NEW MODEL FOR LOCAL POST DISASTER TOURISM GOVERNANCE:
Evidence from Indonesia’s Merapi Volcano

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Abstract

This article examines the dynamics of local post-disaster tourism governance in areas on the foothills of Merapi Volcano in Yogyakarta, Indonesia, which is one of the world’s most intensively active volcanoes. In this research, the author invites the readers to discuss the success achieved in local collaboration through transforming disaster life into a profitable tourism site. They face difficult situations amid government limitations in handling this post-disaster development. Using qualitative descriptive analysis, this study offers a new local-based collaboration model, especially for the post-disaster tourism governance in developing countries. Result of the study showed that local collaboration cannot be achieved in an instant, rather involves a process that is influenced by local wisdom. This article makes positive contribution to public policy literature and is essential for policymakers at the lower level and concerned about local-based development and empowerment.

Keywords: Merapi Volcano, collaboration, tourism, local, public
INTRODUCTION

For the most part, tourism studies from the perspective of public administration, still perceive tourism as an orderly process that does not have to deal with the coming of disasters, including through a policy approach (Hall, 2003) and management (Wahab, 2003). This policy approach is also further elaborated in studies of policy formulation (Stevenson et al., 2008), implementation (Erđi, 2011), and evaluation (Rudana, 2009). Meanwhile, the management approach includes planning (Inskeep, 1994; Gunn, 1988; Fandeli, 2002; Wardiyanto, 2011), strategic planning (Poon, 1989; Zaenuri, 2012), and management of tourist destinations (Fandeli, 2001; Wahab, 2003; Damanik, 2012). Nevertheless, if tourism is seen as a phenomenon related to disasters, it is impossible to explain it using the above approaches because of its unpredictability. Additionally, disaster as a process that occurs suddenly will thwart all tourism policies and previously determined plans.

One of the characteristics of a disaster is its unexpected and unplanned nature. Duit & Galaz (2008) argues that developing governance theory as one of the latest public administration paradigms requires examining a new approach. According to (Duit & Galaz, 2008), this phenomenon can manifest in three behaviors, namely: 1) threshold, the lowest intolerable condition; 2) surprise, sudden and unpredictable arrival; and 3) cascade (effect flow), successive effects occur, domino effects, trickle-down effects, where these three behaviors are inherent characteristics of a disaster. Previously, Kooiman (1993) introduced new forms of governance called interactive governance as an alternative paradigm to explain unpredictable phenomena by considering variables such as dynamics, complexity, and complexity (types) diversity, where the three variables certainly match the characteristics of tourism-disaster.

Several experts have studied disaster tourism. However, such studies were not based a governance perspective. Wickramasinghe (2008) conducted a study on efforts to formulate an appropriate strategy aimed at shielding tourists from impending disasters. The approach provided a comprehensive picture of the policy’s preparation. Previously, (Faulkner, 2001) had created a framework for managing disaster tourism based on a strategic management approach. Likewise, Aguirre (2007) conducted a study in Costa Rica on the effects of volcanic eruptions on tourism, particularly on managing information, coordination, and participation in handling disaster mitigation in tourist destinations using a quantitative positivistic approach in the category of observing natural phenomena.

In this context, the emergence and growth of tourism activities is essential
because there are specific and unique objects in the region. Other than that, tourism has an exceptional nature, uniqueness, difference, originality, diversity, and locality (Inskeep, 1994) to attract many people to travel. Tourism-disaster is also rooted in the understanding that nothing is impossible because even post disaster objects can become exotic source of tourist attraction.

Witnessing such a situation, the local government right from the district to the village level, tried to seize this opportunity, including forming a management team for the Volcano Tour tourism by involving community leaders, youth, and local village officials. Moreover, people who are victims of past Merapi eruption are also still engaged in efforts to reconstruct and rehabilitate their dwellings, continue to suffer from psychological ailments, hence have yet to recover to health state prior to the eruption.

On the contrary, investors have begun to establish several lodgings around the Merapi eruption area, the travel agencies have started organizing travel packages that traverse Merapi slopes that provide a lava tour or lava tracking experience to tourists (Harian Jogja, Monday, January 9, 2012). In light of that, this phenomenon is interesting to study. Mount Merapi tourism is now a leading national tourist destination and has made significant contribution to changing Merapi slopes surrounding areas and local community. Another contribution of this article is in the realm of local community-based tourism-disaster development model based on collaborative governance approach.

METHODS

The research was based on used qualitative description design on in tourism-disaster (Creswell, Hanson, Clark Plano, & Morales, 2007). This research describes the observed phenomenon and does not carry out calculations using statistical techniques. The research used several data collection techniques including in-depth interviews, documentation, direct observation of the Merapi volcano tour area. Six informants provided responses to questions posed by the study team, which was followed by in-depth interviews with informants in the Sleman Regional Government, especially in the Department of Culture and Tourism, Local Board of Disaster Management (BPBD) in Sleman Regent, Yogyakarta Province Tourism Office, tourism industries such as travel bureau and lodging, and community groups providing tour services and Merapi volcano tour manager.

FINDINGS

Stakeholders’ Involvement in Merapi Volcano Tour

Identifying stakeholders involved in tourism-disaster must consider three stakeholders’ elements: power, legitimacy, and urgency. The primary stakeholder is the
Sleman Regent, and Department Culture and Tourism in particular, as the public representative. This agency has the power to regulate and facilitate the management and development of the Merapi volcano tour. Its legitimacy comes from Regional Regulation No. 8 of 2014 concerning Structure Organization and Procedure of Sleman Regent. One of its main tasks is to organize tourism affairs, including tourism on the Merapi volcano tour. The office is responsible for everything related to the Merapi volcano tour on behalf of the Sleman Regent.

