Bandung Cooperation with Braunschweig (Germany) in Realizing Smart City

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ABSTRACT

The Bandung City has carried out various international cooperations to obtain investments in the long or short term, support for infrastructure development, youth exchanges, cooperation in culture, and receipt of fees and grant funds. One of the various cooperation is the efforts of Bandung in paradiplomacy through the sister city concept. This study is necessary because Bandung and Braunschweig have carried out the Sister City Program from 1960 to 2021. This research is a descriptive study with a qualitative approach, examining why Bandung maintains cooperation with Braunschweig (Germany), running for more than 40 years. This article employed data collected from journals, news in the mass media, and information from the official websites of related parties as supporting references. In answering the research question, the author utilized the concepts of smart city and sister city. This study discovered that Bandung maintained its cooperation with Braunschweig due to its interest in building a smart city.

Keywords: Bandung; Smart City; Sister City; Braunschweig

ABSTRAK


Kata Kunci: Bandung; Smart City; Sister City; Braunschweig

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1. Introduction

In the dynamics of global politics, international political/diplomatic actors are no longer dominated by the state but also non-state and sub-state ones. Each actor plays an equally important role in international interactions (Mukti, 2020). The main concept used to describe the character of the contemporary international system is interdependence. The concept explains that the state is not a single and comprehensive actor but is dependent on one another. All countries cannot meet their needs and depend on other resources, products, and cooperation with outside or international parties.

Classification of actors in modern international relations will dominantly emphasize the critical role of structural factors, namely to discover how community groups organize themselves to make a definitive decision, then bind all members in the group to identify patterns of behaviour that will become the standard of the group. The Government in Indonesia, especially in the regions, whether in the province, city or district, based on Law No. 24 of 2000 regarding international agreements, provides opportunities for local governments (Pemda) to make agreements with provinces or cities from other countries on the continents of Asia, Europe, Africa, and America (Mukti, 2013). At this time, countries and cities compete with each other to attract the attention of the world around them in various ways such as investment, buying and selling, tourism, free markets, improving facilities and mobility to support investment activities as well as business places to live, a workforce with good quality skills, and other activities. This competition is supported by globalization, which significantly impacts technological changes, and the broad market interest opens up more significant challenges through current technological advances.

Thus, such competitive situation encourages local governments, especially those from Indonesia, to be more competitive and create their city branding. It aims to promote the areas they manage, improve the economy and create a more prosperous society. One of the possible efforts is conducting sister cities or twin cities, defined by paying attention to a city that is geographically and politically distinct yet linked. Indonesia’s longest sister city collaboration is between Bandung and Braunschweig from Germany, supported by the longest bilateral relationship in the sister city sector, which is also in Bandung. The collaboration covers various fields: socio-cultural, education, student and youth exchanges, training, economics, sports, and arts. The partnership must be continuously evaluated, reviewed, maintained and improved as long as the performance is positive. Several previous studies have examined the success of this partnership, influenced by several factors, such as the existence of information disclosure, mutual assistance in terms of costs, leadership, reciprocity and public participation (Villiers, 2009; Casseres, 1998; Tjandradewi, & Marcotullio, 2009 in Rochman, 2019). Therefore, this study aims to explore further the factors of Bandung’s interest in increasing partnerships with Braunschweig through the Sister City Program from 2013 to 2020.

This research focuses on data related to the collaboration between Bandung and Braunschweig in Sister City. The importance of the theme raised is to complete the deficiencies in the previous articles related to the sister city. To further examine Bandung’s interest in increasing partnership with Braunschweig, it is necessary to have another opinion on international relations to describe the level of analysis of this event.
This journal views the event through sister city and national interests and the interrelationships between these concepts and other previous studies.

Relations other than the state for inter-government have a more complicated pattern than what has been determined and is owned by the state, and the local scale government plays a role (Rosenau, 1997). From Rosenau’s view, the pattern in question is problems and solutions that can contain actors other than the state: Sub-State Governments, Non-Governmental Organizations (NGOs), International Regimes, and Multinational Corporates. However, in this paper, the pattern discussed is regarding the interests of Bandung, increasing partnerships with Braunschweig in the form of sister cities as the involvement of sub-state government actors in paradiplomacy. There is an institution that supports sister cities; some of the activities owned by the company are noted too often involve people-to-people contact through educational programs, cultural activities, trade projects, and others that play a role in contributing to peace.

