

# *The Role of Social Capital at Disaster Risk Management, A Public Administration Perspective: Study on Kebon Agung Imogiri Bantul*

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**Abstract**—The 7 degrees Richter earthquake in Lombok which is just happened reminds us of a reality that Indonesia has a challenge as the disaster-prone area. Besides famous as the "ring of fire", Indonesia located on the earth's fault plate. Therefore, Indonesia has a challenge on the mitigation level. Take a lesson by the success of the post-disaster rehabilitation-reconstruction response in Yogyakarta in 2006, this writing would like to find the society pattern on developing the capital social as the main step in disaster mitigation. The capital social concept in the current context will be understood as the communal capital which has the informal institution factor, institutionalized rules, and trust. The three factors will synergize each other to achieve a condition where there is a mutual support to achieve the common goals. This research will focus to find the society pattern as the good social capital. it shaped a network with a rigid structure and cognitive-based, and the society of cultural norm. The social norms will be appeared by the linear linkages with the completion of critical times experienced by the society. This research location will apply in the Desa Kebon Agung, Imogiri district, Bantul-Yogyakarta with the qualitative approach. The result shows that social capital is the one of the capitals besides the education capital and financial capital, that have an important role in the success and acceleration of post-disaster rehabilitation-reconstruction.

**Keywords:** *Public Sector Management; Social Capital ; Disaster Risk Management ; Post Disaster Management; Disaster Mitigation*

## I. INTRODUCTION

Social capital in the philosophical context of looking at humans produces the following conclusions: focusing on relationships that occur between individuals, paying attention to "lines", humans developing through a process of social learning (social learning), humans are multidimensional (not just economic factors), and indicators of capital measurement social is done by looking at norms, beliefs, networks, and reciprocity that are formed in a community. There is a growing relationship between social capital and disaster, the positive relationships have found in case of high level of fairness and trustworthiness with the disaster preparedness [1]

The earthquake that hit Yogyakarta and Central Java in May 2006 left many sad memories. The earthquake that

occurred at 5:40 a.m. in the morning shocked the community so many were victims. At least in Bantul Regency, 119,879 houses were destroyed, and 85,354 houses were damaged[2]. Kebon Agung Village is one of the 75 villages in Bantul Regency. Kebon Agung Village most of the population work as farm laborers. This is evidenced by the size of the Kebon Agung agricultural area which reaches 117,670 ha (64.2% of the total area of the Kebon Agung area) and only 65.44 ha is used as residents' offices and settlements. In 2000, this tourism village was established by the Bantul Regency Government as a tourism and agricultural awareness culture village.

Kebon Agung Village has a distinctive social character especially because it is able to preserve habits including norms, ethics, trust and maintaining social networks. This is an initial indication of strong elements of social capital. This village has the success of good post-disaster reconstruction. At least all of the houses are fully intact and even increase in number after the post-disaster reconstruction program. Success in restoring village conditions is also shown by the return of the economic sector of the community. In particular, Kebon Agung Village has a Tourism Village industry. Kebon Agung Village is currently the top 10 best tourism village in Indonesia chosen by the Ministry of Culture and Tourism. In particular, Kebon Agung Village has a Tourism Village industry. The lost trust of customers had made the tourist village there was no demand and the absence of supporting facilities such as homestays and cultural education tools was also damaged. From the identification of the above locus, it is possible that what moves or becomes an invisible resource of the people of Kebon Agung Village is the existence of social capital.

## II. RESEARCH METHOD

This research is descriptive qualitative. The research focus is on how the social capital role in post-disaster, especially on rehabilitation and reconstruction process in Kebon Agung as Tourism Village, Imogiri, Bantul, Yogyakarta. The data source in this research is primary and secondary data. Data collection techniques in this study include observation, in-depth interviews (In-depth Interview), and documentation.

Analysis of the data in this study using an interactive model (interactive models of analysis) developed by Miles and Huberman[3]. The validity of the data in this study, there are four criteria include the degree of confidence (Credibility), transferability (transferability), dependence (Dependability), certainty (Conformability).

### III. RESULT AND DISCUSSION

#### A. Kebon Agung After Disaster

The hamlets in Kebon Agung were devastated after a severe earthquake struck this area. There were only 27 houses left in Kebon Agung Village. While the total number of damaged settlements in two hamlets due to the earthquake was 278 houses.

