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Dynamic Governance Strategy in Pollution and Damage Control Patterns in the Citarum Riverside(DAS)

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Information Article

ABSTRACT

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The pattern of pollution and damage control in the Citarum Riverside (DAS) carried out by the Regional Government of West Java Province has not been optimal because the environment and water around the river flow are still polluted for two decades. This research aimed to examine the dynamic capabilities of local governments as a positive step to restore the glory of the Citarum River. The research method used qualitative methods, data collection techniques used observation, and the data only refers to secondary data. It was conducting analysis used the Systemic Literature Review (SLR) method to map previous research and to found a novelty from this research using three databases. They were Taylor and Francis, Emerald and Science Direct. The theory was Dynamic Governance by Neo & Chen, focusing on competency dimensions of Thinking Ahead, Thinking Again, and Thinking Across. The results were whole the Regional Government of West Java Province has moved in a dynamic direction because it has created a variety of innovative policies and programs, as a form of innovation from the realization of the Thinking Ahead dimension. The establishment of a policy base related to normalization of the Citarum River consisting of presidential and governor regulations and The existence of new dynamics including the involvement of the ulemas as actors in the revitalization process of the Citarum River also take a part on it. Realization of the Thinking Again dimension, namely the running of the Citarum River normalization business programs that refer to regional policies. Then the realization of the Thinking Across dimension is the initiative of the West Java Provincial Government to adopt the pentahelix model in conducting collaborations related to the improvement of the Citarum River.

Keyword: Dynamic Governance, Citarum River, Policy Innovation

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1. Introduction

The Citarum River is a national strategic river, which is full of economic value and runs an important role in the survival of the people in West Java, especially those crossed by this river, starts from Bandung Regency until Bekasi Regency. However, in the background, the preservation of the Citarum River seems to be threatened. It's because the various issues along the Citarum riverside are such complex problems like the water and environment's of citarum river have been polluted for two decades.

In 2013, according to the Blacksmith Institute and Green Cross Switzerland, the Citarum River was in the third position as the dirtiest and most polluted place in the world (Rio Tausikal, 2019). Now, the Citarum River is still in the status of heavily polluted. So monitoring and evaluation must be carried out related to the status quo of water quality (Sutadian et al., 2018). The data related to the status of river water quality, according to the Central Agency for Environmental Statistics Indonesia, four rivers in West Java are heavily polluted, they are:

Table 1.1 Quality Status of Water River of Riverside in West Java 2016

Province	River	Water Quality Criteria According to Government Regulation Number 82 Year 2001
		Class II
West	Citarum	Heavily Polluted
Java	Citanduy	Heavily Polluted
	Ciliwung	Heavily Polluted
	Cisadane	Heavily Polluted

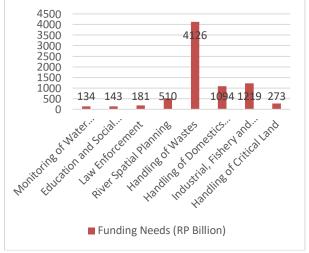
Sources: (Central Agency for Environmental Statistics Indonesia, 2018)

The image of the Citraum River is undeniably contaminated due to the growing industrial sector, which results in negative externalities on the sustainability of the Citarum River, such as liquid waste as one of the causes of pollution. So, in conclusion, the Citarum River revitalization effort is difficult homework to complete. Especially the upstream part of the Citarum riverside which should require the most attention from the government. There were enormous pollution from domestic and industrial wastes, causing a decrease in water quality. Then the problems that should get attention between various issues in the Citarum riverside are the rate of the growing population that related to the increasing of utilizing resources in Citarum river. such as land use for the agricultural sector in the upstream area, around 65%, development 15% and the other 10% (Agaton et al., 2016).

According to secondary data, domestic waste in the Citarum riverside is almost 20,461 tons / per day, and only 29% is transported, then 71% pollutes the river. The types of waste produced are various, including domestic waste originating from household waste, including organic, inorganic, medical and other waste (Source: River Basin Organization of citarum, 2018).

The most complicated problem from Citarum River is the issue of waste that the Regional Government of West Java Province for 2019-2025 requires funds of up to IDR 7.99 trillion, and the largest allocation of funds for handling waste of 4.1 trillion.