Although most of these areas are included in disaster-prone areas, which hampers efforts by the local government to optimize the management, it still holds ultimate responsibility for risk and community development. Excerpts of an interview with the Head of the Culture and Tourism Office emphasized the role and responsibility of the office in Merapi tourism management:

“So, we cannot be optimal in managing the Merapi volcano tour area because activities in that area face various impediments. In any case, the area is form part of the disaster-prone area. The initiative of the site to become a tourist destination is, of course, had its origins from the community itself. But are we silent when many people flock to enjoy the beauty of nature or “want to tell” how the impact of the Merapi eruption was? We are still conducting the guidance through making appeals in workshops for residents to be aware of disasters and as a tourist attraction.” (Interview, October 5, 2014)

Next in line among primary stakeholders from the private sector are the travel agencies and tourist accommodation providers. These two stakeholders have an intense relationship with Merapi volcano tourism. Although they do not have formal authority from the government, these two stakeholders can promote and provide accommodation for Merapi volcano tour tourists. In addition, Mount Merapi is still categorized as a disaster-prone area. The implication is that both stakeholders can carry out tourism service provision activities only if the volcano remains in the “normal and active” status.

As noted by Mr. Jajang of Java Mandiri Tour, which is one of the tour companies that organize the tour package:

“Tour packages to enjoy the natural beauty, especially in Mount Merapi, have drawn a lot of tourist interest. We package the tour in the form of..."
tour adventures that involve driving a jeep or trail exploring the slopes of Merapi to see pre-determined objects and sites. The tour packages are arranged in accordance with the interests of tourists, whether to visit all ODTW or just a few. We offer these tour packages to various groups with focus on young people. The focus is on the above group because the special interest tour package requires excellent stamina.” (Interview, October 18, 2014)

The primary stakeholders who are representatives of the community or small business groups are tourism service providers, who are directly involved in providing souvenirs, tourist attractions, and restaurants. The stakeholders have been authorized to provide services to tourists. They have obtained operating permission from the Sleman Regent government to carry out their activities during periods when Mount Merapi is active. The legal basis for their activities includes licenses for trail and jeep tourism attractions from the police and the Indonesian Motor Association (IMI). Thus, by introducing special interest tours in the form of Merapi adventures, souvenirs, and local cuisines tourist operators have created valued added to the experience of tourists.

These operators provide tour packages that are offered at standard prices, which is aimed at creating to avoid the emergency of unhealthy competition among practitioners. This is evident from the excerpt of an interview with the head of the Grinata group who quipped that:

“We deliberately make uniform package tours to avoid price wars between tourists and guarantee service certainty. Packages prices are determined in joint discussions so that packages are inexpensive but can also support all of us. Nonetheless, there is no fair survey or basis for calculating prices to ensure that services provided are in line with experiences tourists have and the cost they incur.” (Interview, October 18, 2014).

While there are three primary stakeholders are groups directly dealing with tourism businesses in the Merapi volcano tour destination, there are several secondary stakeholders that have indirect influence on managing the Merapi volcano tour packages. Although these secondary stakeholders are not crucial for the Merapi volcano tour’s survival, the past, present, and future can affect the Merapi volcano’s development. Secondary stakeholders that are drawn from the public sector include the Provincial Government of Yogyakarta through the Department of Tourism and the Republic of Indonesia’s Government under the Ministry of Tourism, while those drawn from the
private sector or tourism industry’s secondary stakeholders include ASITA and PHRI. Meanwhile, the secondary stakeholder community group is Merapi volcano tour management team, which is part of Umbulharjo’s Village Government.

From the perspective of collaborative governance, findings of each stakeholder’s involvement in conducting shared vision can be obtained as follows in Table 1.

The collaborative relationship among the government, private sector, and the community show that the government still plays a dominant role in this shared vision. This is because the government formulates the vision and mission, with the private sector and the community merely reduced to providing inputs that may either get incorporated or not. Even the socialization of the vision and mission still depends primarily on government, which makes use of various media outreach.

In terms of participation, the relationships that occur between stakeholders are depicted in the following Table 2.

Analyzing the pattern of involvement of the three stakeholders shows a mutually beneficial form that arises from active participation borne out of collaboration. With role the community has been elevated by the participation of the three stakeholders. However, the domineering effect of the government as the primary driver of program activities remains clearly evident and unparalleled.

### Table 1. Collaboration on Shared Vision

<table>
<thead>
<tr>
<th>No.</th>
<th>Stakeholder</th>
<th>Organizations</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government (Public sector)</td>
<td>Disbudpar (Department of Culture and Tourism), BPBD (Local Board for Disaster Management), Umbulharjo’s Village Government</td>
<td>Formulating a tourism-disaster vision by involving tourism stakeholders</td>
</tr>
<tr>
<td>2</td>
<td>Tourism Industry (private sector)</td>
<td>Travel Agents and Lodging</td>
<td>Providing input to the government so that the tourism-disaster vision can drive the development of the tourism industry</td>
</tr>
<tr>
<td>3</td>
<td>Community (Civil society)</td>
<td>Travel Service Operators and Management Team</td>
<td>Giving input to the government of tourism-disaster vision gives sufficient space for community participation</td>
</tr>
</tbody>
</table>

*Source: Zaenuri, 2018.*

### Table 2. Collaboration in Participation

<table>
<thead>
<tr>
<th>No.</th>
<th>Stakeholder</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Government (Public sector)</td>
<td>Disbudpar (Department of Culture and Tourism)</td>
<td>Facilitating business development and tourism human resources</td>
</tr>
<tr>
<td>2</td>
<td>Tourism Industry (Private Sector)</td>
<td>Travel Agents and Lodging</td>
<td>Marketing and making travel packages</td>
</tr>
<tr>
<td>3</td>
<td>Community (Civil society)</td>
<td>Travel Service Operators and Management Team</td>
<td>Participating in tourism HR training and providing information about the tourism attractions</td>
</tr>
</tbody>
</table>

*Source: Zaenuri, 2018.*
Table 3 shows findings on stakeholder involvement in networking. However, the implementation phase is primarily dominated by the private sector. The private sector promotes and carries out various recovery programs covering multiple types of exhibition activities.

