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Key Elements of Environmental Justice in the Geothermal Power Plant Resistance Movement

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ABSTRAK

Energi panas bumi saat ini dianggap sebagai energi terbarukan yang ramah terhadap lingkungan sekitar. Namun berdasarkan fakta empiris di berbagai negara, produksi energi panas bumi ternyata kerap menimbulkan kerugian sosial-ekologis bagi masyarakat. Berbagai gerakan *environmental justice* kemudian muncul untuk melakukan penolakan dan memberikan konter wacana terhadap persepsi dominan yang menyatakan energi panas bumi merupakan energi terbarukan dan ramah lingkungan. Artikel ini bertujuan untuk memahami bagaimana strategi dan diskursus gerakan Aliansi Selamatkan Slamet dalam menolak pembangunan PLTPB Baturraden di Banyumas dengan menguraikan elemen-elemen kunci dan kondisi spesifik yang dihadapi. Aliansi Selamatkan Slamet dianggap menarik karena telah mampu melibatkan secara aktif berbagai elemen dengan sudut pandangnya masing-masing untuk bersama menolak pembangunan PLTPB. Dengan menggunakan kerangka kerja teoretis berupa elemen-elemen kunci strategi gerakan (tuntutan, arena, dan taktik), artikel ini mengkaji bagaimana Aliansi Selamatkan Slamet menentukan pemilihan target, pembingkai media, waktu, dan relasi yang ada dalam gerakan resistensi. Metode yang digunakan berupa pendekatan kualitatif dengan merujuk data primer berupa wawancara dan mempelajari dokumen-dokumen tertulis. Hasil penelitian ini menunjukkan bahwa kondisi sosio-politik, hubungan antar organisasi, dan kultur organisasi turut berpengaruh dalam strategi dan diskursus yang dibangun gerakan Aliansi Selamatkan Slamet.

Kata kunci: Energi panas bumi, *environmental justice movement*, strategi gerakan, diskursus gerakan

ABSTRACT

Geothermal energy is currently considered as an environmentally friendly, renewable energy source. However, based on empirical data from various countries, geothermal energy production often results socioecological losses for the host community. Various environmental justice movements have emerged to protect environment by protesting and providing a counter discourse against the dominant perception that geothermal energy is renewable and environmentally friendly. As Indonesian government put more effort to develop more geothermal power thermal across the country, more reactions also emerge and surprisingly include the critical one. This article aims

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to look at one of the critical reaction from community to counter the argument of positive impact of a geothermal site. It is important to understand how the strategy and discourse of an agent to argue that environmental friendly is not always beneficial, especially for local community. This article looks into the Aliansi Selamatkan Slamet (freely translated into Save Slamet Alliance) movement that rejects the construction of the Baturraden Geothermal Power Plant (PLTPB) in Banyumas by outlining the key elements and specific conditions observed. Aliansi Selamatkan Slamet is intriguing because it has achieved active involvement of various elements through its respective perspectives to jointly reject the construction of the PLTPB. Using a theoretical framework of the movement strategy, it examines how Aliansi Selamatkan Slamet determined the selection of targets, framing, time, and relations in the resistance movement. The results indicate sociopolitical conditions, relations between organizations, and organizational cultures are influential to the strategies and discourses of the movement.

Keywords: Geothermal energy, environmental justice movement, movement strategy, movement discourse

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INTRODUCTION

Everchanging studies of social movements have attempted to investigate socioenvironmental conflicts from a broader dimension, namely, a global dimension, and have considered environmental degradation a challenge to human safety (Miller 2006). Mainstream environmental groups that have emerged since the 1970s have expanded their membership base to involve people of color and of the working class in social movements (Camacho 1998). The main issue raised by this social movement arose from various environmental problems experienced by individuals or groups to provoke policy changes and practices relating to the environment (Tong 2005). The link between environmental degradation and oppression is evidenced by unjust and unequal access to public facilities, waste and radioactivity exposure, and discriminatory responses to natural disasters. Many reports on environmental injustice have led to a new discussion on a topic called the environmental justice movement (Cole and Foster 2001).

The core concept of environmental justice relates human rights and government accountability to mainstream environmental protection. The concept of environmental justice, therefore, depicts a broad reflection of what is considered an environment. Such a view demands a radical change from a traditional ecological approach to a more ho-

nocentric understanding. This novel approach has been applied to concerns for the environment of the lower-middle class and other regions that have a strong impact on how resources and environmental risks are distributed in the global community.

One way to apply this approach is by looking at how the environmental resistance activists understand and counter a relatively positive narrative about supposedly environmental friendly project. Geothermal project is suitable for this purpose as it is seen as part of clean energy and can be massively campaigned by government and private company to build with minimum resistance. Geothermal energy is a type of renewable energy with low carbon emissions and used in various countries. Geothermal energy was first used in 1916 in Larderello, Italy. Currently, this renewable energy source produces 220 kWh of geothermal energy. Since its first use, geothermal energy has begun to be harnessed in volcanic regions, where hot reservoirs are close to the surface (William 2010). However, due to the limitations of geothermal technologies, the contribution of geothermal energy to global electricity production has not been significant. By 2025, new predictive geothermal energy will contribute 2% to 3% of total global electricity production (Craig and Gavin 2018). However, despite the considerable commitment to transition to environmentally friendly energy, the development and application of geothermal energy remain constrained by low social acceptance of geothermal energy in various countries.

