

# **Soldiers in the Indonesian Government: The Indonesian National Army (TNI) in Collaboration Citarum Harum Program**

**By**

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## **Abstract**

The Citarum River is a strategic river that has a vital function for people's lives in West Java, but the pollution and damage that has made the Citarum River a polluted river in the world. Several previous revitalization programs for more than 10 years failed, until in 2018 the government involved the Indonesian National Army (TNI) through the Citarum Harum program. This research is expected to provide knowledge for the community and a reference for effective policies for the government. This study aims to examine the involvement of the TNI through military operations other than war (OMSP) in the Citarum Harum Program in the Regency of Karawang-Indonesia. This research uses a qualitative approach, primary data is obtained through direct observation and in-depth interviews, while secondary data is obtained from relevant research documents and documents, data analysis using Nvivo 12 Pro. The results showed that the involvement of the TNI in the Citarum Harum program had a significant impact on the success of the program. In its realization, the TNI dominates various activities of actors including the government. The presence of TNI encourages active participation and the establishment of motivation manifested in the changing mindset of the community and the industry. The TNI resounding image and simultaneous decisive action foster the obedience and commitment of the actors in collaboration.

**Keywords:** Indonesian National Army, Collaborative Governance, Citarum Harum.

## **Introduction**

Citarum River is the largest river in West Java that has a strategic role, its existence is a source of life for 35 million people (PPK Citarum, 2019). It stretches for 297 km with its headwaters at Situ Cisanti which is located at the foot of Mount Wayang, Bandung Regency, and empties into the North Coast of Java Island, Muara Gembong, Bekasi Regency, where the Citarum Watershed (DAS) crosses 13 regencies/cities (Satgas, 2019). The vital existence of the Citarum River is a source of raw water and 80% of the drinking water of the people of Jakarta and is a source of irrigation water for 420,000 ha of agricultural land, in addition to being a source of energy for hydropower plants (PLTA) with an electricity flow of 1,888 Mw for the islands of Java and Bali (Satgas, 2019).

The actual condition of the Citarum watershed is subject to pollution and extraordinary environmental damage, feeds of waste disposed of in the Citarum watershed reached 3,512.2 tons/day (Satgas, 2019). An accumulation of high domestic and industrial activities, as well as poor public awareness, makes rivers a landfill (TPA). In general, pollution and damage to the Citarum River come from industrial waste, agricultural waste, livestock waste, fishery waste, and domestic waste including water and garbage (Ginkel & Ozerol, 2015; Greenpeace New Zealand, 2018).

The failure of several Citarum watershed revitalization programs illustrates the complexity of the problem. Sadly, until the time when the Citarum River water was heavily polluted, it did not meet the requirements for water quality that was suitable for consumption (Department of Binamaraga and West Java Spatial Planning, 2020).

Departing from the failure of the previous program, in 2018 the government realized the Citarum Harum program. Through the Presidential Regulation of the Republic of Indonesia Number 15 of 2018 concerning the Acceleration of Pollution and Damage Control of the Citarum River Basin by involving various stakeholders including the TNI. TNI involvement is carried out to optimize the success of the program, in addition to being part of military operations other than war (OMSP). This is based on Law Number 34 of 2004 Article 7 concerning the Army, in the regulation provides legality regarding the involvement of the TNI in military operations other than war (OMSP), so that the involvement of soldiers in the Citarum River revitalization program does not conflict.

Collaboration as an integrated system (Sudarmo, 2015) is the basis for the realization of the Citarum Harum Program inseparable from the characteristics of the watershed itself. Watersheds as complex ecosystems consist of ecological, social, and economic systems or a combination that have complex structures. It is said to be complicated because the watershed is a source of activity both natural, economic, and social in which the whole component is mutually influential (Metcalf et al., 2018; Wisnubroto et al., 2021). In addition to the limitations of the government in overcoming problems, the public does not always have sufficient resources (Florini & Pauli, 2018)

Referring to the condition of the Citarum watershed in Karawang Regency, it is stretched along 117 Kilometers damaged and waste pollution, proven to be high in lead and bacteria content. The source of the pollution comes from dozens of factories that dump their waste directly into the Citarum River. The government noted that there were 32 companies whose *outfall* went directly to Citarum, which were of the dozens of factories engaged in the textile, food, chemical, and paper industries (DLHK Karawang Regency, 2020).

The high pollution and damage to the Citarum watershed in Karawang Regency caused a lot of losses. It can be seen in the mass death of fish, the expansion of critical land around the Citarum watershed, in addition to a large amount of chronic sedimentation due to uncontrolled landfills sourced from domestic, industrial, and even medical waste. The accumulation of these conditions had an impact on floods in 2020 which submerged hundreds of houses in 89 villages spread across 29 districts in Karawang Regency, where as many as 14,000 people were affected by the Citarum River overflow flood (Yulyanto, 2020).

