

¹Community Involvement on Caldera Toba Geopark Development Case Study: Pusuk Buhit Area, Samosir Regency

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ABSTRACT

Geopark is a geological area, including the specific features of the geologically significant, rare or in the form of beauty which also has ecological value, archaeological, historical and cultural to local economic development through conservation, education and tourism. The most important thing of geopark development is local involvement by making a collaboration between government and locals, such as in Caldera Toba National Geopark. The existing collaboration between government and locals in this geopark, is formed simply as reciprocity, where they understand their position in the development of geopark and is willing to establish new relationships that equally benefit to them, even though there are some actors who deny the existence Caldera Toba Geopark. That kind of collaboration came up by mapping each actor role and position in every stage of geopark development, also ultimately how each of these actors collaborate in developing and operating Caldera Toba Geopark as a national and international tourism destination. The most interesting thing to be explored is how to collaborate geopark managerial issues with local culture. To involve the locals with their own entrenched culture, the government needs to create creative strategies and innovations to collaborate the locals, the government itself and the third party as well. This study lies in Pusuk Buhit Area, which has four geosites and located in Geoarea Samosir. Pusuk Buhit has its history of the starting of the old Bataknese people. Based on that history, Pusuk Buhit is inhabited by the old Bataknese family that have their pure Bataknese culture and its local wisdom. Beside their culture wisdom, this area is still affected by religious wisdom, such as Christianity and local religion, named Parmalim. To involve all stakeholders with their own interests, the government should construct the new institutional scheme for the future Caldera Toba Geopark, that has to be a collaboration institutional. By using stakeholder analysis for the mapping, with primary data collection methods in-depth interviews with some of the key actors, the author may interpret and assess the extent of the collaboration undertaken by each actor in developing Caldera Toba Geopark, as well as predict the suitable collaboration for managing Toba Caldera Geopark, as a strategy to make this geopark works.

Keywords: geopark development, local community involvement, Caldera Toba Geopark

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Introduction

Background

Lake Toba in North Sumatra, Indonesia, is declared as a National Geopark of the Republic of Indonesia with a theme of Supervolcano and uniqueness as the largest Quaternary Tectonic-Volcano in the world. The Toba Caldera area was formed as a result of Toba Super Volcano eruption with an intensity of >8 VEI which affect globally. It is the largest Quaternary Caldera in the world and therefore is a significant world heritage. This area is rich of geological, biological and cultural diversities which then defined as Toba Caldera Geopark. This name is confirmed by the Decree of the Governor of North Sumatra Province Number: 188.44/404/KPTS/2013, on 26 June 2013 about The Toba Caldera Acceleration Team for the Application to be a Member of Global Geoparks Network UNESCO. The Toba Caldera Geopark has been declared as a National Geopark of the Republic of Indonesia.

Geopark defined as an area that contains of outstanding geological elements, including the value of archaeology, ecology and culture, where the locals are invited to participate in order to protect and revitalize the natural heritage (UNESCO, 2010). Geopark is an integrated concept of protection, education and sustainable development that aims to protect geodiversity, conserve environment and develop local economic, through geotourism activity, geological, biological and cultural education and research and promotion of nature heritage to public. Geotourism activity which directly connected to sustainable tourism, seems capable to create tourism activities which are able to preserve tourist attraction itself and provide educational value to all stakeholders, as well as to develop local economic.

Global Geopark Network or GGN, is a program created by UNESCO, based on awareness of geology and landscape affect on human development and also cultural diversity of our planet. Unfortunately, that values are not accommodated on World Heritage Convention by excluded geological sites as one of identifying system to determine the World Heritage. On fact, there are a huge

numbers and distribution of geosites on earth. GGN program is established as a protection and development of geosites that contains earth history.

Toba Caldera Geopark delineated from highest point of Toba Caldera, which is the watershed and water catchment area of Lake Toba. The width of this area is 3,658 km² and includes 7 regencies, such as Simalungun Regency, Toba Samosir Regency, Samosir Regency, North Tapanuli Regency, Humbang Hasundutan Regency, Karo Regency and Dairi Regency. This area divided into 4 geoareas based on technical approach on centers of eruption or evolution of eruption itself that formed Toba Caldera (Chesner, 1991 on Department of Mining and Energy of North Sumatra Province, 2014). Those geoareas are Porsea Caldera Geoarea, Haranggaol Caldera Geoarea, Sibandang Caldera Geoarea and Samosir Geoarea, that have 45 geosites at all.

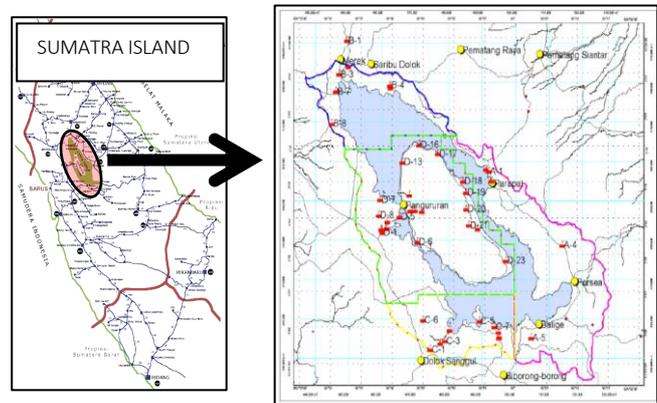


Figure 1. Location of Toba Caldera National Geopark

In details, geopark concept, which is mentioned as preconditions of Global Geopark Network candidates by UNESCO, can be divided into 6 sub-aspects, such as significant geological landscape, local involvement and managerial, local economic development, tools for education, tools for protection and conservation, as well as international recognition. To implement those preconditions, it needs so much transformation on tourism development in Toba Caldera Geopark, such as changing mass tourism concept into more sustainable one. Based on Culture and Tourism Department of Simalungun Regency, number of tourist was growing too fast, from 103.000 tourists on

2013, became 131.000 tourists on 2014, just in a little part of Lake Toba in Simalungun. Tourism development in Toba Caldera Geopark tend more explorative than preventive to future damage. One thing that must be done is institutional mapping associated to the development of Toba Caldera Geopark.

As mentioned before, Toba Caldera Geopark lies between 7 regencies of North Sumatra that have each own policies on tourism development. Beside them, Toba Caldera Geopark is also as residence of many local communities that have their own values on development, such as Batakese culture, Christianity, Parmalim (local belief), and many more. Moreover, land ownership on Toba Caldera Geopark is another problem on geopark development, especially customary land tenure, whose owners are family with a big number of its members. Indigineous people with their cultural values, may not be able to take it for granted of geopark concept implementation. Those complexity show that stakeholders mapping of Toba Caldera Geopark is a priority.

Stakeholders mapping of Toba Caldera Geopark on this research aims to map every stakeholders and their roles, as well as their interests and influences on geopark development. Every actors in every stage, have their own interests in Toba Caldera Geopark development. It is necessary to have those things mapped to distribute each stakeholder's role on each stage of the development on a institutional scheme. The institutional scheme is also expected to reduce conflicts of interest that may occur between actors and also reduce possibility of authority overlapping on each development stage. Stakeholders mapping and institutional scheme seem to be the win-win strategy to involve every actors, especially local community of Toba Caldera Geopark.

Methodology

Stakeholder Analysis

According to UNESCO (2010), stakeholders are people, groups, or institutions which are likely to be affected by a proposed intervention (either negatively or positively),

or those which can affect the outcome of the intervention. These stakeholders play important roles on development process, as the subject or the object of development. Stakeholders are not only government and citizens, but also others who play important roles too, like private sectors, investors, non-government organizations, communities, etc. All stakeholders need to be accomodated on development, so the development may sustain by decreasing negative impacts on stakeholders and environment as well.