Some of the environmental social impacts of geothermal energy generation such as increased seismic activity, water pollution, noise pollution, health problems, land deforestation, disruption of flora and fauna ecosystems, and a decrease in local community's livelihoods have also contributed to the low social acceptance rate of geothermal energy use. Especially since the earthquake in Switzerland caused by the geothermal exploration process in 2006, followed by similar events in Germany, the geothermal energy acceptance rate in the global community has significantly decreased (Kunze and Hertel 2017). A wave of refusals in the form of environmental justice movements in Germany, Switzerland, Italy, and Australia was a reaction to the effects of the

application of geothermal energy. The media framing of the reporting on geothermal energy influenced this matter. The risks and negative impacts associated with geothermal technology tended to be reported more often compared with its economic potential and technological development (Romanach, Carr-Cornish, and Muriuki 2015).

In addition to what has occurred in Switzerland, Germany, Italy, and several other countries where geothermal power plants have been implemented, similar occurrences have been observed in several other developing countries with considerable geothermal potential namely the Philippines, Indonesia, and Mexico.

Table 1. World's Potential Geothermal Energy 2014

No.	Country	Potential (MW)	
1.	USA	30,000	28.9 %
2.	Philippines	4,000	3.9 %
3.	Indonesia	28,910	27.8 %
4.	New Zealand	3,650	3.5 %
5.	Mexico	4,600	4.4 %
6.	Italy	3,200	3.2 %
7.	Iceland	5,800	5.6 %
8.	Japan	23,40	22.6%

Source: Ministry of Energy and Natural Resources' (KESDM's) Strategic Plan 2015–19

This paper explored the contexts of the social movement to reject geothermal energy in Banyumas Regency, Indonesia, by using the environmental justice movement approach and emphasizing the topics related to injustice and policy formulation that significantly affect the environment. Researchers that have investigated topics related to socioenvironmental conflicts in geothermal energy, such as in Germany (Kunze and Hertel 2017), Italy (Pellizzone et al. 2017), and Australia (Dowd et al. 2011; Romanach, Carr-Cornish, and Muriuki 2015), and Switzerland (Stauffacher et al. 2015), have attempted to explain the history of the rejection of geothermal energy exploration in various parts of the world, societal acceptance of geothermal energy, media coverage of geothermal technology, and how the resistance affected the development of renewable energy. Notably, not been much research has been carried out to analyze resistance strategies and discourses engineered by anti-geothermal energy movements. Therefore, it is essential to explore

a particular case in order to understand the challenges faced by environmental resistance movement by looking at its strategies and discourses.

Indonesia has the second-most geothermal energy potential worldwide and used only 4.9% of its existing potential in 2014 (Ministry of Energy and Natural Resources 2015). The data have become the reason for the planned geothermal power plant (PLTPB) across Indonesia, including the plant in Baturraden (also known as Baturaden) in Banyuwangi Regency called PLTPB Baturraden (Ministry of Energy and Natural Resources 2015). During the construction of PLTPB Baturraden, geothermal exploration caused negative impacts, at least according to local residents. The residents at the slopes of Mount Slamet reported massive damage to the natural environment that directly affected their lives and this has driven the locals to object its development.

The PLTPB Baturraden covers an area of 488.28 hectares in the tropical rainforest area on the slopes of Mount Slamet. Using this location inevitably posed environmental implications for the Mount Slamet area in Banyuwangi. The tropical rainforest of Mount Slamet has an ecologic, economic, and sociocultural significance for the surrounding community and is a catchment and water storage area for the five districts on its slopes.

Another ecological function no less important than maintaining the tropical rain forest is as a protector of the biodiversity on Mount Slamet. The government's approval of opening the Mount Slamet protected forest area for PLTPB Baturraden caused landslides from road infrastructure piles that had not been responsibly disposed by PT Sejahtera Alam Energy (PT SAE) as the construction company. The avalanche clouded the river around the slopes of Mount Slamet and disrupted the activities of the surrounding community. Material avalanches also damaged several waterfalls managed by the community as tourism destinations, also disrupting the economic well-being of the native community. In addition to the landslides and river water pollution, various wild animal's forest habitats were threatened, forcing the animals to climb down and go into the community settlements to find food on community plantations.

In response to this problem, various elements of the community who were members of the Aliansi Selamatkan Slamet (Save Slamet Alliance) carried out several resistance strategies to reject PLTPB Baturraden. The efforts made by the alliance were notable because the various elements had collaborated based on their respective perspectives to jointly reject the construction of PLTPB Baturraden. Their actions included rural communities who had knowledge of the strong relation between the slopes of Mount Slamet and the everyday lives of the indigenous people and civil society organizations more focused on the relationship of the development of PLTPB Baturraden with a wider policy scheme. Thus, this article also explored how an environmental movement can create discourses that accommodate and persuade various elements to participate.