The total revitalization of the Citarum watershed in Karawang Regency is carried out through the Citarum Harum Program based on collaboration. In addition to the problems of pollution and damage that occur, the poor habits of the community plus the magnitude of sectoral egos are one of the challenges of the revitalization of the Citarum watershed (STBM

Kemenkes, 2017). Bishop et al (2018) shows sectoral ego as a problem of public institutions, and the right solution to overcome this is collaboration. It is not an exaggeration that (O'Leary & Bingham, 2021) makes *collaborative governance* the most important option to build the future of public policy in a country. Where *collaborative governance* is present as a practical innovation that can cure various policy pathologies, both in terms of regulatory politicization, swelling or budget constraints, as well as policy implementation failures (Dhanpat, 2019; Stoddart et al., 2020)

Many similar previous studies related to pollution and damage to the Citarum watershed Riyadi (2020) entitled Environmental Damage Due to Pollution of Hazardous and Toxic Materials: A Case Study of the Citarum River, West Java, Indonesia. The research shows that there has been damage and pollution throughout the Citarum watershed. The damage to the Citarum watershed that occurs due to the behavior of the community and industry is a serious crime that can cause many disasters. This study shows that strict, clear and comprehensive legal steps are needed for the protection of the Citarum watershed. In addition to the need for repressive measures as an effective measure to deal with the damage and pollution that occurs. Similar research was also conducted by (Afkarina, 2020; Ayyasy, 2021; Brotosusilo et al., 2019; Cahyaningsih & Harsoyo, 2010; Imansyah, 2012; Juniarti, 2020; Marganingrum et al., 2013; Mulyana & Ginting, 2021; Nugraha, 2020; Putra, 2016; Safitri et al., 2019; Setiady, 2017).

There are also several studies involving the TNI in government social programs conducted by (Banjarnahor et al., 2020; Chandra, 2019; Herdiansah et al., 2017; Hidayat, 2019; Kristiyono et al., 2021; Makruf & Thamrin, 2018; Nabawi, 2016; B. A. Nugraha et al., 2020; Patria, 2018; Priambodo et al., 2020; Subagyo & Rusfiana, 2018; Taloko et al., 2018; Toisutta, 2009; Triwibowo et al., 2019; Widyaningrum et al., 2020).

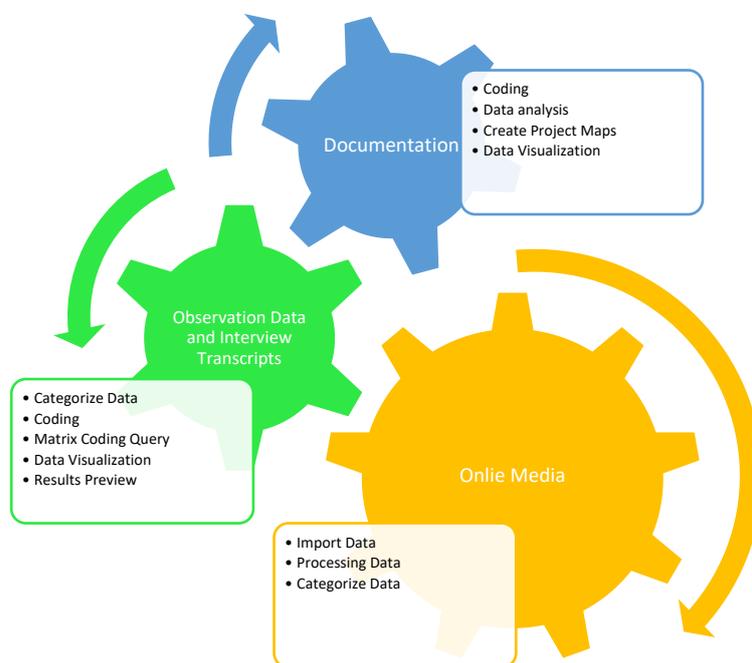
Based on this, research through collaborative governance process approach in the Citarum Harum Program in Karawang Regency has not been carried out much. Based on this, this research has a very high novelty, by examining the TNI activities in the government's collaboration process in optimizing the success of the Citarum Harum program. Where the research uses *the collaborative governance* theory proposed by (Ansell & Gash, 2007) by focusing on the collaboration process consisting of: (1) *face-to-face dialogue*, (2) *trust building*, (3) *commitment to process*, (4) *shared understanding*, and (5) *intermediate outcomes*. The purpose of this study answers how the involvement of the TNI in the government collaboration process to overcome pollution and damage to the Citarum watershed in Karawang-Indonesia Regency.

## Method

Research related to the TNI in the Indonesian government through the Citarum Harum Collaboration was carried out from 2018 to 2021. Based on the problems raised, this research uses qualitative methods. The qualitative method was chosen as a way of understanding, exploring, and explaining not only theoretically, but with facts on the ground related to how the involvement of the TNI in government collaboration. The youthfulness of the data in this study consists of primary data and secondary data, primary data obtained from in-depth interviews with several informants, and secondary data through literature studies (Creswell, 2014). Determination of informants through purposive techniques, in which the informant consists of: (1) Head of Karawang Environment and Hygiene Office; (2) Head of Karawang Regency Health Office; (3) SDA 1 BBWS Citarum Operational Staff; (4) Section Head of PJT

II; (5) Head of Rengasdengklok Subdistrict; (5) Sector Commander of Task Force Citarum Harum; (7) Industries /Companies in Karawang Regency; (8) Community Leaders.

The data analysis techniques used in this study by data collection, data reduction, data display, verification, and affirmation of conclusions (Creswell, 2022), then assisted by the Nvivo 12 Pro as a qualitative analysis data tool (Woolf, N. H., & Silver, C., 2017) to get the best findings, through matrix coding analysis with the following stages:



**Figure. 2:** Data collection and analysis techniques with NVivo 12 Pro.  
**Source:** processed from Woolf & Silver (2017), 2022

Meanwhile, the credibility check technique uses *the triangulation* technique (Creswell, 2022; Jentoft & Olsen, 2019).

