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Local government response capacity to natural disasters in the Central Highlands Provinces, Vietnam

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Natural disasters in the Central Highlands of Vietnam are increasing and therefore becoming a concern for the provincial governments. The local authorities' recent ability to respond to natural disasters in the region is considered ineffective, as evidenced by the increasing number of deaths and economic losses. Here, we focus on presenting and analyzing the current capacity of local authorities in the Central Highlands of Vietnam to respond to natural disasters in a normal state and in transitioning to an emergency state. We also provide evidence of natural disasters that have occurred and the actions undertaken by the Central Highlands provinces over the period 2015–2021. Our analysis shows that the capacity of local authorities to respond to natural disasters in the region is not commensurate with the actual requirements, in the dry season, the drought area increases, in the rainy season floods occur more, and human losses and economic losses have not been controlled. We propose that first of all, the government needs to have a system of timely guidance documents, the coordination between relevant agencies, secondly, that civil servants working in disaster response work must be capable, thirdly, the government must there should be publicity on how to respond, four is to limit the hot growth of projects such as hydroelectric projects, five is that the government must have a long-term master plan and sixth is to pay attention to livelihoods, education level of local ethnic people. These proposals can gradually control and limit the damage caused by increasingly severe natural disasters in the Central Highlands.

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Introduction

The process of globalization and international integration is taking place more and more deeply, especially in developing countries like Vietnam, one of the important requirements is national governance capacity, in which process, at the local government level, the process of restructuring and strengthening governance capacity is considered an important orientation and task. Furthermore, the process of international integration has exposed the natural environment of developing countries to catastrophic impacts due to natural phenomena, which requires local governments to be proactive and strongly develop management capacity (Phuong, 2018). Up to now, resources on improving governance capacity in Vietnam have focused mainly on discoveries and findings about global governance capacity, national governance, and social development management (Ly, 2019). In addition, the studies also focused on discovering the community's adaptive capacity, the adaptation of local people to natural disasters, storms, and floods, and the discoveries and research on the governance capacity of the community. Local government levels in responding to natural disasters are quite modest and do not seem to have become a priority issue for a long time, but recently local authorities in Vietnam have had many practical activities to improve the governance capacity of local governments, which have also generated the interest of researchers (Thuy, 2016), but research on local governance capacity is still limited. There is a huge gap in Vietnam (Ly, 2019), moreover, the goals of local governance in Vietnam are quite broad, including economic, educational, health, and social goals, and ensuring economic development—sustainable society, ensuring social security and safety, and constantly developing people's lives (ĐN, 2016).

The local government in Vietnam in its normal state has the functions and tasks of not only administrative management but also creating an environment to promote innovation and attract the participation of people and businesses in the process development policy-making process, improving the quality of life and making an important contribution to the sustainable development of the locality. However, the active participation of the people in the normal state is still limited and the people's participation in the governance of the local government is mainly carried out under a democratic mechanism, including directive democracy and representative democracy, which means that the governance role of local government is quite strong. On the other hand, in response to the reality of responding to drastic changes in the natural environment, many natural disasters, and unusual developments, nature is increasingly fierce in Vietnam such as sea level rise, floods, droughts, etc. This poses an urgent need to understand and discover the current governance capacity of local governments at all levels in responding to natural disasters that Vietnam has already experienced and will suffer, as well as the ability of local governments to help people overcome the challenges posed by natural disasters. Relief activities currently mainly come from the government and some public sector organizations, so it is necessary to seek more support from social organizations and volunteer activities from individual donors. These forces are diverse and have great potential but have not been effectively exploited.

Central Highlands region of Vietnam includes 5 provinces, namely Kon Tum, Gia Lai, Dak Lak, Dak Nong, and Lam Dong, in which there are 60 district-level administrative units, and 75 wards below the district-level administrative unit. 48 townships and 592 communes, under the commune-level administrative unit, there are 7186 villages, of which 2525 villages and villages are 100% ethnic minorities (Khanh et al., 2022). The Central Highlands is also the most diverse region in terms of ethnic composition in Vietnam, with 54 ethnic groups, of which

2,199,784 are ethnic minorities, accounting for 37.65% of the whole region's population. 54,470 km², accounting for 1/6 of the area of Vietnam (baochinhphu.vn, 2022), but up to now, people in the Central Highlands still have many difficulties, especially economic difficulties and ethnic minorities (Giang, 2019). In particular, the prolonged drought in the dry season, the narrowing of the reservoir area, the reduction of the area of agricultural and industrial crops, the loss of crops, and the lower and lower food output lead to lower living standards and livelihoods. The design of not only the local ethnic people but also the people of the Central Highlands is facing more and more difficulties (Le et al., 2021). This is a practical requirement for local authorities to have sufficient capacity to forecast and respond to unusual developments in natural disasters.

The Central Highlands is considered an important area with a strategic position for Vietnam in terms of politics, economy, society, security, and defense, and is considered an indigenous land rich in traditions and cultural nuances with its characteristics in Vietnam as well as in the world that are still handed down to this day. Although there are many nuances in economic and cultural life, the organization of the local government model in the Central Highlands is completely similar to the organizational model of local government in other regions of Vietnam. This can have advantages in local governance both in the normal state as well as in emergencies when there is a clear direction, but in emergencies also have disadvantages when Central Highlands has specific characteristics of geography, cultural life, capacity in handling and responding to natural disasters of civil servants in operating the administrative apparatus of the administrative apparatus which may not be good sufficient with practice (Ly, 2019). Therefore, local governance in the Central Highlands, Vietnam is still a new and highly topical issue, so these issues need to be discussed carefully to discover and detect the results, effectiveness, and limitations in local government governance in the Central Highlands region of Vietnam. Moreover, the transparency of information when talking and discussing with the people the construction of a hydroelectric dam near the community tourism village has not been prioritized (Hao, 2022), the exploitation and processing of bauxite or, alumina production and aluminum smelting and the assessment of bauxite ore mining planning have not been discussed and managed clearly (Hao & Ton, 2017). Therefore, the opinions of social organizations and people must be put on the agenda because projects have an impact on people's lives.

Based on the above explanations, this article complements the existing literature by pointing out the natural disasters that occurred in the Central Highlands in 2015–2021. Pointing out the capacity of the Central Highlands government in responding to these disasters, there is a comparison to see the capacity of the Central Highlands government in the normal state and the capacity when transitioning to a state of emergency. In addition, the article has pointed out the activities and limitations that the Central Highlands government has not yet responded to, thereby being able to promptly respond proactively to disasters that are occurring with increasing frequency and scale increase. Drawing comments and assessments on the response to natural disasters in the Central Highlands in the past time and making recommendations to the Central Highlands government in minimizing damage caused by natural disasters.

Capacity of Central Highlands local government in response to natural disasters from 2015–2021

The governance of local government in Vietnam. Local government operations are based on institutions set by the central

state and institutions set up by localities. The institutions set forth by the central government are universal to all subjects in society, but the institutions set forth by the local government, even those within the village, are conventions, and customs and are limited to the local area. The operation of the local government aims to well handle all relationships taking place in social life, especially the relationship between citizens and the government, and the provision of public services at the local level. This is often associated with local affairs and the interests of people within the locality. Therefore, good local governance should be based on local characteristics, resources, and local people's needs to develop strategic plans for the locality (Ly, 2019). The subject of local governance consists mainly of the local government, then the local population community, such as socio-political organizations, socio-professional organizations, etc., and the people who are born, live, and reside with household registration in the locality. The mechanism for actors to participate in local governance is implemented either directly or indirectly. In Vietnam, the model of local government is divided into three levels including province, district, and commune, each level has certain autonomy in terms of functions, tasks, apparatus, and budget by local conditions according to regulations of the Law. Local governance at all three levels is subject to the common governance of the central government, and each lower level is under the common management of superiors (Ly, 2019).

When it comes to the local governance, there are many different interpretations in Vietnam. Local governance is only really promoted when (1) The political and legal system respects the people's freedom and legal and legitimate rights; (2) The strictness in applying the law to all subjects in society; (3) There is a clear, objective and scientific division of power; (4) The participation of many actors in the process of planning and organizing the implementation of policies; (5) Public resources must be managed strictly and transparently (Anh, 2014). Local governance is the attributes and values of local governance suitable for local governance requirements, ensuring proof of local development and meeting local expectations (Mai, 2017). However, the concept of local governance is implemented based on the general principles of state governance, implemented by the local government to implement the local development strategy and meet the requirements of the people (Truyen, 2021). In this view, local governance is considered only as an exercise of national governance, the role of self-determination and relative independence in governance decisions is of little concern, which also means that the role of the people is relatively weak in participating in local governance. Faced with this reality, the administrative capacity of the local government is approached in the following ways: (1) The system of legal documents issued by the local government as a basis for the management of issues. local; (2) Organization of the apparatus of local government; (3) Personnel in the local government apparatus; (4) Public service provision to serve local people and businesses (Truyen, 2021).