Twin cities refer to a form of cooperation officially approved by two cities from different countries and are for the long term. However, there is a modern sister city concept. According to D Eisenhower, the 34th President of America, the contest was developed, and he also supported the concept in a national conference, which offered the program “people to people” in 1965 (Hepler. H; Sister Cities Link Culture Program, Business). The statement of support is intended to link personal and regional or community organizations from anywhere in the implementation of diplomacy, hoping that the results created through sister cities will minimize problems and tensions between countries in the future with good relations.

Zelinsky asserted that the initiative to realize inter-regional relations comes from the community and the local government or sub-state (Zelinsky; 1990:25). Based on the uniqueness of the sister city cooperation, it should be interpreted as an effort to feedback between regions that cooperate and can obtain mutual benefits according to their respective interests. Sister city has characteristics divided into three structures to describe the concept. The first structure is associative, providing direction to an idea of “international friendship” and equally exchanging culture and concerns about international issues. The second one is reciproactive, improving the exchange system in education. The last one is commercial, an effort to take advantage of the two previous processes (associative and reciproactive) to fulfil their respective local interests (O’Toole, 2001). Based on Kevin’s view, a sister city has a final destination scheme that two cooperated regions or cities can obtain results and benefits through cultural exchange, education and other fields.

Moreover, these arguments can support the statement that the Bandung City Government has a sense of care to increase the international friendship network, which aims to benefit from sister city activities carried out between cities from different countries. However, three things are lacking in this twin city or sister city. First, there is a sense of ignorance of the surrounding community or apathy toward the relationship between cities of different countries (sister cities). Second, the selection of regions or cities that will become sister city partners does not go through a process attended by the community but is unilaterally by the city government, and it gives the impression of a “strange choice”. Lastly, sister city schemes are often used as a forum by politicians as an excuse for personal interests such as having fun with the costs incurred by the state originating from taxes from the people abroad (Dupuis & Bruin, International Sister Cities). A twin city or sister city is one of the concepts that local governments often carry
out in various para-diplomacy activities. Thus, it can be seen as an object of a sister city, including culture, education, and various activities in the related political field. In other words, the sister city is an effort made by the local government or sub-state level city to conduct international relations.

The researcher has united cooperation within the scope of a sister city, which contains all areas of cooperation carried out by the Bandung City Government with regional or city governments from other countries, especially in relationships involving the authority or power of the central government, for example, cooperation in Overseas Engineering, Sub-regional economic cooperation (KESR), Foreign Non-Governmental Organizations (NGOs) and others. In its implementation, the activities of the Bandung City Government representatives on an international scale have been run in the sister city concept. The implementation of the sister city has a mission to create mutual trust and understanding with each other with an even process of intimacy (integrated approach). Then, the sister city of Bandung with various overseas cities was established. With the existence of paradiplomacy in the sister city, this research focuses on the interest of Bandung in increasing partnerships with Braunschweig.

A city will experience an increase in population due to the development, increasing needs and causing limited natural resources. Of course, it affects the arrangement and how to manage an area or city. Hence, the city government is important in optimally utilizing and managing natural resources and minimizing future problems. The smart city concept is no longer used in various international cities to create active cooperative relationships between communities and regional representatives in contributions that continue developing and creating cities that offer comfort, security, and stable strength in various challenges and changes. Each city will experience that.

In previous studies, a smart city refers to relationships between representatives of local governments, the community and their administration. Good governance and management are aspects of smart administration for users of modern means of communication in society, such as e-governance and e-democracy. The smart city concept is practiced in discussions about using new and more advanced technology in everyday life in urban areas. In ICT and advanced transportation technology, logistics and modern transportation systems as smart systems can develop and advance city traffic and population mobility. Then, various other fields lead to living in smart cities, such as safety, green, security, efficiency, sustainable development, and energy (Housing, 2007).