Help does not come soon on the first day. People are forced by circumstances to be able to survive critical conditions. During this critical period in the evacuation period all cattle and buffalo came out of the cage, and in the meantime, the cages were used for the stay of children and mothers. The agreement in determining the "shelter" time was also due to other challenges that had to be faced during the evacuation period. The issue of theft and looting is common in other hamlets. The youth member of Kebon Agung was guarding other than the security factor as well as getting food assistance delivered by cars or trucks on Jalan Imogiri. In addition to suffering from physical injuries, survivors also experienced psychological disorders which affected their psychological and spiritual conditions. The catastrophic condition has left a deep psychic wound in the form of psychological symptoms commonly referred to as post-traumatic stress disorder. Symptoms, such as experiencing more traumatic events (re-experiencing) that often manifest in nightmares. There are also symptoms of avoidance (numbing) which manifest in the form of fear behavior and avoid stimuli that are similar to traumatic experiences. It may be that with increased emotional intensity (arousal) that can be seen through frequent anger, irritability, sleep disturbances, anxiety, and high suspicion.

The Crisis and Recovery Center Team (CRC), Faculty of Psychology, UGM reported that 2.5% of the population experiencing mental burden after the earthquake in Bantul had difficulty adjusting to the medium and long-term. This means that approximately 30 thousand survivors will need psychological assistance from the third week to approximately three months later. Furthermore, what needs to be anticipated is 1% of the population or approximately 12 thousand people who experience psychological problems in a longer period. Most likely they came from houses that were heavily damaged or collapsed.

Similarly, what happened to the people of Kebon Agung Village. After the earthquake, the prevalence of psychological problems was high in vulnerable groups, namely victims who suffered injuries or broken bones. The psychological burden they feel decreases endurance (psychosomatic) which affects the longer recovery process or even exacerbates the condition of the disease.

Handling victims of stress due to the earthquake in Kebon Agung Village is indeed not easy. Traumatic experience because the earthquake has shaken and weakened individual defenses in the face of challenges and difficulties of daily life. Especially the conditions of trauma, physical and mental conditions, the personality aspects of each victim are not the same.

#### B. Institutions in the Kebon Agung community: Farmers, Livestock and Religious Groups

Like an agrarian village in general, Kebon Agung also has farmer groups as one of the important institutions that help farmers and farm laborers in maintaining their income. This institution exists because of the need to fulfill the economic needs of the community, most of whom are farmers.

Government subsidies in the form of seeds and subsidized fertilizer are managed by farmer groups. The distribution process is carried out by farmer groups independently. Socialization carried out by the Government also through farmer groups in the community. Therefore, the farmer group is a learning forum and production unit to improve the quality of their agricultural production.

As an institution, the bonds that occur in farmer groups are economic ties where members are attracted to each other and are bound to achieve an improvement in the quality of agriculture which means that it will increase or guarantee economic income for the farmers. One of the agricultural successes in Kebon Agung is the success of agricultural pioneering organic rice. In addition to the higher selling prices, organic farming does not force farmers to buy fertilizer.

In addition to agriculture, the Kebon Agung people also have income from livestock. Farmed animals in Kebon Agung village include cattle, buffalo and goats. The use of buffalo in Kebon Agung is still common to support the agricultural process as a means of plowing rice fields.

The community that maintains cows or goats hopes that this ingenious business will benefit from its sales, especially in the run-up to the Idul Adha. There is no milk production in this area, so only broilers are sold. The same is true for poultry where there are no laying hens in the two hamlets, but only broilers are cultivated.

Religious ritual activities also have a strong bond, because they are related to faith problems that are not seen but are believed to exist. the majority of the people of Kebon Agung are Muslims, prayer is the main thing that cannot be released. In practice, the community performs prayers in congregation at the mosque found in each RT or village. Although not shared by the whole community, it is enough to create a personal touch between the people who live in it. From a social perspective, the ritual of praying together becomes very meaningful because every member of the community is invited to have social interaction with each other.

Unlike the usual ritual prayers that can be followed by all citizens, the Jumatan ritual is only carried out by men who are Muslims. Not in any place this Jumatan ritual can be done. The implication is that residents will meet again with residents

who do not come from just one village and this adds to the close relationship between citizens.

Sripahan or obituary is one of the forces that can force people to gather. The spontaneous motion of citizens, especially close neighbors, to help grieving families can be ascertained very quickly. Without going through a rigid command line, whoever is the closest to the neighbor who is suffering from grief, does the activities he can do to help the burden of the family left behind.

The funeral procession is carried out like villages - the majority of Islam - in Java in general. Starting from bathing corpses, installing tents, preparing burial grounds, and providing food and or drinks for mourners. The grief for the family left behind did not stop until the funeral. Based on the existing traditions, slametan activities were also carried out after the death of a citizen. Slametan is a ritual of sending prayers to deceased spirits. This ritual was attended by people in one village and other relatives who were close to the family they left behind. There are several rituals with a certain period in the slametan, that is, the night after the body is buried, 3 days, 7 days, 40 days, 1 year, 2 years and 1000 days after the funeral. Each ritual has held a prayer together which ends with giving treats both snacks and drinks. Citizens consciously and willingly carry out these things with the simple hope that they will be helped when they are in trouble. This is a form of reciprocity that occurred in the Kebon Agung community.