In local governance in Vietnam, there are recommendations to consider the voice of the people to have an equal relationship with the government, to mobilize the people to participate more and more in local governance as the owner of social organizations, dialog with the authorities, contribute to the formulation of public policies, aiming at the sustainable development of the locality (Ly, 2019). This recommendation is quite similar to the recommendation made for developing countries that need to decentralize governance to local governments with the implication of strengthening local governance capacity in localities where they are more self-determined (Halfani, 1996). It is possible to reduce the interference of the superior government with the subordinates, but this should only be done when the lower local governments have sufficient governance capacity when the

education level and the level of self-consciousness about Citizenship, the level of participation of social organizations and the reporting and accountability of local government meet the requirements of local governance. In addition, the voice of the people is increasingly concerned by the government, which also shows the humanity in the policy of the State of Vietnam, the state of the people, by the people, and for the people, thus paying attention to the terms of planning, the material and spiritual contributions of social forces further contribute to improving the capacity of local authorities.

The capacity of local government in Central Highlands Provinces, Vietnam. The capacity of local government in slow and developing countries is still quite limited, so when implementing decentralization and increasing governance initiative for local governments when local governance capacity is not yet ripe, cause concern, and ways in which bureaucracy may arise (Wilson, 2000). Local capacity is reflected in a practical capacity, political qualities, knowledge, professional skills, and public service ethics demonstrated in the ability to mobilize the participation of people, and political organizations political, economic, and social (Mai, 2017).

The local capacity is demonstrated at three levels: First, the authoritarianism of the government, the voice of the people being overlooked or ignored, and the governance model of the bureaucratic government overwhelms the role of the local government has had certain relationships and the presence of the people, the accountability and transparency are not high. The third level, the governance capacity of the local government is quite independent of superior government, with the participation of the people in most of the policy process, towards consensus, accountability and responsibility, transparency, effectiveness, and efficiency (Brinkerhoff, 2008). From these three levels, the capacity of local governments in the Central Highlands of Vietnam is only met at level 2, in the normal state people have little interest in citizenship, which mainly arises. In urgent situations in normal situations, there seems to be little presence of social organizations, but when there are unusual events such as natural disasters or disasters, social organizations make a rather positive contribution. However, the reporting and accountability of local authorities is still a weak link and is mainly implemented upon request or during conferences, thus leading to the issuance of too many guiding documents, which lacks a mechanism to check, monitor, and evaluate the effectiveness, even errors in terms of the legal basis, format, and presentation technique (Truyen, 2021).

When researching the capacity of local governments in the Central Highlands, Long and Trang (2020) pointed out five components including institutional capacity, organizational capacity, implementation capacity, technical capacity, and political capacity. This is very similar to the component of the capacity of local government in the study of Merilee (2009). In the Central Highlands, there have been revelations about each component of the capacity of local governments, in which the institutional capacity has not kept up with the practical requirements in formulating and issuing decisions for local governments. The organizational capacity and administrative apparatus are strictly regulated, and internal institutions are regulated, but the connection and coordination in dealing with geniuses are still slow at least in the deployment of 4 in place (forces; supplies, vehicles, equipment, and logistics). Implementation capacity is still limited, and not linked to sustainability. Technical capacity through grasping and applying technology to the policy process to bring about effective government is also very low. Moreover, the capacity of local authorities in a normal state

can resolve conflicts and respond flexibly to the needs and interests of the people, but when a natural disaster or emergency disaster occurs, it is often embarrassing (Long and Trang, 2020).

According to author Thuy (2016), the capacity of local authorities in Vietnam in general and in the Central Highlands focuses on three main aspects, which are (1) education level, self-consciousness about civil rights; (2) the extent to which civil society organizations participate in local government activities and (3) accountability and reporting. (Truyen, 2021)) argues that the capacity of local authorities is reflected in four aspects (1) the system of legal documents promulgated by local authorities by practical requirements, serving as the basis for the operation of the local government. operation of the apparatus; (2) the organizational capacity of the local government apparatus; (3) the capacity of the contingent of civil servants in the local government apparatus; (4) activities of providing public services for local people and businesses. However, based on analyzing the capacity of local authorities in the Central Highlands, the article will not include the reporting and accountability capacity according to Thuy's point of view (2016) in the research content. Thus, the capacity of local governments will be synthesized and emphasized on the above 6 components, contributing to the formation of a research framework on the governance capacity of local governments in the Central Highlands, making The Central Highlands local authority strong enough and can better respond to natural disasters. In addition, with the motto of mobilizing four on the spot that local governments and provinces are deploying, including on-the-spot command, on-site forces, on-the-spot vehicles and materials, and on-site logistics, to improve the capacity of local authorities in the Central Highlands, it is a good choice to pay attention to social forces in other localities.

Natural disasters in the Central Highlands, Vietnam in the period 2015–2021. Clause 1, Article 3 of the Law on Natural Disaster Prevention and Control explains that a natural disaster is an abnormal phenomenon of nature such as a storm, tropical depression, whirlwind, lightning, heavy rain, pipe flood, flash flood, inundation, and sliders caused by rain or runoff, land subsidence caused by rain, flood or current, high tide (Vietnam National Assembly, 2013b), these phenomena can cause damage to people, property, environment, conditions living, socio-economic activities, incl. Among natural disasters, floods and droughts are increasing in both scale and damages caused by floods and droughts in the period 2015–2021 are illustrated by Fig. 1.

Figure 2 shows that out of 5 levels of warning, the red warning covers a fairly large area, while the light blue indicates that the disaster risk level is still present but the area is quite small. Besides, there are very few lakes that store water, mainly lakes and mainly natural lakes. The river system in the Central Highlands is very few, there are no large rivers, but the slope is quite high, and when there are floods, the rivers pose many risks to people, this can be seen through a number of indicators in Fig. 2.

In the historic flood in August 2019, all 5 provinces of the Central Highlands had 10 deaths (Gia Lai: 1; Dak Lak: 1; Dak Nong: 5 people; Lam Dong: 1; Kon Tum: 2); The four injured people are all from Lam Dong province. Regarding housing: 3717 houses were flooded (Dak Lak: 913 houses; Dak Nong: 60 houses, Gia Lai: 26 houses; Lam Dong: 2430 houses), and Lam Dong had 548 houses that had to be relocated. Regarding crops, 8382 ha of rice and crops were flooded; 703 ha of perennial crops, 2558 ha of annual crops, and 1083 ha of fruit trees were damaged; 299, and 120,741 poultry died and washed away. For aquatic products, 125 ha of traditional fish farming and 4300 m³ of cages were total damage estimated at 992.5 billion VND (Triu, 2019). Regarding

the drought situation, Dak Lak province has 87% of districts at high risk of drought, 7% of low-risk districts, and 6% of districts with medium risk; Lam Dong province has 42% of districts with high, high-low-risk accounts for 50%, and 8% of districts with medium risk, Gia Lai province has 41% of districts with high risk, low-risk accounts for 35 and 24% of districts are at moderate risk; Kon Tum province has 20% of districts with high risk, low risk accounting for 70 and 10% of districts with medium risk; Dak Nong province has 12% of high-risk districts, 38% of low-risk districts and 50% of medium-risk districts are depicted in Fig. 2 (Long and Trang, 2020). Among the 5 provinces, Dak Lak province has the most severe shortage of surface water and ground water, with a total water shortage of 362 million m³/year. Lam Dong province has two districts with a serious shortage of surface water in the year of low water, with a total water demand of 128 million m³/year. The results of the assessment classified according to the degree of water shortage in 5 provinces of the Central Highlands (Table 1) are all high, the amount of ground water in high water year as well as in low water year does not seem to have any difference at all four levels from <0.5 million m³/year to ≥25 million m³/year, even in high water years as well as in low water years the difference between provinces is not significant. Besides, there is a clear difference in the amount of water surface at <0.5 million m³/year due to the steep slope, so it is difficult to keep, but from 0.5 – 10 million m³/year to ≥25 million m³/year, the amount of water is not many, mainly stored in lakes, but the scale is still quite modest.

Damage caused by drought. In the 2016/2017 crop year, the total area of industrial crops and fruit trees affected by drought was 110,766 hectares, of which the lost area was 7586 hectares (of which 496 hectares of pepper were burnt to death, mainly in the area). Gia Lai 218 ha, Dak Lak 277 ha, the rest are coffee trees with 100% loss of productivity, Gia Lai (coffee 399 ha, pepper 218 ha); Dak Lak lost about 56,138 ha of coffee, of which there was a loss of about 4399 ha, the drought of 4409 ha, of which 277 ha; Dak Nong lost about 22,658 ha, lost 1767 ha of coffee; Lam Dong the damage was about 30,439 ha, 161 ha (Thu, 2016). The area of the Central Highlands provinces subject to drought has tended to be more and more severe in recent years (See Fig. 3), although Kon Tum province has less damage, the area is still very large, even in recent years reports have shown drought, flood, and inundation. Floods, flash floods, and landslides are frequent occurrences and cause great damage to both people and property in the Central Highlands (Tung, 2022).

