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The strategic role of civil society organisations in handling climate change: A case of Riau in Indonesia

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Abstract. Although many local civil society organisations (CSOs) involve in reducing the impact of climate change, the issue has been reported by a limited study. This paper addresses the gap by investigating the role of local CSOs in helping to anticipate the effect of climate change. This study looked into the case of Riau because it has many CSOs concerned with environmental problems. The objectives of this research are to classify the environmental CSOs in Riau and analyze their contribution to climate change resilience. Using a qualitative approach, the data were collected by using interviews on a series of participants, including CSO's activists, government officials, academicians, and community leaders. We reveal that local CSOs can be classified as conservation, advocacy, empowerment, and conflict resolution. Along with their own and government programs, the CSOs have been contributed to tackling climate change by ensuring forest and peatland preservation. The theoretical and practical contributions of the study are elaborated.

1. Introduction

Climate change, defined as a change in the structure of the atmospheric composition and the variability of environmental climates over comparable time spans triggered actively or passively by anthropogenic activities [1], is a serious problem faced by many countries around the globe. Climate change is led by the greenhouse effect, which is the process of retaining solar radiation from the atmosphere caused by greenhouse gases raising global warming. Those included in the greenhouse gas category are carbon



dioxide (CO₂), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), methane (CH₄), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) [2]. Human activities such as the use of fossil fuels, deforestation, and land use are the primary causes of greenhouse gas accumulation in the atmosphere.

Climate change has a wide range of consequences for people's lives. The warming of the earth's surface affects not only the surface temperature but also the climate system, impacting various aspects of natural change and human life such as water quality and quantity, biodiversity, forests, health, agricultural land, and coastal ecosystems. Rainfall which is too heavy degrades the consistency of water supplies. Furthermore, as the temperature rises, the amount of chlorine in clean water rises. [3]. Global warming increases the amount of water in the atmosphere, which in turn increases rainfall. Although the increase in rainfall can increase the number of clean water sources, too much rainfall results in a high possibility of water returning directly to the sea, without having time to be stored in clean water sources for human use [4], [5]. climate change is also believed to be the cause of rising global temperatures, rising sea levels, increasing flooding and landslides, and affecting harvests and water supplies [6].

Many actors have contributed to reducing the impact of climate change in a country. The participation of multi-actors in reducing climate change risks establishes climate change governance, which is the process of formulating and implementing policies, regulations, and development priorities that refer to the goals of sustainable development [7], [8]. The actors can be categorized as state and non-state actors. The state actors include government organisations, both central and local governments. The non-state actors are the actor outside government related to climate change programmes, such as the business sector, international institution, and civil or non-government organisations [9]. State and non-state actors have equal responsibility in reducing and mitigating climate change impacts.

The present research focused on the role of non-state actors, particularly civil society organisations (CSO) in mitigating the effect of climate change. CSOs are non-governmental organisations (NGOs) including non-profit organizations, associations, foundations, forums (formal and informal), labour unions, professional associations, and educational and research institutions. Therefore, CSO is also commonly acknowledged as NGOs. Among the many functions of civil society, it considers that the main functions of CSOs are monitoring and advocacy function of public policies and the function of community empowerment. Through its functions, civil society ensures that development carried out by the government and the bureaucracy must be able to anticipate climate change, including climate change adaptation and mitigation.

The growing body of literature has asserted the important role of non-state actors in overcoming the impact of climate change. Several studies have shown the significant role of CSOs in climate change campaigns. Poutiainen et al. investigated adaptation strategy conducted by Canada's CSO to reduce climate change in the health sector [10]. Numerous efforts were carried out by environmental CSOs in Canada, including keep water and air quality, ecosystem intervention, and help vulnerable groups. Granderson studied the role CSOs in providing climate change adaptation planning in Vanuatu [11]. She found that CSO activists used a technocratic approach based on climate science and have concentrated on the seriousness of risks as well as the possibility of external intervention. Kristanti et al. pointed out the role of international donor's CSO in assisting the Indonesian government to reduce the effect of climate change through various programmes associated with central and local government [1].

The research on the role of CSOs in mitigating climate change remains a variety of empty spaces to be further explored. The first one is that prior studies have not explained the involvement of local CSO in a region or country. The second one is that the explanation associated with pattern, activity, and strategic role of CSOs in climate change issues is extremely scarce. To address the research gaps in the current body of the literature, the paper has two manifold purposes. Firstly, this work intends to describe the significant role of local CSO in tackling climate change risk in developing countries. Finally, the present research explains how local CSO takes a part in reducing climate change impact. We analyze the case of Riau, Indonesia to fill the aims of the study. Riau was chosen as the locus of this study because of three important logics. First, Riau was one of the regions in Indonesia having plentiful natural resources, including forests and peatland. Second, along with it, the destruction of natural resources also massively

occurred in Riau. Third, many CSO appeared to respond to the issues. The research questions answered in this study are: (1) how many and how the contemporary circumstances of CSOs in Riau, and (2) what are the CSOs carrying out to reduce the impact of climate change in Riau?

