

# Strengthening the Role of Local Institutions in Protecting the Environment of Mount Lawu Areas for Tourism Purposes

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## Abstract

Strengthening the role of local institutions in protecting the environment of Mount Lawu areas is become an important thing that has to do by local government together with local people, especially to increase the value of local resources for tourism purposes. This suitable to encourage young generation to protect and manage their environment so that the function of the environment can be sustained and promoted to tourists. Presently, many local people are not aware of their enviroment. Many activities tend to destruct and exploit the environment. If such condition is being allowed, then, tourists and young generation will not have a chance to enjoy and experiance the beauty of the environment. Based on the above statement, this study is done to explore in detail how local people in Mt. Lawu through their local organization tried to protect their very useful and worthfull environment and promote it as tourism assets.

## Keywords

Mt. Lawu; local agencies; environmental condition; the role of the people

## INTRODUCTION

In the Law of the Republic of Indonesia Number 32 of 2009 on the Protection and Management of the Environment stated that the environment is a unity with all things space, power, state, and living creatures, including humans and their behavior, which affect the nature itself, the continuity of livelihoods, and the well-being of humans and other living creatures. While the protection and management of the environment is a systematic and integrated efforts are being made to preserve the environment

and prevent pollution and/or damage to the environment that includes planning, utilization, control, maintenance, supervision, and enforcement.

According Wisegeek (2013) environmental management is “a process that industries, companies, and individuals undertake to Regulate and protect the health of the natural world. In most cases, it does not actually involve; managing the environment,

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but rather is the process of taking steps and promoting behaviors that will have a positive environmental impact on how resources are used and protected". In order to survive, environmental function sustainably needed their protection and management wisely. Environmental protection and management seriously need a power institutionalized so as to demonstrate solidarity and togetherness. An agency has the power to synergize the resources of the community in order to achieve a goal. Thus, the existence of institutions, both local, national and international levels is essential for the protection and management of the environment. The local agency is a unit that is dynamic and growing life in the community and has a range that includes administration as the smallest village. Therefore, the existence and role of local institutions particularly relevant to reach across lines and regions due to the very limited capacity and capability of formal institutions.

Lawu Mountain area is an area prone to impacts that require appropriate management and earnest. Protection and management of the area of Mount Lawu which lately is getting worse and has created an imbalance of the ecosystem and has even caused many disasters such as landslides, floods, and droughts that disrupt the lives of the public at large. Hence, proper management of these areas can be done by implementing various local institutions particularly to strengthen the role of local institutions in this matter.

Based on the above condition, the research on strengthening the role of local institutions in the protection and management of the environment in the area of Mount Lawu have a high urgency and significance.

### Local Institutions

Basically an institution is the crystallization of the actions and the guiding principles that serve as guidelines for living that point to a pattern of behavior which is steady, stable, structured, and well-established. The function of an institution include: (1) guidance to members (community) to behave in re-

lation to subsistence, (2) maintaining the integrity of members to keep the principle of integration in society, (3) provide guidance to members in conducting social control (Wrahatnala 2013).

Every community has their own interest, roles in the city and society, which usually determine its development inclines and goals. Community participation usually refers to a policy-making process that is made via the official or unofficial cooperation among the professionals, family member, the community organization, and the administrative officers (Healey 1998; Adano et al. 2012). The achievement of the community participation is related to the awakening and rising of the sense of community from local residence. The sense of community is the pre-condition of the community participation and the participation can encourage the residents to deeply consider how to combine their personal interest with the future of the society and economy, thereby improving the quality of the community participation.

The local agency is a local-level social institutions that stand between people in private life with the environment, which was not only instrumental regulates the life of the community alone, but also have a very important role for the economic growth of a society (Sallis 2012; Lawlor & Olander 2010; Taylor & Van Grieken 2015). The local agency has many roles, including a role as a power resource regions, both in urban and rural areas so helpful in optimizing the success of development including environmental development. Therefore, the necessary synergy to build the network construction coordination between all local institutions (Lopez 2007; Mutenje et al. 2011; Gupta et al. 2010).