## Result And Discussion

### *Initial Conditions (Citarum River Revitalization Failure)*

Watershed as an ecosystem requires the involvement of all parties in its management (Khan et al., 2017; Pande, 2020). The government's efforts to revitalize the Citarum watershed so far have still failed. More than 15 years of the revitalization of the Citarum River carried out by the government cannot change the title of the dirtiest river in the world (Erianti & Djelantik, 2019; Iskandar, 2017)..

The above reality is evident from the failure of several programs such as in the 2000-2003 period, the West Java Regional Government launched the Citarum Bergetar program. The word "vibrate" stands for clean, *geulis* (beautiful in Sundanese), and sustainable. The Citarum Vibrating program consumes a budget of 6.7 Trillion, of which the program is focused on controlling conservation recovery and community empowerment (Djuyandi, 2021). As a result, until a span of more than 10 years, the program cannot change the pollution and severe damage that occurs, in addition to empowerment that has not been able to change the behavior of people who like to throw garbage into rivers that support at least 27.5 million people of West Java and DKI Jakarta (Satgas, 2019).

Efforts to revitalize the Citarum watershed were again carried out in 2013 through the Citarum Bestari Program. Bestari is an acronym for clean, healthy, beautiful, and sustainable. In this program, the government spent a budget of Rp 80 billion with a target that in 2018 Citarum river water can be directly consumed. In fact, until 2018, the waste generation disposed of in the Citarum watershed was 3,512.2 tons/day sourced from 8 (eight) districts/cities, not including human waste of more than 40 tons/day (Task Force, 2019). The impact of the high content of lead and chemicals and *escherichia Coli* (*E. coli*) bacteria in Citarum river water is very dangerous when water is consumed by the community.

The second failure factor of the Citarum watershed revitalization program was the low awareness and involvement of the community and industry, in addition to weak public trust in the government, because the community is only used as an object and not a program priority. The support of various relevant stakeholders through active involvement can bring closer to the success of the program (Prastio et al., 2019), following the characteristics of watersheds that cannot be managed independently by relying on government capacity (Menlhk, 2018).

On February 22, 2018, President Joko Widodo issued Presidential Regulation (Perpres) Number 15 of 2018 concerning the Acceleration of Pollution Control and Damage to the Citarum River Basin Ecosystem. Through the Citarum Harum Program, a total revitalization is carried out through collaboration. The strategy used by the government in optimizing these steps is by involving the TNI, companies or industries, and active community involvement (Satgas, 2019).

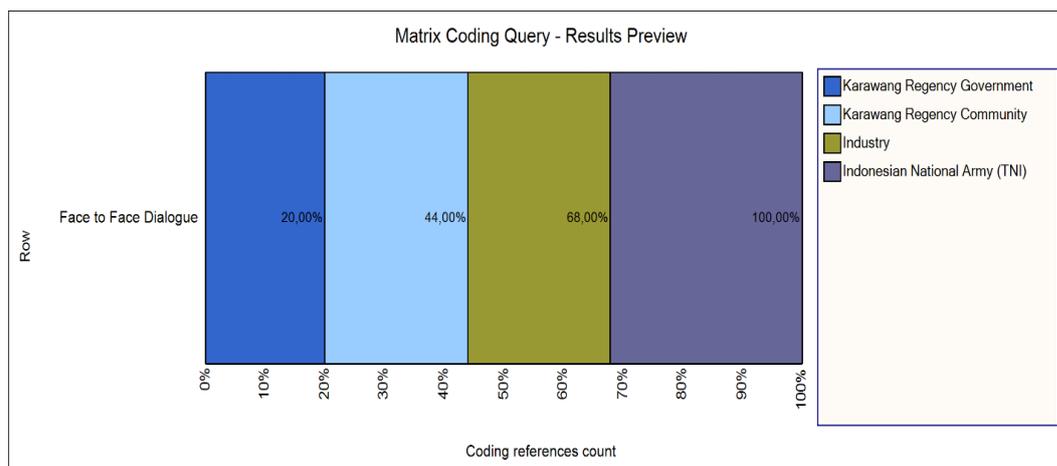
Below shown figure 1 will be explained the results of the identification and analysis of previous research data obtained through the identification and analysis of Vosviewer with the keyword collaboration in the Citarum Harum watershed program from the google scholar database in the range of 2010-2022 as many as 50 0articles based on a network of findings, novelty, and gaps of previous research, the results divided 9 (nine) topic clusters that intersected with the success of the Citarum Harum program watershed collaboration in Karawang-Indonesia Regency as follows: (1) the first cluster (red) relates to the accuracy of agricultural landscapes, capacities, Citarum basins, closed collaborations, ecosystem conditions and services, energy, environmental services, evaluation, implementation, and program interests. furthermore, there is a strategy, upstream of the Citarum river, as a source of water in west java Indonesia; (2) the second (green) cluster relates to agriculture, agroforestry, calibration, opportunity, conservation, distribution, interaction, land cover, main watershed, rainfall, role, and upstream Citarum watershed; (3) the third (blue) cluster is related to riverside activities, the Ciliwung Watershed and the Citarum Harum Program, the program collaboration process, communication, downstream and upstream approaches, pollution, and air quality; (4) the fourth cluster (yellow) relationship with adaptation to challenges from inside and outside the watershed, relationship with the Ciliwung watershed, Citarum watershed, development of collaboration and integration, the role of local governments, support of community groups and universities, cooperation of each cuttingholder in taking opportunities; (5) the fifth cluster (purple) relates to the governance of the citarum harum program collaboration, the evidence and experience of the Citarum Harum program, the importance of the role of actors, the handling and planning of the program, the sustainability and utilization of the Citarum watershed, and the management of the Citarum watershed; (6) the sixth cluster (light blue) is related to the Bandung basin, the Cikapundung river in Bandung, the threat of climate change, the business and coordination of citarum river management, the impact of flood disasters, to water quality in the Citarum watershed; (7) the seventh cluster (orange) relates to the cisadane watershed, adding resources and institutions to deal with problems in the Citarum watershed;



amount of authority and resources owned by the TNI, including in building intensive communication between actors.