On development process, stakeholders are also taking their own interests that may not be done together in the same time or even opposing each other. To avoid such conflicts, each stakeholder needs to be mapped and positioned by its interests and roles. Beside avoid conflicts, stakeholder mapping and positioning may rules a collaboration scheme on development which can make sustainable development implemented. A method to do this mapping and positioning named as stakeholder analysis.

Stakeholder analysis is a vital tool for understanding the social and institutional context of a project or policy, that can provide early and essential information about who will be affected by the project (positively or negatively); who could influence the project (again, positively or negatively); which individuals, groups, or agencies need to be involved in the project, and how; and whose capacity needs to be built to enable them to participate (Innes and Booher, 2010). Stakeholder analysis, therefore, provides a foundation and structure for the participatory planning, implementation, and monitoring that follows. The process, which is well-known as A Four-Step Process as follow (Moleong, 1988).

1. Identify key stakeholders, whose participation will be sought, from the large array of institutions and individuals that could potentially affect or be affected by the proposed intervention. This can be achieved by drawing up a simple list by answering questions below.
 - a. Who are potential beneficiaries?
 - b. Who might be adversely impacted?
 - c. Have vulnerable groups been identified?

- d. Have supporters and opponents been identified?
 - e. What are the relationships among the stakeholders?
2. Assess stakeholder interests and the potential impact of the project on these interests. Some stakeholder interests are less obvious than others and may be difficult to define, especially if they are hidden, multiple or in contradiction with the stated aims or objectives of the organization or individual. This assessment can be achieved by answering questions below.
 - a. What are the stakeholder's expectations of the project?
 - b. What benefits are there likely to be for the stakeholders?
 - c. What resources might the stakeholder be able and willing to mobilize?
 - d. What stakeholder interests conflict with the project goals?
 3. Assess stakeholder influence and importance by asking for each stakeholder group about its:
 - a. Power and status (political, social and economic)
 - b. Degree of organization
 - c. Control of strategic resources
 - d. Informal influence (for example personal connections)
 - e. Power relations with other stakeholders
 - f. Importance to the success of the projectInfluence refers to the power that stakeholders have over a project, and importance relates to the degree to which achievement of project objectives depends on the active involvement of a given stakeholder group.
 4. Outline a stakeholder participation strategy according to:
 - a. Interests, importance and influence of each stakeholder group
 - b. Particular efforts needed to involve important stakeholders who lack influence
 - c. Appropriate forms of participation throughout the project cycle

Research Focus: Samosir Geopark and Its Actor

Geological sites in the proposed Toba Caldera Geopark area are divided into 4 geoareas with the total geosites of 45. These geoareas that are formed to ease the management, are formed by technical approach of eruption evolution of Toba Caldera Geopark (Chesner, 1991 on Toba Caldera Geopark Application, 2014). These geoareas are Haranggaol Geopark, Porsea Geopark, Sibandang Geopark and Samosir Geopark. The position of Samosir Geopark makes it become the center of the whole Toba Caldera Geopark. Another point is the whole of this geoarea is inside of the same administration area, Samosir Regency, which contains of 65% of identified number of geosites.

Samosir Geopark is a part of Toba Caldera that shows sequence of geological phenomena, especially related to traces of the 'super volcano' caldera eruption. Toba Caldera formation, exposure of bedrock and Samosir Island formation were coming by a process of the lifting of the lake bottom (part of the caldera) Toba as a resurgent doming, until the geological processes that has continued until today as a post-caldera volcanic activity (hydrothermally altered). The earth dynamics of this region are well documented through beautifully and uniquely panoramic landscape, outcrops geological structure, stratigraphy and also variations in rock type. This area occurred since 33,000 years ago, covers an area of 1481 km², which is part of Samosir Regency.

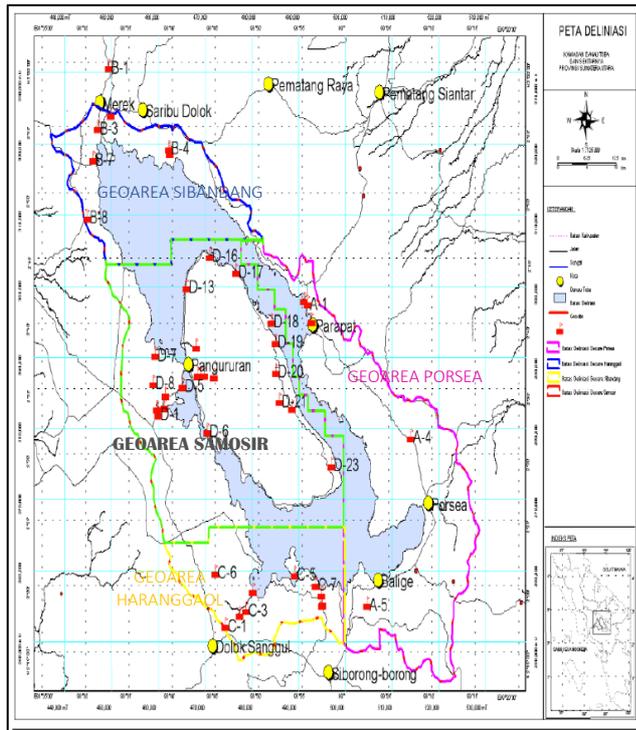


Figure 2. Georeas of Toba Caldera Geopark
(Source: Adopted from UNESCO, 2010)

Samosir Geoarea was planned to be the entrance of Toba Caldera Geopark. As a response, the government of Samosir Regency had developed Toba Caldera Geopark Information Center in Sigulatti, top of Pusuk Buhit Mountain. Pusuk Buhit Mountain is the highest level of Toba Caldera and placed in the middle of the mountain height. It used to be the first Batakese Village, but now it is already left. Besides that, Pusuk Buhit area has a great phenomena as a harmony of nature, culture, history and geology in one place. On the plan, geotourists will start their trip from Pusuk Buhit as the center and entrance of Toba Caldera Geopark.

Pusuk Buhit area has 2 geosites as proposed by the Toba Caldera Geopark Acceleration Committee, Aek Rangat and Batu Hobon. Aek Rangat is a sulfur hot spring and Batu Hobon is a cultural-historical site of the old belief of Batakese, Parmalim. Beside that, there are few cultural attractions, such as Sopo Guru Tatea Bulan, Aek Siptudai and Sigulatti. In the valley of Pusuk Buhit Mountain, there are also old villages that still lived by the Batakese, named Sianjur Mulamula Village and Sarimarih Village. On that villages, there are stored many

cultural-historical heritage of Si Raja Batak as the ancestor of all Batakese people in the world.

The diversity of tourist attraction and the people living in it, as well as the diversity of interests associated with the region, causing a lot of actors that play a role in the development of Pusuk Buhit area as a center of Toba Caldera Geopark. Those actors are mentioned below.

1. Government Institutions
 - a. Tourism Ministry of Republic of Indonesia
 - b. Geological Agency of Republic of Indonesia
 - c. Toba Caldera Geopark Acceleration Committee
 - d. Governor of North Sumatra (represented by Economic and Development Assistant)
 - e. Planning and Development Agency of North Sumatra Province
 - f. Culture and Tourism Department of North Sumatra Province
 - g. Mining, Energy and Natural Resources Department of North Sumatra Province
 - h. Regent of Samosir Regency (represented by Expert Staf)
 - i. Planning and Development Agency of Samosir Regency
 - j. Head of Sianjur Mulamula District
 - k. Head of Sianjur Mulamula Village
 - l. Head of Sarimarih Village
 - m. Local People Organization of Sianjur Mulamula Village
2. Funding Associations
 - a. UNESCO
 - b. North Sumatra Development Bank
 - c. PT Indonesia Asahan Aluminium (Inalum, an aluminium fabric that has been there for many years)
3. Media and Academician
 - a. North Sumatra University
 - b. Kompas Group (national media)
 - c. Pos Roha Tabloid (local media)
4. Local Community
 - a. Punguan Guru Tatea Bulan (local, cultural association)
 - b. etc.