Finally, from the perspective of collaborative governance, it bears strong relationships with partnerships. Based on observations and documentation in the field, Table 4 depicts each stakeholder’s involvement in the partnership.

<table>
<thead>
<tr>
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<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government (Public Sector)</td>
<td>Disbudpar (Department of Culture and Tourism)</td>
<td>Creating the “Sleman Bangkit” program as a form of recovery after a disaster</td>
</tr>
<tr>
<td>2</td>
<td>Tourism Industry (Private Sector)</td>
<td>Travel Agents and Lodging</td>
<td>Becoming a sponsor and helping in the promotion</td>
</tr>
<tr>
<td>3</td>
<td>Community (Civil society)</td>
<td>Community and Universities</td>
<td>Organizing seminars and supporting the “Sleman Bangkit” movement</td>
</tr>
</tbody>
</table>


Analysis of relationships between stakeholders in partnerships showed that the private sector and the community play dominant roles. The private sector provides insurance for tour packages, hence protects or bears the community’s risk of providing travel services, while the government provides supervision to ensure that relationship does not cause harm to the community.

Stages of Disaster Management

Disaster management, in general, follows a cyclical, starting with normal

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Government (public sector)</td>
<td>Disbudpar (Department of Culture and Tourism)</td>
<td>Permitting the insurance company and providing access to travel agents</td>
</tr>
<tr>
<td>2</td>
<td>Tourism industry (Private Sector)</td>
<td>Insurance Company</td>
<td>Protecting tourism service providers and asking for advice from the Ministry of Culture and Tourism</td>
</tr>
<tr>
<td>3</td>
<td>Community (Civil society)</td>
<td>Travel Agents</td>
<td>Obtaining insurance protection and paying a premium</td>
</tr>
</tbody>
</table>

conditions (mitigation), toward the onset of a disaster (response), emergency response (recovery), and healing to normal (resolution). Based on the stages in the tourism-disaster context, Appendix 1 shows study findings. First, from various activities under normal conditions through disaster mitigation, the involvement of multiple stakeholders can be identified as follows:

Based on analysis of stakeholder involvement applying governance principles with assumptions of ordinary circumstances requires an understanding of disaster mitigation, government involvement under normal conditions appeared to be more dominant that in other conditions, compared to the private sector and the community. The government provides directives that influence and underpin the conduct of activities. Meanwhile, the private sector and the community more often than not, provide supporting roles.

Second, conditions toward the onset of the disaster, preparatory activities to respond to the disaster event, stakeholders’ involvement can be depicted as follows in Table 5.

Table 5. Stakeholder Involvement toward the Onset of a Disaster

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>Government Involvement</th>
<th>Private Involvement</th>
<th>Community Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evacuation plan scenario</td>
<td>Making SOPs and floor plans as guidelines for evacuation</td>
<td>Not involved yet</td>
<td>Hearing the aspirations of the community and be involved in making SOPs</td>
</tr>
<tr>
<td>2</td>
<td>Barracks management training</td>
<td>Having several barracks and are trained on how to manage, place people, goods, principles in storing goods, logistics distribution mechanisms</td>
<td>At the time of emergency, from SGM, it provides goods in the form of formula milk.</td>
<td>The community is actively involved.</td>
</tr>
<tr>
<td>3</td>
<td>Public kitchen management training</td>
<td>Initially carried out by the TNI (Indonesian National Army), then followed by a resilient village given training to be independent, in the future do not always rely on the TNI</td>
<td>Logistics supply, in the form of food, side dishes, noodles, from Indofood, TV One, Metro TV, SGM</td>
<td>The community is actively involved. The surrounding community helps each other directly affected by the disaster. Only a day later, help arrived. Movement of rice wrap (Gerakan nasi bungkus) helps disaster affected.</td>
</tr>
</tbody>
</table>

Third, during the emergency response phase and recovery, the community contributed labor to the exercise, with the private sector and the government playing a more significant role. Table 6 shows the roles played by each stakeholder during community recovery from the disaster.

Analysis of stakeholder involvement during the recovery phase showed that the government received assistance from other stakeholders, especially the private sector network to effect necessary activities. Such network, thus, helped the government to rehabilitate and reconstruct infrastructure and housing.

Fourth, Table 7 shows stakeholder involvement in this phase.

Based on results of stakeholder involvement analysis, it became evident that this resolution stage roles played were balanced. The government initiated and involved the community, but played limited role in in ODTW activities after the Merapi eruption. Meanwhile, with regards to establish partnerships with the public, the private sector played a dominant role.