Based on the aforementioned argument, this article attempted to fill the gaps in the literature through an analysis based on the efforts of the Aliansi Selamatkan Slamet to reject PLTPB Baturraden. This research focused on the following question: How did Aliansi Selamatkan Slamet create the resistance strategy and discourse observed in the rejection movement? This study was conducted by analyzing the key elements and internal and external situations of the movement to understand how they affect the selection of specific strategies and discourses compared with other available alternative repertoires.

The analysis contributes more than a mere chronological discussion that elaborates on strategies that have been carried out, and the results do not attempt to highlight the most appropriate and effective strategies for geothermal resistance movements. By contrast, this article investigated how the choice of the most effective strategy was made based on the conditions of the movement. Therefore, this paper specifically examined how strategies and discourse are chosen based on key elements of the Aliansi Selamatkan Slamet movement.

This research has four parts. The first part discusses the exploration of theories relevant to analyzing movement strategies and discourse. The second part comprises research methods by presenting the data analysis techniques used in this study. The third part is a discussion and

analysis of the findings. Finally, the fourth part presents conclusions and recommendations for further research.

LITERATURE REVIEW

Environmental Justice Movement

The social movement, in general, was defined by Bebbington et al. (2008) as a process of collective efforts of the community and marginalized groups at the grassroots level to empower and enhance democracy. Ballard et al. (2005), by contrast, asserted that social movements are political joint ventures (usually in the form of networks or organizations) organized to change the existing political, economic, and social systems. Tilly (1985) asserted that social movements should be understood as a form of a social campaign, rather than a form of organization. In line with these definitions, social movements as an alternative process are formed by a group of actors whose motives are based on justice, although not explicit (Bebbington 2007). Dagnino (Bebbington, Hickey, and Mitlin 2008) asserted that this alternative process often offers different ideas for development, opposes core ideas that form the basis of policy-making, challenges major dominant narratives, and is legitimate knowledge for policy formulation. Social movements attempt to present alternative sources of knowledge to have a role parallel to the dominant sources of knowledge to be used as references in policy formulations. Klandermans (2004) mentioned several factors underlying the motives for becoming involved in a social movement: instrumentality, identity, and ideology. Instrumentality relates to injustice and discrimination against a group. Through protests created by social movements, a group gains the opportunity to increase their bargaining power. Social movements realize that conventional channels of political participation have been closed; therefore, they must propose alternative strategies for their voices to be heard (Bosi 2007).

Since the 1980s, a new perspective has been developed regarding the environmental movement that attempts to go beyond its analysis of the distributive paradigm, that is, toward questions about recognition,

difference, and political participation (Young 1990; Fraser 1997, 1999). Specifically, in 1982, community and civil rights activists protested the disposal of toxic waste in the predominantly African-American community of in Warren County, North Carolina (Pellow 2016). This perspective is called the environmental justice movement (EJM) and, at that time, was a new social movement. The distributive paradigm in mainstream environmental justice had placed too much emphasis on whether the positives or negatives of environmental distribution were insufficient; the framework related to distribution must remain integral, and concerns related to cultural recognition and political participation are crucial components of an EJM (Schlosberg 2012). The expansion of the discourse, thus, creates a point of view that a relationship exists between the movement for environmental justice and other humanitarian movements (Schlosberg 2012). Therefore, Schlosberg then stated that environmental and ecological justice is primarily an issue of justice, not an environmental issue.

Sharing the same idea as Schlosberg, Mohai, Pellow, and Roberts (2009) also defined EJM as an effort to fight for the protection of a social group vulnerable to environmental losses such as air and water pollution due to industrial activities. The environmental resistance movement has concluded that the impact of environmental losses is implicitly related to the poverty level and race of a community group. Thus, EJMs are related to environmental protection and the economic justice and cultural identity of local community groups (Pulido 1996). The EJM concept also describes that victims affected by environmental injustices encounter environmental problems due to the economic and cultural inequalities (Mohai, Pellow, and Roberts 2009). Thus, overlooking the existing socioeconomic conditions is impossible when discussing ecological conflicts on the basis of the EJM concept.

Social Movement Strategy and Discourse

The strategies of an environmental resistance movement depend on the history of the conflict and the demands of the movement. Martinez-Alier et al. (2016) analyzed 1,500 cases and identified 27 mobilization

strategies in resistance movements; among those often carried out by resistance movements were letters of rejection, public campaigns, street demonstrations, knowledge dissemination, blockades, and the development of network alliances.

In addition, Conde (2017) explored three strategies that can be applied to resistance movement alliances. The first strategy is a referendum, a frequently applied strategy in Latin American countries, and through 2012, 68 referendums have been carried out in several countries related to local communities refusing the proposals and actions of mining companies (Haarstad and Fløysand 2007; Muradian, Martinez-Alier, and Correa 2003). The second strategy is the adjudication of cases of social conflict in the courts. The extent of the various elements incorporated into movement alliances such as nongovernmental organizations (NGOs) and legal practitioners has enabled marginalized communities to employ this strategy. However, as stated by North and Young (2013), the adjudication process can require a considerable amount of time, cost, and effort as well as the support of well-managed movement alliances and professional lawyers. Through the adjudication strategy, the community can obtain court-mandated compensation for the losses of land, quality and quantity of water, biodiversity, and livelihood. Based on the context of human rights, the rights to the collective region and aesthetic values of ecology cannot be monetized into compensation (Martinez-Alier 2009). The third strategy is the use of knowledge to influence public policies and perceptions. The activities of scientific studies can be conducted in the initial stages of the resistance movement before the exploration process occurs to influence public perceptions in a manner that disseminates the reasons why the environment-damaging activities should be rejected (Martinez-Alier 2009). The resistance movement can align with academics to counter misleading information produced by companies who often deny the inevitable environmental losses that would occur (Bebbington et al. 2008).