Uphoff in Widiono (2011) emphasized the importance of the organization rather than institutions. He said the organization is more modern, while institutions tend to be traditional. Local institutions include institutions in the public sector, the voluntary sector, and the private sector. In addition, institutions that live and thrive in society is dynamic and complex. Kind was developed in accordance with the dynamic needs of

the community. Based on the dynamics and complexity of the institution can be divided into two groups, institutions and organizations. Institutions have the following characteristics: demand-oriented, role played, ceremonies, social supervision, recognition, support, hereditary tradition, empirical, adhering to the norms, the priority age, and prestige. While the organization has the following characteristics: a goal-oriented, tasks performed, procedures, regulatory oversight, due recognition was formally established, conceived and realized, their loyalty and attachment to the objectives, priorities on competence, and is a means to achieve certain goals.

In addition, the local institutions in the society is also divided into traditional institutions/customs and traditional institutions instead. Traditional institutions established by hereditary system by the community. While the agency is not traditionally the formation of a new generation (not hereditary) or the result of a build from outside the community, such as KUB (Business Group), Forest Farmers Group, LMDH (Forest Village Community Institution), and the like, although the shape is partly still traditional because it has not has a management structure as modern institutional.

Local agencies do not always have a formal structure, but always seeks to disseminate the values and rules of the institution, so that local institutions can be internalized continuously. Internalization of local institutions in the community related to the knowledge or local wisdom which is the totality of knowledge and skills possessed by the community in a certain geographic area that enables them to reach and organize their natural environment.

### Environment

The living environment is the unity with all things space, power, state, and living creatures, including humans and their behavior, which affect the nature itself, the continuity of livelihood, and welfare of human beings and other living creatures. While the protection and management of the environment means a systematic and integrated un-

dertaken to preserve the environment and prevent pollution and / or damage to the environment that includes planning, utilization, control, maintenance, supervision, and penegalan law (Law of the Republic of Indonesia Number 32 of 2009 on the Protection and Management of the Environment).

Environment provide resources for human activities but all human activities in utilizing resources to subsistence and development will produce a range of both solid waste, liquid, or gas (State Ministry of Women Empowerment 2006). According Wi-segeek (2013) environmental management is "a process that industries, companies, and individuals undertake to Regulate and protect the health of the natural world. In most cases, it does not actually involve; managing the environment itself, but rather is the process of taking steps and promoting behaviors that will have a positive environmental impact on how resources are used and protected".

The living environment is a complete system, the collectivity of a series of subsystems interconnected, interdependent and functional with each other, thus forming an intact ecosystem. According to Capra (2001) with such a systemic understanding the environmental decomposition into components and parameters, as well as the analysis that follows the description should reflect the linkage components and environmental parameters are inseparable from the other. Therefore, the social environment is considered to be part of the environment hidup is the area that is the venue for a variety of social interaction between different groups pranatanya along with symbols and values, as well as related non- natural environment and the built environment (spatial). Theoretically managing social environment can be interpreted as an attempt or a series of actions with mempertmbangkan (a) resistance sosial (social institutions): (b) the state of ecosystems, (c) spatial, (d) social qualities, (e) social resources, (f) conformity with the principles, purposes and goals of environmental management.

Schematically components of the environment can be described in three as-

pects, namely natural (natural aspect), social (social aspect) and the target (build aspect). Although there are three aspects, but in practice each category can not simply be examined in each partial aspects, because three is an integral unity, called ecosystems (Soetaryono 2000; Conrad & Hilchey 2011; Gómez-Baggethun et al. 2012).

### **Mountains Region and the Environment**

The results of Earth Summit in Rio de Janeiro in 1992 resulted AGENDA 21 in which one of its chapters, namely Chapter 13 outlines the Managing Fragile Eco-systems: Sustainable Mountain Development. It shows that the mountainous region and its management is very important so as to get the attention of its own on the world stage. As an ecosystem, a mountainous region includes a collection of biological resources and non-living. Resources of mountainous areas can provide a variety of benefits, among others as the “water tower” of nature, habitat biodiversity, forest resources, traditional knowledge and cultural center, and as a tourist attraction. Various strategic value that is owned by the mountainous region to encourage the importance of maintaining and managing the mountainous region as a sustainable resource.