The basis of collaboration is built *from the existence of face-to-face dialogue*. Facts on the ground show that there is a formal face-to-face forum formed by the Karawang Regency Government through the Karawang Environment and Hygiene Service called the Citarum Watershed Coordination Forum, but it has not involved industry and the community. The non-involvement of industry and society automatically has an impact on non-synchrony, manifested from weak trust in government policy programs, and a large indifferent attitude toward industry and society.

The absence of industry and society made the TNI in the Citarum Harum Task Force (Satgas) take steps by encouraging the two actors to join the Citarum Watershed Coordination forum. Community and corporate involvement in face-to-face dialogue as a basis for building commonality, and ensuring contributions in supporting successful collaboration (Bryson et al., 2015). Following the facts, the non-involvement of industry and society as the main contributors to pollution and damage was due to the failure of the Citarum Vibrating and Citarum Bestari programs. *Collaborative governance* is a need for the government to formalize the involvement of parties outside the government to reach a consensus (Ansell & Gash, 2007) in addition to ideally watershed management and water pollution control to be carried out wisely (Zhang et al., 2015). This situation in the percentage of actors' involvement in the "face-to-face dialogue" indicator, where the TNI plays a very important role in the process of collaboration to build consensus is shown in figure 2 below.



**Figure 2** Analysis of actor involvement in the "Face to Face dialogue" indicator  
**Source:** Processed via Nvivo 12 Pro, 2022.

The encouragement of participation by the TNI received a good response, as evidenced by the always presence of industry and the community in the Citarum Watershed Coordination forum which is held regularly once a month. The involvement of the TNI to bridge and stimulate the Karawang Regency Government, industry, and the community, in the forum, is not limited to face-to-face dialogue but is encouraged to generate consensus. Manifested from the support of industry representatives such as PT Pupuk Kujang, PT Toyota Motor Manufacturing Indonesia, PT Multi Indo Mandiri, PT PLN, KIIC Industrial Estate Manager, PT HM Sampurna and Yayasan Inspirasi Anak Bangsa by participating in planting 3,600 trees on the banks of the Citarum River. In addition to creating a consensus not to dump waste directly into the river and require each industry or company to have a WWTP. Previously, there

were 86 companies that disposed directly into the Citarum River basin and 54 factories that dumped waste into Citarum tributaries (DLHK Karawang Regency, 2020). In line with that, the community is encouraged to appreciate the river and not to make the Citarum River the right end of the landfill (TPA) of garbage, as well as stop carrying out Open Defecation activities (BABS). The success of the TNI builds intense communication between various parties as a way to build trust, mutual respect, mutual understanding, and commitment to government collaboration.

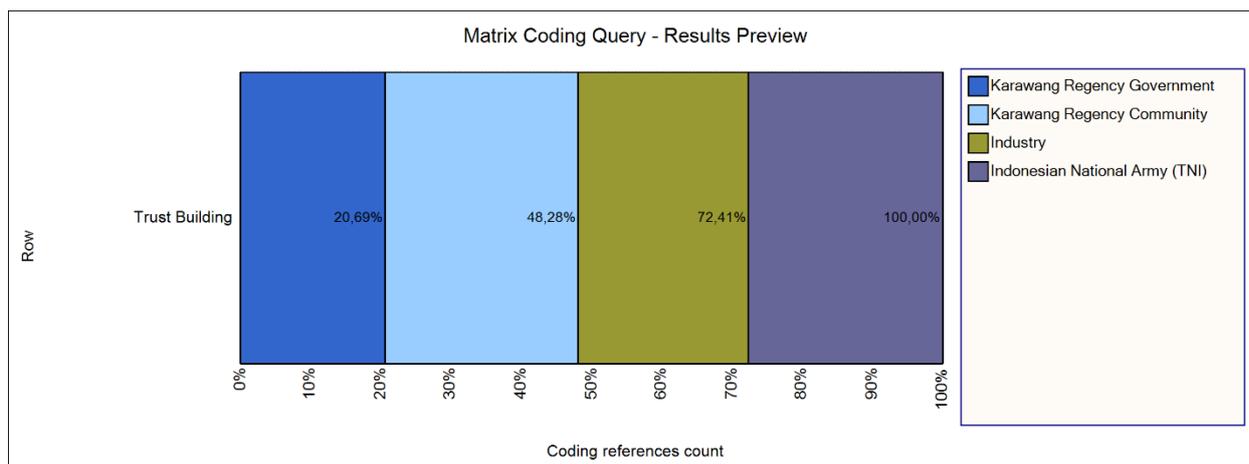
### ***Successfully builds trust between actors***

Communication and trust as a major part of collaboration (Emerson & Nabatchi, 2015), define the purpose of collaboration as the foundation of trust between actors. Poor trust as a cause of failures of government programs (Ran & Qi, 2019), including the failure to revitalize the Citarum watershed so far reflects the weak involvement of other actors outside the government. Efforts to build trust through Citarum Harum collaboration are carried out through the provision of information, program socialization, education, and the formation of community groups by the TNI and the Government. An absolute prerequisite for collaboration to be successful is to build continued trust (Siddiki et al., 2017).