In the past 5 years, in the face of unusual natural events that have increased natural disasters, increased surface runoff reduces the ability of ground water to store and recover. The total potential for ground-water exploitation of the Central Highlands is currently about 5400 million m³/day and night, but in the face of the situation of people massively developing industrial crops and mining, the exploitation of water is excessive (Vu, 2020). Moreover, the construction of the irrigation system and water storage reservoirs did not meet the actual requirements, and the lack of planning in socio-economic development led to more and more severe damage caused by natural disasters. Even during the rainy season, people in many places still lack hygienic drinking water due to contaminated ground water (Nhung, 2021).

The capacity of local governments in the Central Highlands in normal and emergencies. Firstly, the system of legal documents promulgated by the local government serves as the basis for the governance of local affairs. Local governments have focused on promulgating and organizing the implementation of legal documents according to their competence, each year issuing thousands

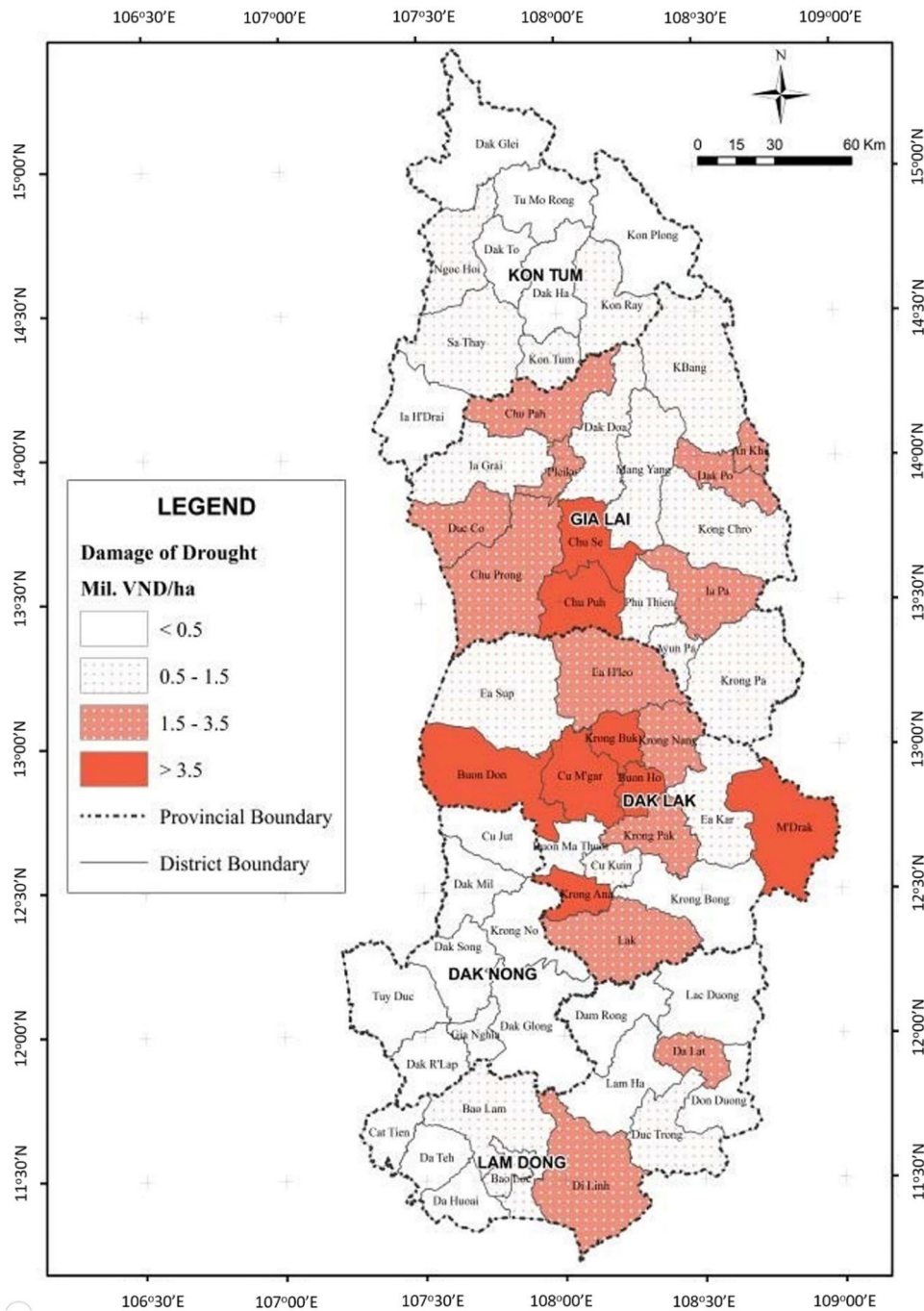


Fig. 1 Disaster map of the Central Highlands provinces from 2015-2021 (Vietnam Institute of Social Sciences—Central Highlands Institute of Social Sciences, 2021). Description Map of Droughts and floods often occur in the Central Highlands, the prolonged trend has seriously affected this area, the area affected by drought is getting bigger and bigger year by year. Flood damage is also severe.

of decisions to concretize central documents to suit the local realities and conditions (Vietnamese Government, 2021). However, the promulgation of the document still has shortcomings, the content of the document does not well represent the roles and responsibilities, including errors in the validity of the document, the legal basis, the format, and the technique text presentation (Truyen, 2021). In emergencies, the promulgation of guiding documents mainly from superiors and local authorities is mainly concretized, without high creativity. Due to the delay in responding to possible disasters, and the unreasonable way of organizing when a natural disaster occurs, the National Steering Committee for Natural Disaster Prevention and Control held a

Conference on solutions for natural disaster prevention and control in the Central Highlands region both to support and to direct (Tung, 2022). Also from this fact, the Prime Minister held an online meeting of the Government Standing Committee with 8 provinces in the South Central region and the Central Highlands on the work of preventing, combating, and overcoming the consequences of rain and floods (Bao, 2021). The government is relatively passive, which inevitably leads to embarrassment when a disaster occurs, and the issuance of directives and executive documents will be passive.

Secondly, the organization of local government apparatus is slow to innovate, and not yet flexible to meet the requirements of

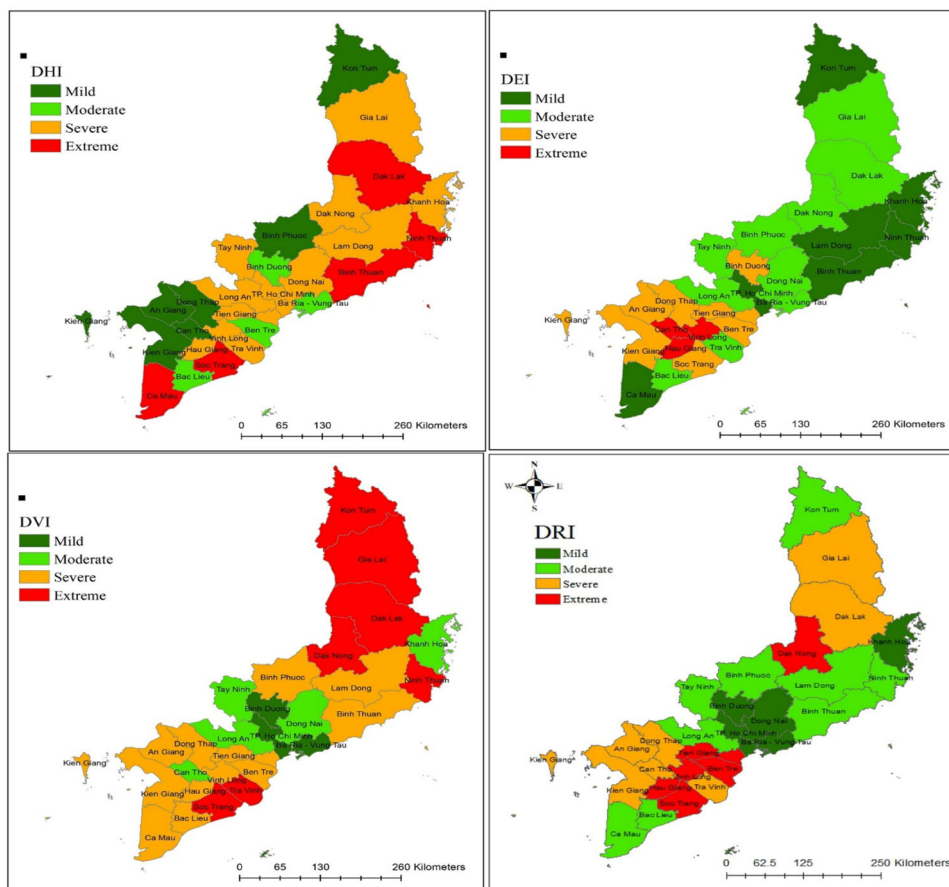


Fig. 2 Maps of Drought Hazard Index, Drought Exposure Index, Drought Vulnerability Index, and Drought Risk Index (Le et al., 2021). The area of the Central Highlands provinces subject to drought as shown by the Drought Hazard Index, Drought Exposure Index, Drought Vulnerability Index, and Drought Risk Index tends to become more and more severe.