In connection with the mountainous region, Kimoto (2003) highlighted the lack of government attention to the fragile mountain ecosystem impacts despite the mountainous region is a source of life for the people under it. He also mentioned that “Generally, Governments develop policies and laws for lowland areas, without taking into account the fragile environments of mountains, nor addressing the particular needs and concerns of mountain people ... Although mountains occupy one-quarter of the world’s landmass and one in every ten people live in mountains. “

In line with the above statement, one of the research recommendations Harris (2000) stated that the massive environmental damage, including environmental mountainous areas, need to immediately get intensive treatment of various parties

in an integrated manner. Environmental damage continues to occur in many places, although the international community has given considerable attention to the efforts of environmental preservation through various programs (Agrawal 2010; Clements et al. 2010; Glaas et al. 2010).

This study was conducted in the area of Mount Lawu, Karanganyar. The area of Mount Lawu is an area that is sensitive and lately has suffered environmental damage. This condition has a negative impact on public life, such as increased flooding, landslides and even drought in the dry season.

The implementation of the research conducted over nine (9) months of the effective year starting of preliminary survey, data collection, processing / analysis of The informatnts include as the Environment Agency (BLH) Karanganyar, Section Forest Management Units (BKPH) Lawu North , Community Development Agency (BAPER-MASDES) Karanganyar, Bengawan Solo watershed Research Center, Center for Water Management (WRM), Forest Village Community Institution (LMDH), as well as the Government District and the village government related.

### **Geographical Setting**

Lawu Mountain area is located at the southern border of Central Java and East Java. Terebut region has a variety of potential resource to be used and managed wisely to meet the needs of society. Some research on the area of Mount Lawu been done. Research Sutarno (2005) regarding the potential mountainous region, particularly of Lawu show that has a unique physiographic and flora and fauna which are endemic. Diversity of flora and fauna of terrestrial Lawu showed abundant wealth of plant species, comprising 150 species Spermartophyte (Angiorspermae and gymnosperms), 77 species of Cryptogamae (Pteridophyte / nail / fern and Bryophyte / moss / mosses). This is partly due to the high humidity in the forest that can be a fertile place for the growth of mosses and lichens.

Research Court (2006) about a po-

tential area of Mount Lawu has focused on identifying the wealth of avifauna (birds) Lawu which consists of at least 51 species of birds that can be found in the region. According to the observation, the potential avifauna can be developed into a very attractive tourist activity known as birdwatching, especially for special interest tourists. Rating of this type generally keen for adventure and witness the peculiar fascination local areas such as birds and other endemic flora and fauna. Research done by Sutarno (2005) is more focused on the physical potential Lawu, both concerning the flora, fauna and soil conditions. All research has not been paying attention to the role of local institutions in protecting and managing the environment in the region. Presently there are many local agencies that have various roles, among others, in supporting the environmental protection and management. The non-profit institutions, namely OISKA has several environmental programs, including a program to make the environment remain stable, particularly in relation to the function of the environment for the wider society. In many villages in the area of Mount Lawu. There are groups of farmers in Mount Lawu such Barokah Tani, Tani Marsudi, Grace, Ngudi fortune, Makmur Kismobudoyo, Maju Makmur, Tani Makmur. In addition these local groups are also contributing to the protection and management of the environment in the area of Mount Lawu. Such institutions include the Children Lawu (AGL) and Kijang Lawu, which is a group of nature lovers. Other local institutions that contribute to the rescue efforts as well as the protection and management of the environment in the area of Mount Lawu is a forest village community institution (LMDH).

Internal barriers related to the need of strengthening the role of local institutions in the protection and management of the environment in the area of Mount Lawu was actually because of the condition of Mount Lawu areas tend to damage. Some reasons were lack of awareness and commitment of the community members, lack of members' knowledge about the important role of environment for their living, lack of funds

to keep the environment preserve, limited fund for supporting and strengthening the local institutions in the conservation activities. Other internal constraints such as limited facilities support for conservation the environment, lack of agricultural land so that many local people did the cultivation in any empty land, etc. Those, then led the destruction of some areas in Mount Lawu and the surrounding. The most frequently natural disaster happened in this area is land slide especially during rainy time. There were many accidents due to this phenomena calamity. Therefore, through this reaserch, the researcher tried to encourage local people to hand in hand presering the damage environment.

