

# Local Wisdom *Nyadran* as the Social Capital in “*Warung Air Tirto Mulyo*” Community-Based Water Management

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## ABSTRACT

*Nyadran* or *Sadranan* is an expression of gratitude towards blessings given by the Lord Almighty, in this case is river or in Javanese language called as *kali*. Therefore, *Nyadran Kali* is the result of acculturation between religion and local tradition. The local wisdoms are people or community capitals contained local knowledge that worth reckoning as one of the efforts in resolve the environmental problems, one of which is the human needs upon the water availability. Accordingly the purpose of this study is to analyze the “*Nyadran*” local wisdom as social capital in “*Warung Air Tirto Mulyo*” (WATM) water management in Puduk Payung Sub-District, District of Banyumanik, Semarang City. The research design used is case study. This study found the local wisdom values explored from the social value, tenacity, accountability, and belief or trust. The reflections of “*Nyadran Kali*” values bring an organization to have wisdom in think and act to always love God, human, and nature. The values of *Nyadran Kali* could be a main asset of an organization to continue to exist and shows its identity which is unique compared to others and will eventually become an intangible asset that capable of maintaining its sustainability.

**Keywords:** *Nyadran Kali* Tradition, Local Wisdom, Social Capital

## INTRODUCTION

Indonesia is known as pluralistic society, consists of a number of diverse ethnic, cultural and religious groups. In fact, the diversity (plurality) of society is a reality that cannot be ignored and its existence must be acknowledged, moreover the diversity of existing traditions and culture. As an Indonesian nation, we must realize that the diversity of the nation is a reality whose existence must be maintained in the unity and integrity of the nation. Diversity is a normality insofar as its existence is realized and internalized as something that must be addressed with tolerance.

The richness of cultures and local traditions which grow and develop in a society, are known, trusted, and recognized as important elements, actually be able to strengthen social cohesion among community members (Haba, in Purwaningsih, et al, 2016). Functionally social cohesion is able to maintain the environmental situation in order to remain harmonious, both among the human beings and the surrounding natural environment. These local traditions have important meanings and values, including as a reference for the behavior of the people in living their lives, including dealing with differences in interacting with other people of different cultures and religions.

These local traditions are actually expressions of the local wisdom of a community in responding to its environmental situation. Substantially, local wisdom is the values that apply in a society. These values are believed to be true and become a reference in the daily behavior of the local community. These local wisdom values are seen as entities that really determine human dignity in their communities because they contain elements of creative intelligence and local knowledge from elites (figures) and the community.

The characteristics of local wisdom in each region are different. Local wisdom in certain communities can be found in forms of natural resource management as local arrangements that emerged from the past through long history and adaptation (Oktaviani and Dharmawan, 2010). Buwono et al (2017) stated that sustainable management of water resources aims to maintain current and future availability and ensure future availability. The community's dependence on water has resulted in the emergence of local wisdoms related to water and respect for water as a source of life. Setyowati (2012) states that local wisdom is an activity, knowledge, and belief of a community in managing nature that is oriented towards environmental sustainability.

Not only that, a study by Rattana (2019) shows their opinion that the use of local wisdom has a positive effect on economic, social, environmental and natural resource change, and the development of innovation. This policy creates a community mechanism for the utilization of water resources. The output of local wisdom is divided into two aspects, namely the development of local technology for water transportation in agriculture and the process of learning the use of water resources by the community.

In general, local wisdom emerges through a long process of internalization and has been passed down from generation to generation as a result of interactions between humans and their environment. This long evaluation process led to the emergence of a value

system that was crystallized in the form of local customary laws, beliefs and culture. One of the local wisdom values that still persists among the people in Pudak Payung Sub-District is *Nyadran Kali* ritual tradition or river alms. Local wisdom is still being carried out in maintaining the *Tuk Buntung* spring, so that Pudak Payung Sub-District never experiences drought.

