

# Building Ecological Intelligence on Community-Based Urban Communities

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**Abstract.** This research was conducted in the community of environmentalists called *Kelompok Tani Lingkungan Hidup* (KTLH) Sangga Buana in Pasanggrahan river, Jakarta, Indonesia. This study aims to see how the efforts undertaken KTLH Sangga Buana in building ecological intelligence of surrounding communities to participate in environmental management. The research approach is qualitative with research method of phenomenology. The research subjects consisted of 15 people consisting of KTLH chairman Sangga Buana, Head of RT location of KTLH Sangga Buana, three members of KTLH and 7 people around KTLH. Data collection is done by in-depth interviews, observation and documentation. Technique of data analysis is done through three flow of activities done simultaneously that is data reduction, data presentation, and withdrawal of conclusion or verification. Based on data, it shows that the effort to build ecological intelligence in managing the environment conducted by environment-loving community KTLH Sangga Buana is through socialization and conducting various activities to encourage the participation of surrounding communities in environmental management. The forms of activity include *sedekah bumi*, *sedekah barat*, *sedekah kali*, *seni tutur* and *seni budaya*.

## 1. Introduction

Utilization of natural resources that goes beyond growing capacity, along with the low quality of human resources involved in the management of natural resources and the environment will lead to an ecological crisis [1]. In addition, the exploitation of natural resources based on individualistic-materialistic views has led to conflicts that result in human casualties, environmental degradation and creating a gulf between welfare and poverty [2]. Overcoming the ecological crisis is not merely a technical matter, but it needs to be traced to the spiritual nature of man, his view of life, his awareness of nature to the ecological behavior that keeps the balance of nature.

The dullness of consciousness is rooted from the dullness of the human spiritual aspect in understanding the nature of human relationships with the natural surroundings [3]. The key to overcome these problems required ecological intelligence so that humans are able to arrange a harmonious and sustainable relationship between himself and his environment [4]. Ecological intelligence in the form of understanding and translation of human relationships with all elements and other living beings. Ecological intelligence is as deep empathy and concern for the environment, as well as a critical way of thinking about what is happening in the environment due to our treatment [5].



Ecological intelligence is poured in the form of concrete attitudes and behaviors that take into account ecological capacity, and will give the faithful stance of human friends with nature [6]. The concept of ecological intelligence not only stops at the wisdom of the local community but also includes the concept of science applied in understanding the system environment that is very complex. Therefore, ecological intelligence not only stops at the individual or personal level but must develop into a collective intelligence that will generate a collective awareness of the environment. This is the background of research to build ecological intelligence (ecological intelligence) in community-based urban communities.

Basically, environmental awareness has become a culture that has been rooted in the earth of Indonesia in the form of local wisdom (ecological wisdom), such as the tradition of sea mamai kadio in Bajo society [1] Indigenous communities in West Java and Banten [7]; Baduy indigenous people with *pamali* culture [8, 9]. Tradition *seloko*, *besale*, *tanah peranakan* and *tanah badewa-dewa Orang Rimba* [10]. The indigenous people of Kampung Kuta in Karangpaningal Village West Java [11]

The awareness of the environment is not only dominated by indigenous peoples but also today there is a growing awareness of the environment in urban areas. In urban areas, the emergence of awareness of the environment runs parallel with the increasingly massive environmental issues that marked the emergence of symptoms of widespread formation of community-lovers of environment done by elements of society spontaneously and voluntarily, for examples; Community 1001 books, Indonesia story, Academic share, enlighten the archipelago, Green transformation, Indonesian light up, Jakarta youth community (KPPJ), Indonesian Environmental Care Community (KPLHI), green smile, Teens Go Green "(TGG), Community Care Caring Community (KPPL), *Tunas Hijau* (TH), Community Lovers ciliwung (KPC), *Kelompok Tani Lingkungan Hidup* (KTLH) and so on. Therefore, building community-based ecological intelligence is an interesting study to undertake.

Because of the various limitations, so the focus of this research will be focused on the community of environmentalists who are members of the environment farmer group (KTLH) Sangga Buana located in Pasanggrahan South Jakarta. The research question asked is how the level of ecological intelligence of the community around KTLH Sangga Buana and how the participation of the surrounding community in the activities of environmental conservation.

