasingly widening in underlying international activities every actor. In Indonesia, regional autonomy that is implemented provides opportunities for each local government to regulate the problems in their territory, including their respective foreign relations. [2]

There are previous studies on *paradiplomacy* such as *International Cooperation By Regional Governments (Case Study: Medan-Penang)* by Stivani Ismawira Sinambela who researched the implementation of the authority of the Medan City Government in carrying out foreign relations, the Sister City collaboration with the City of Penang is an MoU that has been mutually agreed upon and has not been renewed since 1984, this shows that there is stagnation in the cooperative relationship between the Medan City Government and Penang. Apart from the MoU which has not changed since it was agreed by both parties, there are several obstacles which are divided into two, namely External Government Issues and Internal Government Issues. [6] Fahmi Sulthoni, *Analysis of cooperation between city governments: case study of sister cities Makassar City and Gold Coast City*. The results of this research found a process in sister city cooperation between Makassar City and Gold Coast City, first: starting with an assessment process by the Makassar City government, there were similarities in administrative status and similar characteristics between Makassar City and Gold Coast City. Second: coordination between the Makassar city government and the Ministry of Foreign Affairs, namely a mechanism that has been prepared together with the aim of providing direction, assisting and facilitating regions in carrying out Foreign Relations and Cooperation. Meanwhile, the results of the coordination between the Makassar city government and the Ministry of Home Affairs are formed after an assessment

process, the assessment process then produces a proposal, the cooperation proposal is submitted to the Department of Home Affairs to then prepare a draft Letter of Intent (LoI). Third: coordination between the Makassar city government and the Regional People's Representative Council (DPRD) of Makassar City, resulting in the approval of the draft LoI which was jointly formed and then signed and submitted in the form of a final LoI by the city government for approval to the DPRD. [7]

Cooperation between Makassar City and Kawasaki was held on September 18th, 2019 through JICA (Japan International Cooperation Agency) through its representative, Ryo Ogawa and Kenji Niwa who offered to help Makassar City to carry out cooperation in dealing with underground pipe leaks in Makassar. Kawasaki City will deliver grant funds for assistance in dealing with pipe leaks. Apart from that, this will be accompanied by human resources training or professional technicians from PDAM Makassar in Japan. As well as provision of technological tools accompanied by professional technicians Kawasaki in Makassar. Collaboration in the form of giving the grant funds are not a loan provided by Kawasaki. This collaboration was carried out directly between the two cities concerned. So, in this case PDAM Makassar City is an actor taking part carry out this form of cooperation. [2] This collaboration is already underway designed since 2017 and will be implemented in 2019-2020. However, due to Covid which hit the world at the end of 2019 this collaboration was postponed. Then there was another meeting between Mayor Dhany Pomanto and Project Formulation Adviser JICA Indonesia Office, Miyake Hideaki in November 2022 to re-discuss the collaboration that had been postponed. [8] This collaboration started from November 2022-November 2025 with the main aim of helping the Makassar City Drinking Water Company to prevent underground leaks in order to reduce the rate of water loss. Currently, the water leak rate in Makassar still reaches around 50%, while in Kawasaki it only reaches 6%. Based on several sources, including PDAM Makassar City itself, throughout 2022 there have been several pipe leaks in several areas in Makassar City.

In the agreement agreed by both parties before, there are three main activities in the cooperation, namely first, sending experts (4-6 people x 9 times) to carry out training to improve the following technology: ability to detect underground leaks and leak repair techniques. The budget is allocated from JICA fund based on letter No.1223/PRJ/01/2018 and No.14010/PRJ/03/2018 between JICA Indonesia and Director of Integrated Settlement Infrastructure, Directorate General of Human Settlements. Secondly, providing equipment (several types of leakage detectors) required to carry out the above training, the budget is allocated from JICA fund based on letter No.1223/PRJ/01/2018 and No.14010/PRJ/03/2018 between JICA Indonesia and Director of Integrated Settlement Infrastructure, Directorate General of Human Settlements. Third, Training to Japan for Makassar City PDAM staff (executive staff: 2 people x 2 staff, executive staff: total 4 people x 3 times), the budget is allocated from JICA fund based on letter No.1223/PRJ/01/2018 and No.14010/PRJ/03/2018 between JICA Indonesia and Director of Settlement Infrastructure Integration, Directorate General of Human Settlements. [2]

Makassar City Government's cooperative relationship is a form of regional government communication in achieving its regional interests with foreign relations with the Kawasaki City Government. In this case, the Makassar City Government has an interest in improving the infrastructure of Makassar City. The improvement in this case is assisted by the form of technological capabilities of Kawasaki City, Japan, which is more advanced in this regard than Makassar City. Makassar. This is often done by several local governments in Indonesia including Makassar as an effort to improve the infrastructure of city development as planned. This cooperation is one of the efforts of the Makassar city government in building a smart city in accordance with the tagline since the beginning of Dhany Pomanto's administration: Makassar to the World City. This cooperation is one of the efforts of the Makassar city government in building a smart city in accordance with the tagline since the beginning of Dhany Pomanto's administration: Makassar towards the World City. In the Makassar Master Plan Sombere and Smart City, it is mentioned that one of the work programs of the Makassar City Public Works Office is Dreakin Water with the target of building a Clean Water Network ready to drink.