Academics have also identified several key elements of the strategies and other respective factors to be considered when social movement actors determine resistance strategies. Jasper (2004) asserted that strat-

egy is a fundamental dimension of rejection, along with physical, cultural, and perceptual movements. Meanwhile, Meyer and Staggenborg (2012) argued that movement strategies include the selection of tactics, demands, targets, and alliances where they are interrelated and identified three key elements in the movement strategy: demands, arena, and tactics. Demands are related to identifying problems and solutions needed by resistance movements. Arena is a setting where actors of the movement address existing problems. Lastly, tactics refer to actions and interventions carried out by movements in articulating their interests. Jasper (2004) asserted that the movement strategy is based on the understanding of culture, arena structure, and interaction at the micro and macro levels. In connection to those key elements, Meyer and Staggenborg (2012) described several factors that influence the selection of strategies: 1) a cultural and political environment, where movement actors have cultural and political opportunities in their interactions with targets, observers, media, and alliances; (2) a movement community, where diverse individuals and organizations in the movement interact; (3) an internal organization of movement, where leaders and members interact. The three levels of interaction are interrelated and have a vital role in determining the strategies.

When actors from social movements establish a solidarity group with a variety of cross-country actors such as NGOs, academics, and other environmental movements, they attempt to expand the discourse they create (Conde 2017). These actors attempt to consider that the conflicts they have been experiencing are not only created locally but are more the result of national or regional regulations. These actors also consider themselves vulnerable to the geopolitical conditions of global capitalism (Urkidi and Walter 2011). Culture, local narratives, and values that have long developed in communities are also often used as resistance strategies. Although these values often conflict with global discourses, local discourses and narratives can increase the progress of the movement by creating distinctive loyalty and identity (Conde 2017).

Several studies have also demonstrated a frequent shift in discourse created by the gap between global narratives and local narratives.

Haarstad and Fløysand (2007) provided an example of a resistance movement against the mines in Peru, where local narratives in the form of close links between communities and their land have been shifted by the national discourse of Peruvian identity to global narratives such as violence against democratic rights. In line with the mine resistance in Pascua Lama, transnational activists have fought for both the livelihoods of local communities and protection of the environment, such as for climate change, protection of glaciers, and broader global discourses such as democracy, participation in the governance, and rights to access information (Urkidi and Walter 2011). Schlosberg (2007) then provided a review and identified the dimensions of the EJM, including the distribution, recognition, and participation (or procedural justice) that contribute to the development of EJM discourse.

RESEARCH METHODS

This study used a combination of qualitative research and the case study method. The case study was applied to assess how the resistance movements against PLTPBs created their discourse and resistance strategies. Interviews were conducted with representation from the Banyumas Branch of Alliance of Agrarian Reform Movement (Aliansi Gerakan Reforma Agraria-AGRA), member of Research and Media Division of Aliansi Selamatkan Slamet, community member of Cilongok Banyumas representative, representation from Universitas Jenderal Soedirman (Unsoed)'s Student Executive Board (BEM) 2017, and representation from the Banyumas Branch of Pemuda Baru/PEMBARU Indonesia.

The data were collected through interviews conducted in Banyumas from October to November 2018 with several informants who were notable elements of Aliansi Selamatkan Slamet. The interviews, with an average duration of 54 minutes, comprised semi-structured questions with key actors of the resistance movement against PLTPB Baturraden and explored the following: the history of the conflict, emergence, and development of Aliansi Selamatkan Slamet and its demands and the efforts made to articulate these demands. The interviews were conducted by using a snowball technique: informant A recommended that

informant B be an informant, and so forth, to identify informants based on social patterns.

In addition, a review was conducted of NGOs' and academics' publications, movement studies on environmental impacts, release statements, social media publications, plan documents such as the environmental management and monitoring plans (UKL-UPL), and other environmental plan documents from 2016 to 2018. Data triangulation was performed to test the consistency of different data sources (Patton 2002). From the results of field research in the case of the movement of Aliansi Selamatkan Slamet against PLTPB Baturraden, primary data analysis was carried out by documenting the in-depth interviews in transcripts based on the theoretical framework created.

PLTPB BATURRADEN PLAN AND ENVIRONMENTAL DEGRADATION

PLTPB Baturraden is located on the slopes of Mount Slamet in Central Java. The executor of the PLTPB project is PT Sejahtera Alam Energy (PT SAE). The power plant has been planned to generate 220 MW of electricity. Through a public private partnership scheme, PT SAE obtained capital from two companies: the German company STEAG PE GmbH, with a 75% stake and the Indonesian company PT. Tri-nergy, with the remaining 25%. The estimated costs for harnessing geothermal power was USD 880 million. The initially planned area of PLTPB Baturraden was 24,660 hectares and included Brebes Regency, Banyumas Regency, Purbalingga Regency, Tegal Regency, and Pemalang Regency. In October 2016, PT SAE obtained a permit to use, not purchase, an area of a forest (IPPKH) covering 488.28 hectares (Interview with Panji Mulkillah, November 1, 2018).