Mutual trust is the core of collaboration (Bianchi et al., 2021). The presence of the TNI in government collaboration has a significant impact, namely on the development of industrial and community trust. The perception of *stakeholders* outside the government believes that the presence of the TNI brings positive changes in the implementation of government programs, as evidenced by the close cooperation and compliance with existing regulations. In addition to the amount of enthusiasm and motivation of the community and the industrial sector in collaboration. In line with the use of the community as the implementing subject in the success of the Citarum Harum program.

The good image of the TNI institution in the eyes of the community has an impact on the development of trust and compliance with the Citarum Harum program. It is directly proportional to the increasing trust in government programs. Trust in the TNI is even greater when it comes down directly to the handling of factory waste and garbage, handling critical land, managing water resources, and arranging floating net cages (KJA). In addition, there are several creative activities such as the creation of nursery land, food security plots on the banks of the Citarum watershed, and the use of riverbanks as a means of recreation, education, and sports that actively collaborate with DLHK, PJT II, industry and the community. Cooperation can build trust by sharing information and knowledge, demonstrating competence, goodwill, and follow-up to activities. On the contrary, collaboration failure occurs when an action weakens trust (Ansell & Torfing, 2015).

In addition to pollution and damage, rampant thuggery behavior is an obstacle to the success of the Citarum watershed revitalization. So far, the Karawang Regency government has been deadlocked when the work program was hit by the actions of thugs from certain community groups who protect the industry as a source of pollutants in the Citarum river. The frequent occurrence of verbal threats, as well as physical contact, and even the use of sharp weapons is an obstacles to non-optimal revitalization. The presence of the TNI succeeded in bringing order to the actions of premanisme (thuggery behavior), through reprimands, to the spread and cracking down on anyone who hindered the revitalization of the Citarum River. This includes disciplining unlicensed industries by leveling buildings located in the area owned by PJT II on the banks of the Citarum watershed. This situation in the percentage of actors' involvement in the "Trust Building" indicator, where the TNI plays a very important role in the process of trust-building collaboration is shown in figure 3 below.



**Figure 3** Analysis of the involvement of actors in the indicator "Trust Building"  
**Source:** Processed via Nvivo 12 Pro, 2022.

The TNI cooperation that is built is increasingly gaining the trust of stakeholders to ensure that collaboration runs with full integrity. Watershed management collaboratively reduces the harm to humans economically and socially (Haryati, 2013). It is carried out by untangling prolonged problems such as conflicts of interest in the use of river water, both conflicts of economic interests and environmental control interests. In addition to enforcing conflicts of interest in environmental law enforcement with economic interests, as well as conflicts of interest in community needs with the duties of agencies in the preservation of watersheds.

### ***Commitment to the process***

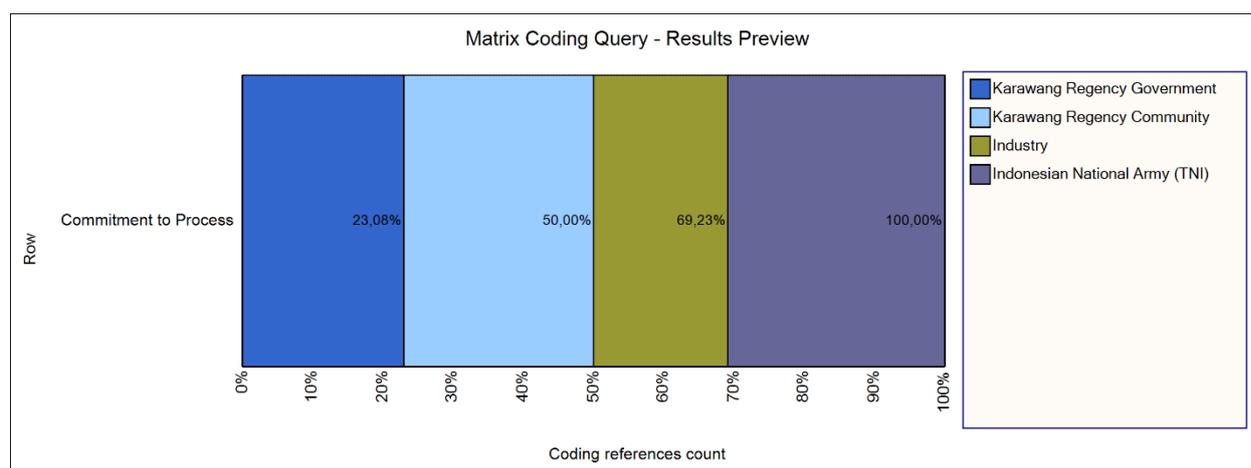
Commitment is a strong determining factor in the success of collaboration that is closely related to the motivation to participate (Schöttle et al., 2014). Once consensus is reached, and trust is gained, then collaborators should ideally have a shared commitment (Ansell & Gash, 2007; Bryson et al., 2015). Each actor in the Citarum Watershed Coordination forum is required to have a commitment to their capacity, sectoral egos, and the magnitude of conflicts of interest are challenges to overcome watersheds comprehensively (Blomquist & Schlager, 2005).

The manifestation of the TNI commitment to efforts to control pollution and damage to the Citarum watershed was carried out through direct socialization to each company, recorded 97 times conducting company patrols and 3,024 to residents' homes in one year, carried out to encourage business actors and the community not to pollute the environment by building WWTP. To control, the TNI conducts river patrols 3 times a day, 84 times a month, and as many as 1,068 times a year consistently. When commitments are violated by the industry, the TNI takes decisive action by closing the out-fall channel until the company meets the specified waste disposal standards.