Those actors are having a strong relation of Toba Caldera Geopark development, especially in Pusuk Buhit area, as the priority. Actors' collaboration is the key of success of Toba Caldera Geopark development. The collaboration could be established by socialize how geopark works to every actors, the important of conservation, education and tourism for their environment, as well as their sustainable life.

On this research, we could not interview each stakeholders one by one, related to research time limit and also tendency of repetitive information. Researcher selected few key stakeholders for collecting the information about their perception, relation and network, values and ownership of resources to Toba Caldera Geopark development. Those are mentioned below.

1. Mr. Achyaruddin Yusuf, Development Director of Special Interest Tourism, Conventions, Incentives and Events, Ministry of Tourism
2. Mr. Mangindar Simbolon, Regent of Samosir Regency
3. Mrs. Theodora Sihotang, Expert Staf of Samosir Regency and Coordinator of Toba Caldera Geopark Acceleration Committee
4. Mr. Darwin Sihombing, Head of Sianjur Mulamula District
5. Head of Sarimarihit Village
6. Mr. Limbong, representation of Punguan Guru Tatea Bulan

Results and Discussion

Networking is the pattern of social relations among independent actors, formed around issues of policy and / or programs that will be implemented (Newsome, 2006). As discussed previous, the dimensions of the geopark network, especially in terms of institutional, structural or regulatory restrictions may affect various aspects of life as lived by every actor involved. Moreover, the application of the geopark will substantially change the focus of everyday people, such as the agricultural sector, which will be juxtaposed with the tourism sector, the character of the people were hard to deal with nature must be transformed into gentle dealing with human beings, and the most important is

the concept of sustainability that may not have been aware of all actors to date this. Therefore, in this study, the dimensions of the network to be examined in order to get an overview of the actors involved is as follows.

Table 1. Network Dimension of Toba Caldera Geopark Development

Network Dimension	Parameter
Perception	<ul style="list-style-type: none"> • Perception on geopark concept development • Perception on mechanism of geopark development • Perception on self-positioning on geopark development
Relation and network	<ul style="list-style-type: none"> • Actors' interests on geopark development • Interdependency between actors • Rules between actors

Source: Adopted from Newsome, 2006.

Actors' Perception

As discussed in previous, the perception of important aspects to be discussed in this study, related to the development of the geopark will change various elements of life for every stakeholder. Perception is the impression that is owned by stakeholders to the surroundings, either to other stakeholders, its relationships, as well as to the substance of the policy issues they face (Bots et al., 2000, in Hermans and Thiesen, 2009). Parameter perception will be discussed in this section are related to perception on geopark concept development, perception on mechanism of geopark development, and perception on self-positioning on geopark development.

Perception on Geopark Concept Development

On this study, actors are grouped into 4 based on its roles on Toba Caldera Geopark development, such as government institution, funding group, local community and media and academician. Each group had been asked for each perception about geopark development and answers are listed below.

Government Institutions

This group, from national to local scale, showed an excitement of this concept. As the initiator, Ministry of Tourism through Mr. Achyaruddin, said that geopark concept is suitable to be applied on Lake Toba. Lake Toba has a strategic value on tourism that attracts government attention from national to local level, supported by the establishment as National Tourism Strategic Area. Geopark concept was considered as a solution of interest conflict on Lake Toba management, between nature conservation, tourism development and local economic development.

“Toba as a lake, is already had a great trend on its era. But on 1998, Lake Toba tourism declined by degradation of its environment. Whereas Lake Toba has a great geological values from 75.000 years ago. It is a big strength for Lake Toba and its local people’s economy. But it was decline by human error on management. It brought me to put myself as a part of the locals and tried hard to save Lake Toba, by geopark idea, on 2009. Geopark Global Network aspects were found in Lake Toba, such as a part of earth formation, contains national and international values, and need to be conserved. So why not? Me and my team tried to apply to UNESCO with a big expectation of international attention on local economic development of Lake Toba and North Sumatra, also Indonesia.” (Yusuf, Development Director of Special Interest Tourism, Conventions, Incentives and Events, Ministry of Tourism).

Agree with national government, government of North Sumatra province also supports the implementation of the concept. Toba Caldera Geopark that lies across 7 districts and requires the intervention of the province as a coordinator. As the coordinator, North Sumatra Province will also welcome the development of geopark concept as a new concept of development and management of the Lake Toba. This concept is raised the image of Lake Toba area as an icon of North Sumatra province, which have slumped and has not returned to its original position. The concept of a promising network of domestic and foreign tourist market has become one way for North Sumatra Province to regain the glory of tourism, while maintaining the sustainability

of the environment and the welfare of society. The seriousness of the response of North Sumatra Province of Toba Caldera Geopark development is by forming a Committee for the Acceleration of the Toba Caldera Geopark, coordinated by Economic and Development Assisstant of North Sumatra Province.

Similarly, Samosir, as one of the districts in the Toba Caldera Geopark, the location of the Pusuk Buhit Area which is the focus of this study. Samosir Regency which has the biggest number of geosites, led Toba Caldera Geopark movement and stated as the central Toba Caldera Geopark. As the government on Samosir Island, Samosir Regency also welcomed the adoption of this geopark concept. During this time, the county government, together with local communities, to feel that what they have is a limitation. A small amount of flat land made them only focus on the agricultural sector. Geopark concept is considered to be one solution on problems of public welfare inequality agriculture and tourism community. Tourism development capable of prolonging the period of stay of tourists with the natural scenery of the capital just one of the obstacles to them, so with the geological wealth of meaning contained in their region, become an added value. In addition, the public is also not asked to pretend, by living life as usual, coupled with skill tourist services, the local people are also able to improve their own welfare by getting more livelihood options. Districts government, such as Sianjur Mulamula District, along with the head of villages – such as Sianjur Mulamula District and Sarimarrhit District, also strongly supports the development of the geopark concept in the region. While they must take pains to understand and convey understanding geopark related to the local community and other actors, related to limited insight, they are eager to running it. “Vission and mission of Samosir Regency are inovasions in tourism.

We agreed with those vission and mission, because Samosir has a big potential on tourism, but still on agricultural mindset. So how we be brave? We have potentials, nature and culture. Based on that, our regent started to collect supports from another regencies, formed Lake Toba Regional Management, socialized geopark to every regents until got their agreement to run the geopark together. After

the agreement, they researched about Batakese old culture, to enrich the geological resource. They found 'Sianjur Mulamula, Sianjur Mulatompa, Mula ni Hajolmaon, Mula ni Habatakon, Mula ni Halak Marhata Batak', means 'the first of world in Batak culture started in Sianjur Mulamula'. It meant that to develop geopark, we need not only government, but also local involvement, to avoid miscommunication. Our government initiated socialization to every villages, to explain what is geopark, why it is important, what benefits they can get, and how important their roles on the development of geopark. As a response from local people, they initiated to make a local organization on tourism based on their place, named LCO. We encouraged them to know their position and their roles. That is how it works, government facilitating local people to run the geopark by create LCO. We legalized the LCO by making a formal decree for them" (Mr. Darwin Sihombing, Head of Sianjur Mulamula District, Samosir Regency).