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Picture 1.1 Recapitulation of Funding Needs related to Citarum Watershed Management

Source: Government of West Java Province

This data is planning of the funding needs related to pollution control in the Citarum River for the next seven years. However, in another side it has a dilemma, like when the Citarum River normalization business program has been running for almost two decades, people and government have changed, and in fact, the Citarum River still bad. Therefore, resolving various issues, primarily environmental issues in the Citarum River that is not an instant task, but requires time, process, and enormous costs (Christensen, 2010).

From the results of the Systematic Literature Review (SLR) that the author has conducted, the concepts contained in dynamic governance theory become more effective and efficient if the policies made by the government and has been innovated (Gulbrandsen, 2014). Good governance such as rules, organizational management, the value of knowledge, structure, and process was a significant component that must be present in an organization (Farazmand, 2012). the local government level needed community participation, either directly or indirectly (Brotestes Panjaitan et al., 2019; Michels & De Graaf, 2017), the government might be able to overcome challenges related to individual consumption behaviour in using energy (Bornemann et al., 2017; Han et al., 2018). Conducting a pilot program for various purposes in policy innovation, such as establishing crossborder collaboration between stakeholders had a purpose of producing a broader innovation policy (Ramstad, 2009; Sullivan et al., 2012), a flexible and balanced governance approach could lead to innovation (Sergeeva, 2019).

Referring to the results of the Systematic Literature Review (SLR) can help the author in analyzing and mapping existing research to assist the author in finding state of the art from this paper regarding the pattern of pollution control around the Citarum River concerning the concept of Dynamic Governance (dynamic governance capabilities), with the characteristics of innovative, collaborative governance, and responsive.

The main competency elements in this theory consist on three elements, First, Thinking Ahead to formulate and identify various conditions, as well as future public needs, Second, Thinking Again, which is to reflect and review the ability and openness to a policy or program that has been made. Third, Thinking Across is the capability of the bureaucracy to adopt new ideas and knowledge (Neo & Chen, 2007). These parameters can be used as a benchmark in writing this scientific paper.

2. Method

This writing used a qualitative method; then, it only consisted of one unit of analysis. This paper aimed to analyze an environmental problem in the Citarum riverside, associated with the concept of dynamic governance in normalization patterns in Citarum Riverside. The author used the method of Systematic Literature Review (SLR). Regarding scientific articles in international journals indexed by Scopus and national journals and accredited journal.

Data collection technique

In this study, the data collection technique that the writer did was first by observing and using secondary data(Creswell, 2007)

As well as in obtaining data, the author refers to secondary data originating from the Indonesian Environmental Statistics Agency (BPS) in 2018 and government documents sourced from the Regional Government of West Java Province in 2019 and the Citarum Riverside in 2018.

Data Analysis Technique

The author analyzed the data, based on several stages by (Creswell, 2007).

- Collecting various types of secondary data related to the focus of scientific research, that related to various environmental issues in the Citarum riverside, including:
 - Data on the status of river water quality in West Java which refers to data from the Indonesian Center for Environmental Statistics, 2018.

- Data related to the amount of domestic waste in the Citarum riverside is sourced from the Citarum River Basin Organization (BBWS), 2018.
- Data related to a recapitulation of funding needs according to Citarum waterside management
- Data related to various stakeholders involved in handling the Citarum waterside
- 2. Author Interpreted the secondary data
- Read, studied and sorted the data so the data was valid and unbiased by checking whether the data was accurate or not from various sources.
- 4. The author performed the results of the data. The analyzed and, combined the results of the analysis with certain statements. It related to the research in order to produce meaning from the data collected. It aimed to answer the problems in this study.

3. Result and Discussion

The central government and local governments had confirmed that in the Citarum waterside there were pollution and environmental damage, and the causes of river pollution dominated waste which could harm public health, economy, social, environment and others (Brunner et al., 2007; Demirbas, 2011; Domingo & Nadal, 2009; Kumar & Samadder, 2017; Yoada et al., 2014). Therefore, various efforts have been made by the central government and local governments to improve

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the quality of the Citarum Riverside (DAS) in a better direction because the Citarum River is vital and strategic.

