Community learning centre in improving disasters awareness through environmental education

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Abstract. The Community Learning Center is a non-formal education program that aims to expand the reach of education in the community by involving community participation. Environmental education is one of the materials given to students in this centre. This can be an opportunity to increase community disaster awareness especially in relation to floods disaster that often occur in the area. The purpose of this paper is to find out: (1) Strategies to increase the role of community learning centre in improving disaster awareness through environmental education, (2) Environmental education that can be utilized in increasing disaster awareness in community learning centre in East Jakarta, (3) Factors supporting and inhibiting strategies for improving disaster awareness through environmental education at community learning centre.

1. Introduction
Flood is a natural disaster that has the potential to damage and harm human life. In Indonesia, flood and its problems have not been resolved completely, even this problem indicates that it is increasing, both in intensity and frequency. DKI Jakarta is a province that is prone to flood in Indonesia. In line with the turnover of time, the dynamics of development in DKI Jakarta are developing very fast and the population is dense to very dense, urban spatial planning that does not heed the environment, has high rainfall intensity, is drained by 14 rivers, the land for rainwater infiltration is increasingly narrow, and land many farms are converted into built-in land, for example in the form of apartment construction, residential land and facilities, which then affects the distribution of diversity on various characteristics of floods and flood target areas in DKI Jakarta.

Floods in DKI Jakarta in 1996, 2002, 2007, and 2013 could be categorized as national and regional floods because the floods were the widest distribution, and the number of victims died more than in the previous year. The flood period mainly occurs in February except in 2013 (January 17-20) because in February this equatorial or inter-tropical convergence area is just above the surface of Jakarta's land and waters which has the highest temperature with large water evaporation. This condition has triggered high intensity rain and long rain times which are thought to be the cause of heavy rain in the lowlands of DKI Jakarta. Many floods in DKI Jakarta have hit settlements. Heavy rain falls on hardened ground as a settlement facility and is located in rather steep (upstream) or landau (middle), to flat (downstream).

The impact of the flood can be felt by the people of DKI Jakarta, especially in the three aspects of the life of the city community, i.e. 1) social aspects where community activities are disrupted; 2) economic aspects that can hinder the distribution channels of goods and movement or mobility of the city community which requires timeliness and transportation costs; 3) environmental aspects that can damage infrastructure, sanitation and cause various diseases for flood-affected communities such as skin diseases, and stomach ache related to the quality of dirty water. Disasters cause a lot of damage and
change for people who are victims. Efforts to build or enhance the potential for resilience in the form of communities are very important.

One way to establish a community that is aware of the disaster is by empowering the community through participation in non-formal education. Non-formal education is one institution that plays a role in the development of human resources through empowerment in the community. Non-formal education is usually practical and special and the education takes place is considered shorter. The teaching and learning process for non-formal education itself can be carried out in various places that already exist both government, community and private, such as training centers, village halls, places of worship, school buildings, home residents and other places that are feasible.

One form of non-formal education is education services for the community or better known as the Community Learning Center/Pusat Kegiatan Belajar Masyarakat (PKBM). Law Number 20 of 2003 concerning the National Education System recognizes that Community Learning Center is a Non-formal Education Unit. Community Learning Center is an institution that aims to empower the community, improve the quality of life of the community both socially and economically. According to [1] he purpose of Community Learning Center is to explore, grow, develop, and utilize all the potential that exists in the community itself. Community Learning Center conducts learning activities, guidance, and skills training.

This paper aims to examine 1) Strategies to increase the role of community learning centre in improving disaster awareness through environmental education, (2) Environmental education that can be utilized in increasing disaster awareness in community learning centre in East Jakarta, (3) Factors supporting and inhibiting strategies for improving disaster awareness through environmental education at community learning centre.