Funding Associations

Another group is funding association that held important roles on Toba Caldera Geopark development. On initiation stage, funding on Toba Caldera Geopark development is still done in a joint venture between related governments. For example is the construction of Toba Caldera Geopark Information Center in Sigulatti financed by the Ministry of Tourism and the land provided by Samosir. Likewise, dossier preparation and delivery activities to UNESCO financed by the Ministry of Tourism together with the existing districts. The operational activities of LCOs that are currently still about socialization with the costs borne by Samosir regency. Charging displays in the Information Center also conducted by the Committee for the Acceleration with their respective budget and ask for help CSR culture of museums and companies processing of natural resources in the province of North Sumatra, especially in Toba Caldera Geopark Area.

Media and Academician

Academicians and the media is a loose group, which has links indirectly to Toba Caldera Geopark. The group consists of Tim

Ring of Fire Expedition Kompas Group already issued "Toba Mengubah Dunia" book (Toba Change the World), in collaboration with the Geological Agency of the Ministry of Energy and Mineral Resources, University of North Sumatra as the main educational institutions in the province of North Sumatra and various local media, both in North Sumatra Province nor Samosir. As the parties are not directly related, but have an interest in the development of Toba Caldera Geopark, this group tends to support the development and the various movements that exist. Moreover, the local print media are occasionally published articles on the development Toba Caldera Geopark running in the field.

Local Community

The next group is the group of local communities consists of various elements of society that are directly related to the development of Toba Caldera Geopark. In this study, the actors enter into third party groups include LCO Sianjur Mulamula, community leaders, traditional leaders, religious leaders of Punguan Tatea Bulan, which controls several areas of customary rights in the Region Pusuk Buhit. Mulamula Sianjur for LCOs, community leaders, traditional leaders and religious leaders who have often enlightened through intense socialization conducted by a group of institutions, especially the Committee for the Acceleration, they've started to understand the concept of geopark is aimed at the welfare of the local communities themselves. "What a nice concept of Toba Caldera Geopark designed to Samosir. Indeed, we need a great concept like this for our village, we were very happy at all. The better our village, our revenue grew" (Mr. Nainggolan, Head of Sarimarrhit Village, Sianjur Mulamula District).

However, a different perception obtained from the owners of customary rights, as expressed by Mr. Limbong are required to maintain the site of Batu Hobon and Sopo Guru Tatea Bulan. Punguan Sopo Guru Tatea Bulan assume that any kind of tourism development efforts that touch their site it is one attempt desecration of their places of worship. Batu Hobon and Sopo Guru Tatea Bulan is still used as a place of worship Si

Raja Batak is still embraced by the people who are Parmalim, local religious Batak tribe.

“This is not a tourism destination. You see, Maam, people come here to pray. Can you imagine if this place become tourism destination? I think it is a bad idea” (Mr. Limbong, Punguan Guru Tatea Bulan). Although it does not prohibit any religious tourists outside Parmalim to come to visit, fear of Punguan Guru Tatea Bulan are tourism activities can interfere with their religious rituals, reduce its sacred also be a way for the government to acquire their customary rights. Their fear is also reflected in their attempts to sue the Government of Samosir to the level of the administrative court in 2011. But gradually the understanding given by the government, can reduce these problems are recognized, although there are frictions in the development of tourism.

“That is the beginning of understanding. When viewed, as if it wanted controlled by the government. But over time, they started getting read what is on our minds, now they have started to accept. So initially there used to be a conflict, even to be sued to the administrative court. So in their minds like no government efforts to eliminate these customary and eliminate sites. So actually we took over was to accelerate its development, not for possession. Then depart from there, there are cultural sites, we strive forward there operational cooperation. For example he does not want government to manage it, we'll make a partnership, so the government facilitated, which would be built up to what we ask of them, we make inputs wants so so so, then the levy will be discussed further. That's stage two. But in principle, if there is the customary owners who want to help, we will try” (Mr. Darwin Sihombing, Head of Sianjur Mulamula District, Samosir Regency).

Perception on Mechanism of Geopark Development

Ideally, mechanism of geopark development directed by UNESCO is a bottom-up, initiation by the people who raised up to the top level of government to be registered to UNESCO. However, with various

limitations, both limited the quality of human resources, limited knowledge, limited funding and bureaucracy in an area that is still difficult, the geopark initiative starts from the determination of the central government and were impressed as top down. “They who involved are the Ministry of Energy and Mineral Resources, the first most involved are local governments, both provincial and district government, there are seven districts. And they must have the commitment, and the commitment happen. They are just Ministry of Tourism, Ministry of Energy, Mining and Resources and Ministry of Education and Culture through Indonesian National Committee for UNESCO.” (Mr. Achyaruddin Yusuf, Development Director of Special Interest Tourism, Conventions, Incentives and Events, Ministry of Tourism)

The mechanism for determining the geopark initiative starts from the Ministry of Tourism and the Geological Agency of the Ministry of Energy to take Lake Toba area to be the Toba Caldera National Geopark in 2014 by President Susilo Bambang Yudhoyono at that time. In addition, the central government was pro-active to impact the North Sumatra governor and the seven regents in Toba Caldera Geopark, and so on up to the local community. The most related group to the mechanism for setting are actors who enter into a local community. As mentioned before, these actors should be in the initiating group geopark, but with because of their limitations, for the initial stage, their position should be the same as the position of the local community in general in the implementation of other development programs. Local people who have received relevant understanding of this geopark welcomes any government program that brings good impact on them. Despite their confidence in the government of yore, but most of them are still prejudiced either against the government wanted to promote their welfare.

Different response came from Punguan Guru Tatea Bulan. Although some of them have received socialization and has repeatedly communicating with the government, this clan is also still unwilling to support the establishment geopark. They also considered in setting mechanisms geopark, they were not invited to participate, so that

they do not know the mechanism that runs. However, after the establishment of the geopark and different approach is taken, this conflict has begun to melt, given inevitably, *punguan* will still coexist with the government forever.

Other groups such as the funder and academia also the media do not have a direct connection with the process of setting mechanisms, although they should be involved from the beginning, except for academics who had been involved from the beginning. However, other groups essentially support the development programs undertaken by the government, both North Sumatra Provincial Government and local governments respectively, for bringing goodness and progress for the region, as well as the welfare of society.

Perception on Self-Positioning on Geopark Development

After undergoing various processes of post-setting Toba Caldera National Geopark, each actor must begin to position themselves in the development of Toba Caldera Geopark, based on what they had. Governments of various levels also begin to position themselves structurally, such as provincial coordinating role, given the geopark is located in 7 regencies and not all regency have the completeness of structurally complete to develop the geopark, such as Planning and Development Agency, Department of Tourism and the Department of Energy and Mineral Resources. This coordination is done by undergoing various stages of development Toba Caldera Geopark together with the local government there and fixed while keeping regional integration for the entire region Toba Caldera Geopark equally evolved. The coordination is seen in the formation of the Committee for the Acceleration Toba Caldera Geopark.

The regency government respectively act as the regulator for the region Toba Caldera Geopark in the region, in coordination with other districts to remain integrated. One form of regulations issued by the Regency of Samosir is the regent issued various decisions related to the management Toba Caldera

Geopark. Another example is to make APBD-P (changing of regency's budget revenue and expenditure) Samosir become a source of financing for the implementation of the main starting Toba Caldera Geopark at the district level. This greatly helps the movement Toba Caldera Geopark at the community level, such as socializing, geopark image formation for the community, and so forth.