Based on the above findings on the pattern of in stakeholder involvement in various phases of the disaster efforts, the relationship between the government, the

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Table 6. Stakeholder Involvement in the Recovery Stage

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>Government Involvement</th>
<th>Private Involvement</th>
<th>Community Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of temporary shelter</td>
<td>Facilitation of village treasury land, made of bamboo</td>
<td>Built by private Metro TV, TV One, Qatar Telecommunication, AU Cooperative, Private Bank</td>
<td>The community donates energy.</td>
</tr>
<tr>
<td>2</td>
<td>Infrastructure recovery</td>
<td>Conducted by BNPB and Public Works Agency, especially on roads and evacuation routes</td>
<td>Pupuk Kaltim; builds an elementary school building; Banjarmasin Pos: builds an Inpatient Health Center; New Zealand Age: Sleman Disaster Internet Networking; provides a tool for communicating related to disaster issues; Harian KR: builds a multipurpose building; Pikiran Rakyat: builds permanent housings</td>
<td>Involvement in the form of donating energy</td>
</tr>
<tr>
<td>3</td>
<td>Cattle replacement and dairy cattle assistance</td>
<td>BNPB (National Disaster Management Authority) provides the replacement of livestock and cages</td>
<td>Purchasing milk products and helping milk treatment</td>
<td>Receive and maintain well, continue, and develop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Community Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of permanent housing</td>
<td>BNPB builds for stimulants. The building value is around Rp. 56 million, and from the government is Rp. 36 million. The land has been from the government of the former village treasury land to certificates.</td>
<td>Assistance for multipurpose buildings, prayer rooms, roads, water facilities, and other public infrastructure</td>
<td>The community is actively involved in donating energy.</td>
</tr>
<tr>
<td>2</td>
<td>Strengthening physical infrastructure</td>
<td>The central and provincial governments, through BNPB and PU, assist in the construction of access roads</td>
<td>Not yet</td>
<td>The community donates energy</td>
</tr>
<tr>
<td>3</td>
<td>Strengthening social infrastructure: pasedaluran (friendship) villages</td>
<td>BPBD becomes a mediator between villages to become a sister village.</td>
<td>Not yet</td>
<td>The community plays an active role in the process of drafting village friendship guidelines.</td>
</tr>
<tr>
<td>4</td>
<td>Sister village formation</td>
<td>Kepuharjo-Wukirsari Glagaharjo-Sinduharjo Hargobinangun-Pakem binaningun Purwoharjo-Donoharjo Girikerto-Trimulyo &amp; Pendowoharjo. Between the two is mutual assistance and cross-social capital that will be made legal.</td>
<td>Not yet</td>
<td>Active involvement is the first concept in Indonesia and will be used as a row model for schools that are threatened by disasters, teaching, and learning activities—not in emergency tents, and disasters occur continuing education.</td>
</tr>
<tr>
<td>5</td>
<td>Sister school formation</td>
<td>The government conducts a geographical mapping of the locations of nearby schools.</td>
<td>Not yet</td>
<td>The community helps to facilitate relations.</td>
</tr>
<tr>
<td>6</td>
<td>The preparation becomes a tourist attraction.</td>
<td>Preparing and facilitating the formation of several ODTW on the Merapi volcano tour</td>
<td>Promoting and making lava tour packages</td>
<td>The community is involved in the process of planning and maintaining the existence of attractions so that they remain original; bunkers are opened again and maintained by the community.</td>
</tr>
</tbody>
</table>

private sector, and the community that emerged lead to conclusions on the nature and form of collaboration in the current tourism management-disaster volcano tour of Merapi. The collaboration arrangements that ensued lead to the following findings:

1. Analysis of stakeholder involvement in tourism-disaster management, two principal categories are identified—primary and secondary stakeholders. Primary stakeholders play a direct role in tourism-disaster management, while secondary stakeholders play an indirect role in tourism-disaster management.

2. Tourism-disaster management requires the three pillars of governance because of the interdependence of the roles that the three stakeholders contribute to the success of tourism-disaster management activities. Additionally, each has different functions and limitations. The government functions included being a regulator and facilitator to ensure that tourism-disaster businesses were compliant with applicable regulations. Meanwhile, the function of the private sector related to promoting and selling ODTW, while the community provided assistance to providers of tourist services.

3. The need for collaboration differed across stakeholders. The inclination of the government tended to seek collaboration with other stakeholders of tourist objects/events with the motivation of obtaining regional income. Meanwhile, the private sector conducted tourism promotions with the goal of getting financial benefits from the tourism activities. For the community, collaboration was necessitated by the need to support cultural development and as a source of job opportunities for its members. The different needs, thus, can lead to the convergence of economic conditions, namely the realization of a common interest in income for the government, the private sector, and the community.

4. Collaborative relationship patterns that included shared vision, participation, networking, and partnerships were in tandem with the phases of disaster management, inter alia, normal conditions (mitigation), in the immediacy of the disaster (response), emergency response (recovery), and recovery toward normal (resolution).

Based on the conclusions above, the condition of tourism-disaster governance from the perspective of collaborative governance can be illustrated in the following Figure 1.

**Discussion**

Based on the various findings above, it is evident that the governance process creates an opportunity for the involvement of
non-state actors in public affairs. Nonetheless, such a process is not without a dilemma (Innes & Booher, 2005). Based on the study findings, the involvement of non-governmental stakeholders in disaster-tourism management is necessitated the need to overcome the limitations of each stakeholder through harnessing collaboration. According to (Innes & Booher, 2005), the dilemma arises from that the fact that despite the involvement of non-state actors in disaster-tourism management, the government still plays a very dominant role. That said, this study findings show that the government provides sufficient space for the private sector and the community to participate in disaster-tourism management.

The urgency to collaborate between stakeholders is not merely at the initiative of the government but also principally driven by efforts of the community who are victims of disasters who feel compelled to act and rise to the occasion to sustain their livelihoods. Based on the urgency to collaborate, it becomes evident that none of the three stakeholders have dominant position. The government has its limitations because Merapi volcano tour area is still a disaster-prone area; the private sector faces difficulties in commercializing its activities because of fears that such efforts may be perceived as capitalizing on hardship of the disaster-affected community. Meanwhile, the community lacks an understanding of disaster-tourism because most of them are farmers.