From the beginning, local traditions in Indonesia, especially in Java, can be regarded as religious traditions, but in a simple form. The people in Indonesia are very strong in carrying out religious and magical institutions because they think that they will receive curses and calamities from their ancestors if they are violated (Dewi, et al, 2020). Therefore, the existence of this ritual tradition up to this day has been carried out because it was influenced by hereditary traditions. Part of the series in this traditional ceremony is the result of acculturation between religion and local culture. This is what Clifford Geertz says that religion is a cultural system (Geertz, 2015).

Local wisdom or what can be called traditional wisdom, is part of ethics and morality that helps humans to answer moral questions about what to do, how to act (in this case related to the field of environmental and natural resource management). This understanding implies that local wisdom plays a role in developing behavior, both individually and as a group in relation to the environment and efforts to manage natural resources (Widarmanto, in Astriani, et al, 2020). Ranger and Hobsbawm define traditional wisdom as a set of practices, which are usually determined by clearly or vaguely accepted rules as well as a ritual or symbolic nature, which wish to instill certain values and behavioral norms through repetition, which automatically implies continuity with the past. This understanding implies that local wisdom has three dimensions of time (past, present, and future), so that it is possible for efforts to be continuous and concurrent with human life in settings and contexts that

change according to the times (Widarmanto, in Astriani, et al, 2020).

Traditional wisdom that has been crystallized in a customary law, takes the form of a system of norms that embodies values, principles, structures, institutions, mechanisms, religions that grow, develop and are adhered to by local communities, in its function as an instrument to maintain regular interactions between members of society, order relationship with the creator and the spirits who are believed to have supernatural powers and maintain the orderliness of people's behavior with their natural environment.

The *Tuk Buntung* spring is used by the local community as a source of community-based water management called "Warung Air Tirto Mulyo" (WATM). WATM is a community group formed in 2008 to provide clean water for community households in the Puduk Payung Sub-District based on self-help communities that prioritize mutual cooperation and joint deliberations. WATM is one of the community-based water management that is able to develop well. The existence of a spring that is still maintained guarantees the availability of water for Puduk Payung residents even during the dry season (Hapsari and Gunawan, 2022).

The existence of traditional communities is very important to be involved in the conservation of aquatic resources. Traditional wisdom is one of the cultural heritages that exist in the community and has been passed down from generation to generation by the community concerned. The most successful way of conserving or managing natural resources (forests, land and water) is through traditional indigenous peoples who have knowledge, understanding and habits that are able to prevent damage to environmental functions (Setyowati, et al, 2019).

In the context of community-based water management, the characteristics and conditions of human capital and economic capital, social capital are one of the important factors in the success of a

sustainable management program. According to Rustiadi et al (2009) community management capacity in an area is largely determined by the capacity of human resources (human capital) and social capital factors. The study of social capital lies in how people's ability to work together to build a network to achieve common goals.

Every community group always has sources and potential social capital that can be utilized by its members, social life is characterized by interactions between communities that form a relationship (Malinda, and Puji, 2022). Putnam defines social capital as referring to parts of social organization, such as trust, norms, and networks, which can increase the efficiency of society by facilitating coordinated actions. Social capital is that part of social life—networks, norms, and beliefs—that encourage participants to act together more effectively to achieve common goals. (Putnam in Field, 2010).

Thus, the *Nyadran Kali* ritual is a form of local wisdom that is still developing today, understood as a form of preserving the traditional and cultural heritage of the ancestors. The existence of local wisdom that develops in society is a form of social capital that is important for people's lives so that they can coexist well in dealing with various problems in society. Therefore, the purpose of this study was to analyze the "Nyadran" local wisdom as social capital in "Warung Air Tirto Mulyo" (WATM water management) in Puduk Payung Sub-District, Banyumanik District of the Semarang City.