Giffinger R and his colleagues have several distinct characteristics in the concept of a smart city, smart economy, smart mobility, smart environment, smart living, and smart people. More specifically, the smart economy includes factors around economic competition, such as innovation, trademarks, entrepreneurship, labour market flexibility, international integration, and productivity. Smart people are not only described by the level of education of every citizen but can also be accessed by how social interaction skills are related to integration and public life and how transparent knowledge is to the world.
2. Theoretical Framework

2.1 Educational Diplomacy Theory

Diplomacy is a method of achieving a nation’s national interests. Soft power, particularly in education and culture, can boost Indonesia’s reputation overseas and increase human resources to achieve national interests. Educational diplomacy is a kind of cultural negotiation with an emphasis on education. The Ministry of Education and Culture engages in educational diplomacy through numerous programs involving other nations. Educational diplomacy aims to advance Indonesia’s national interest in human resource development through education (Soesilowati, 2009). It is implemented via scholarship programs and student exchanges. In this research, the Indonesian Ministry of Education and Culture has provided CLC students in Tawau with chances to continue their education in Indonesia through scholarships.

2.2 Bilateral Cooperation Approach

International cooperation is a series of cooperative partnerships conducted by nations to fulfil the aims of each nation and assist each other in every way, without the use of violence or force separated by law (James E Dougherty & Robert L Pfaltzgraff, 1971). It can take different forms and be conducted for various reasons, including establishing restrictions on authority, protecting nationals living in other countries, and sending envoys between nations. International cooperation between Indonesia and Malaysia is also known as bilateral cooperation. Bilateral cooperation refers to international cooperation between two nations (governments). According to Budiono Kusumohamidjoyo (in Kelvin 2019), bilateral cooperation can be carried out by two countries geographically close or far apart, with the primary goal of meeting the interests of the two countries to achieve common goals to improve social, political, economic, cultural, security, and educational relations.

As a country that implements its state philosophy, Pancasila, intending to establish a global order based on independence, everlasting peace, and social justice, Indonesia maintains international contacts and cooperates with other nations. Indonesia’s bilateral cooperation covers diplomatic, economic, social, and cultural interactions. Through this approach to international collaboration, the Governments of Indonesia and Malaysia have collaborated on managing cases involving unlawful Indonesian migrant workers in Malaysia. It aims to legitimize the status of Indonesian migrant workers in Malaysia, which would help ease the administrative procedure surrounding the education of their children.

Smart governance is smart management that consists of various fields such as the role of politics, service to the people of the state, and administration benefits. Access is given to local and international people, and the provision of various information and communication tools and a modern sustainable transportation system is an essential part of smart mobility. A smart environment is described as a healthy natural state, for example, the environment or green space, climate, safety, health, tourism, housing, and others. In addition, Bandung also has a smart city concept with several dimensions: smart education, smart transportation, smart payment, smart society, smart commerce, smart health, smart surveillance, smart energy, smart government, and smart environment.
Bandung has successfully designed several dimensions related to the smart city. With this harmony, the author adopted the smart city concept as a tool to discover Bandung’s interests to increase the partnership with Braunschweig. This study utilized the smart city concept to explain how Braunschweig and Bandung collaborate to create better friendships and support a better smart city concept because sister cities and smart cities go hand in hand. The novelty of this paper is to explain Bandung’s interests in the sister city cooperation. The following table lists partnerships in Bandung in the sister city cooperation.