According to the author, a governance approach used the concept of dynamic governance relates to the normalization of the Citarum waterside needs to be studied. The reason was the form of development in understanding the scientific scope of public administration. In simple terms, dynamic governance was a concept that adapts to conditions in various kinds of organizational situations that were uncertain and always changing, full of various kinds of challenges and obstacles experienced by these organizations (Neo & Chen, 2007). The efforts that controled pollution and damage the Citarum waterside could not be separated from the obstacles and problems that exist, so the dynamic ability of those who had authority. The Regional Government of West Java Province was important. This was needed as a common goal in the future, policy direction and strategy and as a forum for creative thinking in making innovations.

Based on the results of the analysis by the author, that the dynamic capabilities or competencies possessed by the Regional Government of West Java Province in efforts to control pollution and damage to the Citarum waterside could be seen in the theory of dynamic governance which consists of the concepts of thinking ahead, thinking again, and thinking across, (Neo & Chen, 2007). It was the ability of the government as a public sector organization to be able to identify community needs and environmental developments in the future by creating various strategies and anticipations to achieve the goals set by the organization (Neo & Chen, 2007).

In analyzed this concept, it was associated with government efforts in terms of efforts to control pollution and damage to the Citarum River which aimed to create innovations that can overcome various developments and the increasing demands of environmental issues. The authors tried to divide it into three aspects, namely policy-making, making programs and innovations as strategic and anticipatory efforts in controlling pollution and damage to the Citarum River, as follows:

Policy Point of View

The increasingly complex issues in the Citarum watershed covering various problem factors, including the issue of spatial planning, industrial waste, livestock and agriculture, five fisheries, domestic waste management, and domestic liquid waste, and the low level of public awareness in managing and protecting the Citarum River, made the government centre intervenes in handling the improvement of the Citarum watershed by issuing Presidential Regulation No. 15 of 2018 concerning the Acceleration of Pollution Control and Damage to the Citarum River waterside as a new policy concept and a form of the central government's seriousness in dealing with this river.

The policy includes actors as directors who were at the central government level including the Coordinating Minister for maritime as

1. Thinking Ahead (Thinking ahead)

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chairman and three other Coordinating Ministers, namely as deputy chairman. Moreover, members consisting of 14 Ministries and related government agencies. These actors were tasked with determining policies for control pollution and damage to the Citarum River waterside. In order for this policy to run well, the Governor of West Java was appointed as commander and commander of the TNI as deputy commander in charge of determining an action plan so that the revitalization and rehabilitation program of the Citarum River in the future could be carried out in a synergic and integrated manner between the central government, the West Java Government, and the Regency Government. Citarum River was crossing many cities.

The policy foundation was also a form of central government support for local governments to create the Citarum Harum program, which was targeted for seven years, starting from 2018-2025, as a form of national policy to control pollution and damage in the Citarum watershed.

A year later, the policy derivative of the Presidential Regulation was passed, namely West Java Governor Regulation No. 28 of 2019 concerning the Action Plan for the Acceleration of Pollution Control and Damage to the Citarum Watershed (DAS). The policy details for the various issues contained in the Citarum watershed are strategies and indicators for measuring success in controlling pollution and damage to the Citarum Watershed, program implementation, and action plans. This regional policy was a course relevant to the national agenda, which has long-term goals. However, other derivative policies such as the Major / Regency Regulation had not been determined because it is still in the process of drafting legislation.

Regarding the point of view of dynamic governance theory regarding Presidential Regulation no. 15 of 2018 concerning the Acceleration of Pollution Control and Damage to the Citarum River Basin and the Regulation of the Governor of West Java No. 28 of 2019 concerning the Action Plan for the Acceleration of Pollution Control and Damage to the Citarum Watershed (DAS) were a form of thinking ahead. Its produced changes to the environmental improvement of the Citarum River, so it created benefits and positive results for the handling of complex environmental issues that are located in the Citarum watershed, the policies that have been set by the central government and regional governments are an integral and connected unit. However, the policy related to the revitalization of the Citarum River had only been established at the level of the Regional Government of West Java Province. It was not yet with the District / City government because the process of making regulations is not easy so it took time. Although the rules were useful in order from the national level to the regional level so that they were more technical and detailed, so the main tasks and functions of implementing policies were clear and unbiased.