## **MATERIALS & METHODS**

This study was conducted in the Community Association III area of Kampong Muteran, Puduk Payung Sub-District. Pudukpayung Sub-District is one of the largest sub-districts in Banyumanik District, Semarang City. The location of Pudukpayung Sub-District is in the south of Semarang City with an area of 392.93 Ha. Located in the southern area with a distance of about 10.2 km from the capital city of Semarang. The

study conducted was focused on Community Association III area of Kampong Muteran where the "Warung Air Tirto Mulyo" was located.

The method used in this article is descriptive analysis with a qualitative approach. What is meant by descriptive analysis method is a method that functions to describe or give an overview of the object under study through data or samples that have been collected as they are without conducting analysis and making general conclusions (Sugiyono, 2009). In other words, the descriptive analysis method focuses on the problem as it is when data is collected. Furthermore, the results of the data are processed and then analyzed to draw conclusions.

Then for the topic of this article, namely "Nyadran Local Wisdom as Social Capital in Community-Based Water Management at Warung Air Tirto Mulyo" is written by using a descriptive analysis method. The descriptive analysis method was used by author because this writing aims to describes data obtained both from varies references and from field to be analyze later on.

## RESULT

### **Nyadran Kali Tradition as the Form of Local Wisdom**

Local wisdom that is still exist and survived today in society is the *Nyadran Kali* tradition. The *nyadran* tradition has been going on since the Hindu-Buddhist era carried out by the Javanese people, and in Sanskrit *nyadran* comes from the word *Sadra*. Perhaps because of the Javanese people difficult to pronounce it, make *Sadra's* words turn into *Nyadran*. The *Nyadran* tradition is a symbol of a relationship with the ancestors, neighbors, and the Lord Almighty for all the blessings that have been given. In other words, the *Nyadran Kali* traditional ritual is a form of local wisdom that exists in society and a reflection of the relationship between humans, God, and the environment. Meanwhile, local wisdom is the intelligence

of the community in responding to situations in their environment. Like in Puduk Payung community, the *Nyadran Kali* tradition is a form of community gratitude for springs or rivers that have been beneficial to people's lives.

The *Nyadran Kali* ceremony is carried out by Javanese people. In its development, *nyadran* is a ritual pattern that mixes local culture and Islamic values, there is a strong sense of Islamic collaborated with the locality. *Nyadran* or *sadranan* is an example of religious acculturation and local wisdom. Therefore, *sadranan* is an expression of social-religious reflection. Having discussed about rituals of the *Nyadran* tradition cannot be separated from the cultural context. This is due to *Nyadran* is part of the seven elements of culture which are called cultural universals, which consist of (1) language, (2) knowledge system, (3) social organization, (4) living equipment system and technology, (5) livelihood systems, (6) religious systems, and (7) arts (Koentjaraningrat, 1990).

Ritual traditions that exist in various places cannot be separated from several things that deemed magical or supranatural, such as the giving of these offerings. Maybe, for some other people this is considered an act of shirk or not in accordance with religious teachings, especially Islam, but this is done by the people in Puduk Payung Sub-District or other Javanese communities. Javanese society is a unique society in terms of religion and culture. They are not used to contradicting religion and belief. The Javanese believe that there are magical things which according to them are other invisible creatures that roam around living humans. Some of these spirits are beneficial and some are detrimental to humans. Therefore, they must try to soften these spirits so that they become tame, namely by giving various rites or ceremonies.

According to Suyanto, the characteristics of Javanese culture are religious, non-doctrinal, tolerant, accommodating, and optimistic. These characteristics give rise to patterns, traits and tendencies that are

unique to the Javanese people as follows: 1) belief in God Almighty as *Sangkan Paraning Dumadi*, with all His attributes and greatness; 2) is idealistic in nature, believes in something that is immaterial and things that are supernatural and tends towards the mystical; 3) prioritizing nature over formal and ritual aspects; 4) prioritizing love as the main foundation of human relations; 5) believe in fate and tend to surrender; 6) is convergent and universal; 7) *momot* and non-sectarian; 8) tend to symbolism; 9) tend to mutual cooperation, friendly, harmonious, and peace; and 10) less competitive and less prioritizing material (Suyanto, 1990).