2. Methods

This was empirical research conducted using a qualitative approach. We employed a qualitative method because we need to understand the role of CSOs in tackling climate change. It was in line with the purpose of qualitative research generating an understanding of a phenomenon than generalizing [12]. Instead of razing to the ground, we attempted to promote an understanding of the practices of CSOs in developing the programs and activities in reducing the effect of climate change in a developing country. The research was arranged in Riau, Indonesia from October to December 2020. The case of Riau was used to highlight how the CSO took apart and contributed to the process of reducing climate change impact through their programs.

The data were collected from primary sources by interviewing a series of informants. They were grouped into CSO activists, government institutions, media, and academics (Table 1). CSO activists came from various organisations in Riau, such as Jikalauhari (*Jaringan Kerja Penyelamat Hutan Riau*), *Wahana Lingkungan Hidup* (Walhi), Scale-up Riau, World Resources Institute (WRI), Kaliptra Andalas, Bahtera Alam, *Forum Indonesia untuk Transparansi Anggaran* (Fitra), and Elang. The respondents from the Provincial Government of Riau included the Regional Agency of Political Affairs, and Forestry and Environmental Office. *Lembaga Adat Melayu* (LAM) Riau was chosen as constituted of cultural organization. We chose scholars from Universitas Riau and Universitas Lancang Kuning as the representation of academics. Antara of Riau, catatanriau.com, and Green Radio Line represented media and journalists. The interviewees were chosen using purposeful sampling and revolving toward another individual knowing the research's problem. All informants were chosen because they understand the involvement of CSO in handling the climate change effect in Riau.

Table 1. The characteristics and the purpose of selecting respondents.

Categories	Organization	Purpose
CSO activist	Jikalauhari, Walhi, WRI, Kaliptra Andalas, Scale-up, Fitra, Elang, Bahtera Alam	To understand the role and involvement of CSO in reducing and campaigning climate change
Government and cultural institution	Regional Agency of Political Affairs of Riau Province, LAM Riau	To understand the function of regional government in controlling CSO
Media	Antara of Riau, catatanriau.com, Green Radio Line	To understand and validate the role and involvement of CSO in reducing and campaigning climate change
Academics	Universitas Riau and Universitas Lancang Kuning	To understand and validate the role and involvement of CSO in reducing and campaigning climate change

Source: Processed by author.

To ensure validity and reliability, we cross-checked the data using the triangulation technique. Triangulation was a method ordinarily used in qualitative research to validate and verify the data and information collected in the field [13]. Specifically, we used triangulation of source and triangulation of methods to ensure that the data were valid and reliable. Triangulation of source was applied by confronting the data taken from one informant to another informant. Triangulation of the method was

performed by comparing the interview with secondary data. After verifying the data, we coded and grouped based on specific themes. The data were displayed in the results and analysis.

3. Results and discussion

3.1 Current situations of environmental CSOs in Riau

The development of CSO in Riau has grown since a long time ago. It was historically rooted in the tradition of Malay society who favors discussing and criticize reality [14]. However, the rise of the New Order under Soeharto's despotic regime in 1966 was the dark age of CSO and freedom of expression in Indonesia [15]. To ensure political stabilization, New Order restricted and controlled the existence of CSO, including in Riau. As a result, CSOs were pressured and blocked to perform their function. After the fall of the New Order, CSOs back to tremendously grow along with freedom of speech in Indonesian reform.

Figure 1. shows the number of CSOs in Riau based on their orientation. Regarding the data, it is known that there are 188 CSOs in Riau. The majority of the CSOs is the CSO focused on socio-cultural issue (120 organizations). The rest is environmental CSO (32 organizations), political oriented CSO (22 organizations), and education-oriented CSO (14 organizations), Unfortunately, the data do not show the real number of CSOs in Riau because not all CSOs were registered to the Political Affairs Agency of Riau Province as a consequence of new regulation about CSOs. According to the new rule, if a CSO has registered to the Ministry of Home Affairs, they have not been a response to register to the political affairs agency of regional or local government. Apparently, it is predicted that the total of CSO in Riau almost 3 times the data in Figure 1.