West Java Provincial Government Program to Revitalize the Citarum Watershed

West Java Provincial Government Program to Revitalize the Citarum Watershed The West Java Provincial Government had long

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implement programs to restore the Citarum River ecosystem, including:

Tabel 3.1 Normalization program of citarum

	river		
Program	Focus Program	Year	
Citarum	Controlling a	2000-	
Bergetar	pollution	2003	
Citarum	It aimed to make	2013	
Bestari	a Citarum river		
(Bersih, Sehat,	will be deserve to		
Indah, dan	drink in 5 years,		
Lestari)	but it unfulfilled		
Citarum	Increasing a	2018	
Harum	quality of water		
Citarum	Accelerating in	2019-	
Harum Juara	control the	2025	
	pollution and		
	damage of		
	Citarum		
watershed.			
Source: (Rio Tausikal, 2019)			

support from the central government as a substantial effort to improve the condition of the Citarum River which is divided into four zones, namely: slightly polluted, critically polluted, highly polluted, and heavily polluted. Each of these programs aims to create changes so that they can remain relevant and effective in achieving the long-term goals and desires of the West Java Provincial Government to make efforts in revitalizing the Citarum watershed.

Innovation program by West Java Provincial Government

Innovations carried out as a form of the West Java Provincial Government's seriousness to restore the condition of the Citarum watershed in table below:

The progr Table 3.2 Innovation in controlling a normalization Citarum River

No.	The Innovation of Normalization Control in Citarum Watershed	Aims of Development of Innovation	
1.	Involving clerics towards waste management	The clerics had a lot of congregations / santri. The clerics gave the instructions that accelerated waste management efforts.	
2	Helding Citarum Expo 2019	This activity aimed to realize the spirit of collaboration among all stakeholders in order to normalized the Citarum River, by signing a cooperation commitment agreement.	
3	Manufacture of machinery for waste management	Working together with Pindad regarding the manufacture of garbage collection machines in the Citarum watershed.	
4	Cultural Village Development Activities (eco-village)	Had a goal to build a culture of love for the environment and build awareness of all stakeholders. This activity has a total of 4,600 Environmental Cadres and has fostered 220 villages in 8 districts / cities. source: (Public Relation -West Java Environtmental Services, 2018).	
5	Citarum Clean-up Community Movement	This activity was expected to foster spirit, inspiration and as a fo of real effort to restore the Citarum watershed. This mut cooperation culture involves 10,000 people consisting of provinc / district / city governments. source: (Public Relation -West Jo Environtmental Services, 2018).	
6	River Patrol Activities	In carrying out this activity, the West Java Provincial Government involves the community and the environmental community in monitoring water pollution, which came from industrial activities that drain liquid waste into the Citarum watershed.	

Sources: Author;2019

one another, and the program also has direct

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Refers to the table, the Regional Government of West Java Province has made efforts to embrace various elements of society in order to revitalize the Citarum watershed because all parties or multi-sectors must be able to work together that better coordination can be established.

On the other hand, the authors found new dynamics to collaborate revitalization of Citarum River by the West Java Province, namely by involving the role of clerics, especially related to waste management because philosophically, clerics have an important role in helping efforts to handle the Citarum watershed.

Form of effort that can be conducted by scholars was conducting lectures by disclosing hadiths about the environment, clean water, managing waste correctly and adequately as a form of environmental preservation in each school, madrasah, and others so that these efforts were expected to be effective in order to increase awareness the community in maintaining and protecting the sustainability of the Citarum River.

The forms of innovation that have been implemented by the West Java Provincial Government vary as a form of application of the thinking ahead theory, viewed from three categories including innovation in terms of the policy, program innovation, and innovative activities in the context of revitalizing the Citarum watershed as an adaptive step.

2. Thinking Again (Reviewing)

The government's ability to utilize actual data and information, review various derivative policies and programs that have been carried out, and review various strategies for analysis and solutions have not suitable. This concept also includes redesigning policies and programs (Neo & Chen, 2007).