Socio-culturally, the implementation of the *Nyadran* ritual is not only limited to the ceremony of cleaning the river, bringing "offerings" or certain foods as a prerequisite in the prayer ritual procession. However, this ritual is also a medium for friendship between families and communities, as well as a medium for social, cultural and religious transformation. *Nyadran* is an expression of social piety where a sense of mutual cooperation, solidarity and togetherness is the main pattern of this tradition (Geertz, 1983). *Nyadran* can be used as a means and media to unite the community, a means of building harmony among human beings. In the *Nyadran* tradition, togetherness is reflected among the community members. Thus, the *Nyadran* tradition can be an accommodation for people who have different social, cultural and religious backgrounds.

Furthermore, the *Nyadran Kali* tradition is a form of human and environmental relations, moreover the *Tuk Buntung* river is a spring that is managed by the residents. Management of natural resources is strongly influenced by the human perspective on the environment. The *Tuk Buntung* River has a special meaning for the people in Puduk Payung, because on the *Tuk Buntung* river, as previously described, there is a spring that is managed by the community to meet the water needs of the Puduk Payung people themselves. This condition makes the

community very grateful for the springs on the *Tuk Buntung* river in their environment. The village or neighborhood where people live and the river are partners who are considered to have the spirit of life, the river is the existence of 'water' meaning life is spirit, and the village is the existence of 'land' (earth) (Hidajat, 2015). Therefore, according to the Puduk Payung community, the *Tuk Buntung* river should be given the *Nyadran* tradition ritual as a unification of a concept of '*manunggal*' or unity to celebrate *urip* (life).

Indigenous peoples identify themselves as an integrated part of the universe in a relationship that is interrelated, dependent, and mutually influencing, because of it is very important to create harmonious, harmonious and balanced relationships to achieve a harmonious atmosphere between humans and their environment (Astriani, et al, 2020). According to the natural way of thinking of indigenous peoples who have a magical religious pattern, the universe is inhabited by spirits who are tasked with maintaining the balance of the structure, mechanisms and rhythms of nature (Nurjaya, 2008). If human behavior becomes greedy, disrupts the balance of nature and is not in harmony with natural rhythms, there will be disturbances, disharmony and upheaval in the universe in the form of natural disasters, disease pandemics, floods, droughts and landslides as a manifestation of the anger of the guardian spirits of nature. This mindset gives rise to prudent, responsible and sustainable natural resource management practices.

### **WATM Community-Based Water Management**

The Community Association (CA) III people's need towards water initially were met by using private-drilled well, Local Water Company (PDAM), and some residents living near springs used springs or the *Tuk Buntung* river (Javanese: *kali*) for their bathing and washing needs. However, the use of drilled-wells during the dry

season, the well water often dry or the water discharge is reduced so that it is not sufficient.

In addition, CA III is one of the distribution areas of PDAM Tirta Moedal. However, unfortunately there are several obstacles regarding the distribution of PDAM water, including inadequate water debit, limited raw water sources, to water that often gets stuck or only flows at certain hours. Not only that, the costs that the community has to pay to pay for the PDAM are quite expensive because they are not comparable to the water supply that is channeled to the households of the CA III community. This has created anxiety and reduced public trust in the PDAM's performance.

Moreover, upon the initiative of one of the residents, Pak Margo, who tried to invite men in the Neighborhood Association (NA) around his house to work together. He proposed to the local community to utilize the spring, manage it and distribute it back to the community. This initiative received a positive reaction from gentlemen in the surrounding environment, the news spread to the CA area. Finally, several people from several CAs gathered and were willing to work together in the water management project. It was then that a community association that manages the spring was formed, named "Warung Air Tirta Mulyo". WATM management is carried out independently by the CA III community. Activities started in 2008 which are social under the auspices of Head of CA with the main focus on managing water for CA III community households with a pipe system. Thus, the formation of the WATM is based on trust, solidarity, and the same purposes in managing the *Tuk Buntung* spring for the community. This is in accordance with the motto of WATM's community-based water management which is "Honesty, Togetherness, and Kinship".