Table 1 Statistics on the number of districts facing water shortage (Vietnam Institute of Social Sciences—Central Highlands Institute of Social Sciences, 2021).

Year	Provinces	<0.5 million m ³ /year			0.5–10 million m ³ /year			10–25 million m ³ /year			≥25 million m ³ /year		
		Face water	Ground water	Total	Face water	Ground water	Total	Face water	Ground water	Total	Face water	Ground water	Total
Year of little water	Kon Tum	8	9	7	2	1	3	0	0	0	0	0	0
	Gia Lai	7	7	3	10	10	14	0	0	0	0	0	0
	Dak Lak	6	3	2	5	5	5	1	4	1	3	3	7
	Dak Nong	5	8	5	3	0	3	0	0	0	0	0	0
	Lam Dong	2	11	1	5	1	6	3	0	3	2	0	2
	Total	28	38	18	25	17	31	4	4	4	5	3	9
Years of plenty of water	Kon Tum	10	10	10	0	0	0	0	0	0	0	0	0
	Gia Lai	8	8	4	9	9	13	0	0	0	0	0	0
	Dak Lak	9	2	2	3	7	4	3	5	7	0	1	2
	Dak Nong	8	6	6	0	2	2	0	0	0	0	0	0
	Lam Dong	7	11	6	4	1	5	1	0	1	0	0	0
	Total	42	37	28	16	19	24	4	5	8	0	1	2

good local governance. The local government has made efforts to reform the organization and operation, but it has not yet met the actual requirements. The functions, tasks, decentralization, and decentralization are not very clear, effective, and efficient (Communist Party of Vietnam, 2021). Moreover, the established apparatus of specialized agencies of local government has not met the requirements of advising local authorities to effectively manage local issues and local characteristics (Communist Party of Vietnam, 2021). Therefore, in the face of an emergency disaster

situation, it appears to be confused, passive, and lacks a clear coordination mechanism. In particular, the grassroots political system in the Central Highlands is still changing slowly, the Party, government, and social organizations have low quality, leadership capacity, and management qualifications have not met the requirements, which the number of leaders and state managers is 6518 untrained people. There are 604 villages and residential groups that have not yet established cell branches, accounting for 7.93%. About 10% of the People’s Councils and People’s

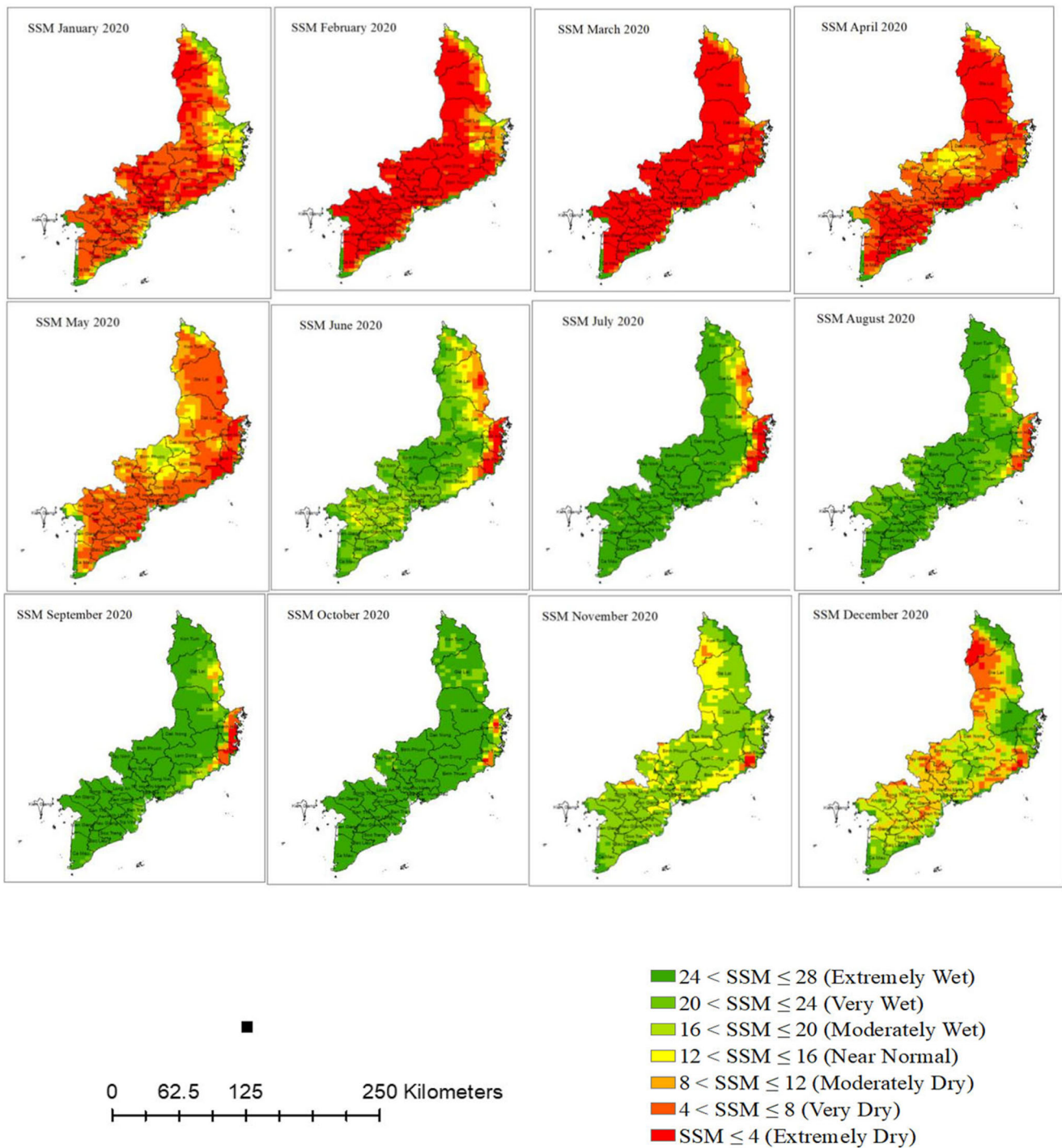


Fig. 3 Area of crops damaged by drought in the Central Highlands provinces from 2014 to 2020 as reported by the Institute of Social Sciences in the Central Highlands (2021). Drought in the Central Highlands is most common from January to April every year. Drought decreases from June to October. From December the risk of drought returns.

Committees operate poorly. Regarding the quality of activities of grassroots party organizations, 2.8% rated it as weak (Duc, 2015).

Thirdly, the human resources in the local government apparatus are structured, the number is not reasonable, the skills to perform official duties are limited, the quality of public service is not high, and related tasks are not very good. Concerning people, organizations, and businesses, the skills needed to perform official duties are still limited, leading to the fact that the performance of public duties is sometimes passive and lacks professionalism (Truyen, 2021). Therefore, the ability to forecast

emergencies lacks flexibility and creativity, and how the organization assigns and coordinates is not closely linked. The level of grassroots cadres in the Central Highlands is still low, and the discipline in public service of some officials is limited, not meeting the requirements of the job, and even ignoring or avoiding solving the people’s pressing concerns (Duong, 2017). Even, though three leaders of Dak Lak province were disciplined, Dak Nong province disciplined 1 party organization and 8 party members, Gia Lai province, the Secretary of Chu Se town was disciplined (Central Inspection Committee, 2020). In 2019, the

Central Highlands provinces disciplined 361 party members: 165 reprimands, 102 warnings, 7 dismissals, and 87 expulsions (Tang, 2019). Therefore, when changing status, the staff will be confused, lack coordination, and lack the experience to deal with unusual situations.