The thinking again process was one of them in carrying out the Action Plan that carried out by the West Java Province Government, which refers to the West Java Governor Regulation No. 28 of 2019 concerning the Action Plan for the Acceleration of Pollution Control and Damage to the Citarum Watershed (DAS) as the ultimate goal. The preparation of the Action Plan aimed to provide stakeholders with a reference in doing more technical planning in terms of budgets, monitoring, and evaluation in the effort to revitalize the Citarum watershed in the 2019-2025 period.

If we Judge the policy, the Citarum Harum Juara program was created, which became a program of the government led by M. Ridwan Kamil as the current Governor of West Java.

The Action Plan contains the handling of various crucial problems in the Citarum watershed by dividing two program categories: programs that have a direct impact, it was a program that have a direct effect on the cause of pollution. Indirect programs was a program that has not the effects directly related to the Citarum River body.

Direct Impact Programs:

Handling of Critical Land, Handling in Waste Management, Handling of Waste (industry, livestock, and fisheries), Handling Domestic Liquid Waste, Education, and Public Relations.

Programs with Indirect Impact:

Controls related to Space Utilizers and Law Enforcement.

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The West Java Province Government quite often conducted monitoring and evaluation related to various programs that can support the success of the Citarum watershed normalization

undoubtedly had a positive impact, following changes to the program in the Citarum watershed referring to the Action Plan guidelines, including:

No	Action Plan	Program	Activity	Output	Location
1	Critical Land	Greening	Conducting various types of plant nurseries for greenbelt Cirata	As many as 25,000 fruits, coffee trees and other perennials have been planted	Cirata Reservoir
2	Handling Industrial, Animal Husbandry and Fishery Waste	Formulation of Pollution Control and Environment al Damage Policies	Evaluation of IPAL performance in 200 companies	There is a standardization of IP AL performance	Bandung Regency
3	Domestic Wastewater Treatment	Making innovations in handling the Citarum watershed with the development of science and technology	Conducting situ- river bio- remediation with Microorganisms and Biomedia which can decipher the types of organic waste	Intended for 1 Situ and 2 Tributaries	Situ Buled; River. Cigalugur and Cimunjul River
4	Waste related handling	Preparation of Policies on Waste Management	Can implement the formulation of policies regarding good waste management	Establishment of policies in waste management	Bandung West Regency
5	Space Utilization Control	Spatial Planning on the Citarum River Border	Identifying problems related to the utilization of the border space found in the Citarum River	Can detail spatial problems in the Citarum River border area from various stakeholders including the central government to local governments	All Areas in the Citarum River
6	Law enforcement	Supervision of business activities	By way of rearranging laws regarding the environment	Can carry out the monitoring activities properly	All activities or businesses in the Citarum watershed area
7	Education and Public Relations	Empowermen t for the Community	Creating a school with an environmentally cultured concept (Eco School)	70 schools	Purwakarta

Table 3.3 Reviewing Programs that has been ran by West Java Province

Source: Government of West Java Province

process. These programs aimed to meet the The programs above were an effort to demands of community needs. This has normalize Citarum watershed that ran well in

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line with legal corridors, which refers to the Regulation of the Governor of West Java No. 28 of 2019 concerning the Action Plan for the Acceleration of Pollution and Watershed Damage Control (DAS), as a source of ideas & actions that can generate innovation in the realm of government. This is an essential key in dynamizing a policy, so it solves problems and unravels dilemmas related issues. to Environment contained in the Citarum watershed. As well as from the established policies and programs & activities carried out was a new system that the process of improving the Citarum watershed can be achieved, and the community gets better outcomes from these programs.

3. Thinking Across

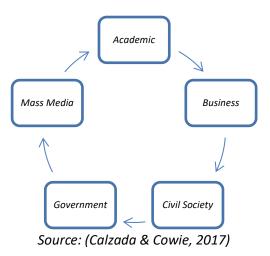
The next step to perfect the various policy innovations, programs, and activities that have been made, were free-thinking, which includes opinions, ideas, and adoption, which comes from outside the frame of mind(Neo & Chen, 2007).