In terms of management, WATM administrators are local people who are willing to join WATM on the basis of a willingness to be socially responsible for helping with the performance of the water

management. Until now, WATM has one water well using the *Tuk Buntung* spring, and five artesian wells have been drilled for operations at several points in the CA III area with up to 392 families in CA III customers.

One of the WATM activities are routine meetings once a month between WATM management. This routine meeting is in the form of community service activities at several operational pumping well points once a month, conducting *sadranan* or *Nyadran Kali* activities, then in the evening after the community service activities, there is held another meeting to discuss various problems that occur in WATM management and discuss the next development of WATM. The community service activities include maintaining pumps, checking pipes or plumbing, and cleaning springs from moss or tree roots. Apart from that, not only routine meetings, the WATM management also holds meetings when there are issues that are crucial in nature requiring joint deliberation.

Image 1.



Source Tuk Buntung Well

### Implementation of *Nyadran Kali* Tradition

The *Nyadran Kali* tradition is carried out near the "Tuk Buntung" spring or river in Puduk Payung Sub-District as an annual ritual in the month of Sya'ban or the month of *Ruwah* on the Javanese calendar. The series of *nyadran* processions begins with river cleaning activities a week before the *nyadran* procession takes place. The cleaning activities were carried out by all members of the local community, including

WATM administrators and the rest of community as the WATM Members. The difference between the duties of the WATM administrators and community members is that the WATM administrators are the core committee for *Nyadran Kali* activities. The duties of the *Nyadran Kali* activity committee include arranging the schedule of activities from start to finish, contacting external parties such as the Sub-District Officials and Bhayangkara Advisory for Community Security and Order (Bhabinkamtibmas). In addition, the duty of the committee is to inform the community when the *Nyadran Kali* activities are held.

A week later, after cleaning the river, on the appointed day, the *Nyadran* procession begins with offerings consisting of seven kinds of flowers, mirrors, combs, and chicken's blood. This is conducted by people who are elders and are considered to have advantages in supernatural matters or are often called caretakers before the residents come.

The next event at around 08.00 in the morning the residents began to arrive in droves. After it was felt that everyone was present including from the government, namely the Sub-District officials, village guards, and village elders who were present, the joint prayer procession began. In the joint prayer procession led by the local kyai or clergyman by using Islamic prayers. After the joint prayer event, the event was continued with a speech by the Sub-District Officials, usually carried out by the Head of Sub-District. The greeting at the end of the activity is followed by a feast or joint meal which is usually called "*Kembulan*". *Kembulan* is a term for eat together from the same place or container by hand. The food and drink available at *Nyadran Kali* can be obtained from each community member who brings various types of food and drink. The *Nyadran* procession is finished when the residents have finished the various foods available, and not infrequently the residents bring some food which is commonly called "*Berkat*" (blessing) because they believe that these foods contain blessings.

Image 2.



Situation of *Nyadran Kali* activity

### The Local Wisdom Values of *Nyadran* as Social Capital for Warung Air Tirto Mulyo Community-Based Water Management

In this study, there are four local wisdoms as social capital in WATM social capital-based water management. The four values are social values, tenacity or persistence, accountability, and belief or trust.

First, togetherness and avoiding conflict. *Nyadran Kali* conducted by WATM administrators and members of the Pudak Payung community in general provides a great opportunity for its members to maintain social contact through interactions that are full of togetherness and a feeling of the same interests. The implementation of *Nyadran Kali* contains social values that prioritize togetherness in achieving common goals. They realized that in essence humans are God's creatures who are given the same position as other humans. Togetherness is manifested in the process of determining the day for *Nyadran Kali* activities which is marked by the opportunity for members to gather together to determine an agreement on planning. Decisions agreed upon by members become the basis for the implementation of *Nyadran*.