When constructing PLTPB Baturraden, PT SAE did not provide the environmental impact assessment (or AMDAL) documents related to the project. PT SAE provided documents on only UKL-UPL. Unlike AMDAL, UKL-UPL does not require involvement of and opinions from the affected community in their preparation. This action implied several assumptions, for example, the PLTPB area is a red zone for

landslides, the environmental degradation and damage posed by the construction of the PLTPB Baturraden, and the lack of involvement of the community in the policy-making process.

Because of the limitations of the UKL-UPL document in analyzing the potential environmental damage and the general negligence of the companies regarding their responsibility to preserve the environment and the communities, many practices damaged the environment and ecosystems surrounding the slopes of Mount Slamet. The opening of the geothermal project forest area in the protected forest area of Mount Slamet caused landslides because the construction company used irresponsible practices, namely, creating a heavy pile of materials for road construction. The avalanche flooded the river and streams and made the river around the slopes of Mount Slamet murky.

One of the affected rivers was Prukut River. The murky water disrupted residents' activities in Karangtengah Village, Panembangan Village, Pernasidi Village, Karanglo Village, and Cikidang Village, who used river water for bathing, washing, toileting, drinking, cooking needs, and economic activities such as plantations and fisheries. Furthermore, landslides damaged several waterfalls that were part of their tourism economy. Additionally, various species of animals were disturbed by the exploratory process in these previously protected forests. Animals such as wild boar, deer, tigers, and apes frequently migrated downhill to the community settlements to find food on plantations. This phenomenon caused anxiety among the residents because main crops such as tubers and secondary crops such as fruit trees could not survive the targeted invasion of wild pigs or monkeys. Thus, the residents had to hunt for, for example, boar, to prevent damage to the plantation (Interview with Panji Mulkillah, Research and Media Division of Aliansi Selamatkan Slamet, November 1, 2018).

Negative impacts caused by PLTPB Baturraden were the source of social conflicts between the community and the company, as explained by Urkidi (2011) and also Abuya (2017). The main factors of these conflicts were socioecological losses of land, water, and biodiversity in protected forests and the absence of community involvement and

participation in the construction of PLTPB projects. Environmental losses, especially the water pollution caused by the PLTPB, triggered an expansion of social conflicts (Perreault 2013), and the absence of participation and representation of the community interests in the planning of PLTPB Baturraden development project demonstrated that the Indonesian government and the corporations did not recognize the rights of local residents (Ali and Grewal 2006).

THE EMERGENCE OF THE RESISTANCE MOVEMENT

The anxiety caused by the lack of recognition of the communities by the government, companies, and other entities supporting the construction of the PLTPB began to emerge when the Alliance of Independent Journalists (AJI) Banyumas released a documentary film entitled “Banyu Buthek,” freely translated as “the murky water,” at the end of 2016, which was shown at some universities (Interview with Adhyatmo Ryanto, President of BEM Unsoed 2017, November 11, 2018). The documentary described the environmental damage, namely, the murky water in the rivers around the slopes of Mount Slamet. These efforts resulted attention to this issue, which spread to various groups, because river water is vital to the daily activities of the residents of the surrounding communities. Aliansi Selamatkan Slamet was founded in March 2017 to coincide with the commemoration of Earth Day. Initially, the formation was initiated by several organizations such as BEM Unsoed, AGRA Banyumas, FMN, AJI Banyumas, nature-preservation organizations, and various individuals. Next, the alliance network extended to various rural communities, environmental activists, agrarian activists, other nature-preservation groups, academicians, journalists, art activists, and many other organizations (Interview with Panji Mulkillah, Research and Media Division of Aliansi Selamatkan Slamet, November 1, 2018).

After its establishment, Aliansi Selamatkan Slamet expanded their number of members in each village, in several subdistricts, and at universities in Banyumas. Among the activities conducted for expansion were the screening of the documentary “Banyu Buthek,” congregations,

and public discussions. Each element in Aliansi Selamatkan Slamet joined voluntarily. All community elements of Aliansi Selamatkan Slamet have the same position in the alliance, that is, the organization has no hierarchy. Decisions are made based by consensus.

To facilitate the flexibility of the movement, the work divisions among the members of Aliansi Selamatkan Slamet were formed based on regional-and function-based coverage led by a coordinator. To avoid having only a select group make decisions, the coordinator could be replaced at any time according to changing conditions (Interview with Marsha Azka, PEMBARU Indonesia, November 16, 2018). Aliansi Selamatkan Slamet had several divisions, including the Research and Media Division, Business Funding Division and Organizational Division in every district, village, university, and city network. Each element was assigned based on ability and expertise and was actively involved in their respective division.