Based on the results of the collaboration needs analysis based on the
The three pillars of governance are shown in Table 8.

Based on the above matrix, tourism-disaster-tourism development creates need for a synergy among stakeholders. This is in line with Kooiman (1993), that ascribes stakeholder involvement in disaster-tourism to a structure in the socio-political system that is necessitated by acts of interactive intervention among the various actors involved. The interaction that occurs is pluralistic and not limited to any of the elements of specific stakeholders or groups. This may explain why analysis results of the collaboration arrangement among the three actors didn’t identify any one with a dominant role in that regard.

Thus, results of this study, contradict (Innes & Booher, 2005) findings that identified the government as the stakeholder involved.
that plays a dominant role in such arrangements. However, results of this study are in line with findings by Nisjar (1997), Nisjar urges the need for equality between stakeholders during the implementation of useful government affairs. The issue, thus, is not influenced by the need to meet private and the public interests. Based on findings of this study, a collaborative governance approach that allots roles in accordance with needs can explain the phenomenon.

**Results of the analysis of the intensity of the government, private sector, and community relations**

Using the concept developed by Wanna (2008) as reference, authors were able to delineate the relationship between stakeholders, especially the primary stakeholders. The relationship showed the different intensity based on managerial risks, forms of activity, orientation, and stakeholders’ involvement. Table 9 illustrates analysis results on the relationship between the three pillars of governance in managing tourism-disaster.

The table above shows the various types of relationships between the three stakeholders. The relationship between the government, the private sector, and the community are categorized as average, while the relationship between the private sector and the community is classified as high. Figure 2 depicts a more detailed portrait of the idea of the three pillars of governance.

**Results of Collaborative Transformation Analysis**

Based on the analysis results the evolution of the relationship between the government and the private sector and the community in tourism-disaster management can be shown to impact the type of collaborative governance. Following the concept explained in this study, the perspective of collaborative governance, including shared vision, participation,

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<tbody>
<tr>
<td><strong>Table 9. The Description of the Intensity of the Relationships between Stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
<td><strong>Government-Private</strong></td>
<td><strong>Government-Society</strong></td>
<td><strong>Private-Society</strong></td>
</tr>
<tr>
<td>Political/manag erial risks</td>
<td>Having a low managerial skill</td>
<td>Having a low managerial skill</td>
<td>Having a high managerial risk</td>
</tr>
<tr>
<td>Forms of activity</td>
<td>Doing the co-production</td>
<td>Adding technical ability</td>
<td>Transactional and economical</td>
</tr>
<tr>
<td>Orientation</td>
<td>Practical</td>
<td>Practical</td>
<td>Normative</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>On implementation</td>
<td>On implementation</td>
<td>Process and implementation</td>
</tr>
<tr>
<td>Category</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>
networking, and partnerships, can be transformed through command, coordination, cooperation, and collaboration.

Shergold (2008) contends that transformation in collaboration ranges from the simplest to the more complex circumstances. The four types of transformations trigger and maneuver the relationship between stakeholders in building collaborative relationships. The commanding transformation relationship is mostly carried out under conditions of shared vision with the government as the prime mover.

Meanwhile, the partnership is transformed by using collaboration as the basis of its relationship. The detailed recapitulation is shown in Table 10.

Based on the recapitulation results, categorization the three pillars of governance in the transformation that

**Table 10. Collaboration Transformation**

<table>
<thead>
<tr>
<th>Collaboration Perspective</th>
<th>Relationship between Stakeholders</th>
<th>Transformation Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared vision</td>
<td>Government-Private</td>
<td>Command</td>
</tr>
<tr>
<td></td>
<td>Government-Society</td>
<td>Command</td>
</tr>
<tr>
<td></td>
<td>Private-Society</td>
<td>Coordination</td>
</tr>
<tr>
<td>Participation</td>
<td>Government-Private</td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>Government-Society</td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>Private-Society</td>
<td>Coordination</td>
</tr>
<tr>
<td>Network</td>
<td>Government-Private</td>
<td>Cooperation</td>
</tr>
<tr>
<td></td>
<td>Government-Society</td>
<td>Cooperation</td>
</tr>
<tr>
<td></td>
<td>Private-Society</td>
<td>Cooperation</td>
</tr>
<tr>
<td>Partnership</td>
<td>Government-Private</td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Government-Society</td>
<td>Cooperation</td>
</tr>
<tr>
<td></td>
<td>Private-Society</td>
<td>Collaboration</td>
</tr>
</tbody>
</table>

*Source: Zaenuri, 2018.*
ranges from the uncomplicated to the more complex ones. If it correlates with the closeness of the relationship as conceived by Wanna (2008), it can be demonstrated as explained as below in Figure 3.

The figure consists of four quadrants, namely based on perspectives of collaborative governance propounded by (Duit & Galaz, 2008) concept of governance complexity. Thus, the four views can be used to explain the process of transformation in governance. Both scholars authored a research article entitled “Governance and Complexity: Emerging Issues for Governance Theory. The research results inspired the creation of a governance typology, which depicts four quadrants that is called “Multilevel Governance System.”

The balance between the high intensity of the relationship and the collaborative transformation determines the collaboration capacity in managing tourism-disaster. The interaction between the intensity of the relationship and the transformation can be extrapolated further by putting stakeholders as orthogonal dimensions, consisting of four quadrants in the space of the conceptual perspective of collaborative governance.