## 2. Methods

This research was conducted at Sangga Buana Environmental Farmer Group (KTLH) which is one of the community that is active in environmental conservation. KTLH Sangga Buana was established in 1998 with a membership of 80 people headed by Chaerudin (Bang Idin) which located on the banks of the Pasanggrahan river. The research approach uses qualitative research with research method of phenomenology. Phenomenology is a critical research method and explores the existing phenomena systematically so that this study is to develop life experience of a phenomenon in searching for unity by identifying the core phenomenon and describing the experience of daily life, accurately. Phenomenological research focuses on experienced in the consciousness of the individual, called intentionality. Intentionality (intentionality), describes the relationship between the processes that occur in consciousness with the object of concern to the process. In terms of phenomenology, experience or consciousness is always conscious of something, seeing is seeing things, remembering is remembering something, judging is judging something. It is an object of consciousness that has been stimulated by the perception of a "real" object or through remembrance or creativity.

Research subjects are sources that can provide the required information. Research subjects in terms of events, events, and observed situations, as well as informants who can be interviewed. Informants consist of key informants and basic informants (designated informants). Key informants or primary sources are people who have a close relationship with the object under study. While the basic informant is a person capable of providing development / expansion of information data. The research subjects were 10 people consisting of the chairman of KTLH Sangga Buana, the head of RT location of KTLH Sangga Buana, three members of KTLH and 7 people around KTLH. Data collection is done by in-depth interviews, observation and documentation. Data analysis technique is done through three

activities that can be done simultaneously that is data reduction, data presentation, and withdrawal of conclusion or verification. The data in this study consist of: 1) words, either directly or indirectly obtained through observation and interview; 2) documents in the form of written materials, drawings or photographs, files, related to the research problem.

### 3. Results and Discussion

Based on the results of field data obtained information that the community of environmentalists KTLH Sangga Buana aims to save nature that has been damaged by irresponsible people on the banks of the river Pasanggrahan with the motto of saving the remaining. Activities undertaken include tree planting, wildlife protection, banning the disposal of garbage around riverbanks, preservation of springs and old graves and historic objects.

Tree-planting activities begin to cultivate seeds (obtained from various parties) of suitable trees planted on the river banks and then plant them continuously until now. He also managed to convince local waraga to bring tree seeds and plant them together and involve various parties. Then gave birth to various businesses such as goat farming, rabbits and other businesses such as cultivation of honey, making fertilizer and animal feed, fish farming, bamboo tree breeding and waste processing.

The environment-loving community of KTLH Sangga Buana seeks to manage the river-worthy areas to benefit humans and the natural environment by treating rivers according to the river's own right, so that flood impacts along the area can be minimized. All that is done through a social-cultural approach in the form of socialization process to the public understand the importance of preserving nature. Therefore, they have a fairly good level of ecological intelligence characterized by knowledge of the importance of environmental conservation accompanied by real action involved in various environmental conservation activities. The surrounding community benefits either in terms of economic benefits or other benefits. Economic benefits are generally enjoyed by those who are members of KTLH Buana whereas for the community around the perceived benefits is an orderly environment, flood disaster can be minimized and the preservation of river ecosystems.

The effort of Bang Idin (founder and chairman of KTLH Sangga Buana) is highly appreciated by the people, both locally, nationally and internationally. It makes him very influential, not only among Pasanggrahan but other Jakarta communities, Tangerang and even Bogor area on the slopes of Mount Pangrango. His ability to manage the surrounding environment and lead humanly his comrades so as to be obeyed by the surrounding community not only because of his capacity as a champion who has extraordinary physical and mental strength, but also because of his ability to explore and utilize science and innovate and invite traditions Which others do not think of at all. This means Bang Idin has extraordinary intellectual ability besides being noble in order to learn the phenomena of nature, by certainly not ruling out his weak side as a human being.

The efforts to awaken the community either community members or non-members of the community KTLH Sangga Buana conducted by organizing various social activities that can strengthen social ties between people at once to foster ecological intelligence community, the alms of the earth, alms barit, alms times, art *tuturseni* martial. Maintenance of sites and historical objects as well as tree planting activities

First, *sedekah bumi*. *Sedekah bumi* is a joint meal activity preceded by prayers and closed with thanksgiving to God, for the good fortune and the fertile nature. The ceremony is held at a crossroads or open space, held in June to coincide with the anniversary of Jakarta. Funds used for the purpose of this activity are taken from KTLH Sangga Buana's cash and help from various parties that become partners. After the procession is held, then in the evening or evening there will be a Betawi leather puppet show dedicated to local people so they will love their ancestral art.