Aliansi Selamatkan Slamet, in the framework of social movements, is a collective effort of the community and marginalized groups excluded by development policies that eliminate their empowerment at the grassroots level (Bebbington 2008). The alliance attempted to achieve environmental justice by offering alternatives to development or dominant narratives and was a legitimate source of knowledge in policy formulation, as stated by Dagnino (2007). In this case, Aliansi Selamatkan Slamet counteracted the dominant narrative that geothermal energy was the most environmentally friendly energy source. By presenting the facts on the ground in the form of environmental damage caused by PLTPB Baturraden, the alliance showcased alternative knowledge sources not considered by policy makers (Interview with Adhyatmo Ryanto, President of BEM Unsoed 2017, November 11, 2018). The counter narrative to the discourse proposed by the corporations and Indonesian government was conveyed directly in seminars attended by PT SAE and the government and in a study issued by the alliance in 2017.

Furthermore, Aliansi Selamatkan Slamet can be analyzed as an EJM because in its campaign for environmental protection, the movement also elaborated on analyses related to economic justice and cul-

tural identity of community groups residing on and around the slopes of Mount Slamet (Schlosberg 2007). The alliance was also against the development of the PLTPB Baturraden as an implication of national and global political economic conditions, and this notion is discussed in the next section.

MOVEMENT STRATEGIES

Strategies in social movements are a set of decisions taken related to tactics, demands, unions, and targets of the movements. Some elements are interrelated in their efforts to achieve a common goal. In this case, Aliansi Selamatkan Slamet considered several choices from various feasible alternatives to develop strategies. The decision was made based on the analysis of the current situation and conditions. Key elements in the movement strategy such as the demands of the movement, arena, and tactics, are influenced by the movement's assessment of opportunities and perceptions of possibilities (Meyer and Staggenborg 2012). Aliansi Selamatkan Slamet then determined the strategies and tactics that they concluded would be the most effective and easy to execute. With the variety of political and cultural contexts surrounding a movement, the actors of the movements develop strategies based on interactions between internal actors, allies, public observers, and the mass media.

First, Aliansi Selamatkan Slamet demanded the stoppage of all development processes of PLTPB Baturraden. Based on this demand, the alliance urged the District Head of Banyumas to issue a recommendation to revoke PLTPB's permit, suggested the Ministry of Energy and Mineral Resources void all of the project's activities, and demanded environmental rehabilitation to ameliorate river water turbidity and road damage (Interview with Cendikia Nuur Kholik, Chairman of AGRA Banyumas, November 16, 2018). Aliansi Selamatkan Slamet, through a press release published on its social media account, demanded accountability from the police resort practiced repression by beating and arresting 24 protesters during the mass demonstration on October 9, 2017, at the Banyumas Regent's Office.

Second, based on field findings, a conclusion is that Aliansi Selamatkan Slamet focused on grassroots organizing of local communities rather than litigation efforts or direct negotiations with policymakers at the elite level. The grassroots condition encourages volunteers to join together to realize common interests within a group that has democratic, not hierarchical, characteristics (Kunreuther 2011). The grassroots organizing was conducted by providing the local communities with information on PLTPB projects and the ecological damage that the projects could cause through various activities conducted in several villages, such as consolidation, discussion, documentary screenings, and meetings.

There are several villages in several subdistricts, for example in Cilogok Subdistrict: Cilogok, Pernasidi, Kalisari, Panembangan, Rancamaya, Sokawera, Langgongsari, Tangerang, Kaegeran, Cikidang; in Karanglewas Subdistrict: Sunyalangu, Pangebatan, Jipang; in Kedungbanteng District: Beji, Windujaya, Karangnagka, Melung; in Kecamatan Baturraden: Rempoah; and in Sumbang Subdistrict: Kotayasa, Kebanggan, Ciberem. (Interview with Suharyanto, November 16, 2018)

In addition to the local community, Aliansi Selamatkan Slamet focused its attention on mobilizing groups of students and urban communities. The role of BEM and student organizations at universities was crucial in amassing students. There were several BEMs, Student environment organizations (Mahasiswa Pecinta Alam-MAPALA), and student movement organizations such as Unsoed, IAIN Purwokerto, Wijaya Kusuma University, Amikom, and Muhammadiyah University Purwokerto, which enlightened the elements of their respective campuses regarding the concerns over PLTPBs. Student groups disseminated the information through the alliance's social media channel because a consensus was reached that that method would be essential and strategic. The mobilization of urban communities was carried out through the organization of migrant organizations from Banyumas in various cities. This mobilization also helped spread the concerns and information related

to the problems caused by PLTPB Baturraden to outside the Banyumas area. For example, Aliansi Selamatkan Slamet was represented by the arts community AMPAS KOPI, and the Cilongok Bersatu (Ciber) organization was invited to and attended a cultural festival to campaigning for this issue (Interview with Adhyatmo Ryanto, November 11, 2018).

Third, Aliansi Selamatkan Slamet used several tactics as methods of resistance to the PLTPB Baturraden project, for example, development of academic studies, petitions, discussions and screenings of documentary films, demonstrations, cultural stages, symbolic actions, and billboards. This strategy was created after considering several factors, including learning about similar resistance movements, the internal conditions of the movement the understanding of the topic being discussed.