Fourthly, the provision of public administrative services by local governments has not met the requirements of best serving people and businesses. The provision of online public services still has many shortcomings, the portals are difficult to access, mainly at the simple level of providing forms on the network environment, and there are very few online public services that allow people to send and pay fees and process and return dossiers through the network environment. On the other hand, the educational level of local people (about 21% of local ethnic groups (including 12 ethnic groups), and 10% of ethnic minorities who have migrated from other places) is still limited, so the use of translation services is limited. There are few public services, and almost no use of public services at a high level in the connection between people, businesses, and the government. Up to now, the Central Highlands provinces have deployed document management software and work records at all levels of government, initially processing work records in the electronic environment. Some provinces have a large number of documents processing in the electronic environment such as Kon Tum (95% provincial level, 85% district level, 70% commune level), Dak Lak 100% provincial level, 60% district level, and 30% commune level. However, the provinces of Gia Lai, Kon Tum, and Dak Nong have a low number of synchronous dossiers, of which Dak Nong still has many wrong application codes, Gia Lai province has the wrong administrative procedure codes and is also the province that has not completed the results. payment connection on the National Public Service Portal. Dak Lak, Dak Nong, and Kon Tum have not synchronized and standardized the list of administrative procedures on the Provincial Public Service Portal. Dak Lak and Dak Nong update administrative procedures in a timely and incomplete manner (Bao, 2020). Kon Tum Province, by the end of 2019 only provided 32 online public services of level 3, had not yet provided online public services of level 4, and by the beginning of December 2020, had received 4003 online applications on a total of 66,929 applications (6.5% of online applications) (Portal of Kon Tum province, 2020). Therefore, when switching to an emergency state, it seems that all public service activities are very difficult to perform, to serve the people.

Fifthly, people's intellectual level and self-consciousness about citizenship: The development process of the Central Highlands has not yet resolved the harmony between the development of the local ethnic minority community and the newly immigrated communities (Minh and Ky, 2020). And in the normal state, the people exercise direct democracy, and representative democracy through the National Assembly, the People's Council other State agencies (Vietnam National Assembly, 2013a). In addition, the voice of the people has an equal relationship with the government, and the people participate more and more in local governance (Ly, 2019). Although ethnic minorities in the whole Central Highlands account for more than 26%, of which 9078 ethnic minorities have a university degree or higher (Nam, 2017). Although the government has made many efforts, up to now the cultural ground and people's intellectual level are still limited, and the life of ethnic minorities in remote and border areas is still poor and backward. Some pressing issues about cultural and social life have been slow to be resolved (Tien, 2020). Besides, the educational level of the people is still low, the literacy rate of ethnic minorities is not much, and the people's access to information and knowledge about law and environmental protection is still limited (Duong, 2017). These difficulties greatly affect the initiative of people in responding to natural disasters,

human power can be mobilized but it is difficult to mobilize resources.

Sixthly, the level of participation of social organizations is not much, mainly socio-political organizations in the administrative system according to regulations with the role, function of supervision, and social criticism, even social organizations participate only when requested. The reasons were pointed out such as unclear coordination mechanisms and policies between social organizations and authorities, lack of synchronization, lack of cohesion, lack of mechanisms in information exchange, and lack of regulation. both immediate and long-term coordination plans and plans (Resident Reporters Group and Party Building, 2022), even the government is afraid due to unclear coordination mechanisms (Thin, 2022). To be able to carry out the coordination in the normal Thai camp, with the proposal from the head of the agricultural sector "community management of natural resources", the subject is ethnic minorities, farmers to share responsibilities and rights (Huong, 2022). When there is an emergency, social organizations participate quite actively but are mainly present in relief activities. If resources from social organizations are mobilized even before a disaster occurs, the government will have more say in the plan to improve response capacity and when natural disasters occur, the coordination between the government and social organizations in the rescue of people to overcome the consequences will become more meaningful. The capacity of local authorities in the Central Highlands can be summarized in the normal state and in the event of a natural disaster in Table 2 below.

Research methodology

This study provides the theoretical basis and practical findings on the governance capacity of the local government at the provincial level in the Central Highlands, Vietnam in response to natural disasters, finding ways and Measures to strengthen the governance capacity of local governments in the Central Highlands, Vietnam in response to natural disasters. The governance capacity of the local government includes many different aspects, the study only focuses on the capacity to act in disaster risk management in the Central Highlands provinces, Vietnam because this is consistent with the research, The database to carry out this study is extracted from available documents, data, reports, and statistics of 5 provinces in the Central Highlands of Vietnam.

Research on local governance capacity in the study to answer the following questions: (1) Capacity of local authorities in developing and issuing a system of guiding documents to respond to natural disasters in the locality. did the provincial-level table meet the requirements of practice?; (2) To what extent is the governance capacity of the provincial-level local government apparatus in the Central Highlands in responding to natural disasters? (3) What is the capacity of civil servants in the provincial-level local government apparatus in the Central Highlands to respond to natural disasters? (4) To what extent is the capacity to provide public services to local people and businesses when natural disasters occur? (5) What is the capacity of the apparatus of the local government at the provincial level in the Central Highlands in developing people's intellectual level and in terms of the self-management and mastery role of the people when natural disasters occur? (6) To what extent is the capacity of social organizations to participate in responding to natural disasters? Study design based on Fig. 4.

Therefore, to analyze the governance capacity of provincial local governments in the Central Highlands in responding to natural disasters, the following hypotheses were tested:

1. H01: The capacity of local authorities in the Central Highlands provinces to develop and issue a system of

Table 2 Governance capacity of local government in Central Highlands in normal and emergencies.

Criteria	Normal situation	Situation of emergency
Document system issued by local government	The system of documents is issued mainly to perform state administrative management tasks, and is regularly revised but has little predictability.	The document system is issued in an emergency state, passively according to the situation, the predictability is not high
Organizing Committee	The operation and organization of the apparatus are mainly oriented and directed by the superiors to well fulfill the tasks according to the decentralization, ensuring the good performance of the state administrative management function.	Not yet flexible in developing plans to quickly change the state from normal to emergency with careful forecasting, arrangement, and preparation in advance. The coordination mechanism is not clear, leading to confusion and passivity.
Personnel in the local government apparatus	The structure and number of jobs arranged by job position are relatively stable, with little fluctuation. The jobs of civil servants are mainly performing civil service activities according to the mixed civil service model.	Passive, lack of flexibility in personnel arrangement. Due to a lack of strict assignment and coordination, civil servants may have the capacity to perform official duties, but have the knowledge and experience to promptly participate in responding to and handling situations when natural disasters occur, it will have a lot of restrictions
Public service provision activities	The way the government communicates with the people is still according to traditional procedures, and heavy administrative paperwork, although there is interest in technology applications, the level is quite low.	The weak operation, the government's response to the people is confused or there are some cumbersome administrative procedures.
Promote the self-determination of the people	The administrative command mechanism is from the top down, there is little innovation and creativity, and sometimes it is still bureaucratic, so the people are less likely to participate in the decision-making processes of the public authorities without informing them. through representative individuals and organizations.	People are strongly mobilized in contributing to human power, but the way of using human power, especially using human power, is sometimes inefficient.
Capacity to mobilize the participation of social organizations	Social organizations are mobilized to contribute financially to the construction of natural disaster prevention funds, but there is no open and transparent mechanism yet.	There is a large participation of social organizations and voluntary organizations, but there is a lack of mechanisms and ways to coordinate these organizations, so after the disaster has passed, many shortcomings are slow to be learned.



Fig. 4 Framework for analyzing the capacities of local governments in the Central Highlands in response to natural disasters.

guiding documents to respond to natural disasters has not yet met the requirements of practice.

- H02: The administrative capacity of the local government's organizational apparatus at the Central Highlands'

provincial level in response to natural disasters has not yet met the actual requirements.

- H03: The capacity of civil servants in the provincial-level local government apparatus in the Central Highlands in responding to natural disasters has not yet met actual requirements.
- H04: The capacity of the provincial government to provide public services to people and businesses in the Central Highlands when natural disasters occur has not yet met the actual requirements.
- H05: The capacity of the apparatus of the provincial local government in the Central Highlands in developing people's intellectual level promotes the role of self-governance, and the people's right to mastery when natural disasters occur has not yet been achieved. meet actual requirements
- H06: The capacity of the apparatus of the local government at the provincial level in the Central Highlands is not yet able to mobilize the participation of social organizations in responding to natural disasters.

Some activities of the Central Highlands provinces in response to natural disasters

Natural disasters in the Central Highlands provinces tend to take place with increasing frequency and scale, especially in December 2021, when floods in Dak Lak province alone caused 19 deaths, 26 houses. collapsed, fell; 1657 ha of rice and 1097 ha of crops were damaged, 2648 cattle and 71,897 poultry were killed or swept away; 252 hectares of aquaculture were damaged. The Prime Minister of Vietnam has emphasized that natural disasters in the Central Highlands are complicated, fierce, difficult to control, difficult to predict, irregular, and can happen at any time (Bao,

2021). Immediately after that, the Government of Vietnam (Prime Minister of Vietnam, 2021c) directed the Central Highlands provinces to promptly implement solutions to ensure the safety and lives of people and provincial authorities. The Central Highlands has made some moves to respond to these disasters by issuing several mechanisms and policies to support people when experiencing natural disasters. However, up to now, the proposed solutions lack specificity, especially the way to realize the main solutions, and solutions and mainly still the policy of providing money for families with material damage and human damage.