Quadrant one explains the perspective of the simplest collaborative governance, namely shared vision. The initial collaborative governance process begins with the shared vision that is already agreed upon and achieves consensus from all stakeholders in carrying out all programs and activities. This type of governance combines low to moderate intensity relationships and is dominated by commanding transformation. Collaborative tourism-disaster governance starts from a similar vision and collective commitment to achieve the future together.

Meanwhile, quadrant two is the next stage called participation. This governance phase combines with high intensity relationships with coordination transformation. Upon undergoing a shared vision, carrying out real action requires coordination between stakeholders. In doing so, the phase also requires high intensity
collaboration to facilitate the making of collective decisions.

Quadrant three involves networking. This governance phase combines low intensity relationships with cooperative transformation. Networking is a continuation of participation, requiring cooperation to share ideas and resources between stakeholders.

Finally, quadrant four is the last stage, called a partnership. This phase of governance combines relationships with high intensity and collaborative transformation. This type is the final phase of the collaboration for an extended period. In this phase, shared creation and institutional innovation begin to be established.

### Analysis of the Stages and Transformation Model toward Normal

Based on the analysis of on the four stages of collaboration, it can be identified as follows in Table 11.

Based on the stages of disaster management and the variations identified

![Figure 4. Tourism-Disaster in the Collaborative Governance Perspective](Source: Analysis Results)

<table>
<thead>
<tr>
<th>Stages of Tourism-Disaster Management</th>
<th>Collaborative Governance Perspective</th>
<th>Relationship Intensity</th>
<th>Transformation Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal condition</td>
<td>Shared Vision</td>
<td>Low</td>
<td>Command</td>
</tr>
<tr>
<td>Approaching Disaster</td>
<td>Participation</td>
<td>High</td>
<td>Coordination</td>
</tr>
<tr>
<td>Emergency Response or recovery</td>
<td>Network</td>
<td>Medium</td>
<td>Cooperation</td>
</tr>
<tr>
<td>Recovery to Normal or Resolution</td>
<td>Partnership</td>
<td>Very high</td>
<td>Collaboration</td>
</tr>
</tbody>
</table>

*Source: Processed from Primary and Secondary Data*
from the transformation process, disaster-tourism management in the perspective of collaborative governance can be illustrated in figure 4.

Figure 4 shows the phases of disaster-tourism starts with command, passing through coordination and cooperation, to collaboration governance. As regards the expected condition, the government can implement a shared vision through command to ensure that it is understood by all stakeholders. In this case, the government plays a central role in ensuring that the shared vision of the concept achieves mutual agreement among stakeholders. Thus, at this stage, a top-down approach is used to foster common understanding of the concept by all stakeholders. Using this command-driven carry out their duties and responsibilities with respect to providing disaster tourism services.

Leading up to the disaster, participation of all parties is crucial. This is because the government cannot handle all the activities on its own without the involvement of other stakeholders. Thus, coordinative transformation is necessary in this phase to help all stakeholders in carrying out their duties. By forging coordination among stakeholders, this phase helps to concretize the next step in implementing the shared vision.

During the emergency response (recovery) phase, networking relationships achieves growing importance hence is emphasized. This relationship also highlights the post-disaster circumstances that are characterized by the need to ensure safe and comfortable recovery. Transformation that occurs in the networking model tends to be cooperative with shared ideas and resources being shared.

Meanwhile, during the final stage of disaster-tourism management, a permanent and institutionalized partnership takes shape. Applying the partnership model is suitable in the lead-up to normal conditions. The phase toward long-term normal circumstances is useful if a partnership with collaborative transformation is carried out. Thus, sharing creations and innovations to deal with perpetual disasters in collaborative transformation should be fostered and supported.

**DISCUSSION**

**Implications of Theory**

The results of the discussion on various collaboration models, if viewed from the vantage point of governance theory (Ansell & Gash, 2008; Duit & Galaz, 2008) concerning the stages of disaster-tourism-management (Miller & Ritchie, 2003), have essential implications for collaborative governance. First, the concept Anshel and Gash (2007) proposes in the construction of the Anshel & Gash theory, the concept of collaborative governance is understood as governance governing the involvement of
non-state actors that are oriented toward consensus and deliberation. Likewise, the theoretical construction of (Lasker, Weiss, & Miller, 2001) asserts that collaborative governance requires the integration of human and material resources, in a process that is characterized by the existence of an equal relationship between stakeholders who have similar interests (Dwiyanto, 2012). Results of this research show that collaborative governance does precisely occur in the same pattern and manner that experts propose. Consensus and deliberation for example occur without any preparation because of the existence of similarity of interests that bind stakeholders. Therefore, the combination of resources and materials is unnecessary because the activities carried out are still simple. The existence of an equal relationship does not have to occur because stakeholders do not share similarity in collaboration ability.

Secondly, the level of collaboration proposed by Wanna (2008), underscores the notion that collaboration starts from incremental toward a transformative interaction. John Wanna’s concept shows that the development of collaboration is linear and deterministic. Any organization in collaboration will always experience results that indicate an ever-increasing level of collaboration. This research on the contrary shows that collaboration of the three pillars of governance undergoes fluctuations hence not deterministic. Thus, collaboration does not have to start from the lowest to the highest level. This study also identified a relationship between the private sector and the community that assumes a direct medium-level position.

Thirdly, the concept put forward by Wanna, Shergold (2008) asserts that collaboration can be done through phases transformation process that begins with command, coordination, and cooperation and culminates in collaboration. This process starts with collaboration under stringent controls and shifts towards extensive autonomy that fosters creativity and innovativeness. This research shows that the creative process is natural and follows a slow pace. It is hardly possible for an accelerated transformation process to occur without the support of a transformational institution.