Regarding learning about similar resistance movements, the alliance investigated how the resistance or advocacy process was carried out against the Kendeng cement plant. Aliansi Selamatkan Slamet learned that the resistance against the Kendeng cement plant had been legally successful through a lawsuit filed in the Administrative Court. However, success did not change what occurred in the field. Policymakers, with all their resources, reapplied for a new permit for the establishment of a cement factory in Rembang (Interview with Adhyatmo Ryanto, November 11, 2018). Based on this assessment, Aliansi Selamatkan Slamet considered that the victory obtained through the adjudication process alone was not sufficient to win the case. Furthermore, this reasoning later contributed to prioritizing the selection of community organizers at the grassroots level over exercising their right to file a lawsuit against policy planning even though the alliance was convinced that legal violations had occurred in the policy planning stages. This attitude also implied that the alliance distrusted the policies and projects being carried out and the existing formal political channels. This decision was also made because of the difficulty of the movement in accessing public information related to PLTPB Baturraden (Interview with Panji Mulkillah, November 1, 2018). From this description, the resources along with the obstacles contained therein were influential in decision

making (Meyer and Staggenborg 2012). In this case, the obstacles were related to the values espoused, past experiences, and movement references (Kretschmer 2007).

The second consideration was related to the internal conditions of the movement, including the internal culture of the movement, the decision-making system, the resources possessed by the movement, and the organizational structure of Aliansi Selamatkan Slamet. These aspects played a critical role in the decision-making process and what decisions were made. Likewise, some strategies were chosen based on their human resource requirements. For example, the incorporation of several NGOs focusing on environmental concerns also influenced the ecological analysis of the alliance. The incorporation of several art workers' organizations also contributed to the use of art as a method of resistance through various activities such as cultural festivals. The large number of members in the alliance was considered in the determination of the demonstration method by Aliansi Selamatkan Slamet. According to Ganz (2004), the strategy of social movements is limited by several factors: the model of movement, resources, barriers to the use of resources, the structure of movements and internal cultures, and expectations aimed at the target of the movement.

ENVIRONMENTAL JUSTICE MOVEMENT DIMENSIONS IN THE DISCOURSE OF ALIANSI SELAMATKAN SLAMET

Aliansi Selamatkan Slamet determined prioritized several concerns in its discourse. Based on the findings in the field, three dimensions were used by the alliance as EJMs in building resistance movements: participation, distribution, and recognition (Schlosberg 2012). Aliansi Selamatkan Slamet prioritized the dimensions of participation (i.e., legal disability and absence of community participation) without negating several other dimensions. The alliance recognized legal disability as the most obvious problem with the establishment of PLTPB Baturraden. On several occasions at hearings and discussions attended by companies and levels of the Indonesian government, Aliansi Selamatkan Slamet

explained several legal defects, namely the exclusion of environmental analyses in plan documents, negligent land movement in red zones, and the use of protected forest areas on the slopes of Mount Slamet for mining. These concerns were also in line with what was stated by Ryan, President of Unsoed BEM 2017, who joined the alliance.

Environmental problems, potential earthquake problems, and the actual results of the other analyses have proven that the UKL-UPL offered by the GmBH corporation, whose headquarters is in Germany, and PT SAE can be considered to be scientifically academically flawed. For example, they did not include an explanation of the area covered by the exploitation of the red shifting land zone. And the community also lacked socialization. (Interview with Adhyatmo Ryanto, November 11, 2018)

Aliansi Selamatkan Slamet also emphasized the non-involvement of local communities in the project planning. Thus, the alliance attempted to create a critical awareness among the wider community of the importance of participation in policy formulation. The alliance highlighted plan documents in the exploration of PLTPB Baturraden that included UKL-UPL but not AMDAL. Aliansi Selamatkan Slamet then considered that the absence of AMDAL had seriously affected the social sustainability of the local communities' ecology. In UKL-UPL, PT SAE was not obliged to obtain approval from the surrounding community for the construction of the PLTPB. Although PT SAE had obtained an exploration permit in 2011, Aliansi Selamatkan Slamet stated that most residents of Banyumas only understood and received information about the PLTPB Baturraden project in the fiscal year of 2016 to 2017. Aliansi Selamatkan Slamet also reported the absence of a mechanism for community participation in the UKL-UPL, such as observed in the AMDAL.

Aliansi Selamatkan Slamet also provided discourse regarding the political conditions underlying the PLTPB project. Among these conditions were the government's efforts to raise foreign investment in its master plan for the Acceleration and Expansion of the Indonesian

Economy (MP3EI) which divided Indonesia's territory based on 6 (six) economic corridors namely Sumatera, Java, Kalimantan, Sulawesi, Bali and Nusa Tenggara, and Papua and Maluku Islands (Interview with Panji Mulkillah, November 1, 2018). Thus, the purpose of constructing PLTPBs was to fulfill industrial needs during the acceleration of the Indonesian economy. During the development of Aliansi Selamatkan Slamet, it set up a discussion and framing of repressive actions by the authorities in their response to the alliance's demonstration on October 9, 2017. Through democratic discourse and freedom of expression, the alliance received considerable support from various NGOs that shared the same concerns regarding promoting democracy and human rights. As many as 45 local and national organizations issued joint statements to condemn the repressive actions of the police and the exploration of PLTPB Baturraden on December 15, 2017. The participatory dimension also included an analysis of socioeconomic conditions, which became the basis for the PLTPB Baturraden development project.