Second, *sedekah barit*. *Sedekah barit* is similar to the alms of the earth and performed alternating hoses with earth alms. This activity is done by eating together in a march. Side dishes and rice are eaten placed on banana leaves elongated, participants sitting face to face make a line of enjoying the dishes placed on the banana leaf.

Third, *Sedekah kali*. *Sedekah kali* is the activity of releasing a number of fish to Pasanggrahan river so that the availability of fish at that time is not reduced and residents can fish at that time for free. This activity is done every month by Bang Idin and friends.

Fourth, *Seni tutur*. Bang Idin on various occasions gives speech art to children, youth, and adults who are the members of his target group. The art of speech in question is the oral narrative of the chivalry stories of princes and magnates of Padjadjaran. It is shown that society, especially the younger generations do not forget the roots of history and can imitate the role models of the characters of the story told. The community participation in those activities is generally quite good, although it is still dominated by members of KTLH Sangga Buana. The surrounding communities are also involved in the event, especially for those who do not have busy during the activity.

#### 4. Conclusions

Ecological intelligence is the understanding and translation of harmonious relationships between human beings with all the elements and other living beings in the form of deep empathy and concern for the environment. Ecological intelligence is also called local wisdom with ecological insight that local wisdom (local wisdom) refers to the human effort by using his sense of cognition (acting) to act and behave towards something, objects, or events that occur in a particular space based on the understanding of ecological concepts.

To build the ecological intelligence of the community in addition to formal form through formal education such as schools, can also be done through non-formal education through community activities. One way to build ecological intelligence through civic activity is to optimize the role of community groups called community.

One of the communities that is engaged in environmental conservation is the Sangga Buana Environmental Farmer Group (KTLH). Increasing the role of communities through socialization and socio-cultural approaches can improve the ecological intelligence of the community. The level of ecological intelligence of the community is characterized by an understanding of the importance of environmental conservation and real action in everyday life. This one is shown by the participation of the community in various social activities organized by KTLH Sangga Buana which includes sedekah bumi, sedekah barat, sedekah kali, seni tutur and martial arts.

#### References

- [1] Utina R 2006 *Kecerdasan Ekologis Dalam Kearifan Lokal Masyarakat Bajo Desa Torosiaje Provinsi Gorontalo* (Prosiding Konferensi dan Seminar Nasional Pusat Studi Lingkungan Hidup Indonesia Ke-21 13-15 September 2012 di Mataram. ISBN; 978-602-18848-0- 5) pp 14 – 20
- [2] Armawi 2013 *Jurnal Manusia dan Lingkungan* **20**(1) pp 57-67
- [3] Rusli Lutan 2009 *Pengaruh Outdoor Education Terhadap Peningkatan Kesadaran Kelestarian Lingkungan Alam dalam Laporan Penelitian Strategis Nasional Anggaran Tahun 2009* (Bandung: LPPM UPI Bandung)
- [4] Goleman D 2009 *Ecological intelligence: how knowing the hidden impacts of what we buy can change everything* (New York: Broadway Bussines)
- [5] Jung C G 2010 *Ecological Intelligence* available at <http://jungianwork.wordpress.com/2011/02/10/on-alchemy-c-g-jung-and-ecological-intelligence>
- [6] Sternberg R J 2004 *Handbook of Intelligence* (Cambridge: Cambridge University Press)
- [7] Maryani E dan Ahmad Yani 2004 *Jurnal ISSN 1412-565 X*
- [8] Raden Cecep Eka Permana 2011 *Jurnal Makara, Sosial Humaniora* **15**(1) pp 67-76
- [9] Suparmini dkk 2013 *Jurnal Penelitian Humaniora* **18**(1) pp 8-22
- [10] Takiddin 2014 *Jurnal. Sosio Didaktika* **1**(2)
- [11] Tia Oktaviani Sumarna Aulia dan Arya Hadi Dharmawan. 2010 *Jurnal Transdisiplin Sosiologi, Komunikasi, dan Ekologi Manusia* **4**(3)