After the Central Steering Committee for Natural Disaster Prevention and Control (2021) issued Decision No. 01/QD-TWPCTT dated February 8, 2021, promulgating a set of indicators to evaluate provincial disaster prevention and control and plan The implementation plan for the period from 2021–2025, until now, the People's Committees of the Central Highlands provinces have specific activities to direct the forecasting and timely implementation of emergency measures to respond to the occurrence. natural disasters according to the motto “four on the spot”, including commanders at the station, assign civil servants to be in charge of high-risk areas and assign specific tasks to officials in People's Committees at all levels, especially at the commune level, to go to the grassroots to help people when there are natural disasters occurs. Organizing timely information, guiding people to travel safely when it rains and floods; deploying forces to control, guide, and support safe traffic through overflowing underground passages and deeply flooded roads; instructing people to stockpile food and necessities in case of floods, inundation, prolonged separation, and to be ready to relocate people and livestock to safe shelters. The provinces have proactively reviewed and mobilized forces to organize the emergency evacuation of households in unsafe areas, especially areas that are deeply flooded and divided, low-lying areas along rivers and streams, and areas. risk of flash floods, landslides, areas where landslides and floods have occurred, arrange temporary accommodation, support food, and necessities for households that have to be evacuated and prevent people from being injured, hungry, and cold.

Safety for the system of dykes, lakes, and dams is supervised by the authorities for safe operation and with the participation of the people. Build forces, vehicles, and supplies in key areas to be ready to carry out rescue and rescue and promptly overcome incidents and consequences of rain and flood, not to be passively surprised (Huy, 2013). However, the forecasting of rainfall and flooding in some cases is still not close to the actual situation. Many irrigation reservoirs are damaged and degraded for a long time, but there is no funding for investment and repair; The meteorological and hydrological monitoring system upstream is not synchronized (An, 2022). The direction of the government of the Central Highlands provinces is said to have high political will, but in reality, the capacity to provide public services to serve the local people and businesses as well as the capacity to mobilize the participation of the local government. Social organization in responding to natural disasters has not yet met the requirements in both the present and the future (Nhưng, 2021).

Currently, 5 provinces in the Central Highlands have established a Steering Committee for Disaster Prevention and Search and Rescue with 122 members, coming from the Departments of Agriculture and Rural Development, the Department of Natural Resources and Environment, the Department of Transport, and the Department of Natural Resources and Environment. Transport, Department of Construction, Department of Health, Department of Labor, and War Invalids. Social Affairs, Department of Planning and Investment,

Department of Finance, and heads of several socio-political organizations including Fatherland Front, Women's Union, Farmers' Union, Youth Union... At the district level, the number of members is 1400 people who are directly assigned to the standing force to respond to natural disasters and disasters. The members of the Commanding Committee for Natural Disaster Prevention and Control and Search and Rescue regularly report to the Provincial People's Committee on the risks and extent to which they can respond in the event of a disaster to reflect the actual capacity of the members. Steering committee members are not able to forecast and assess potential risks, lack a GIS database system and General Electronic Atlas of the Central Highlands, degraded irrigation works, and lack of warning equipment disaster early (Ky, 2016). Priority projects on disaster prevention and control are not suitable for the current situation, budget spending on flood prevention accounts for less than 1% of total investment in the Central Highlands, including in affected provinces. as heavy as Dak Lak and Lam Dong. Large floods and historical floods have not been forecasted early, there is no map of zoning and landslide warnings with large proportions; Only landslide warnings have been issued at the district level. In fact, during the flood from the night of August 6, 2019, 11 districts in 3 provinces Lam Dong, Dak Lak, and Dak Nong were severely affected, more than 600 households had to be relocated urgently, more than 6140 hectares of submerged crops (PV/VOV, 2019).

These losses are said to be the local government's ability to develop and issue a system of guiding documents that is not close to reality. The administrative capacity of the local government's apparatus, and the capacity of the Board of The Command of Natural Disaster Prevention and Control and Search and Rescue have not yet met the actual requirements, so the specific action plan in responding to emergencies is to ensure the safety of the population in flood areas; planning, zoning, natural disaster prevention; planting forests to cover bare land and bare hills, protecting watershed protection forests; improve the capacity of water storage and supply of reservoirs, consolidate the irrigation canal system in a sustainable direction suitable to the natural conditions of the region; strengthening information, communication, and education on disaster prevention, avoidance, and mitigation for the population community, training plans to improve response capacity for disaster prevention and control forces at all levels are limited (Huy, 2013).

Faced with limitations in the practical governance of local governments in the Central Highlands, the central government issued Decision No. 379/QD-TTG approving the National Strategy for Natural Disaster Prevention and Control to 2030, with a Vision to 2020, 2050 (Prime Minister of Vietnam, 2021a), Decision No. 553/QD-TTG approving the Project of raising public awareness and community-based disaster risk management to 2030 (Prime Minister of Vietnam, 2021b). Based on the direction of the central government, right from the beginning of 2021, the heads of governments of the Central Highlands provinces have made statements about improving local governance capacity by protecting forests, preserving natural green areas of the plateau, protecting the ecological environment, mitigating climate change and enriching resources (Dung, 2021). However, after the direction of the central government, the statements of the local government were not included in the policy program to respond to natural disasters. Prioritize infrastructure development. In addition, the priority projects of the Central Highlands after 2020 have not yet met the actual needs in natural disaster response management (Vietnam Institute of Social Sciences—Central Highlands Institute of Social Sciences, 2021).

Discussion

It is possible to draw some comments and assessments about the situation of responding to natural disasters in the Central Highlands in recent years on the following aspects:

Responding to natural disasters, the Central Highlands provinces have made great efforts in concretizing the leadership and direction from the central government (Prime Minister, 2007) by promoting activities such as seminars to collect opinions of experts to develop and issue a system of guiding documents to respond to natural disasters, but it has not yet met the practical requirements. The Central Highlands is being heavily affected by climate change, with the average temperature here increasing by 0.1°C per decade, along with extreme weather phenomena that constantly appear, and frequent floods occur in the rainy season, drought, heat in the dry season, thunderstorms, tornadoes, and hail appear more and more frequently and irregularly (Oanh, 2021). However, disaster prevention still reveals many limitations, some solutions are not sustainable. The forecast of rainfall and flood is not close to the actual situation. Many irrigation reservoirs are damaged and degraded for a long time, but there is no funding for investment and repair; The upstream meteorological and hydrological monitoring system is not synchronized, and the plan for prevention and response to natural disasters is not close to reality (An, 2022). Even in the center of the provinces are cities, the ability to cope with floods is not high, when it rains most of the cities are flooded, many roads are eroded and divided, and it takes a long time to time and resources to overcome due to the administrative capacity of the local government apparatus of the province in the Central Highlands did not do well in forecasting and warning of floods and inundation, and information was not updated and distributed. Frequent sharing leads to a lack of information in operation (BT, 2022). Moreover, local authorities are not good at planning for sustainable development, especially in poor forest management due to the narrowing of the area, forest coverage in the Central Highlands is 45.92%, of which poor and poor forests account for 70%, rich and medium forests are concentrated in some areas of special-use forests and watershed protection forests, making the natural environment unbalanced, building infrastructure construction lacks cohesion, so when a natural disaster occurs, the structures do not seem to support each other (Kiem, 2020).

The capacity to respond to natural disasters does not seem to be effective, especially when natural disasters in the Central Highlands become more and more severe, and human and property losses are increasing. The government has not paid attention to raising people's knowledge so that people can protect themselves and nature. People still destroy forests and illegally encroach on forests for agricultural plants, and industrial (Kiem, 2020). The government cannot develop people's intellectual level and promote the self-governing role, the people's right to mastery so that the people can speak for themselves, form self-governing organizations, and not pay attention to the provision of public services. serving local people and businesses. Especially, the administrative capacity of the government for economic establishments established and managed by the state is not effective, as evidenced by many violations of deforestation and forest land occupation, concentrated mainly in the area, which is assigned to state forestry enterprises, forestry companies, and forest management boards (Kiem, 2020). Forest crime is not actively controlled. In 2019, 1309 cases of illegal deforestation and shifting cultivation were detected and handled. In the first 5 months of 2020 alone, 417 cases of deforestation were detected, an increase of 57 cases (15.83%), causing damage to 126.8 hectares of forest (Minh and Ky, 2020). On the other hand, due to the interest in the participation of social organizations, when a disaster occurs,

these organizations participate quite actively in response to natural disasters, but often according to a spontaneous mechanism.

Forecast the ability of the government to predict and respond to natural disasters is not high, so when natural disasters such as floods and droughts occur, they are often passive. Local authorities have not paid enough attention to provide good public services to the people both in normal conditions and when natural disasters occur. The level of self-management and self-response of people in the event of natural disasters is limited, so not only local people but also people in other regions who migrate to the Central Highlands have to find new places to live and choose nowhere is into protection forests and special-use forests, as a result, natural forests are increasingly narrowed to serve as places to live and develop people's livelihoods. In the period 2005–2017, the Central Highlands provinces had 58,846 free-immigrant households with about 220,000 people, this situation is forecasted to continue, but the government has not yet come up with a satisfactory solution to end it soon (Lich, 2019). The shrinking forest area means that the drought will increase and last, the river flow will be reduced by 15–70%, and some rivers will be short by more than 85% (Vu, 2020). In addition, due to prolonged hot weather for many days, the whole region currently has about 2685 million hectares of forest at high risk of fire (Ly, 2020).