Nyadran is a tradition where people come to ancestral tombs in Ruwah or before the coming of Ramadhan. Nyadran activities in the village of Kebon Agung do not only perform grave pilgrimages, send prayers to ancestors so that their sins can be forgiven, but also clean tomb activities carried out a week before the grave pilgrimage is carried out.

The grave clean activity is carried out by residents, both fathers, and youth. Starting with cleaning the grass around the tombstone, cleaning the ward to repainting the tomb fence and meeting hall. Because each RT in Kebon Agung has its own funeral area, then all residents have an obligation to participate in preparing nyadran activities in each RT. There are no exceptions including those who do not have ancestors in Kebon Agung. After completing the ritual of sending prayers to help reduce the sins of the ancestors, then each citizen will get blessings in the form of Sego Gurih eaten together. In Kebon Agung Nyadran village is a symbol of the relationship between the community and the ancestors and the Creator.

### *C. Conflict and Resolution*

The anatomy of the conflict that took place in Kebon Agung in was set into three initial propositions. First, conflict occurs between individuals (or families) who have the same interests and compete for scarce resources, namely emergency primary needs (food, blankets, clothing). The scarcity that occurs is not because the quantity or supply is lacking, but the distribution management is messy and the procedure is not clearly standardized.

Second, it is not economic or political resources that are the main contention of the conflicting citizens, but existential resources. Existential resources are understood here as

resources whose existence must be fulfilled because they are a condition for the survival and survival of life, namely food, drinks, and tarpaulin.

Third, the conflict in Kebon Agung Village did not end with the formation of a pattern of dominance-subordination, but a conflict de-escalation because in the end the conflict could be resolved in the two hamlets, each with a different mechanism.

In the process of rehabilitation and reconstruction, the escalation of conflict is seen to be elevated in Kebon Agung, especially when the community members know where the priority order of the recipients is. For some people who still have not received assistance, they still have to be affected by the latest order. But not everyone feels that way. The unspoken protest of the unfairness of the proportion of aid was due to the reluctance of citizens to open conflict because the target of his displeasure was the person he had known so far, namely the neighbor he had known since childhood. Some of them even have family relations. This is consistent with the Magnis-Suseno thesis which states that Javanese people tend to avoid frontal and open confrontation. If there is disagreement with someone, the Javanese will only subtly use it using allegory and wise advice from their ancestors. This relates to Javanese cosmological views that emphasize harmony with God, nature, and fellow humans[4].

### *D. Hidden Strength of Kebon Agung*

In terms of economic rehabilitation, the people of Kebon Agung Village do not rely on the Pokdarwis Institution. Even though this institution, which had existed since before the earthquake, did not contribute at all in the rehabilitation and reconstruction process. Pokdarwis members don't even have the power to breathe in their institutions. Pokdarwis actually suspended animation while the impact of the earthquake was still felt. Pokdarwis which is a source of side income from the community is unable to sustain the needs of the community, both economically and socially.

This can be caused by Pokdarwis activities which are only driven by several people, and unfortunately, the figures in it are not charismatic figures. So those people who feel they don't have a sense of belonging. The Pokmas which was formed as a government effort to maintain the existing bonds in the community was successfully carried out in Kebon Agung Village. This Community Group was formed during rehabilitation-reconstruction by each RT head and consisted of an average of 10 people who were neighbors were 3 of them were the administrators of the Pokmas.

Habits of residents gather to make the processes during the rehabilitation and reconstruction stages a little easier. Community groups in Kebon Agung Village are given the right to conduct a personal survey regarding the conditions of their residence. Community groups in Kebon Agung are not like Community Groups in most other villages that are only used as a condition for disbursing funds. In Kebon Agung Village the determination of the priority of the reconstruction assistance recipients was determined through a village meeting which was attended by all the residents who were certainly in

Pokmas. After identifying the damage to the house of each citizen, it is easier to determine the priority order.

*E. Is there a role for social capital in the post-disaster rehabilitation and reconstruction process in Kebon Agung?*

Social capital in this study is understood as a network formed through communities and social groups - in the language of public management, it is commonly understood as an institution. Own institutions in society can be grouped into two, namely institutions that are equipped with structures in which are known as organizations and institutions that are formed informally that are more liquid, not rigid, institutions as forums which members come but go continue to have institutional dynamics.

Social capital is the basis of civil society and refers to the interactions between formal and informal groups and individuals both internal and external to a community[5]. The conditions of social capital contained in the Kebon Agung are reflected in the 4 classifications of institutions where despite having a different group basis, the social capital bonds that occur form a bridge, where no longer are the groups are rigidly independent and exclusive, but interrelated one another. In particular, analysis can be carried out through the institutional base classifications in both villages:

*3.5.1 Tradition / Religion*

The Kebon Agung community as part of traditional and religious-based institutions views that the disaster that beats them is not a punishment but their loyalty to remain devoted to God.