The second dimension of discourse development is the distributive dimension, which is related to environmental losses experienced by local communities and that have disrupted individuals' daily activities. Aliansi Selamatkan Slamet rejected the use of protected forest areas on the slopes of Mount Slamet for geothermal mining activities. The alliance asserted that the construction of the PLTPB included clearing 675.7 hectares of protected forest and that would reduce water infiltration and, thus, damage the hydrological system, resulting in decreases in the quality and quantity of the water supply that is a daily necessity for the community and its economic activities. Moreover, extraction of surface water and groundwater would occur in protected forest areas for exploration purposes.

The loss caused the surrounding community incurred from the construction of PLTPB Baturraden can be explained through a phenomenon Silva-Macher and Farrell (2014) called a "clash of metabolism," or the conflict between subsistence economics and extractive economies. Local communities, most of whom continue to depend on nature in the production process of their economic activities, are forced to man-

age extractive social industrial metabolism from a PLTPB. The impact of geothermal exploration activities on changes in river water quality has disrupted the production economy of local communities, and the impact on the livelihoods of local communities is a considerable reason for the occurrence of socioenvironmental conflicts (Kirsch 2007).

The distribution dimension is directly related to the third dimension: recognition, in the form of a strong awareness and bond between local communities and river water in everyday life. Honneth (2001) asserted that recognition is a condition of recognizing collective identity, particular needs, and the livelihoods of local communities. In this case, the recognition within Aliansi Selamatkan Slamet is in the form of collective identities, such as the language and culture of the residents of Banyumas, and community myths related to the relationship between Mount Slamet and the surrounding environment that played a role in the movement. Likewise, the collective identity of the residents of the slopes of Mount Slamet was instrumental in mobilizing local communities. Additionally, as Schlosberg (2012) stated, recognition also means paying attention to the reasons and processes of environmental degradation that occur. Recognition also means realizing that the environment or nature is also formed based on human relations and discourse. Through this understanding, Aliansi Selamatkan Slamet was asserting that the to be parties harmed by the construction of the PLTPB were humans, flora, fauna, and environment of the slopes of Mount Slamet. The threatened diversity of thousands of rare flora and fauna species because of deforestation was also an impetus for the alliance to start resistance movements.

The three dimensions, namely, distribution, participation, and recognition, are interrelated and intertwined in the discourse of environmental justice movement, for example, when Aliansi Selamatkan Slamet campaigned for environmental protection without removing the analysis of social inequality and injustice, that is, they considered affected communities as vulnerable groups with no access to the policy formulation process. The alliance also observed the ecological losses experienced by the community due to the PLTPB project as a non-

stand-alone case without any connection to other problems. Aliansi Selamatkan Slamet looked at the problems of PLTPB in a broader context as a consequence of national and regional policy regulations and schemes (Interview with Panji Mulkillah, November 1, 2018). They also realized their vulnerable position in the geopolitical conditions of global capitalism (Urkidi and Walter 2011). The use of participation and recognition discourse in addition to distributive discourse helped the alliance understand the social, cultural, and institutional conditions underlying the environmental distribution of the PLTPB project (Schlosberg 2012).

CONCLUSION

Based on the findings found in the field, the strategy employed by Aliansi Selamatkan Slamet is identified as a resistance movement against the development of PLTPB Baturraden in Banyumas. The strategy was analyzed in the context of three key elements in the concept of movement strategy: demands, arenas, and tactics. The main demand of the alliance was the revocation of the PLTPB Baturraden permit. The demand focused on grassroots mobilization targeting rural communities, urban communities, and academics from several universities. The tactics carried out by the movement included the development of academic studies, petitions, discussions and screenings of documentary films, demonstrations, cultural stages, symbolic actions, and installation of refuse billboards. The three elements were influenced by the interaction of movements within the surrounding cultural and political environment, between communities or organizations in the alliance, and the internal organization of the alliance movement.

As an EJM, Aliansi Selamatkan Slamet did not describe the discourse of rejecting the development of PLTPB Baturraden in the distributive dimension as environmental damage due to mere mining activities. There was a participatory dimension in the development of refusal discourse. The movement highlighted that the development plan of the PLTPB was not participatory and should have included socialization with and information dissemination to communities around

the slopes of Mount Slamet. Local residents had no opportunity to provide opinions and assessments of the plan documents. The repressive attitude of the authorities in responding to the demonstration was also highlighted by the movement, with the intention of gaining wider support. Aliansi Selamatkan Slamet also noted several illegalities in the installation of PLTPB Baturraden in the red shifting land zone. Additionally, the dimension of recognition was created with the awareness of local residents regarding the importance of clean river water for their daily needs. Therefore, their approach is actually non-confrontational toward the idea of clean and sustainable energy as it is the core argument of geothermal project. By maximizing the lack of the procedural aspect of the project, the alliance is able to gather support and mobilize more activities to resist the development.

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