**Table 1. Data on the Implementation of the Sister City Program between Braunschweig and Bandung**

<table>
<thead>
<tr>
<th>Year</th>
<th>Twin City or Sister City Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>Signing of MoU Sister City between Bandung-Braunschweig Cities</td>
</tr>
<tr>
<td>1972</td>
<td>Restaurant Training and Radio Lehrgang</td>
</tr>
<tr>
<td>1972-2000</td>
<td>Practice Program</td>
</tr>
<tr>
<td>1973-1974</td>
<td>Nurse Training</td>
</tr>
<tr>
<td>1974-2001</td>
<td>Hanz unz Heide Exhibition</td>
</tr>
<tr>
<td>1975-2000</td>
<td>Study Program</td>
</tr>
<tr>
<td>1975</td>
<td>Graphic Printing Training</td>
</tr>
<tr>
<td>1985-2001</td>
<td>Youth Exchange</td>
</tr>
<tr>
<td>2000</td>
<td>World Expo Events</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Braga Festival</td>
</tr>
<tr>
<td>2016</td>
<td>Water Waste Management</td>
</tr>
<tr>
<td>2018</td>
<td>Batu’s History Building</td>
</tr>
<tr>
<td>2019</td>
<td>Culture Night</td>
</tr>
<tr>
<td>2021</td>
<td>Bandung Week</td>
</tr>
</tbody>
</table>

Based on the data table, the cooperative relationship between the Bandung and Braunschweig has existed since 50 years ago and 61 years of friendly relations. The Sister City Program between the two cities began after the signing of the MoU. Then, in 1972, the Restaurant Training and Lehrgang Radio Programs were carried out in education and training. Subsequently, from 1972 to 2000, there was a program to practice what Bandung Government officials performed. There was a Nurse Training Program carried out from 1973 to 1974. From 1974 to 2001, discussions containing plans and innovation missions were conducted to strengthen trade sector relations. Since 1975, there have been activities between lecturers and visual arts students at the Bandung Institute of Technology (ITB) and the Hochschule fur Bildende Kunste Braunschweig (HBK) and lasted in 2000. There was also a training program for graphic printing conducted in 1975. In 1985, an exchange program was held for youth from Bandung to Braunschweig; this program continued until 2001. In 2000, there was a program in the arts sector promoting culture through international exhibitions in Hannover and Braunschweig. From 2011 to 2012, an ongoing program called the Braga Festival Performance Program was held in Bandung with the cultural theme “people to people,” presenting arts and culture from Bandung and Braunschweig from Germany. The Water Waste Management Program took place in 2016. The following two years, in 2018, a historic building was built in Bandung, coming...
from a collaborative program with Braunschweig. In 2019, the Culture Night Program was also carried out, discussing the culture of each country concerned. Furthermore, there was also the Bandung Week Program, held in 2021.

Following the data above, this study discusses the reasons for Bandung’s interest in increasing its partnership with Braunschweig. The partnership is due to the good relationship going on for a long time, since 1960, strengthened by the sister city cooperation. The author believes that the two cities encounter urban environmental problems that can be solved through the sister city cooperation and the advantages of Braunschweig, supporting the smart city concept of Bandung.

3. Research Method

This study applied a qualitative method to discover the crucial reasons underlying the interests of Bandung to increase its partnership with Braunschweig through the paradiplomacy cooperation of sister cities. The data are descriptive-qualitative in writing (Bogdan & Taylor, 1992). The qualitative method can provide more detailed and complex data regarding the researched phenomenon. Therefore, the data are expected to expand knowledge and insight regarding the interests of Bandung in increasing its partnership with Braunschweig through the paradiplomacy of the sister city collaboration.

This study adapted the descriptive-qualitative method. Descriptive research is a way to explain and interpret something using the main objective to describe facts, characteristics of objects, and subjects studied properly and correctly in a simple but systematic way. Descriptive research also presents a more detailed picture of dealing with a particular phenomenon, relationship or social setting (Silalahi, 2012). Subsequently, qualitative research aims to understand a social phenomenon from the participant’s point of view using various interactive ways such as observations, documents, interviews, and complementary techniques. A qualitative method produces research with descriptive nature in the form of explanatory words and prioritizes a deeper understanding of a problem (Sitoyo, 2015). In other words, descriptive-qualitative research is written by explaining a phenomenon in society based on valid facts.

According to Sugiono, the data analysis technique compiles data through questions and answers, surveys, observations, and other supporting materials. Then, the data are systematically rearranged to understand the findings and convey them properly to the readers (Ruhyat, 2013). The data analysis in this article was divided into three stages.

a. Data Reduction
   The process of classifying and categorizing the data obtained and avoiding irrelevant information

b. Data Serving
   Presenting information obtained from the reduction results by displaying it in tables, notes, graphs, charts or tables

c. Drawing conclusions
   In the last stage, a conclusion was drawn from the data and the resulting theory or concept.