The direction from functional agencies and agencies in charge of natural disaster prevention and control has not yet met actual requirements. The People's Committees of the Central Highlands provinces have natural disaster prevention agencies called Commanding Committees for Disaster Prevention and Search and Rescue, in which the Chairman of the Provincial People's Committee is the Head and a Vice Chairman. The President of the Provincial People's Committee shall act as the Standing Deputy Head, the Director of the Department of Agriculture and Rural Development shall act as the Deputy Head of the Committee in charge of natural disaster prevention and control, the Commander of the Provincial Military Command as the Deputy Head of the Department of Agriculture and Rural Development. Head of the committee in charge of disaster rescue and relief (Government of Vietnam, 2014), but through actual events when natural disasters occur, it shows that the direction with the motto 4 on the spot is not proactive. The results are not substantial and the results when a natural disaster occurs are still heavy, this is partly due to the limited capacity of civil servants in this agency in responding to natural disasters, especially major disasters (Nhung, 2021). In particular, the functions of the Commanding Committee for Natural Disaster Prevention and Search and Rescue have not been well connected with relevant departments in advising the provincial government on mineral exploitation activities, environmental conditions, environmental protection, illegal migration, warning about the deforestation of watersheds, protection forests... to reduce risks when natural disasters occur. Although the Commanding Committee for Natural Disaster Prevention and Control and Search and Rescue has almost no plans to respond to natural disasters, it has not yet corresponded to the levels of disaster risk, especially the plan to respond to large floods, landslides, flash floods, droughts... in the direction of response rather than prevention and early warning. For example, the consequences caused by Typhoon Ketsana in 2009 caused historic floods on the Dakbla River, Kon Tum province, killing 56 people, and destroying 10,000 houses; total material damage is over 400 billion dong. From late 2014 to mid-2016, a severe drought occurred, causing heavy damage, seriously affecting production and people's lives in 05 provinces of the Central Highlands, making 1150 ha of production forest and 140,606 ha. industrial crops, 17,541 hectares of rice were damaged, 72,060

households lacked water for daily life, and the total damage was estimated at over 6000 billion VND (Tung, 2022).

Local authorities in the Central Highlands provinces have not attached importance to the inspection and supervision role of the people in the government's activities in preventing, combating, and responding to natural disasters. In addition, the capacity of providing public services to serve the people and for the product development of enterprises in the Central Highlands, the capacity of the apparatus of the local government is still limited, so it has not been able to mobilize the people's energy, especially the criteria of human and material resources on the spot. Therefore, several works serving construction investment projects for natural disaster prevention and control do not meet the requirements, so they cannot be put into use, and also due to the lack of supervision role of the community, especially the people (Thanh, 2021a). On the other hand, the local authorities in the Central Highlands provinces for many years have loosened the protection of forests due to their local management capacity, leading to the forest here being continuously destroyed, the land being encroached on by innocent people (Thanh, 2021b). In addition, local authorities have not paid attention to communication about disaster prevention activities, warnings, risks, public services, and policies that people enjoy when there are natural disasters, storms, and floods in the mass media. Therefore, the connection between the people and the government is still small and the policy of people knowing, people discussing, people checking, and people benefiting are still quite fuzzy.

Local authorities in the Central Highlands provinces have not been proactive, lacking in early preparation and remote response plans when natural disasters occur. The preparation of human resources, facilities, and investment in equipment for early warning, prevention, and control of risks and risks, is not commensurate with actual requirements. When a disaster occurs, the damage is often very large (BT, 2022). On the other hand, the capacity to respond to natural disasters of regular civil servants in agencies specializing in disaster prevention and control in the Central Highlands is not good for warning and handling situations when they occur. natural disaster. In the way of governance of local governments, they have not taken into account the provision of public services to serve people and businesses, and have not paid much attention to and regularly raised the people's intellectual level and the role of self-governance and ownership, the initiative of the people, especially the local people, to join hands with the local authorities, especially the effective implementation of option four on the spot, in which the local forces in the Central Highlands with the promotion of the people's strength as well as promoting the role of social organizations participating in local governance in the Central Highlands in the normal state and the state when there is a natural disaster, the more it is necessary to connect.

Facing limitations in the Central Highlands government's ability to respond to natural disasters, the Government of Vietnam has taken several actions to help people through the Asia Bank (ADB) organization to limit the damage. switching to smart production associated with nature protection, minimizing impacts on natural capital, increasing the rate of social protection, and accessing health services (Ngoc, 2022). Recently, Vietnam's National Steering Committee for Natural Disaster Prevention and Control held a conference on solutions to natural disaster prevention and control in the Central Highlands, and the conference agreed to guide the Central Highlands government to develop natural disaster prevention and control scenarios. appropriate disaster response documents to have effective solutions, thereby improving the initiative in disaster prevention and control (Tung, 2022). Also at this Conference, the scenario was proposed, it is necessary to build and repair community houses,

dykes, embankments, and irrigation lakes to serve natural disaster prevention and control and people's production; develop a plan for natural disaster prevention and control before the rainy and stormy season to proactively prevent it. The Government has directed that when natural disasters occur, it is necessary to promptly rescue, rescue, and support people, not to let people go hungry (Hoa, 2022). The head of the Government of Vietnam emphasized supporting the people of the Central Highlands with specific activities such as taking care of and ensuring people's lives after floods, preventing people from being deprived of food or clothing, do not let floods cause epidemics (Bao, 2021). The Politburo of the Communist Party of Vietnam (2022) has issued a separate Resolution No. 23-NQ/TW on the direction of socio-economic development and assurance of national defense and security in the Central Highlands until 2030, with a vision looking to 2045, to support and promote the development of the Central Highlands, connect the Central Highlands with the rest of the country based on developing socio-economic infrastructure, especially transport infrastructure, investment interest, greatly improving the connection between the provinces in the region, and between the region and the whole country. This direction shows that in the long-term, despite the Government's attention, the capacity of local authorities in responding to natural disasters is still a decisive factor.

To minimize the impacts and damage caused by natural disasters, the Government has invited the Asian Development Bank, the United Nations organization in Vietnam to consult and assist the Central Highlands in building adaptive capacity and improving the livelihoods of local people, improving environmental sustainability, social inclusion and resilience to climate change (Ngoc, 2022). The head of the Government chaired an online meeting with the Central Highlands provinces to direct the correct forecast of the situation so that the people know how to prepare for natural disasters, and quickly overcome the consequences of floods (Bao, 2021). The Government of Vietnam also consulted with businesses, proposing that it is necessary to focus on four breeding centers with a focus on high-tech applications, multi-layered tree planting combining deep processing and logistics, and one-way mineral exploitation. sustainable way, developing ecotourism and resort tourism (Think, 2022). In addition, the Institute of Meteorology, Hydrology, and Climate Change, in collaboration with the International Organization for Conservation of Nature in Vietnam, organized a workshop on "Promoting the goal of "Net Zero" in the Action Plan. response to climate change in the Central Highlands provinces" (Oanh, 2021). The Union of Scientific and Technical Associations of the Central Highlands has conducted several studies and surveys on the impacts of change (Thu, 2015). In particular, the Central Highlands of Vietnam has developed a strategy for sustainable development of the Central Highlands region, green growth, and adaptation to climate change in October 2022. However, realizing the political determination of the Central Government takes more time because of the current difficulties and limitations of the Central Highlands local government.

Some recommendations

Given the increasingly unusual developments of natural disasters occurring in the Central Highlands of Vietnam, this poses a requirement for determining the status quo and promoting the governance capacity of local governments in the Central Highlands to proactively respond to natural disasters, the following recommendations should be taken into account:

Firstly, in developing and promulgating a system of documents directing the response to natural disasters, it is necessary to pay more attention to practical conditions and close to the

characteristics of the Central Highlands, where many ethnic minorities live. Local governments in the Central Highlands provinces, when promulgating documents directing the response to natural disasters, especially those with long-term orientations, can mobilize the contributions of people, organizations, and individuals, to create consensus, strengthen understanding and connection between people and authorities at all levels, and at the same time promote the people's wisdom and support for human and material resources in the community, even in the normal state and even in the event of a natural disaster. This is also enshrined in the People's Constitution to exercise state power, all state power belongs to the people (Vietnam National Assembly, 2013a; Vietnam National Assembly, 2013b). The exercise of state power by the people by participating in local governance also demonstrates the good nature of a State that the people know, the people discuss, the people do, the people monitor, the people supervise and the people benefit. On the other hand, the promotion of the role of the people and social organizations, also contributes to the development of people's intellectual level, especially with local people, promoting the role of self-governance and mastery of the people. Governments are involved in the decision-making process. This is not only the work of the locality but also the interests of the people, an important condition for carrying out propaganda activities, raising the people's intellectual level, and enhancing the role of the people in participating in social activities. In local governance activities, people know, discuss, and contribute ideas to documents and plans in the process of promulgating decisions of local authorities, properly expressing the spirit and policy of human rights. People are the ultimate subject of power (Vietnam National Assembly, 2013a). It is also a way to make publicity and transparency in the governance activities of local governments, making the apparatus of public agencies effective and efficient, civil servants must be active and proactive in meeting the requirements of local governance of the Central Highlands in the normal state as well as in the state of responding to natural disasters. Along with the participation of the people, local governance should further promote the role of organizations, businesses, voluntary organizations, and local self-governing community organizations, to mobilize the participation of local people. generalist of the whole political system, especially the active role of the people in coordinating with public agencies in proactively responding to natural disasters (Ly, 2019).