The networks formed in religious institutions and traditions become one of the strong keys in bond in society. Routine meetings in the community make the value of togetherness formed. Habitual habits create more sharing habits because after they pray for their ancestors and ask for blessings from their ancestors.

*3.5.2 Material / economy*

Farmer and livestock groups are one of the institutions that are also useful in completing the rehabilitation and reconstruction phase. The livestock makes people in Kebon Agung have the pattern of sharing with each other. A good farmer group has an effort to develop the quality of agriculture from the nursery to harvest and the farmer groups in Kebon Agung. Pokdarwis was suspended for up to one year and Pokdarwis had no special meaning in post disaster reconstruction.

*3.5.3 Meeting the needs of feeling safe and comfortable*

Ronda as the only social institution based on meeting the needs of security and comfort in Kebon Agung sees the situation of the rehabilitation and reconstruction phase as an important step in looking at the quality of each person in society. This is because when post-disaster every person needs a condition of feeling safe and comfortable. A good person in the community is a community that can understand and complement each other's functions.

*3.5.4 Identity of member identity*

The habits of the youth to gather Kebon Agung are turned out to be very useful in the rehabilitation and reconstruction

process. As explained above, starting from the process of taking assistance, the establishment of emergency houses, until the reconstruction process is complete, the support of the youth is so great. The phrase that is commonly heard is because they feel they own the village and because they are victims of the disaster, they must return the village together.

As stated in the previous section that is during the emergency response the youth is tried to get help located in the Kebon Agung field to help their families get help while sheltering. This is what creates a unique value for people who have social capital manifested in the form of institutions in society. Social capital - the ties that bind neighbors, friends, and acquaintances together, deepening their trust and making their collective action more likely - works in ways often guided by geography and distance [6].

From the discussion above, it can be identified that social institutions that are in critical condition are not directly and exclusively helping in terms of rehabilitation and reconstruction. Strong ties in community institutions do not always be individual to be in the rigid box of each institution. This is evidenced by the existence of cross-institutional membership, for example, a person who is a member of the Friday prayer congregation, also a member of the Ronda, and tahlilan

The model of social capital in its liquid form makes society in critical condition every boundary box to melt in a whole society without differentiating the institution's origin. This is what is meant by social bridging bridges. Keep in mind that success and courage in the aftermath of the earthquake are due to shared trust everything that can be shared in the community and that values are formed from the network ties in the existing institutions. Social capital has a great potential in disaster preparedness and resilience of individual, community and nations as well. Bonding and bridging social capital allow individuals to receive warnings, undertake disaster preparation, locate shelter and supplies, and obtain immediate aid and initial recovery assistance. Preparedness[1].

The community's social capital and leadership are found to be the most effective elements in both cases in enhancing collective actions and disaster recovery [7]. In Kebon Agung, Social Capital in Communities are able to do the dynamics of prioritization honestly (minimum forgery data), mutual respect (prioritizing the incapable) and patience (nrimo) make Kebon Agung have more value than other villages.

In addition, it can be used to make great pride. This is a form of social capital as a bridge between each group in society. Each group has a role in what is requested by the communal community at that time. When modernity and rationality - to access direct reciprocity in the Bantul community in general and make people reluctant to use their network capacity - the escalation of conflict quickly increases[8]. Social capital is a resource which is embedded in every community and it has been observed that it plays an important role in different stages of a disaster. Social capital can be crucial for a community to survive till outside help arrives, in event of a disaster, and many a time it is the only



resource that the community can mobilize to respond and recover[9].

#### IV. CONCLUSION

Based on the results of the research and discussion that has been done, the following conclusions can be drawn. The village was carried out effectively with the help of social capital as the main strategy for its completion. Pokmas, ronda, Pokdarwis, gejom lesung and karawitan music, RT groups and hamlets, are organizations that existed by the community since before the disaster and disaster as social mitigation for disaster management. Conflicts that occur during emergency response, rehabilitation and prevented from spreading are more widely available because of the people of Kebon Agung Village.

Second, the social aspect becomes a variable that behaves important to support the acceleration of processes and processes. Socio-economic aspects used are indicators, education, environmental conditions, the ratio of productive age, and the number of children attending school. In the constellation of heterogeneous livelihood structures, the reconstruction of houses is carried by the shoulder to shoulder through mutual cooperation and mutual assistance based on expertise.

Third, elements of social capital that support or most of the processes and processes in Kebon Agung Village are elements of religion and a culture of mutual cooperation. The combining base that has a lot of influence on rehabilitation

and reconstruction is by patronage, where people are actively and continuously meet and have more mature interpersonal ties.

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