The commitment of the TNI to government collaboration also focuses on changing people's behavior. Sadly, so far, People regard rivers as giant trash cans and the ultimate destination of all kinds of dirt (Fuady & Indriani, 2020). In fact, 918 tons/day of waste disposed into the Citarum Karawang watershed comes from residents who are not served by waste handling as many as 518,250 people who are members of 172,939 families (DLHK Karawang Regency, 2020). Exacerbated by a large number of wild latrines in the entire watershed in line with the high practice of Open Defecation (BABS) in the Citarum watershed is very high reaching 82% (Ministry of Health, 2019). After the collaboration through the involvement of the TNI in collaboration, there was a significant change, as evidenced by the fact that the waste

that entered the Citarum Karawang watershed dropped dramatically by 65%, with a ratio of 62.03% of waste management services, the ratio of handled waste was 41.35, with the total waste transported into the river. TPA of 400 tons/day(DLHK Kabupaten Karawang, 2021).

Ensuring the commitment of the community, the TNI together with the Karawang Regency Health Office encouraged the implementation of Stop Open Defecation (BABS) in the Citarum River. As a solution, the TNI in all sectors of Citarum River Karawang Regency carried out the demolition of illegal latrines and built facilities in the form of latrines/public toilets and communal MCK (Mandi Cuci Kakus) that are feasible and environmentally friendly. Of the 1,700 MCK targeted for completion until 2025, in 2022 there will be 678 MCK. In other words, more than 40% has been achieved from the desired target (Jabarprov, 2022). This situation is in the percentage of actor involvement in the "Commitment to Process" indicator, where the TNI plays an important role in the collaboration process to build a joint commitment of each actor to make the program a success Citarum Harum is shown in figure 4 below.



**Figure 4** Analysis of actor involvement in the indicator "Commitment to Process"  
**Source:** Processed via Nvivo 12 Pro, 2022.

The cessation of the habit of disposing of waste in the river and the practice of defecation, indicate the establishment of compliance and the company's commitment to creating significant waste gradually to minimize pollution and can improve the water quality of the Citarum River. It was recorded that in 2019 the number of Karawang people who still practice open defecation into the Citarum River as many as 133,026 people divided into 26,905 families. There has been a decline, until 2021 there are still 20% or as many as 26,605 people who are still being treated, the target is that in 2025 there will be no more people in West Java including Karawang who defecate into the Citarum River (STBM, 2021). The above shows that the actors' long-term commitment to collaboration results in effective performance (Scott & Boyd, 2020), instead weak commitments as a failure of collaboration (Morse, 2014).

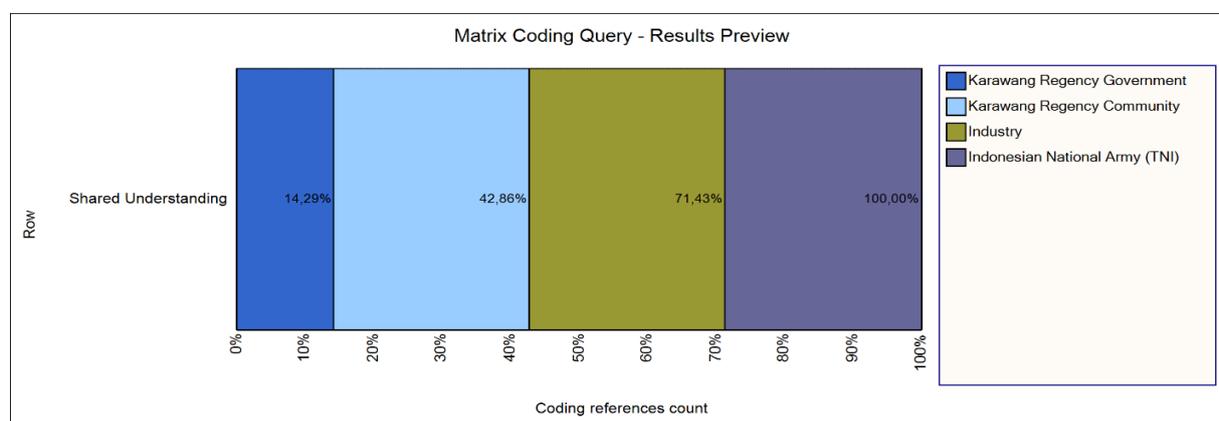
### ***The development of mutual understanding***

common understanding can unite perceptions of the substance and purpose of collaboration, relating to a common vision and mission, common intentions, common goals, common ideologies, clear goals, strategic directions, and aligned core values (Ansell & Torfing, 2015; Emerson & Nabatchi, 2015; Harley & Blismas, 2010). The synergy that occurred between the TNI, the Karawang Environment and Hygiene Service, the Karawang Regency Health Office, PJT II, industry, and the community illustrates an understanding, namely a total revitalization of pollution and damage to the Citarum watershed.

The consensus was reached through the Citarum Watershed Coordination forum as a manifestation of the formation of understanding of the problems and substance of the Citarum Harum program. Mutual understanding can take the form of agreement in defining a problem to find a common solution (Ansell & Gash, 2007). A common understanding is formed through long and continuous socialization by the TNI and the Karawang Regency Government. Research shows that all actors in collaboration understand the meaning of the substance of the program. Following that *collaborative governance* is intended to unite parties in common understanding and purpose (Harley & Blismas, 2010).