The Thinking Across process used by the West Java Provincial Government realized, by:

a. Adopting the Penta Helix Model

To improve existing policies and programs, the Regional Government of West Java Province adopted a model used in other countries, namely by applying the Penta Helix concept as a breakthrough for Citarum Harum Juara. Penta helix is a collaboration that includes five elements of stakeholders in it, namely: Academics, Business / Business, Civil Society, Government, and Mass Media. The five elements can be abbreviated as ABCGM (Calzada & Cowie, 2017). This concept is based on the government's inability to be able to solve various problems, especially those related to very complex environmental issues, such as in the Citarum watershed, so that collaboration between stakeholders ultimately becomes a necessity (O'Toole, 2015; Thomson & Perry, 2006).

Picture 3.1 Model Penta Helix



Explanation:

- Academics: Contribute to capacity building society or community, based on writing.
- Business World: Community empowerment or community in the development process.
- 3. Civil Society: Monitoring and evaluate the environment.
- 4. Government: Make every policy based on rational thinking
- 5. Mass Media: The media plays an important role, because the role of the mass media in supporting the revitalization of the Citarum watershed is very important.

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Basically, collaboration is a process (Cornforth et al., 2015; Emerson et al., 2012) Collaboration between stakeholders has actually been established for a long time regarding the handling of the Citarum watershed, previously collaboration only occurred between academics, the business world, and the government. However, the triple Helix Concept is now considered irrelevant so that the Regional Government of West Java Province adopted The author analyzed to identify and map which parties were involved in the normalization of the Citarum watershed. It shows in table 3.4 below.

The results of the identification by the author showed that the synergy between stakeholders using the Penta Helix model for controlling the Citarum watershed had been created. Handling the Citarum watershed using the Penta Helix model can accelerate the

No	Component Penta Helix	Stakeholder's that involved		
1	Academics	Padjadjaran University (Unpad), Indonesian Education University (UPI) and Bandung Institute of Technology (ITB) conducted research related to the Citarum River and conducted Citarum Harum Thematic Community Service.		
2	Busineess	Kind of Industrial		
		CSR that have been done by corporation are:		
		• PT. South Pacific Viscose did sediment dredging on the banks of the Citarum River.		
		• PT. Central Santosa Finance gave a help to fload victim in a several local Bandung Regency.		
3	Civil Society	 Living environment facility (Walhi) Independent cadets: Compos, Coffee, and Biogas Developing Ekolink: The arrangement of citarum upstream border Cooperatives Bangkit Bersama: Developing Ecotourism 		
4	Government	 Government of West Java Province (Involving of some related agencies, that control Citarum Riverside) River Management Organization (BBWS) Citarum was forming under Ditjen SDA-Kementerian PU: Technical implementation Unit (Construction infrastruktur) Coordination team in water resource (TKPSDA) WS Citarum: involving Water resources. River flow Management organization (BPDAS) Citarum Ciliwung management coordination forum in CItarum Riverside Nation Military (TNI): spread out in 22 sector around the citarum Riverside. 		
5	Mass Media	 The Indonesian National Mass Media Alliance (AMMNI) and State Defense Journalists (JBN) formed the Citarum Care Journalists community: wada for journalists who have concerns about the condition of the Citarum River so that they not only make news but also carry out other environmental activities. Make a legal website of Citarum Harum: Citarum.org. 		

Table 3.4 Penta Holix Model in Manage the Citarum Watershed

Sources: Author;2019 another model, namely the Penta Helix model.

pollution control program and damage that occurs in the Citarum watershed so that the

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collaboration created must be compact and mutually supportive to be able to build a fragrant, healthy, clean, and sustainable Citarum River. Because we do not assume that public affairs are only government affairs, but the participation of stakeholders outside the government is also very important and determines the success of efforts to control pollution and damage to the Citarum watershed.

This collaboration model was necessary for a country that adheres to democracy because the way the government achieves each of these goals requires other stakeholders who were continuously among the five stakeholders, so trust would increase. public However, community participation was not guaranteed that it could contribute significantly to the changes by the government (Cheema & Rondinelli, 2007).