District government, in this case the District Sianjur Mulamula, position itself as a partner for Samosir regency government in realizing the vision and mission and success of existing programs, including the Toba Caldera Geopark. Head of Sianjur Mulamula District become one liaison between the district and the local community, both community leaders, traditional leaders, religious leaders and other actors. In addition, Head of Sianjur Mulamula District enable the local community by collecting them in a scope of the organization discussed earlier, the LCO. LCO of Sianjur Mulamula or more is formed from a combination of community leaders, traditional leaders, religious leaders and local communities and village and sub-district government. Such collaboration is expected to enable local communities to not only be a spectator, but also involved in the development of Toba Caldera Geopark.

Unlike the funders group consisting of actors who have multiple roles, such as government institutions and the tourism industry. This is because there is no clear financing scheme in the management of Toba Caldera Geopark. Especially for the tourism industry, according to Mr. Achyaruddin and Mrs. Theodora, the tourism industry in Samosir is waiting for directives from the government, because they realize their mutual symbiotic relationship between the tourism industry and government. In addition, the tourism industry is more prone to be directed, because they never tasted triumph before the Monetary Crisis of 1998. It is considered as one of the advantages, because the tourism industry felt compelled to join together with the local government to regain the glory days back. The group most sensitive social issue in Toba Caldera Geopark are local communities. One thing that the whole question in the minds of local people who attend each dissemination of Toba Caldera Geopark is the position of the

local communities in the program and want to carry on the agricultural sector which has been the belle of their economies. After several times by understanding related to the implementation of this geopark concept, then the local people start to understand his position is as a government partner for the operator of each Geopark geosite in Toba Caldera, as well as providers of services to existing tourism activities. They also begin to understand that the geopark will not shift the agricultural sector, which has become the main source of their livelihood, but it becomes an addition to quality of life and well-being. In addition, they have also become a major garda conservation activities in their own neighborhood, so they kind of tourism will not destroy nature entrusted to their ancestors. Awareness is slowly but surely grow from the local community is the main capital in the development of the future Toba Caldera Geopark.

Academics are very aware that they have to position themselves to continue to explore the potentation of geology, nature and culture of the Toba Caldera Geopark, to continuously develop this geopark. Ability they have collaborated with local knowledge they may not have learned in theory, but it is known by locals as hereditary knowledge they have. Similarly, the media, which has become a partner Toba caldera Geopark manager to communicate with parties outside Toba Caldera Geopark. In addition, the media is also a means of promotion of various tourism programs will be developed. Here is the recapitulation of actors' perception on Toba Caldera Geopark development in Pusuk Buhit Area.

Table 2. Actors' Perception on Toba Caldera Geopark Development in Pusuk Buhit Area

Actors	Perception of		
	Geopark Implementation	Mechanism of Geopark Implementation	Self Position
Institution	Very supportive and eager to realize the concept	Inisiator	Regulator dan negotiator between actors

Actors	Perception of		
	Geopark Implementation	Mechanism of Geopark Implementation	Self Position
	of geopark in Toba Caldera		
Funding Group	At the initial stage, funding group is still done by the institutions, together as a form of support to the realization of Toba Caldera Geopark	Unrelated	Waiting for approachment from institution, because they have no direct relation to implementation of Toba Caldera Geopark
Local Community	There is support, but there are also several concerns arise, such as changes in the economic sector, the existence of culture, customary land status and so forth	Through socialization, the local community can finally understand and support and participate in the implementation of geopark movement. But there are those who still worry related to indigenous rights and desecration of places of worship	Operator, after a process of capacity-building
Academics and Media	Applying the results of research and share information with the public related to the concept of geopark	Some academics and the media is following since the beginning, and even become one of the entry	Inovator, people who are always researching to find a wealth of geological and then publish the

Actors	Perception of		
	Geopark Implementation	Mechanism of Geopark Implementation	Self Position
		funnel idea of applying the concept geopark in the area of Lake Toba	new culture, as part of the geopark development

Source: developed from this research

A. Actors' Relation and Network

Relationships and networking among stakeholders is also an important point to be discussed in this study. The application of geopark concept in a region, which has been the place of residence, makes possibility of positive and negative impacts arise from the intersection of the two. Therefore, it need to be analyzed, related to the various interests of actors in the development of geopark are currently running, interdependence between actors and the regulations apply that bind and affect relationships and networks between actors.

Actors' Interests on Geopark Development

While the majority of actors support the application for the geopark area of Lake Toba, but each actor must have a common interest and on each agenda item in the Toba Caldera Geopark. The interests of actors in each group must also vary, depending on the role to which it aspires also power it has to Toba Caldera Geopark, in this case for Buhit Pusuk Area.

For groups of institutions, the most ideal interest in applying Toba Caldera Geopark is how to resolve the conflict of interest between preserving the sustainability, environmental protection, economic development and improving people's welfare. According to the majority of the government group, the geopark concept becomes part of the solution to this problem, where there are elements of geological conservation, education

and the development of community-based Geotourism. These three elements must be executed jointly to optimize the benefits that will be felt by all relevant actors geopark.

Behind that ideal interests, the mentality of local government, that is still hidden area, also has a political interest. It is revealed from various communication that exists between members of the Committee for the Acceleration and some intellectual actors are also part of the government group. The political importance is not just a position of each actor in the government structure that is currently emerging contested (when the study adjacent to the upcoming Indonesia's In Unison Mayor Elections 2015-2020). Far from it bureaucratic, when many people know that the Toba Caldera Geopark has reserves a huge potential of geothermal energy, many people who claim to be 'the hero' for Toba Caldera Geopark. The geothermal power struggle over very often heard from the parties in the government group directly linked to the development of this Toba Caldera Geopark.

In contrast to the top-level government, district and village levels of government have an interest only how for the welfare of society and also how to keep harmony between nature, culture and people. This happens because the government village of Sarimarrihit and Sianjur Mulamula, as well as Head of Sianjur Mulamula District, bound only by the surrounding community united through blood ties Si Raja Batak descent. Interests that they entailed is how they run the agricultural sector and the tourism sector can run side by side and together can promote Sarimarrihit Village and Sianjur Mulamula Village in particular, also the Sianjur Mulamula District in general.

For each funder, they have each other's interests in the willingness to finance the development of Toba Caldera Geopark, regardless of the state budget funds or budget. Examples such as the Bank of North Sumatra and the companies CSR funds used for the development of Toba Caldera Geopark. With the help of funding Toba Caldera Geopark, Bank of North Sumatra vision to carry out its mission as the regional development banks. As I've discussed previously, the Bank of North Sumatra's vision is to become the mainstay of

banks to help and encourage economic growth and regional development in all fields as well as one source of local revenue in order to improve people's living standard.

Companies that donate funds through CSR to Toba Caldera Geopark also has an interest to fulfill its responsibilities to restore a portion of its profits in the regions where the company is processing resources. In addition, there are initiatives of these companies to establish good cooperation with the local government, as part of a mutually beneficial relationship that exists. Examples are conducted by PT Inalum, as the aluminum processing company which has been operating in Toba Samosir. In keberjalanannya, PT Inalum has contributed much to the development of the region, especially in the area of East Sumatra, with the absorption of human resources, incentives in the form of scholarships for local residents, help build the North Sumatra Province, and also participated in the financing of charging displays to the Information Center Toba Caldera Geopark in Sigulatti.

Another thing when discussing the interests of the actors who are in a group of third parties. Actors from third parties, which are the actors who are directly involved in the process Toba Caldera Geopark on the lower level, have an interest to maintain what they have. Local communities, traditional leaders, community leaders, religious leaders and even Punguan Guru Tatea Bulan though, as discussed earlier, has concerns about the existence of sectors which lived after the application of the geopark. Local communities concern about continuity of agricultural sector if the tourism sector is entering their territory. Religious leaders and traditional leaders concerned about the local culture and religion they are slowly eroded by the tourism sector. They will consider themselves not able to keep their heritage if they cannot preserve the ancestral culture and their religion. Likewise with Punguan Guru Tatea Bulan, which feared desecration of places of worship and their customary land acquisition by the government. Their interest was how to empower what they have, without handing it to another party.