Primary data were obtained through interviews. In contrast, secondary data were collected from previous research on news portals, theses, journals, and others from trusted and accountable sources (library research) (Agusta, 2003). The data encompassed information about the paradoxical crisis, sister city cooperation, international
cooperation, and smart city related to Braunschweig’s collaboration with Bandung through the paradiplomacy of the sister city cooperation. This study focuses on the paradiplomacy of the sister city cooperation between Braunschweig and Bandung from 2000 to 2021.

4. Results and Discussion

4.1 The Process and Development of the Sister City Cooperation between Bandung and Braunschweig

The Bandung City Government has been aware of the need to carry out paradiplomacy to improve the economy and welfare and introduce arts, culture and society to empower local communities and make it a strategic role of the city bureaucracy. Sister city is in line with the cooperation scheme for foreign relations. It has received a study from the Minister of Foreign Affairs No: 09/A/KP/XII/2006/01 regarding General Guidelines for Procedures for Foreign Relations and Cooperation by local governments and has been included in Law No. 37 of 1999 concerning Foreign Relations and Law No. 32 of 2004. The sister city concept is also one of the efforts of representatives of Bandung in increasing its paradiplomacy with cities from different countries, especially Braunschweig (Alam, 2020).

The main reason underlying Bandung’s paradiplomacy system is to fulfil economic, cultural and social needs, which has been well implemented through the sister city cooperation with cities from other countries, including Braunschweig. The sister city cooperation between Bandung and Braunschweig has been going on since 1960. This sister city collaboration is the oldest one in Indonesia. This collaboration began when Prof. Dr. George Ecket, the Director of the International School Book Institute and UNESCO Staff in Braunschweig, established a relationship with the Indonesian Education University (UPI) Bandung with the Braunschweig Teacher College in 1950. Then, it continued with the developments brought by academics from both countries through a conference in Braunschweig with assistance from the German UNESCO commission in May 1957. It developed again with the holding of a statement to strengthen friendly relations in Bonn by representatives of Indonesia represented by Majoenani as Cultural Attaché of the Republic of Indonesia in June 1959.

Furthermore, things got better with the approval and signing of the Charter of the Bandung Brotherhood Association and Braunschweig on 24 May 1960 at the City Museum Braunschweig. Moreover, this momentum became the first inter-city agreement in Germany and Southeast Asian level (Sinaga, 2010, p: 37). The sister city paradiplomacy agreement between Bandung and Braunschweig is inseparable from the following long process.

a. Exploration was carried out by exchanging the potential of each city, expected to provide benefits from the use of state representative offices from abroad in Indonesia or Indonesian representative offices abroad.

b. Ratification of the Letter of Intent (LoI) was conducted as evidence of a positive response from both parties to sign the LoI.
c. Cooperation Planning after signing the LoI, each local government arranged a cooperation plan or Term of Reference and Plan of Action, explaining the vision and mission of the cooperation and the results to be achieved.
d. Getting Approval from the Regional People’s Representative Assembly (DPRD) by submitting the draft cooperation plan results
e. Submission of Application for Government Facilities, i.e., after being approved by the Regional People’s Representative Assembly, the regional government sent a letter of application to the Minister of Home Affairs of the Republic of Indonesia to obtain cooperation facilities. This application letter is also required to draft a Memorandum of Understanding (MoU).
f. Preparing a draft of MoU, the implementation of the MoU draft regarding sister city cooperation was later discussed in a meeting by the Ministry of Foreign Affairs to be sent to the Indonesian representative office abroad for further discussion with the prospective sister city partner and waiting for a response.
g. Signing an MoU that has been agreed upon by both parties and then sent to the Ministry of Foreign Affairs to be stored as a state document.
h. Implementation of Cooperation. After the MoU was successfully signed, the cooperation would officially bind each city with several programs prepared and agreed upon.
i. Observations, The monitoring and evaluation were carried out continuously to obtain results and achievements from the cooperation through observations by the Ministry of Home Affairs and related institutions or ministries.
j. Cooperation Implementation Report. A process where the city government reported how the implementation of cooperation was adjusted to the template or format stated in the monitoring and evaluation to the Ministry of Home Affairs. This report is intended to serve as a basis for considering the sister city cooperation plan with potential partners from other countries.