Based on the description above, it can be understood that community members are aware of togetherness, a sense of shared responsibility for both joy and sorrow, and good communication. This is a value that is believed to bring a sense of comfort to the members. This is a strong basis for a sense of attachment to joining WATM membership. Joint decisions are things that should be held by a successful organization.

Second, the tenacious value is a reflection of the toughness of nature and environmental conservation. Evidence of the community's tenacity in managing the sustainability of springs is by protecting the environment around the springs such as planting various plants and trees, and the prohibition not to throw garbage in the springs. One type of tree planted is the banyan tree. This tree was planted because the banyan tree is a type of tree that has the potential to protect water and is a type of water conservation plant that can store and bring water closer to the soil surface. Based on this, it can be understood that the community has tenacity in preserving the natural environment. They realize that planting plants and trees is a form of conservation in protecting the natural environment. Therefore, nature conservation is something that should be done to facilitate water supply and also for the sustainability of human life.

Third, the value of accountability is a reflection of good accountability. Even though WATM is water management as a traditional social organization, the funding for all activities in *Nyadran Kali* activities is jointly shared by community members through donations. In particular, funds managed by members are only used to finance *Nyadran Kali* activities and are not used to pay the chairman and other administrators. The funds obtained were used for the operational costs of the *Nyadran Kali* activities. Therefore, withdrawing donations from members requires WATM management to make financial reporting as a form of responsibility.

Fourth is the value of belief or trust. Trust, according to Fukuyama, is part of the background for establishing a relationship that is closely related to cultural roots. In other words, the values and norms are in accordance with the culture in the Pudak Payung community, which proves that there is mutual help, mutual cooperation and community participation in *Nyadran* tradition activities. At all it is not a burden and a problem because *Nyadran* activities

are ancestral activities that must be preserved. Through the values of togetherness and kinship, the Pudak Payung community, which consists of WATM administrators and members, can trust one another. In this case the trust grows and binds between individuals and makes a collaboration that is still ongoing today.

In this tradition, all religions, either Muslim, non-Muslim or *Kejawen* Islam can regulate behavior in everyday life both in carrying out group interests and individual interests. In this case the Pudak Payung community makes this tradition a form of togetherness that exists between them. All religions follow this tradition without exception so that this tradition can bind all of them to remain intact and establish good relations without hating each other.

The findings of *Nyadran's* values in people's lives become their own local wisdom and the identity of a community that always maintains and preserves its culture. The implementation of these values becomes the capital or asset of a community that struggles to show its existence as a society that seeks to protect the sustainability of its environment (Roth, in Niswatin and Mahdalena, 2016).

According to the description above, the society, consisting of WATM administrators and community members are aware of the existence of human nature as God's creation. This essence guides humans to act as a form of gratitude for the blessings given. The value explored is the belief and belief that God is the cause of human existence. Consequently, harmony between God, humans and nature must be maintained.

The ceremony or ritual aims to maintain the balance of the harmonious relationship between humans and their Creator. The religious ceremony or ritual is an activity that is believed to be one of the musts that will determine the outcome of the spring that is used by the community. The community believes that the more harmonious the relationship, the closer God will be to granting every prayer that is said, and will give blessings to human life.

## CONCLUSION

*Nyadran Kali* is a form of local wisdom that still exist and survived today in the community, which is carried out by the Pudak Payung Community. *Nyadran Kali* is one of the local wisdoms that is always maintained by the WATM community and the Pudak Payung community. This study found the values of local wisdom which were explored from social values, tenacity, accountability, and belief or trust. *Nyadran Kali* as one of the local wisdoms of the Javanese people can be seen as capital or an asset because it has values that can be implied for its members with the aim of bringing welfare to its members. Reflection on the values of *Nyadran Kali* brings an organization to have wisdom in thinking and acting to always love God, humans and nature. The values of *Nyadran Kali* can be the main capital for an organization to continue to exist, showing its identity which is unique compared to others and will eventually become an intangible asset capable of maintaining its sustainability.

### Declaration by Authors

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