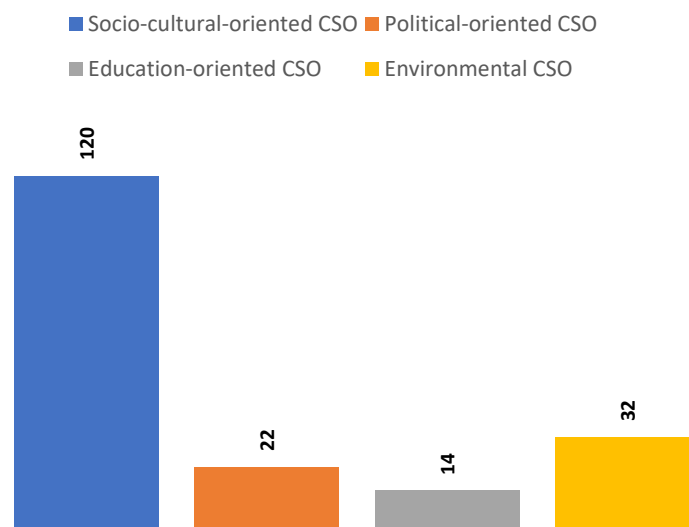


Figure 1. Number of CSO based on their activity.

Source: Processed from the Data of Political Affairs Agency of Riau Province.

CSO in Riau can be classified into three types in terms of their home base and operating area as shown in Table 2. They are local, national, and transnational CSO. If the CSOs receive a fund from an international donor and take action in Riau and other countries, they are called transnational CSO. There are several transnational CSOs in Riau, such as WRI and World Wide Fund (WWF). National CSO can be understood as CSO funded by a national body and performed in Riau, such as Walhi and Fitra. Local CSO is CSOs located in a city or regency in Riau and funded by a national and international institution, such as Jikalahari, Kaliptra Andalas, Scale-up, Elang, and Bahtera Alam. Practically, all forms of CSO can be collaborated and cooperated in applying for the programs in the field to reach the program's

effectiveness (Table 3). Collaborative actions among CSOs frequently shape in the form of networks, coalitions, and alliances, such as eyes on the forest (EoF). EoF is a national alliance among environmental CSOs, such as Jikalahari, WWF, and Walhi focused on the controlling of forest destruction in Riau. Not only in Riau but also in Kalimantan EoF is occupied. Shortly, it is also enlarged in Papua to address recent environmental damage.

Table 2. The characteristics of CSOs in Riau.

Basis	CSO	Funding
Local CSO	Jikalahari, Elang, Kaliptra Andalas, Scale-up, Bahtera Alam	National and international donor
National CSO	Fitra, Walhi	National and international donor
Transnational CSO	World Research Institute, World Wide Fund	International donor

Source: Processed from the research data

3.2 The role of CSOs in climate change

In Riau, CSOs concerned with the reduction of climate change impact largely are environmental CSO. In fact, classifying CSOs into a specific cohort is greatly difficult because they are complex and fluid. Despite their institutional separation, CSOs do not have a particular component or operation. We recognize three CSO roles that are important to reducing climate change: advocacy, conservation, and conflict resolution. Advocacy is a type of action that leads to active support in the form of advocacy, support, or recommendations. Advocacy may also be described as a method of attempting to influence public policy through various forms of persuasion communication. [16]. Advocational CSO is a strategic and integrated action carried out by individuals or groups to put an issue on the policy agenda. Finally, advocacy seeks to find a solution to a problem by enforcing and implementing public policy to address the issue. Face-to-face campaigns, social media campaigns, marches, filing petitions, and persuading others to take action are all examples of advocacy tactics. Advocacy strives to mobilize facts, attention, and social action in order to effect substantive change. The CSOs include in this category in Riau are Jikalahari and Walhi,

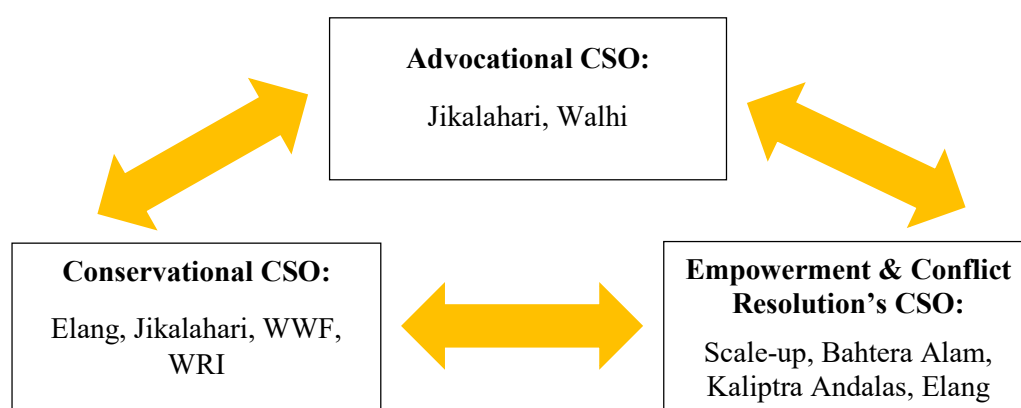


Figure 2. The classification of environmental CSOs in Riau.