The relationship between the two countries resulted in several positive activities in various fields, implemented through benefit programs such as cooperation in the arts and culture through the Harz unz Heide Exhibition from 197 to 1977, the World Expo Event in Hannover in 2000, and the Braga Festival in 2012. In education and training, there existed the Lehrgang Radio Editor Program in 1972, Hotel and Gastronomic (restaurant) Training Program in 1972, Nurse Training Program from 1973 to 1974, Graphics Printing Training Program in 1975, and Practice Program by officials from the Bandung City Government from 1972 to 2000. The programs in the management comprised a donation by Braunschweig to collect data or survey the arrangement of the Cikapundung river in 2000, a restoration of the Young Generation Arena Building in Bandung to its original place in 2018, and re-management of the benefits of the Asia-Africa building, improving the quality of the Featured City Park, and Green Open Space Training (RTH) from Braunschweig as “Brach Making”.

Furthermore, in economy and trade, it was performed through sending trade destinations by the Chamber of Commerce and Industry (KADIN), which took place in conjunction with the Harz unz Heidi Exhibition from 1974 to 2000 and product exhibition trade from large, medium and small companies (SMEs) at the World Expo Event in 2000. Moreover, in facilities and infrastructure, it included support in equipment for slaughtering animals, assistance for VW Combi cars, typewriters and projector screens, medical team equipment services, support for university-level education, support for
orphanages, support in reading materials such as books placed on the campuses of both cities, and the aid of modern fire extinguishers.

**Table 2. Results of the Braunschweig-Bandung Paradiplomacy Cooperation Through the Twin Cities**

<table>
<thead>
<tr>
<th>Sub-State Actor</th>
<th>Results of the Twin City Cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braunschweig and Bandung</td>
<td>This bilateral relationship has been going on since 1960 and is dominated by Braunschweig. Most implementation forms are in assistance, training, and other exchange cooperations. Braunschweig and Bandung have benefited by recognizing a global image in all developing and developed countries.</td>
</tr>
</tbody>
</table>

Behind the success of the above programs, several motivations have encouraged the two cities to establish such cooperation properly and follow the agreed agreement. The motivations, among others, are the similarity of interests and characteristics of the advantages of each city, making the cooperation of the twin cities can be implemented properly, reliable, compact, durable or long-lasting, sturdy, efficient and effective. Then the importance of these equations was also stated to be true by Robert Keohane and Joseph Nye through the interdependence complex theory. A pattern of relationships based on the same reasons and characteristics can form an ideal pattern of which the impact can produce well in the short and sustainable term. The similarity in the characteristics and interests of each city is also considered important for all regions that intend to cooperate with twin cities, as stated in the Minister of Home Affairs Regulation No. 3 in 2008 regarding cooperation requirements. The following are some similarities in the characteristics and interests of both parties.

a. In characteristic form: The city acts as the centre of culture, trade, tourism, and education as well as a technology-based modern city.

b. In achieving common interests: Interests in the environment, economy, education, facilities and infrastructure, spatial planning, economy and improving the quality of the younger generation.

The motivations that encourage and support the collaboration of the Bandung-Braunschweig twin cities explained above align with the concept of independence, which brings both of them mutually dependent in a positive way and benefits both parties. Thus, the cooperation forged continues to positively impact in the short or long term. Moreover, the benefits obtained by Bandung through its sister city with Braunschweig can support it in creating a smart city.

4.2 Bandung with Smart City Concept

During the reign of Ridwan Kamil, Bandung smart city began to be formed, which later developed with the existence of city development that goes hand in hand with the smart city concept. The concept of a smart city or smart city Bandung has several priorities: Smart Education, Smart Transportation, Smart Government, Smart Surveillance, Smart
Society, Smart Commerce, Smart Health, Smart Payment, Smart Environment, and Smart Energy.