The formulation of clear goals can streamline collaboration (Donahue & Zeckhauser, 2011). Clarity on the substance of the Presidential Regulation (Perpres) of the Republic of Indonesia Number 15 of 2018 concerning the Acceleration of Pollution and Damage Control of the Citarum River Basin, simultaneous can be understood by all *stakeholders*. The presence of the TNI in its realization encourages a common understanding of the goals of collaboration. It is carried out through large interventions to the industry through coaching activities and decisive action. Overall, there are 1,813 industries in the Citarum watershed that are supervised and fostered, while the industries identified and inventoried for their waste handling performance are 1,043 industries (Renaksi, 2021). This number includes in Karawang Regency, so far the TNI has closed outfalls to more than 30 companies whose waste clearly pollutes the river (Satgas, 2021).

Based on the above conditions, even though in collaboration there is equality of every actor and the government has more authority to regulate (Raharja, 2017), the presence of the TNI dominates the effectiveness of collaboration, including in the government where the Karawang Environment and Hygiene Service, Karawang Regency Health Office, PJT II always agree to the actions of the TNI. This situation is in the percentage of actors' involvement in the "Shared Understanding" indicator, where the TNI plays an important role in the collaborative process of building understanding in the karawang community and the private sector / the industries that drive the success of the Citarum Harum program are shown in figure 5 below.



**Figure 5** Analysis of actor involvement in the indicator "Shared Understanding"  
Source: Processed via Nvivo 12 Pro, 2022.

The mutual understanding of the private sector or industry is proven through the large amount of support and participation in revitalization by participating in the planting of 3,600 trees on the banks of the Citarum River, supporting the realization of the Demoplot, and requiring each company to have a WTTP. Prior to the collaboration through the Citarum Harum Program, there were 86 companies that disposed of directly into the Citarum River and 54 factories that dumped their waste into the Citarum tributaries (DLHK Karawang, 2020). After

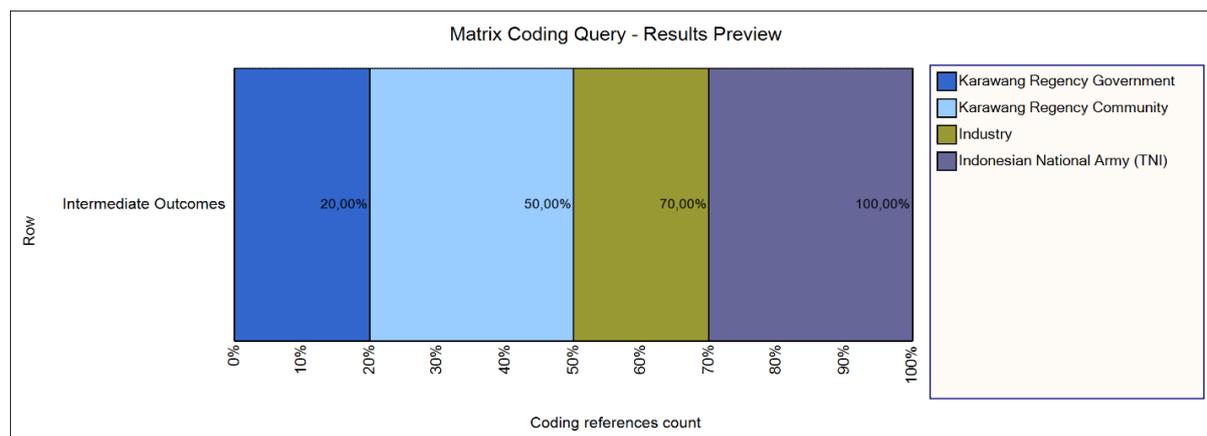
the collaboration, it was recorded that in 2021 the percentage of handling industrial waste reached 80%, in Karawang Regency, that there were 287 companies and industries that were licensed and had WWTP's, while 12 other companies were still in the development and improvement stage of WWTP, meaning that there was attention to the program and compliance from the industry (Renaksi, 2021).

**Achievements while collaboration**

Collaboration can be said to be concrete when there is a possibility of success from the collaboration process, manifesting in the existence of small victories, the establishment of strategic plans, and the existence of facts and findings produced together (Ansell & Gash, 2007). The involvement of the TNI through military operations other than war (OMSP) significantly increased the formation of trust and commitment of all actors, in addition to the creation of an understanding that was in line with the objectives of the Citarum Harum program. This realization is evident from the series of concrete actions carried out by the TNI consistently and sustainably since 2019.