Conservational CSO is a CSO that aims to preserve the environment while also considering the advantages that can be achieved at the time by preserving each environmental aspect for future use. Conservation may also be referred to as preservation or protection, and it is an attempt made by humans to conserve nature. [11]. The aim of the conservation of living natural resources and their habitats is to ensure that living natural resources and the balance of their ecosystems are preserved so that they can

sustain efforts to enhance community health and human life quality. Jikalahari, Elang, WRI, and WWF are some of the Riau conservation CSOs. Conflict resolution CSO is a CSO dedicated to resolving conflicts. Bahtera Alam, Scale-up, Kaliptra Andalas, and Elang are CSO committed to conflict resolution. The conflict usually occurs between corporations and society in controlling the land. In fact, resolving a dispute is a difficult task, there are a lot of people who are opposed to it. As a result, a strong mediator is required to assist in the resolution of the issue. When the dispute resolution process is completed, CSOs typically use empowerment programs to strengthen the conflicted population.

Table 3. The cohort of CSO and the role.

Programme	Role	CSO
The Green Siak	Conservation	Collaboration among Jikalahari, Walhi, Fitra, Regency of Siak
Conservation of Teso Nilo Geopark	Conservation	WWF, Walhi
Controlling corruption of forest and environmental sector	Advocation	Jikalahari, Fitra, Walhi
Peatland restoration	Conservation	Elang, Walhi, Kaliptra Andalas
Land reform and conflict governance	Conflict resolution	Scale-up, Bahtera Alam, Kaliptra Andalas
Forest fires watch	Advocation	Jikalahari, Walhi
Tourism village	Empowerment	Elang, Bahtera Alam

Source: The results of data analysis.

The role and programs among all environmental CSOs in Riau can be seen in Figure 2 and Table 3. The data illustrate that all types of CSOs have a program conducted together. The programs are directly and indirectly connected to the reduction of climate change risks in Riau. The conservational CSOs have the Green Siak Programme conducted among Walhi, Jikalahari, Fitra, and the Government of Siak Regency. Green Siak is a program that aims to encourage the principles of sustainable development in the use of natural resources and increase the economy of the community in the Siak Regency. As advocacy function, Jikalahari, Fitra, and Walhi also control corruption in forest and environmental sectors in Riau. The corruption encompasses land-use change practiced by the regional head government. One of the success stories is their advocacy in the case of Rusli Zainal and Annas Maamun (former governor of Riau) rendering Rusli Zainal and Annas Maamun were arrested by the Commission of Corruption Eradication (KPK). In their role on conflict resolution, several CSOs such as Scale-up, Bahtera Alam, and Kaliptra Andalas attempt to resolve the land-use conflict in Riau, mainly conflict related to peatland use between general public or custom society and corporation. Through conflict resolution, CSOs in Riau intend to realize fair and equal land ownership in Indonesia.

This research theoretically contributes to the current body of the literature because our findings complete the discussion on the role of CSO in addressing climate change in the local context of Indonesia. CSO plays a pivotal part in addressing climate change in many countries. The results of our study also support previous findings that highlighted the emergence of societal entangle in climate change governance [17]–[22]. Practically, our work is also useful to the CSO's governance in Indonesia. We suggest that the government should strengthen the CSOs and develop mutual cooperation and understanding with them in reducing the impact of climate change in Indonesia. The collaboration between CSO and the government can enhance the effectiveness of climate change programs.

4. Conclusion

The current study investigates the contribution of CSOs in overcoming the impact of climate change. By analyzing the case of CSOs in Riau, we seek the strategic role of CSOs in mitigating climate change

in provincial Indonesia. The results show that there are three types of environmental CSOs in Riau, specifically local, national, and transnational CSO. They are divided relied on the source of funding and activities. The criteria of CSO related to the program of climate change reduction in Riau surround conservational, advocational, and conflict resolution CSOs. In implementing the programs, environmental CSOs in the Riau develop a network, collaboration, and cooperation ranging from a national and international institution.

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