Fourth, (Eppel, 2013) concept is quite comprehensive in explaining the phenomenon of collaborative governance. The concept emphasizes the relationships between stakeholders in the collaboration. The stages of collaboration are described into five types: coexistence, communication, cooperation, coordination, and collaboration. These five types of collaboration have different characteristics that shape the formation of relationships that increase from one phase to the next. One important thing from this concept is that a formal secretariat is needed to support collaborative relations.
To that end, (Eppel, 2013) concept is beneficial for analysis and should be the basis for the formation of a legal and permanent management team to promote and support collaborative governance transformation.

Fifth, the concept of (Miller & Ritchie, 2003) on the need to take into account, risk management factors in tourism management, is crucial for strengthening disaster-tourism management. Risk assessment helps in predicting a crisis that is likely to occur. The results showed that government, the private sector, and community support is needed to sustain community response to eruption disasters, Nonetheless, this concept needed adjustment because in this study found that the three governance pillars did not conduct crisis assessments together. Thus, the role of institutions that can represent the three pillars of governance is vital in this regard.

Sixth, Bill Foulkner (2001) concept discusses the need for a different leadership style between managing tourism and disaster-tourism-. On the one hand, tourism is entirely managed based on normal predictable ways. On the other hand, disaster-tourism management must navigate uncertainty amidst chaos that calls for risk taking or entrepreneurial leadership style. However, the limitations of this concept lie in the difficulty of applying it to hybrid organizations that involve various stakeholders. For this reason, there is need for an organization that is based on three pillars of governance that can apply entrepreneurial leadership styles.

Seventh, the concept of Carter (1994), which considers disaster management as a cyclical process, is very suitable for sustainable tourism. In the context of disaster management cycles, collaborative governance transformation process underpins the framework. Nonetheless, what needs improvement is to identify the stages that are suitable for collaboration transformation. Appropriate phases of disaster events that begins with normal or pre-disaster conditions, emergency response, to recovery influence the phases of the collaborative governance transformational.

Based on the analysis of the collaborative governance transformation process and assessment of the transformational process using (Eppel, 2013) model as reference, informs the following recommendations for the collaborative governance model on disaster tourism management in Mountain Merapi tour operations.

The model explains that collaboration as the latest transformation must be implemented in formal institutions that have a permanent secretariat and partnership function. The existing formal institution is the Merapi volcano tour management team, which to date only plays a limited role. The management team, which has been identified
as a secondary stakeholder can be empowered to become a primary stakeholder. The management team is expected to provide direct tourism services and can transform collaboration with all disaster tourism stakeholders.

To become collaborative transformation agents, the management team must have forge strong relationships with all stakeholders, including the government, the private sector, and the community and assumes the position that enables it to have regular connections with disaster tourism stakeholders. Such an arrangement should help in strengthening the dynamism and synergic relations with the three pillars of governance.

Based on the analysis of various existing models, Figure 6 shows the proposes the following recommendations to the model.

From the context of the intensity of the relationships between stakeholders, the management team is an agent that can mobilize the resources available for all stakeholders.
stakeholders. The management team conducts collaborative transformations by forging strong relationships and bearing legal responsibility to carry out main activities of Merapi volcano tour.

Meanwhile, Figure 7 depicts the transformation process that the management team should carry out:

This recommendation model shows that the management team has full authority to manage the Merapi volcano tour by placing its position as the primary stakeholder. Being at the center of activities, the team can fully carry out its functions. Through collaborative transformation of functions, roles and activities, coupled with the collaboration of the tourism industry and the community, can help to accelerate planning and implementation of services efficiently.

The management team can collaborate with the travel and accommodation agencies to create an integrated travel packages. In addition, collaborating with tourism services providers should enhance the linking of services to tourist needs. Moreover, the management team also has an opportunity to interact well with the community because it is part and parcel of the community. Higher intensity of interaction enhances the capacity of the management team to assist community groups in providing tourism services.

Based on figures 5, 6, and 7, provide guidance on formulating a general model of disaster-tourism governance based on collaborative governance perspective. Model recommendations are based on the current conditions that is presented in Figure 8, which are then modified. Therefore, proposed general model recommendations proposed are as follows Figure 8.

Figure 8 shows recommendations of the disaster-tourism management model from the collaborative governance perspective as applied to Merapi volcano tour in Sleman.
Regency. Based on model recommendations, the following are the proposed adjustments:

1. A fundamental change is needed to ensure sustainable disaster-tourism development of the volcano tour of Merapi, Sleman Regency. The changes in management should initially focus on implementing adaptive governance, and subsequently collaborative governance. The shift will lead to an acceleration in managing changes in tourism management in the event of a disaster.

2. The need for joint development of potential ODTW post-disaster needs based on government-centered view by management with the collaboration of non-governmental actors to be developed jointly based on a opportunities for collaboration among various stakeholders.

3. Creating synergy in disaster-tourism management by providing

4. Equipping the management team with the authority and mandate to transform collaboration to accelerate the achievement of sustainable disaster-tourism governance.

CONCLUSION

The objective of this research is to use a collaborative governance perspective to provide an answer to four problem formulation issues relating to disaster tourism management. The fourth problem formulation concerns inter alia, a) the reasons for the need for collaboration between the government, the private sector, and the community in tourism-disaster management, and the design that takes into account the needs of each pillar of collaboration governance considering government limitations; b) a description of the intensity of the relationship between government, the
private sector and the community; c) the current process of transforming disaster tourism management from the perspective of collaborative governance, with the aim being obtaining a comprehensive picture of the three pillars of governance transformational process in managing disaster-tourism-ranging from a shared vision, participation, networking to partnerships; d) collaboration transformation model to explain the stages that should be taken to bring into reality proper disaster tourism management from a collaborative governance perspective. The steps that are needed are in tandem with the transformational process beginning with normal conditions prior to disasters, onset of disasters, recovery, and resolution, and back to normal.