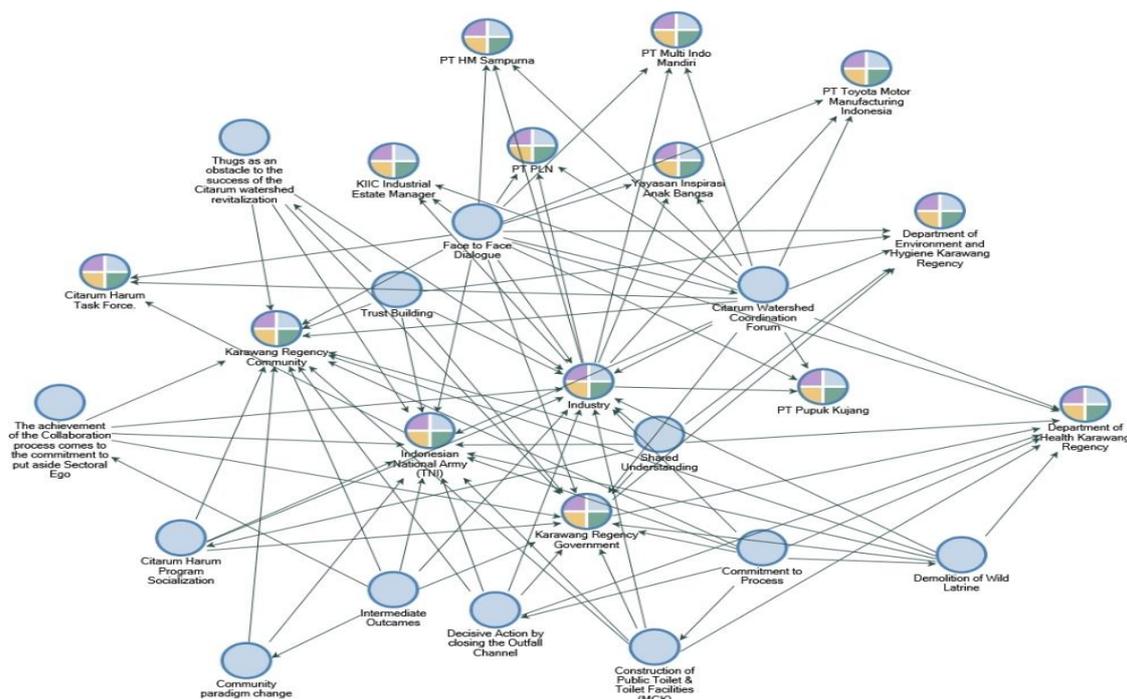
Although not a final achievement, the actors shared goals illustrate the progress of success by putting aside sectoral egos in absolute terms. Because agreements and commitments are a crucial part of challenges that determine the outcome of collaboration (Prastio et al., 2019). The temporary achievement of TNI involvement has an impact on the lack of conflicts of interest in the revitalization of the Citarum watershed. Like the handling of critical land in the Citarum River, previously the area of critical land reached 77,037.36 ha. Currently, the area of critical land in Citarum has been reduced to only 16,637.36 ha, which each year always exceeds the target that has been set.

The paradigm shift of the community towards rivers, the success of Stop Open Defecation (BABS), and consistently building communal MCK and dismantling wild MCK are the collaborative achievements of the Citarum Harum Program. The involvement of the TNI has a real impact on the objectives of the condition program, as can be seen from the 1,700 MCK targeted for completion until 2025, in 2022 there are already 678 MCK. In other words, more than 40% was achieved including in Karawang Regency. Likewise, in the handling of industrial waste, consistency through river patrols 3 times a day and inspections of enterprises and decisive actions have an impact on industry compliance. It is recorded that in 2021 there are already 1,286 factories that have repaired their WWTP. This situation is in the percentage of actors' involvement in the "Intermediate Outcomes" indicator, where the TNI plays an important role in the collaborative process that shapes paradigm shifts in society Karawang and the rogue industry that encouraged the success of the Citarum Harum program are shown in figure 6 below.



**Figure 6** Analysis of the involvement of actors in the indicator "Intermediate Outcomes"  
 Source: Processed via Nvivo 12 Pro, 2022.

The accumulation of the above conditions, in 2021 monitoring results from telemetry installed at several points in the Citarum River in the Karawang Regency area showed a score of minus 10 with the status of "lightly polluted", with Biochemical Oxygen Demand (BOD) levels of 9.25 milligrams per liter, Chemical Oxygen Demand (COD) 145.12 milligrams per liter, and water temperature 29.3 Celsius. It is recognized by the Karawang Regency Government and related stakeholders that the presence of the TNI brings active participation and more motivation, in addition to compliance and commitment in efforts to succeed in the long-term Citarum Harum program.



**Figure 7** Maps Collaborative Governance in Citarum Harum Program, Karawang Regency  
**Source:** Processed via Nvivo 12 Pro, 2022.

Based on the findings of the study presented in each of the previous indicators according to the percentage of involvement and connectedness of each actor in collaborative governance actions in the Citarum Harum program in Karawang Regency, it forms a visualization network as shown in Figure 7 above. In simple terms, it can be said that this study confirms the success of this study is collaboration is not only in the synergistic cooperation of the three actors, the government, the private sector, and the community. However, this study proves that another significant actor in the success of this collaboration is the involvement of the TNI in the Citarum Harum Program in Karawang Regency, Indonesia. This is based on the role of TNI involvement in each indicator of collaborative governance which is more dominant.

## Conclusion

This research succeeded in answering how the involvement of the TNI in government collaboration through the Citarum Harum program. This research has limitations because it was only carried out in the Karawang-Indonesia Regency area. However, this research has succeeded in uncovering the TNI's activities in government programs, by focusing on the perspective of the abortion process, which has not been widely studied so far. The reason is that the involvement of the TNI has proven to be able to optimize collaboration to achieve program goals through the encouragement of active participation and empowerment of industry

and the community in the Citarum Watershed Coordination forum. The TNI exists as the main sector in building trust in government programs, which can generate motivation and compliance of the actors involved. The credibility of the TNI brilliant image in front of it has succeeded in changing the mindset of the community to better appreciate the river as a source of life, manifested by the reduced pollution and damage to the Citarum watershed. As a suggestion, further research needs to be revealed more deeply regarding the dynamics of the implementation of the Citarum Harum program on a wider scale, especially the involvement of *free rider actors* in the scope programs not researched in this research.

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