Secondly, training civil servants in the provincial-level local government apparatus in the Central Highlands to be capable of advising as well as directing the promulgation of a system of executive documents in the prevention, control, and occurrence of potential natural disasters ability, and high flexibility to deal with situations. Building specialized agencies, namely Commanding Committees for Natural Disaster Prevention and Control and Search and Rescue in provinces with sufficient capacity to manage natural disaster prevention and control, as well as building and giving mechanisms for these committees to cooperate. Connecting with forces such as the police and the army to proactively respond to natural disasters, coordinate with departments such as the Department of Agriculture and Rural Development, the Department of Information and Communications, and the Department of Transport to do the work and preparation of contingency plans and plans, especially well-prepared four on the spot, including (1) the commanding force and (2) the commanding force on the spot, this is a large and wide force. among the people and specialized forces who have the capacity, and practical experience, are trusted by the people, and serve the people (Central Committee of the Communist Party of Vietnam, 2017). (3) Materials, vehicles, equipment, and (4) logistics on the spot so as not to be passive and how to deploy the

fastest response. On the other hand, natural disaster and disaster prevention and control activities need to be integrated with plans for natural disaster prevention and control and response to climate change in the development planning of the provinces in a realistic manner. The most effective implementation is the disaster risk zoning for each type of natural disaster in the area, which identifies the types of natural disasters that frequently occur in the area, affecting each type of disaster. the area in the province, city; risk zoning for each type of disaster such as flood, flash flood, inundation, drought, water shortage, landslide, riverbank, and stream bank erosion, etc.. consistent with the development scenarios of the provinces (People's Committee of Dak Lak Province, 2021).

Thirdly, enhancing the publicity, transparency, and accountability of local governments in the Central Highlands provinces on the web portal of each province, especially publicizing action plans and programs related to the response to natural disaster prevention and control. In addition, it is necessary to publicize and transparently public and private resources for natural disaster prevention and control, as well as resources for investment in building a system of natural disaster prevention and control, works so that Authorities, especially the people, can monitor. Investment activities that lack publicity, transparency, and supervision by the people make democracy violations likely to increase, giving rise to people's indifference, and the government's governance apparatus has bureaucracy, lack of inspection and supervision with public authorities inevitably leads to corruption, corrupt construction works lead to low quality and when a natural disaster occurs, damage can be caused larger (Chinh, 2020), while these structures need to be sufficiently resistant to extreme weather, destruction of natural disasters and lack of transparency is believed to be the main causes of corruption, waste, quality The quality of works is poor, many disaster prevention works are newly built and repaired but cannot be put into operation (Bac, 2019). This is also the consequence that in the past 10 years, there have been thousands of projects built with a huge budget for flood prevention, water storage, and drought that could not be put into operation, exploitation, or when completed unusable. Increasing transparency is also a way to increase people's trust, and maximize the participation of the people, the Investment Supervision Board and local communities, participation of the Fatherland Front, and political and social groups.

Fourthly, stopping the hot growth of some hydropower dam construction projects, the construction of large-scale solar power plants in watershed and protection forests, and the licensing of construction areas. The Central Highlands provinces are having dozens of solar power plants under construction, the licensing of construction projects, the development of industrial parks, and many factories and projects have encroached on forest land, leading to forest destruction, and causing serious damage to the natural ecosystem (Trung and Tuan, 2021). In addition to the damaged protection forests, the area of regenerated forests has also been narrowed. On average, over the past 10 years, the proportion of natural forests and regenerated forests in the Central Highlands has shrunk to about 46,267 ha/year for this purpose (Binh, 2020). To develop farm economy and other purposes, these activities require a large amount of water for irrigation, so the exploitation of ground water exceeds the limit, causing the ground-water level in the Central Highlands to decrease seriously (Phuc et al., 2018). Warnings The Central Highlands will face natural disasters with increasing frequency and scale due to delays or insufficient attention to sustainable development to minimize changes in climate, environment, and natural disaster prevention and control, but this issue does not seem to have become an issue on the agenda.

Fifthly, the governments of the Central Highlands provinces need to define a strategic vision and develop a master plan and a plan for sustainable development. Local governments in the Central Highlands need to further improve their governance capacity in formulating long-term development strategies, exploiting and effectively using available resources, especially needing to minimize the exploitation of inadequate mineral resources. control is seriously damaging people's livelihoods (Hao and Ton, 2017). Timely prevent deforestation, especially special-use forests, protection forests, and watershed forests, strictly handle deforestation, and prevent uncontrolled licensing of projects that affect the living environment. people, causing environmental pollution. Building protection works, and irrigation works against floods and droughts should be based on science, paying attention to people's opinions. It is necessary to give stronger rights to self-governing organizations in the community and improve the intellectual level of local people and ethnic minority groups so that people can be self-aware and aware that forest protection is a common responsibility. To realize the goal of sustainable development, the Central Highlands needs to have a strategic vision, build a comprehensive and long-term development strategy, and change the existing way of local governance to be more proactive and active in the face of challenges, and unusual and increasingly fierce developments of natural disasters.

Sixthly, the authorities in the Central Highlands need to pay more attention to ethnic minorities in terms of economic life, educational attainment... because this is a vulnerable group and this is the main direct force. participate in forest protection. The Central Highlands has 7334 villages and residential groups, there are 2764 villages, hamlets, and villages with a large number of ethnic minorities living and most of them live far from the city center, province, district, even close to old-growth forests, watersheds, and protection forests (Minh and Ky, 2020). Therefore, it is necessary to consider and build a mechanism for ethnic minority people to directly participate in forest protection and forest protection activities and enjoy the benefits of the forest protection and development policy, and guide the people in the forest. people enter the forest to exploit non-timber forest products without affecting the conservation of forest ecosystems (Institute of Social Sciences in the Central Highlands, 2014). The principles and regulations on the implementation of "closing the forest" and "opening the door of the forest" need to be clearly understood and implemented by the people. Paying attention to the prestigious group of people in the ethnic minority community, these people have a great influence on the establishment of values of the community and the local government to improve the role of local governance in need to pay attention to and adopt regimes and policies to mobilize the participation of reputable people to contribute ideas to the government's decisions related to natural disaster prevention and control. People also need to be discussed more in the construction of projects, especially projects related to livelihood, the government needs to have a transparent information mechanism in the media before and during the projects are built. Before the government comes to organize the implementation of decisions, social organizations and people need to consult and publicize their opinions by the law.

Conclusion

Natural disasters are becoming a big concern for people and authorities in the Central Highlands provinces of Vietnam. The consecutive disasters in recent times have caused great loss of life, and people's livelihood, these losses are difficult to enumerate. However, up to now, the capacity of the Central Highlands local government in responding to natural disasters seems to have many shortcomings right from forecasting and operating to

repairing the damage. To prevent, combat, and minimize natural disasters as well as their impacts, the Central Highlands provinces need to proactively improve their capacity to respond to natural disasters and be proactive in planning policies, policies must be able to respond to actual conditions, predictability, and at the same time improve the capacity of civil servants in specialized agencies in charge of natural disaster prevention and control, the government needs to do a better job of providing public services to serve people and businesses in the normal state as well as when a natural disaster occurs. Raising the people's intellectual level, especially local people and ethnic minorities in terms of self-governance, and promoting the people's mastery role, it is necessary to mobilize more people's participation in the decision-making process of local government and mobilize the participation of social organizations. Local governments will soon put an end to the destruction of forest resources, stop polluting projects, and further improve the capacity of local governments in the Central Highlands provinces in strategic planning and development. This is not only an urgent task but also a long-term strategic orientation not only now but also in the long-term for the Central Highlands to develop sustainably.

Data availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Author contributions

Conceptualization, methodology, formal analysis, data curation, writing—original draft preparation, first author; writing—review and editing, supervision, project administration: NHT; writing—original draft preparation, first author; writing—review and editing, supervision, project administration: NVQ All authors have read and agreed to the published version of the manuscript. This research received no external funding.

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