Table 3. Indicators of Smart Cities between Bandung and Braunschweig

<table>
<thead>
<tr>
<th>Implementation of Sister City Cooperation</th>
<th>Indicators of Bandung Smart City Concept</th>
<th>Smart City Concept Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braunschweig’s agreement to help Bandung through the Water Waste Management program at PDAM Tirtawening in 2016</td>
<td>Smart Environment</td>
<td>Smart Environment</td>
</tr>
<tr>
<td>The Bandung City Government held the Little Bandung Festival in Braunschweig in 2017 to strengthen the cooperation of the respective cities involved.</td>
<td>Smart Education</td>
<td>Smart People</td>
</tr>
</tbody>
</table>

The table above demonstrates the environmental indicators of Braunschweig’s assistance to Bandung for the Water Waste Management program at PDAM Tirtawening in 2016, through a meeting by the Braunschweig delegation, Annegret Ihbe and the Indonesian Consul General in Hamburg, Sylvia Arifin. The Director of PDAM stated that PDAM Tirtawening was one of five PDAMs in Indonesia with two core businesses, managing waste and clean water. The management refers to the service of PDAM Tirtawening established in 1992; the land area is 82 ha and has a function to minimize polluted water generated from wastes, both hotels, residential houses, factories and others. Furthermore, the smart society indicator is in a festival called the Little Bandung Festival, which the Bandung Government held in Braunschweig in October 2017. This festival focused on various promotions such as the creative industry, traditional Bandung culinary arts, cultural art exhibitions and tourism. The festival was opened by Dr. Helmut as the Deputy Mayor of Braunschweig and Singgih Yuwono as the Consul General of the Republic of Indonesia in Hamburg. This festival serves as concrete evidence to strengthen the sister city cooperation between Braunschweig and Bandung (Rachma, 2019). In short, the implementation of the collaboration of twin cities carried out by Bandung and Braunschweig could help realize Bandung with the smart city concept.

4.3 Bandung’s Interest in Enhancing Partnership with Braunschweig Through Sister City

The similarities in interests and characteristics of each city have become a strong reason to carry out the sustainable twin-city cooperation. Then the success of the cooperation comes from the motivating factors, the existence of strong and equal interest and spirit of cooperation. Then, the Bandung-Braunschweig collaboration through paradiplomacy in twin cities is in line with smart cities. In other words, the important factor underlying the reason Bandung has increased its partnership with Braunschweig from 1960 to 2021 is the opportunity that Bandung has obtained, a great opportunity to create Bandung with a smart city concept. The sister city collaboration with Braunschweig has completed one of the two indicators from the main point; the smart city concept, comprising the smart
environment and smart society indicators. Hence, Bandung needs to continue increasing its partnership with Braunschweig to reach Bandung with the smart city concept. The partnership between Bandung and Braunschweig has resulted in culture, education and training, urban planning, trade economy, and infrastructure programs. Due to the many results obtained from the collaboration, the collaboration between Bandung and Braunschweig has been sustainable since the 1960s.

5. Conclusion

Of the many international cooperations, the role of sub-states is no less important, including in sister cities. The twin city cooperation established by Braunschweig and Bandung has existed since 1960 and has brought a lot of positive impacts and created interdependence to provide equal benefits to both parties. Then, the success of the sister city cooperation is highly in line with the smart city concept, where Bandung has completed the lack of indicators of sister city cooperation with other cities, the two ideal indicators as Bandung Smart City: the smart environment and smart society indicators. Therefore, Bandung continues to strengthen friendly relations and enhance its partnership with Braunschweig to support the creation of Bandung Smart City.

References

Gilang Nur Alam dan Arifin Sudirman, “Paradiplomacy Pemerintah Kota bandung Melalui Kerja Sama Sister City”, 2020
Hepler,H (1994); “Sister Citie Program Link Culture, Business.”American City and Country September: 22


Rogier van der Pluijm (2007); City Diplomacy: The Expanding Role of Cities in International Politics; Netherlands Institute of International Relations. Hal. 11


Ulber Silalahi, “Metode Penelitian Sosial”, (Bandung,PT.Refika Aditama,2012) hal. 27-28