Academia and the media is also have interests that very different from other groups.

This group's interest is just how to develop science, especially geology and tell it to the general public, as an educational effort. Academia and the media are not directly related to and does not also have attached great importance to the development Toba Caldera Geopark. But the existence of these groups cannot be overlooked simply because they are the spearhead of innovation and imaging for Toba Caldera Geopark.

Interdependency between Actors

Actors interdependence relationship occur between actors in carrying out development in the region of Pusuk Buhit Area, Toba Caldera Geopark. Pusuk Buhit Area that has a historical background to the Batak in general and for the Batak tribe who settled in the region in particular, makes all the actors involved have a high interdependence relationships to one another.

Each actor has its own dependence with other actors, both in the same group, or different groups. Addiction occurs because in essence humans are social beings who need each other. Moreover, all the actors of this move in the same space, so it is necessary mutual tolerance to accommodate all the existing activities.

Institutional group containing actors from government, from the national level down to the village level, has mutual dependency. Of this group, the nature of mutual dependence lies in the bureaucratic system of government, where coordination and decision making tiered applied. Institutional actors who are at the top level also has a dependency on the level below, related to the control of resources and field conditions. Antaraktor interdependence in a group of institutions can be seen in the following scheme.

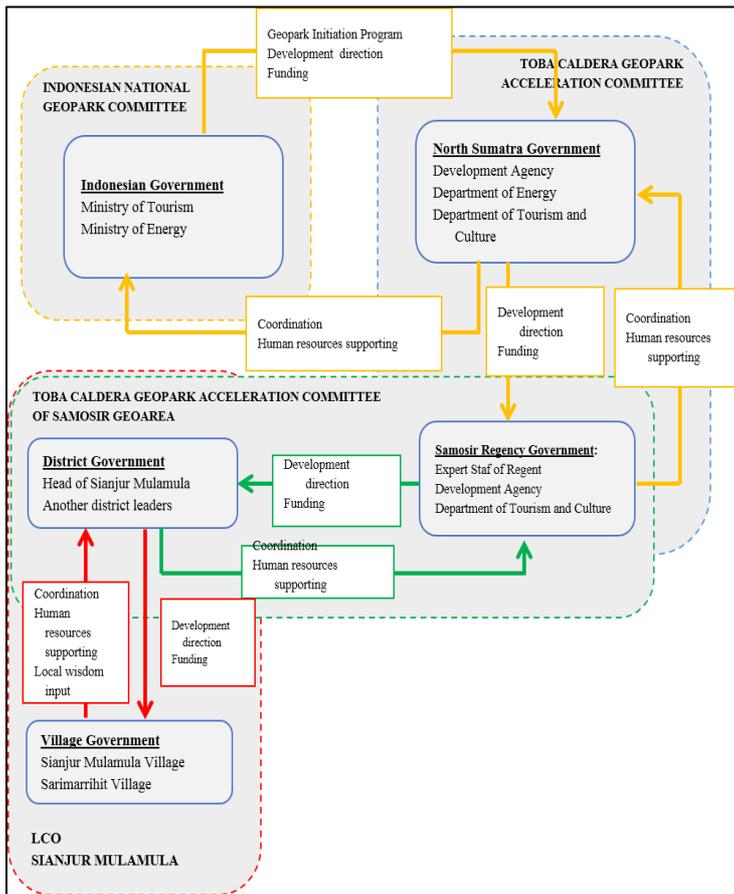


Figure 3. Interdependency between Actors on Toba Caldera Geopark Development

Group institutions have interdependence with one another and each of these relationships majority belong to a particular container to facilitate the coordination of joint. At the central level, the Ministry of Tourism is preparing Indonesian Geopark National Committee that planned to accommodate the entire network of the governing body in each geopark, so communication can be established one another. At the level of North Sumatra Province, formed the Committee for the Acceleration Toba Caldera Geopark led by Assistant of Economic and Development of North Sumatra province, who also formed a small committee in each geopark. In this case, Geopark Samosir also have a small committee comprising Samosir Regency government and the government of each district is in it. Sub-district government, in this case the Head Sianjur Mulamula also cooperate with each village there is, in this study and the village of Desa Sianjur Mulamula Sarimarhith, in the form of legal Neighbourhood Civil Society Organizations (LCO) Sianjur Mulamula. It

contains the LCO representatives of the village administration, community representatives about geosite, traditional leaders and religious leaders, were legalized by the Decree Head. LCO activities are also funded by Samosir district budget, as stated in the decree. Other groups that have internal interdependence is a third-party group, which consists of local communities, indigenous peoples, religious figures and actors directly related to the other. Forms of interdependence that are most visible to the actors who deal directly with the development of geopark and has its own values that must be applied in its management. Actors include local communities, indigenous peoples, in this case Punguan Guru Tatea Bulan, and religious leaders who also helped fill the social life of the local community. Kesalingtergantungannya shape shown in the following scheme.

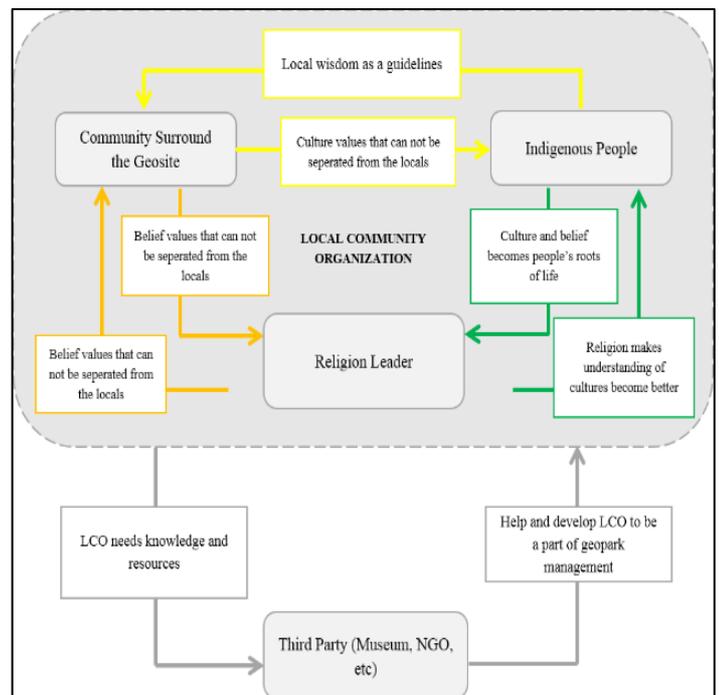


Figure 4. Interdependency between Third Party Group on Toba Caldera Geopark Development

Group of funders and academics and the media do not have a relationship of interdependence internally that could influence Toba Caldera Geopark. This happens because in these two groups, each actor stands alone without any dependency with another actor in the same group. Even if the group's internal dependency relationship exists, but the relationship is less influence Geopark development Toba caldera.

Rules between Actors

The rules that apply in this section show the variety of formal rules and local rules that bind all actors there. Formal rules and regulations in the form of local policy may not be written, but it became a rule that binds all actors involved in it or one of the actors there. This attachment limit the movement of every actor in the activities, in this case for its involvement in the development Toba Caldera Geopark.