While, there were also identified some external barriers related to strengthening the role of local institutions in the protection and management of the environment in the area of Mount Lawu such as less intensive implementation of government programs for the protection and management of the environment, lack of regulations relating to environmental management, weak enforcement of laws or rules, lack of training on the environment from the government and related agencies, and many private companies outside Mount Lawu that had exploited the environment.

Several attempts were made to overcome the obstacles, such as both internal resistance and external constraints, made coordination between all the elements of stakeholders, organized campaign environmentally conscious, providing environmental education and related training in order to sharpen the implementation of the principles of environmental management, and built partnerships with other local agencies for any kinds of conservation and preservation. There also very unique program stipulated by local government, i.e. that Implementation of environmental awareness campaigns among others is an obligation. The local government required two trees for those who will get married to be plant in certain area in Mount Lawu. This program is good for increasing people to be more aware towards their environment. Beside, this

program is also addressed to make green of their environment. Another program is empowering farmer groups in organizing environmental campaigns such as making flyers to distinguish the type of plant and create farmer groups membership.

The other programs and activities that have been implemented by various local institutions in order to support the efforts of environmental protection and management in the Gunung Lawu area are tree planting, picking waste, simple waste processing, construction of Garbage Bank, promoting environmental hygiene (clean environment of garbage), Energy-saving movements, environmental pollution control, environmental destruction control, environmental education, training for children in schools, water control, agriculture and plantation processing, environmental counseling by government agencies, use of manure, protection and environmental management by LMDH, Improvements to the village environment (by Karangtaruna), weekday work and flower planting along roads.

Some expectations of local institutions in the protection and management of the environment that was successfully collected during the Focus Group Discussion done by the researcher were as follows: non-profit organizations OISKA hope that the government can increase its role in environmental protection and management efforts. The approach of community group participation in this research has capable for mobilizing resources as needed, while preserving environment is a process of accepting environmental change. Thus, community group participation in conservation of environment is the process of community involvement in the effort to maintain the existence of environment so that it can be realized the preservation of sustainable environment.

In Mount Lawu, some of the community groups of people stated their desire in the focus group of discussion which mentioned in the following: 'Barokah' (farmer group) hoped that through various programs of environmental protection and management the agricultural land in the area of Mount Lawu done by our researcher could be used

to keep the agricultural land fertile. Another farmer group called 'Marsudi' also mention that most of the farmers in Mount Lawu expected to own agricultural land instead of renting like what they had already done in this time. 'Anugerah' farmer group hoped that some of their environment which already damaged due to land exploitation could be returned to the ecosystem. They also want to have chance to cultivate their land to become agricultural land. 'Ngudi Rejeki' farmer groups expected their local regulations (Perda), specifically to reinforce the greening program done by government as well as the involvement the villagers in the program so that they could work and coordinate in the framework of environmental protection and management. Nature Lovers group, 'Anak Gunung Lawu' (AGL) expects that the preservation of Mount Lawu has to be given more attention, especially in terms of managing the waste caused by the unconsciousness of Mt. Lawu climbers in preserving their environment. It was necessary to appeals and create rules to manage the garbage, so that they can be brought back by the climbers down and thrown to the main garbage provided by local government. Besides groups of nature lovers also expects that all parties and stakeholders to help to raise awareness of the climbers especially about how to preserve the environment. Forest Village Community Institution 'Sekarjingga' hoped that travelers who camp in the top of Mount Lawu were requested to be more concerned about the environment primarily in managing the waste. 'Makmur' farmer group Kismobudoyo given suggestion to researcher that the government has to prepared in giving a good seed to the farmers. By doing so, the government could provide some improvement and increase the wealth of the people. 'Maju Makmur' farmer group expected that the farmer groups are encouraged to have various activities supported by the government, such as making some traditional crafts, preserving traditional culture and tradition, making traditional culinary, etc. for tourism purposes.