The research produced the following findings:

1. The need to collaborate between the government, the private sector, and the community is adaptive in nature to needs of the time and moment. Although there is a common need for the existence of the institution that brings together the three stakeholders, the collaboration that has emerged is characterized by iniquity of roles and importance among the stakeholders. Government domination is still visible, while proportional collaboration should be the ideal.

2. The intensity of the relationship between the government, the private sector, and the community still falls under the moderate category. Whereas the relationship between the private sector and the community can be categorized as high, the community is still limited to providing tourism services, which are supervised by the government and the private sector develops and implements travel packages.

3. Transformation of collaboration in managing disaster in shared vision is still at command phase with coordinated participation. Therefore, cooperative networks have increased while collaboration is still confined to the private and community sectors. In contrast, the relationships between the government, the private sector, and the community are still basically cooperative in nature hence far removed from collaboration.

4. In normal conditions, collaborative transformation is likely to be commanding, especially in building a shared vision. In the phase leading up to the disaster, coordination of transformational collaboration drive all stakeholders’ participation. At the emergency response stage (recovery), collaboration transformation relies on the network, which helps in returning
the situation to normal. In the final phase, toward normal conditions, a collaborative transformation is needed to create a long-term partnership between stakeholders.

5. There need to develop a model that equips the management team with authority to carry out transformation in tourism-disaster management before the disaster, during the disaster, recovery, and the resolution to normal. The management team should be the main driver and steer of the collaborative transactions and in developing long-term partnerships.

The results of this study indicate that no supporting facts have been found for this thesis. The thesis argues that disaster-tourism management requires a reputable institution to carry out transformational leadership underpinned by proportional collaboration between the government, the private sector, and the community. Collaborative transformation is implemented by strategically important institutions.

In a nutshell, disaster-tourism management from the perspective of collaborative governance, by giving full authority to the management team to be the driver of transformation serves as the main alternative to continue disaster-tourism management. This research produces a thesis that is different from the various theories on collaborative governance. Results of this study revealed that collaborative governance in the disaster-tourism context underwent a transformation in terms of informal to formal relations, from command to collaboration, and from a shared vision to a partnership.

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### Appendix 1. Stakeholder Involvement in Normal Conditions (Mitigation)

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>Government Involvement</th>
<th>Private Involvement</th>
<th>Community Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Make lava pockets</td>
<td>Fully carried out by BPBD (Local Board for Disaster Management).</td>
<td>There is no help from the private sector</td>
<td>Energy to assist installation</td>
</tr>
<tr>
<td>2</td>
<td>Making an Early Warning System</td>
<td>The EWS equipment is all from the government: sirens, lava flow monitors, CCTV in several places, equipment for sending data, and rainfall collectors.</td>
<td>Providing assistance for monitoring lava flood buildings</td>
<td>Completing the fence and finishing of buildings by providing labor</td>
</tr>
<tr>
<td>3</td>
<td>Making evacuation signs</td>
<td>Planning and implementing several points that need to be evacuated</td>
<td>Through CSR programs</td>
<td>College students help with creation through KKN (Real Work Lectures)</td>
</tr>
<tr>
<td>4</td>
<td>Eruption simulation</td>
<td>Performed in Kepuh Village, Wukir, Argo, Hargo, Giri. Simulation is in the form of evacuation preparation. Material from BPBD is in accordance with contingency plans.</td>
<td>Not involved yet</td>
<td>Communities are involved starting from the preparation of scenarios, implementation, determination of gathering points, desired evacuation routes, evaluation of effectiveness, and preparation of SOPs.</td>
</tr>
<tr>
<td>5</td>
<td>Routine monitoring</td>
<td>Fully carried out by BPBD: Sirens for rain lava floods, recruiting communities when there are rain and floods (EWS monitors), communities trained in understanding eruption symptoms, given HT equipment, 13 people scattered in Cangkringan, Pakem, and Ngemplak</td>
<td>Creating a disaster information system</td>
<td>Become an EWS monitor who is equipped with an understanding of eruption, and if there is rain, they must report, observe visually, and report the actual conditions</td>
</tr>
<tr>
<td>6</td>
<td>Establishing a disaster preparedness school</td>
<td>Collaborate with the education office to conduct studies and identify the determination of schools located in disaster-prone areas. The formation of SSB schools (Disaster Preparedness Schools) is an MoU between the affected and the buffer, which will become a sister school. The new implementation was in 2015 and has been carried out simulations by giving opportunities to affected schools to buffer schools.</td>
<td>Book assistance and school supplies by publishers</td>
<td>School committees are involved in drafting SOPs, rehearsals, and the drafting of evacuation SOPs. Community organizations also help, such as Muhammadiyah, PMI.</td>
</tr>
<tr>
<td>7</td>
<td>Form a disaster-</td>
<td>There are nine villages located in four sub-districts. Communities, which can</td>
<td>Helping with a personal</td>
<td>Active involvement in the whole process</td>
</tr>
<tr>
<td>Resilient Village</td>
<td>independently anticipate the impact of disasters, utilize the capabilities they have. For example, doing initiation by going through seven meetings to see the potential threat of disasters and making maps of risks, vulnerabilities, forming village volunteers, making contingency plans that will be used as a guide in the event of a disaster about what to do. Some use network and manual systems. Village Information System</td>
<td>Computer (PC)</td>
<td>of forming a disaster-resilient village</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Zaenuri (2018)*