The form of agreement agreed by both parties is a form of Minutes of Meeting (MoM). The agreement is still based on the approval of the Indonesian Central Government and the Japanese Government represented by JICA. Seeing from the agreement, it includes a form of agreement that is recognized in the concept of paradiplomacy institutional infrastructure. Of the many foreign collaborations Makassar has established, the cooperation agreement with Japan does not use MoU (Momerandum of Understanding) and LoI (Letter of Intent). Several regulations such as PP 28, 2018, Permendagri 22, 2009, and Pemenlu 3 2019 are the legal basis for foreign cooperation between cities in Indonesia. The regulation explains that the foreign cooperation relationship begins with several explorations first. After that, it is followed by a Letter of Intent between the two cooperating cities. While the cooperation agreement recognized by Japan is a Meeting of Minutes or it can also be said as a Resume Discussion between the two cooperating parties. Thus, in this cooperation there is no form of MoU, LoI, and Cooperation Agreement (PKS). Meanwhile, what is commonly used by Makassar City in cooperation agreements is the three forms of agreement. In the concept of paradiplomacy, the MoM is classified as an Exchange of Letter or Note which is the initial stage of a cooperation agreement to find out the form of cooperation to be established and the actors involved. In the mechanism of the cooperation agreement, the Japanese side only needs to hold discussions with the City of Makassar and convey the mechanism of cooperation. As for the approval by the Mayor of Makassar, it was not immediately at that time. Representatives from the City of Makassar who discussed will later ask for approval from the Mayor of Makassar. [2]

In 2022, after covid, the Makassar City government resumed cooperation with JICA in the form of HR capacity building activities in regional drinking water companies. this capacity building program will use an exchange system. Employees of Perumda Air Minum Makassar will be sent to study in Japan. Conversely, Kawasaki will bring experts to Makassar, and will run for the next 3 years. Starting from January 10, 2022 and the

financing of this cooperation program will be fully borne by Japan. Based on an interview with Ir. Andi Prawika Utari, ST, Head of the Subscription Relations Section of the Public Relations of the PDAM, said : “The implementation of the renewed MoU between the PDAM and the Waterworks Bureau City of Kawasaki Japan is in the form of training. At the beginning of the implementation of the MoU, 2 (two) directors of PDAM Makassar went to Kawasaki in early 2023 to attend seminars and obtain information/data about the ways or methods used by Kawasaki in overcoming NRW there including demonstrating the technology it has. The directors also made a presentation on the facts of NRW in Makassar City, thus showing that the cooperation between the two parties was right on target. Prior to the renewal of the MoU, there was hesitation among PDAM leaders due to the budget that would have to be spent. But this cooperation is in the nature of a grant so the PDAM will not incur any costs for the implementation of this MoU and all funds come from Kawasaki. After the renewal of the MoU, implementation will be intense starting next year. Some of the obstacles in this implementation are covid 19 spread throughout the world, and there was a change in the leadership of the PDAM so that the new leadership had to relearn this collaboration.”

In an international cooperation, including regional foreign cooperation, there should be an element of give and take. But in this case the PDAM is still in a position to receive benefits from this cooperation. But according to the author, Kawasaki could also benefit from the possibility of the technology being transferred to the PDAM, but the Waterworks Bureau of the City of Kawasaki has no intention of doing so. Because it is likely that the costs of this technology will be large in its procurement so that it still requires negotiation space for it, and qualified human resources in carrying out international cooperation to achieve the desired goals. Even though this collaboration has begun to be implemented, there is problem such as: the lack of human resources, especially in the region government, foreign language skills, drafting international cooperation capability, diplomacy and negotiation skills.

#### **4 Conclusions**

The cooperation built by the City of Makassar and Kawasaki Japan should be utilized optimally by Makassar to improve services in terms of providing clean water. This collaboration should be beneficial for Makassar City's achievement as a smart city. The form of agreement agreed by both parties is a (MoM). The agreement is still based on the approval of the Indonesian Central Government and the Japanese Government represented by JICA and the budget is allocated from JICA fund. At the beginning of 2023, the cooperation agreement between PDAM and Waterworks Bureau City of Kawasaki has been restarted with the form of MoU, but there has been a change in the agreement where in the previous MoM there was a point about Providing equipment (several types of leakage detectors) which was removed in MoU so that what remains is training for PDAM

employees and sending personnel experts from Kawasaki to PDAM. Of course, this is a "defeat" for PDAM Makassar in negotiations with Kawasaki, even though technology transfer is important in handling NRW cases in Makassar City. The implication of this research is the foreign cooperation of the Makassar City Government in terms of being implemented by PDAM Makassar with Kawasaki City has undergone changes, however there is a reduction in the previous cooperation agreement which is still included regarding the provision of technology was then eliminated, which of course was a loss because technology transfer was important to overcome the NRW problem in Makassar.

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