2. Literature Review

2.1. Community Learning Center (PKBM)

Non-formal education programs are carried out in places provided by the community that make it possible to carry out the learning process. The place of learning accommodates a variety of non-formal education service programs called the Community Learning Center (PKBM) which the management is carried out by the community themselves. Through the learning program at Community Learning Center, non-formal education seeks to empower the community as a manifestation of participation in the preparation of competitive human resources [1].

Community Learning Center is a forum for various community learning activities directed at empowering the potential to drive development in the social, economic and cultural fields. Community Learning Center is formed by the community which belongs to the community, and is managed by the community to expand the service of learning needs of the community.

Community Learning Center is a place for community learning activities focused on community empowerment through education in accordance with the learning needs and potential of the community in achieving educational, economic, social, and cultural progress [2]. Community Learning Center as an outside school educational institutions or community education and learning forum and by the community is called flexible because there are opportunities for the community to learn what the community needs.

According to Giddens [2] things to consider in determining Community Learning Center goals, i.e.:

a. Reducing community dependence on the government directed at community self-reliance in increasing knowledge and skills to develop the family and community economy

b. Community Learning Center develops programs and involves and utilizes the potential of the communityS

c. The potential that exists in the community that has not been explored so far will be able to be extracted, grown and utilized through a persuasive approach

d. The program carried out is directed at developing knowledge and skills that are in accordance with the needs so that they can improve the family economy
e. Motivate people to participate directly from planning, implementation, evaluation.

In general, Community Learning Center is formed with the aim of learning the learning community so that they have the skills, knowledge and attitudes by carrying out 3 (three) activities, i.e. serving, fostering, and fulfilling the needs of the learning community, in essence, human resource development (HRD).

Community Learning Center is a center for community learning activities, managed by the community to serve community education that aims to improve the quality of life as early as possible. Community Learning Center as a forum for activities for non-formal education. Characteristics of Community Learning Center based on the community [3], i.e.:

a. Formation initiatives from the community
b. Management of program implementation is carried out by the community
c. Planning and program determination starts from the experiences in the community
d. The implementation of the program is prioritized using the potential and resources of the community
e. Funding is sought from sources in the community
f. Strategic goals and according to community agreement
g. Involve government agencies and non-governmental organizations as work partners in the implementation of their activities programs
h. Providing educational services both individually and in groups
i. Program implementation is based on efforts to improve the quality of human resources
j. Have a facilitator or assistant
k. Availability of learning places and facilities
l. Availability of information and documentation

2.2. Environmental Education
This paper will elaborate on the concept of prevention of disasters. In relation to disaster and risk, public wisdom has taught that preventive measures are very strategic to avoid the impact of disasters and greater risks through environmental education. Environmental education is defined as "the process of developing world citizens who are aware of, and concerned with the environment as a whole and the problems associated with it, and who have the knowledge, expertise, attitudes, motivation and commitment to work individually and collectively to find solutions to problems that are happening and prevention of new problems [3]. Environmental education is given to everyone for all ages and at all levels.

Environmental education can be provided in non-formal education, i.e. education organized not through formal schooling or institutionalization, where knowledge, expertise and values are taught by family, friends or close friends, or members of a community. In general, non-formal education is usually carried out by non-governmental organizations (NGOs) that care about the environment [4].

3. Methods
A literature review or narrative review is a type of method in this article. A literature review is a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic.

4. Results and Discussion

4.1. Strategies for Increasing the Role of Community Learning Center in Increasing Disaster Awareness
The strategy to increase the role of Community Learning Center in raising awareness of disasters, especially floods in the East Jakarta region, can be done by delivering environmental education material by Tutors who place more emphasis on practice by using the lecture method, question and answer, and demonstrating for participants who study environmental material. This varied method is a method that
can be used to implement a plan that has been prepared in the real activities of the learning objectives that have been prepared optimally. The Lecture Method is to convey information verbally, both formally and directly for 45 minutes or informally and only takes 5 minutes. In relation to learning, lectures are teaching methods in the form of narrative material spoken orally. The demonstration method is a teaching method that uses demonstration to clarify an understanding or to show how to do something for students. The question and answer method is a teaching method that allows direct communication that is two way, because at the same time there is a dialogue between the teacher and the students.