For groups of government institutions, both from the central government to village government, the applicable rules of the most obvious is the rule of the bureaucracy. This rule is binding on all actors in the institutions of government, so that the movement of the actors on the lower level is sometimes constrained by bureaucracy. For example, just the movement of the Committee for the Acceleration Toba Caldera Geopark in Geoarea Samosir, which legally obtain decree of Regent Samosir and coordinated by expert staff of Head Samosir more dynamic, for dealing directly with the court, sometimes a lot hampered by the authority which is still held in full by the Committee Toba Caldera Geopark in North Sumatra Province, who legally get a decree of the Governor of North Sumatra located in Medan. Different movement speeds have feared could hamper development, primarily associated with the enthusiasm of people who should not be let down by bureaucracy.

The dynamic movement of Toba Caldera Geopark development is also visible at the level of local government, such as the District of Sianjur Mulamula, Mulamula Sianjur Village and Sarimarih Village. Although still follow bureaucratic rules, where each movement of the village heads are still waiting for direction from the district and sub-district heads to take direction from the regents, but as the party that directly deal with the public, they were perceptive enough to anticipate the turmoil at the grassroots. LCO of Sianjur Mulamula, for example, which was set on October 29, 2014, is one of the local government's tactics in dealing with public enthusiasm. Although the establishment of the LCO in the directives of the Committee for the

Acceleration Toba Caldera Geopark in Geoarea Samosir, but the initiative to involve the various elements of society in it, such as traditional leaders, community leaders, religious leaders and members of the majority owner of the customary on-site geosite, an effort that was good enough to embrace the all relevant actors directly. In order to have a legal framework and a clear source of financing, this LCO also follow the rule of the bureaucracy in the form of Decree of Head of Sianjur Mulamula District No. 23 in 2014, on the Establishment of Rural Community Organization Sianjur Mulamula, District Sianjur Mulamula.

Bureaucratic rules also apply to actors who double as funders, such as the Ministry of Tourism, Government of North Sumatra Province and District Samosir. The Ministry of Tourism is economically more powerful and a reformed bureaucracy, easier to channel funds for the construction and development Toba Caldera Geopark. One form is the physical construction of buildings of Information Center of Toba Caldera Geopark fully funded by the Ministry of Tourism. According to Mr. Achyaruddin of the Ministry of Tourism, the financing is not the first time the Ministry of Tourism to spend on Toba Caldera Geopark. But many times the funds it is not absorbed and returned to the Ministry of Tourism due to hit the bureaucratic problems in the field, both between institutions and with the community.

In contrast also with the bureaucracy that still occurs in North Sumatra province and Samosir, related to financing problems. To input displays on Geopark Information Center in Sigulatti, for example. Local team in Samosir wishes a sharing tasks, while they were on their way to socialize and expect a team of North Sumatra province taking part to fill the displays, but it can not be done just like that. Back bureaucracy becomes the key problems, supported by the many affairs of each sector in the province, which makes the movement of Toba caldera Geopark became less focused and sometimes marginalized. Other rules are the actors in the group of third parties who have the rules of each. For example, traditional leaders and Punguan Guru Tatea Bulan, which has Batak Toba rules that govern every aspect of life of its members. Customary rules that are associated with the

development Toba Caldera Geopark is *Tarombo* or genealogy example, which bind certain actors of the customary rights that exist in the Pusuk Buhit Area. One is geosite Batu Hobon and cultural attractions Sopo Guru Tatea Bulan, which is jointly owned by Punguan Guru Tatea Bulan. *Punguan* Guru Tatea Bulan not just a set of specific clans, but a collection of old clans that are linked directly with the descendants of Si Raja Batak, although the people had migrated to the rest of the world. Although it has become nomads, but two of their main site is still entrusted to their descendants who live in the area Limbong - Sagala and surnamed Limbong, one of the old clans are directly related to genealogy Si Raja Batak. Care financing 2 (two) main site they also performed together, both out of personal funds, as well as from cash *punguan*.

In addition to the customary rules related *Tarombo* or pedigree that is still held fast by the whole of the Batak on this earth, especially for Punguan Guru Tatea Bulan, custom rules that can not be separated from the life of the Batak is rules of *Dalihan Na Tolu*. In terms of meaning, *Dalihan Na Tolu* means three furnaces, which is defined as the furnaces Batak society described as a cauldron that was on the stove. Furnace at that time is made up of three feet and three feet is the one that serves to prop up the cauldron that is on it. Analogy balance obtained from three feet furnace is used as a foundation *Dalihan Na Tolu* in Batak that apply to all of the Batak people in this world. *Dalihan Na Tolu* system is divided into three functional groups, among others *Dongan Sabutuha* (born from the same womb), *Boru* (girls) and *Hula-hula* (family of the wife). *Dongan Sabutuha* often called *Dongan Tubu* (siblings) is defined as people who are the same surname, which is expected to always agree on the whole collective decision-making, because they are considered siblings camaraderie together. *Boru* interpreted as a daughter, her husband and her children, and families-in-law of the woman. *Boru* is a party that is very loved and adored, although they would not inherit from their biological parents. Instead, when a girl married off, usually biological parents will give *pauseang* (property replacement) or *Ulos nasoolo buruk* (fabric that will not be obsolete or outdated) that describe the taste of loving parents to girls

'taken away' is. *Hula-hula* class is defined as the clan who gives his daughter in marriage.

For the *Bataknese*, the *Hula-hula* is seen the glory of the sun, because of the *hula-hula* gives blessing to *Boru*. In social life, *Dalihan Na Tolu* is a cornerstone of democracy in every plan, both in the construction of the village and the provisions of customary law which always focuses on mutual assistance system (Rietbergen-McCracken and Narayan-Parker, 1998). These systems regulate social relations in the life of the Batak people, including the rights and responsibilities in social life. In a joint decision-making led by a dean or a custom king, never taken unilaterally, must always be done deliberation and voting. Almost all plans related to customs, both the construction of the village as well as to the private lives of Bataknese, set in *Dalihan Na Tolu*, who became the *Batak* philosophy of life, side by side with religious affiliations.

Related to the Toba Caldera Geopark development, especially in the area of this Pusuk Buhit area, *Dalihan Na Tolu* system is also applicable, for both actors in a third party hold tight to the customs system, or a group of government institutions and ethnic Batak have a clan. A small example appears at the time of geopark socialization in Sigulatti, with sources Regent Samosir, surnamed Simbolon. At the moment there are questions that come from a *Opung Boru* or grandmother surnamed Simbolon too, *Dalihan Na Tolu* system is also running. Although a Regent, he must show love for his grandmother Simbolon, by responding to the question politely and request to be accommodated as much as possible, both for the sake of progress Toba Caldera Geopark in the future, and to keep the *Dalihan Na Tolu* system was still running.

Community Involvement on Each Development Stage of Toba Caldera Geopark

Participation of each actor can be divided into four type participation, among others the dissemination of information, consultation, collaboration and strengthening. Quick actor involvement mapping is seen in the following scheme.