According to the author, the use of the Penta Helix concept was good for the Citarum River revitalization program. However, the commitment must be strong among the stakeholders because it could influence the collaboration process.

b. West Java Provincial Government Conducts a Visit

Another form of thinking across is to conduct comparative studies or visits to other agencies as a means of getting new ideas and knowledge, including:

Tabel 3.5 List of invitation	
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No	Activity	Tahun	
1	West Java Governor M. Ridwan	2019	
	Kamil, has made a working visit		
	to Japan which aims to		
	establish cooperation related		
	to handling pollution in the		
	Citarum River with the		

No	Activity	Tahun	
	Japanese Minister of the		
	Environment named Tsukasa		
	Akimoto.		
2	The Regional Government of	2019	
	West Java Province received a		
	team from the United Nations (PBB), related to cooperation		
	in the environmental sector to		
	overcome the problem of the		
	Citarum River.		

Source: Author;2019

The purpose of the exchange of experience and information is for the benefit of the local government so that the ability of Human Resources (HR) increase in terms of conceptual, technical, skill, and managerial capabilities and social abilities.

4. Conclusion

The problems related to the Citarum watershed are still very relevant to be studied because this environmental problem is very complex and is still a common concern from the central government to local governments and other stakeholders. The government has been trying to solve the problem of the Citarum River for a long time, and the government has spent so much money on the normalization of the Citarum River, but until now the problems related to the Citarum River have not been resolved, this is because environmental issues will never stop so The government's dynamic ability to handle this matter is very much needed.

The concept of dynamic governance (dynamic governance) can be interpreted as the ability of the government to continue to adjust its policies and programs so that short-term and long-term interests can meet the demands and needs of society. This is reflected in the various

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programs and projects that aim to fix problems that occur in the Citarum watershed that have been carried out by the central government and local governments from the past until now, of course, there are still advantages and disadvantages in it.

From the discussion that the author has done before, the author studies it with the concept of dynamic governance which refers to three main dimensions, including: thinking ahead, thinking again, and thinking across, including:

The dynamic capabilities that are created as a form of realization of the thinking ahead mindset, the authors divide them into three categories, namely in terms of the policy of the Presidential Regulation and the Regulation of the Governor of West Java regarding the acceleration of pollution control and damage to the Citarum watershed, in terms of programs and in terms of innovations carried out by the Government. West Java Province. These policies and programs are a form of the government's seriousness in responding to various issues in the Citarum watershed. Regarding policy, because the policy is decentralized, so it has to wait for the policy at the Regency / City level regarding the technical aspects of the pollution control policy and damage to the Citarum watershed to be completed so that each Regency / City can carry out its duties properly. Another thing is that there is a new dynamic in carrying out the Citarum watershed revitalization business program, namely the involvement of ulama actors who have a role in carrying out the Citarum watershed improvement socialization program.

The dynamic process of forming capabilities of the thinking again mindset carried out by the Regional Government of West Java Province is by compiling an action plan and implementing it, reviewing programs that have been carried out as a form of monitoring and evaluation to support the success of the Citarum watershed normalization process, regarding the Governor Regulation West Java No. 28 of 2019 concerning the Action Plan for the Acceleration of Pollution Control and Damage to Watersheds (DAS).

Furthermore, the realization of the thinking across the formation process carried out by the Regional Government of West Java Province, including by adopting the Penta Helix model which aims to create collaboration from the five stakeholders (Academics, Business World, Civil Society, Government and Mass Media) to assist acceleration. Normalization of the Citarum watershed, but on the other hand, working visits aimed at obtaining new ideas, knowledge and information that can improve existing policies are still low, so they need to be improved.

Suggestion

Commitment from various stakeholders is needed to improve the Citarum River because the collaboration involves so many stakeholders that according to the author, the existing commitment must be improved and maintained in order to improve the conditions and environment of the Citarum River so that it will remain a concern and continue. Moreover, it is better if all the general public are involved in controlling the Citarum

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River, such as the establishment of community institutions at the Rukun Tetanggga (RT) and Rukun Warga (RW) levels because all groups must work together and have a commitment to revitalizing the Citarum River.

The author sees that the thinking across a process that has been carried out by the West Java Provincial Government is still lacking. There are still a few activities related to comparative studies or visits.

From the results of the analysis by the author, the dynamic capabilities of the West Java Provincial Government have been created in terms of three aspects, including thinking ahead, thinking again, and thinking across so that the local government has been able to produce various changes in managing the normalization of the Citarum River.

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