4.2. Environmental education that can be utilized in increasing disaster awareness in community learning center in East Jakarta

Environmental education that can be provided to stimulate awareness of flood disasters. First, facilitation for awareness of communities that their perceptions and attitudes and the actions or treatments they have applied so far to the environment and natural resources, both at individual and collective levels, may have contributed to the creation of global scale environmental damage and disasters (global warming, climate change, and so on). This is necessary because often the impact of an action on the environment and natural resources is visible and appears in a relatively long period of time.

For example, many people do not need to care about how they dispose of garbage, whether it is dumped into rivers, drains, sewers, or collected & transported by garbage workers. They will only be aware of the risk of artificial after an event of landslides in a landfill that claimed human lives. Even the government (regional) tends to always be slow in creating safe and sustainable waste management.

Second, a public campaign that continues to evoke understanding, awareness and reflective attitude of communities that the global environment is actually experiencing a crisis. All communities must be invited not only to understand and realize but also to act in the context of the sense of crisis. More strong and more valid scientific evidence about global warming, should have made communities aware that all communities of the world are facing the same global environmental crisis. These public campaign efforts have actually been carried out by many parties involving activists, environmental organizations, governments, and other environmentalists, and need to be carried out in a steady and sustainable manner.

Third, training the communities through various methods to develop reflective power, i.e. a form of ability not only to realize and understand the causes and consequences of the global environmental crisis, but also to develop individual and collective capacities to find solutions to various problems that are occurring and possible problems. Such activities need to be carried out continuously by various training institutions and NGOs that care about environmental issues.

Fourth, the creation of enabling setting for communities to want and dare to enter the realm of political engagement in order to guard and control various 'anti-environmental' public policies. Communities must be encouraged to always articulate, discuss, and aggregate concern and partisanship towards the environment into other forms of collective action to advocate for public policy and environmentally friendly legislation. The efforts that have been pursued by activists and environmental organizations are more on forms of advocacy when environmental risks or disasters have been created, such as floods, landslides, and so on. Activists and environmental organizations need to make efforts to create conditions that support this political involvement, so that even if they do not have to be mobilized, communities can immediately take collective action if needed. For example, if communities find "anti-environmental" public policies, they can quickly carry out advocacy actions themselves, even without the support of environmental organizations, to the authorities.

4.3. Factors supporting and inhibiting strategies for improving disaster awareness through environmental education at community learning center

There are two factors that need to be considered further in the context of efforts to increase disaster awareness through environmental education in Community Learning Center, i.e. internal and external factors. Internal factors, the interests and motivations of the learning communities, the availability of learning resources to be a supporting factor, motivation arises from the learning communities because the people learn to want a better life change [5, 6]. As for those who become obstacles to activities in
terms of time which often coincides with other activity schedules such as work schedules of the students. External factors, lack of understanding and creativity of Community Learning Center managers so that they are unable to take advantage of the potential in the Community Learning Center [7, 8].

5. Conclusion
Environmental education can be given at Community Learning Center by focusing more on material regarding disaster. Environmental education is directed at strategic actions on several levels. In the realm of cognition and awareness, communities need to always be facilitated to gain an understanding and knowledge of environmental conditions and natural resources that are increasingly critical and are in a "crisis". Such knowledge and awareness will encourage them not to create treatments that are "business as usual" towards the environment and nature. In the realm of attitude and behavior, communities need to be encouraged to have reflective power; an ability to understand the problems around them and overcome them independently. In the realm of collective action, communities are always invited to be more active and courageous in involving themselves in various forms of political engagement, because the destruction of natural and environmental resources on a large scale is often caused more by public policy practices that tend to be anti-environmental [9, 10].

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