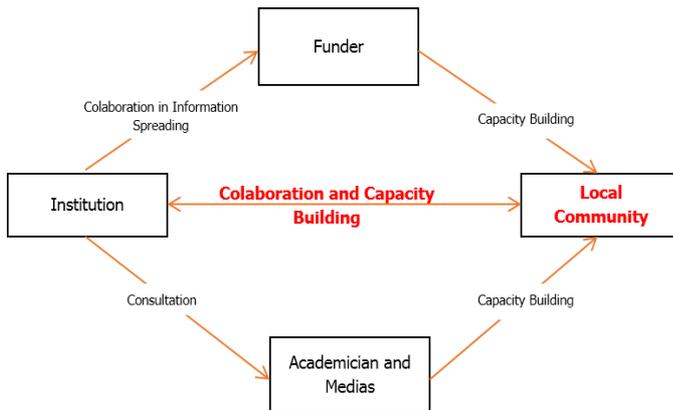


Figure 5. Participation of Each Actors in Toba Caldera Geopark Development

Each actor in a group of actors each have a stake in participating to the advancement Toba Caldera Geopark. Broadly speaking, groups of institutions as an initiator in the application of the concept of geopark, academia and the media need to consult on a wide range of knowledge that must be explored and conserved in the region. For the issue of financing, the institutions collaborate with the actors in a group of funders. In the management of geopark, the institutions collaborating with third parties, consisting of many traditional leaders, religious leaders, local communities and other relevant parties, such as the Punguan Guru Tatea Bulan. This is done in conjunction with reinforcement in the form of capacity building of local communities, associated with various human resource constraints that exist in the Pusuk Buhit Area.

The stages of the development can be divided into four, such as initiation, preparation, implementation and monitoring, and evaluation. Community involvement on every stages can be described as follows.

Initiation Stage

The initiation stage is the preliminary stages of the dissemination of information from actors who have early access to information related to the geopark and acts as an initiator in the initial stage. This process is dominated by a group of institutions in sequential order from the national to the village. Various activities initiation as

dissemination to local communities, delivering information and request for funding to potential funders, communication with the academia and the media and a variety of other activities, in order to spread the concept of Toba Caldera Geopark especially in Pusuk Buhit Area and efforts to make the perception of usefulness.

In this stage, each actor, especially local community, is still bound to influence and their respective interests in looking at the implementation of the geopark in the region where the move. Government as the initiator trying to equate every opinion there, including efforts to accommodate the influence and interests of each actor in the same perceptions related geopark.

Preparation Stage

The preparation stage can be interpreted as a step towards the realization Toba Caldera Geopark. This stage contains various planning activities, coordination with various actors at every level, details of programs to develop, until they are ready to be implemented. Agenda efforts to enroll a member of the Global Geopark Network (GGN) is also a major agenda in this preparatory stage. Various preparations to meet the requirements of the proposed UNESCO, such as the existence of the governing body, the readiness of local communities, packaging geosites and so forth, into activities that are also carried out in this stage.

At this stage, the government of all levels join in the Committee for the Acceleration Geopark Toba caldera, to streamline the various programs of preparation to be done. In this stage also established Local Community Organizations (LCO), which is the result of collaboration between groups with third party institutions, especially local communities, indigenous peoples and religious figures. LCO serves as a bridge between government and society in the move together towards the realization Geopark Toba caldera.

Implementation and Monitoring Stage

This stage is the operational stage of a geopark, in this case Toba Caldera Geopark.

Currently operating geopark, activities such as the implementation of the various programs that have been planned in the previous stage, supervising and monitoring the activities of the geopark *keberjalanan*, conducted jointly by the actors directly involved in it.

At the implementation stage, Toba Caldera Geopark must already have a management board consisting of a combination of government and local communities. Management Board is the managerial function of Toba Caldera Geopark, including the operational part of every geosite. Other actors who have an interest and the same influences, joined the councils that are supporting the movement of the Management Board.

Evaluation Stage

An evaluation stage in the planning process is a step to evaluate how the program has been running, in this case the operational of Toba Caldera Geopark, especially in the area of Pusuk Buhit. The results of the evaluation forms the basis for fixing the flaws that occur in the operation of various geosites in Pusuk Buhit Area, as well as overall Toba Caldera Geopark, increase the range of services has been good, and innovating to develop the greater Toba Caldera Geopark.

This stage is carried out also by the actors directly involved. Each actor classify themselves each as the National Committee Geopark Indonesia for the national authorities, the Media Council for the actors in the media, the Board of Research for relevant actors of research, the Council of Local People for the actors associated with local elements, such as indigenous peoples and religion, as well as the Partners for actors funders. Each group of these actors together to evaluate the performance of the Management Board and provide inputs for progress in managing Management Board Toba Caldera Geopark in the future.

Conclusion

The study found some important matters related to the development Toba Caldera Geopark which turned out to invite the attention of a lot of actors, both from the national level down to the local. Lots of the

appeal of the application of the concept, a 'sugar' for the actors there. Although it offers a good variety of concepts, implementation geopark also reap the rejection of certain parties.

Actors involved in the development Geopark Toba caldera, especially that contained in Pusuk Buhit Area, can be grouped into four large groups, among other government agencies, funders, third parties as well as academics and media. Actor grouping is done on the basis of hypothesis primary role of each group of actors. The grouping is also subdivided into levels of the area where the actors move.

Institution group, consist of a group of good governance from the national to village level, such as the Ministry of Tourism, Ministry of Energy, the Provincial Government of North Sumatra, Samosir District Government, District Government Sianjur Mulamula, Sianjur Mulamula Village Government and Sarimarrhit Village Government.

Funder group, which consists of actors who sustain Toba Caldera Geopark in terms of funding, such as the Bank of North Sumatra, CSR funds from companies that operate around the Toba Caldera Geopark and tourism industry. Recently, the group raised funds are still performed by actors from institutional groups worked together, given the need for urgent funding.

The third-party group, which consists of the actors directly in contact with the ground, but lacked a place to be a part in the initiation stage. This group, among others, traditional leaders, religious leaders, community leaders, Punguan Guru Tatea Bulan and LCO Sianjur Mulamula, the formation of the Government of the District Sianjur Mulamula. Third parties are also required actors who should get a part in the initiation stage, but is waiting for a directive from the group institutions, such as museums of culture and so forth.

Academics and media group, consisting of researchers and the media personnel, which help research in North Caldera Geopark and publish it to the local community. Until now, the actor contained in

this group include Tim Ring of Fire Expedition Kompas Group and North Sumatra University. Differences in interests, perspectives, norms in force and resources owned by every actor associated Toba Caldera Geopark, especially in the area of Pusuk Buhit, one challenge in the process of planning and collaborative management. Therefore, it takes a form of dialogue conducted by every relevant actor, in the form of authentic dialogue, to accommodate and find solutions to the different views. Authentic dialogue, requires all agents or actors must be bound to one another in a common task in which consideration has characters such as bonding agent between actors at mutually beneficial ensuring that legitimate demands, accurate, comprehensive and sincere. This form of dialogue is often done by the initiative group of government institutions, especially in the form of socialization in every village that has geosites.

Socialization is aimed at finding common ground related to the concept of geopark and actors, especially local communities and indigenous peoples find and understand and agree positions and responsibilities himself as to the nature of reciprocity in the fulfillment of their respective interests (reciprocity). Instead of moving on their own, especially in the development of this geopark, better all the actors move together, by making local people aware of and interested in meeting interests is the result of the mutual interests of others. They can start to explore chance they get from Toba Caldera Geopark development in the region, in this case in the Pusuk Buhit Area. With this collaboration, all the actors are expected to realize that their interests cannot be met without meeting with the interests of other agents and are looking for options to start a mutually beneficial cooperation.

Socialization is done many times by the government, do to further reassure local communities and indigenous peoples that the purpose of this development is not to further trouble them, let alone take over sectors of the economy that has been run previously, but for their welfare. Understanding your ongoing and persuasive approach undertaken by the government, began to get a response in the form of their willingness to join in LCO,

which is a legal organization that is composed of various elements of society, including local government, traditional leaders, religious leaders, community leaders and local communities around geosite. This willingness shape a new relationship that will guide the development and the development and management through a collaborative process that actually (relationship). Although they often have a primary relationship with other stakeholders, but the new relationships created are better able to define the conflict that exists between them.

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