'Tani Makmur' farmer group also hoped their efforts to continually advance or

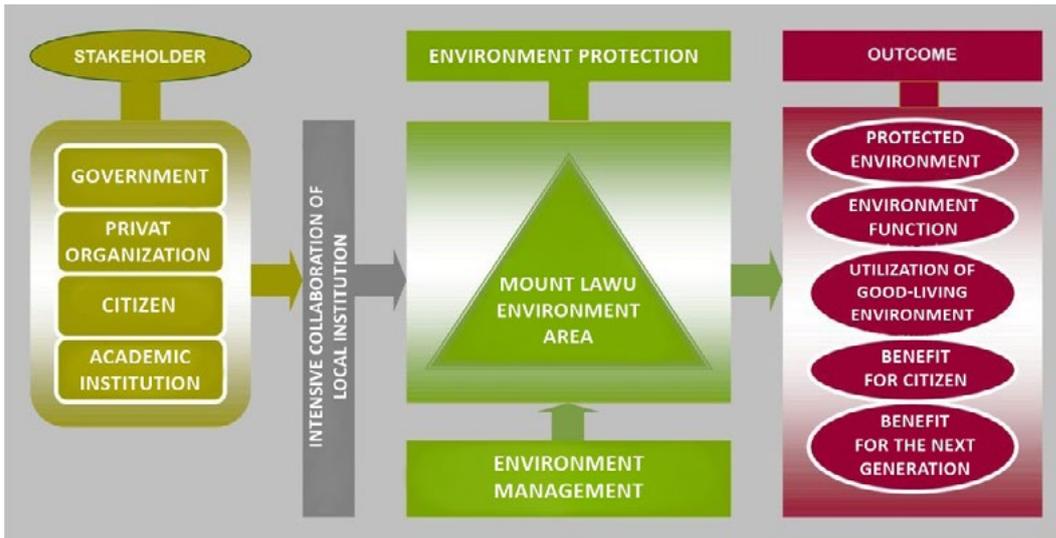


Figure 1. ICLO Model (Intensive Collaboration of Local Organization).

empower the other farmer groups towards the realization of the increase of agricultural products so that crops could be relied upon to meet the needs of farmers and their families. PKK District of Jenawi which also has a major environmental program in relation to the household waste management hopes that more people aware of the importance of environment. Farmer groups contained in the District Ngargoyoso expect their capital loan directed to support environmental management, primarily to address issues related to the environment. Groups of nature lovers 'Kijang Lawu' hoped that the activities of environmental management can be implemented more effectively. Village youth groups joined in Karangtaruna hope that the people are more concerned about the environment, so that in the long term can realize the environmental preservation and welfare of the community.

The above ICLO Model was created based on the potential and problems related to strengthening the role of local institutions in the protection and management of environment in the area of Mount Lawu. The purposes of ICLO Model were asking some stakeholders mainly government, private institution, academic institution and local people to work together in protecting and managing Mount Lawu areas. Intensive collaboration among the stakeholders were tried to defining an Environmental protecti-

on programs These programs were an effort of local people to maintain the preservation of the environment. Management of the environment is an attempt to manage the environment in a sensibly and sustainably in order to provide benefits to human life. The expected outputs were namely protected environment, sustainable environmental functions, area utilization of environmentally friendly, benefit for society and the benefits for generations to come.

## CONCLUSION

In the area of Mount Lawu there are many local institutions. These local institutions can be categorized into some types including forest village community institutions, farmer groups, nature groups, PKK groups, schools, local government agencies, and non-governmental organizations. In performing their duties and functions each local institution has a concentration. As local agencies concentrate on agriculture, others concentrate on forestry. However, besides carrying out their respective concentrations, these institutions also have a concern for the environment so that they also implement programs and activities of living environment, mainly related to environmental protection and management in Gunung Lawu area. In terms of environmental protection and management, local agencies have a

number of roles that can be categorized into several stages: roles in the planning stage, role in implementation, role in monitoring or monitoring, and roles in assessment or evaluation.

Efforts by stakeholders to overcome obstacles in strengthening the role of local institutions in the protection and management of the environment were coordinating among all stakeholders, conducting environmental awareness campaigns, providing environmental education and related training in order to sharpen the implementation of management principles A good environment, and build cooperation with other local institutions.

The Karanganyar District Government's policies and programs as a formal institution in strengthening the role of local institutions in the protection and management of the environment are primarily represented in various programs and activities undertaken by relevant agencies such as the Environment Agency of Karanganyar Regency as well as the Agriculture, Food Crops, Plantation and Forestry Sub-districts Karanganyar.

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