



Research Article

SWOT Analysis of Water Induced Disaster Management Policy, 2072 of Nepal

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Abstract

SWOT analysis is a simple and useful framework for analyzing strengths, weaknesses, opportunities, and threats of any plans, programs, projects and policies developed by an institution. The government of Nepal had formulated and implemented water-induced disaster management policy in 2072 B.S. which was analyzed using SWOT matrix with the help of document analysis and interview methods. Addressing water induced disaster as policy problems, participatory approaches, resource allocation and identification of hazard and vulnerabilities are the strengths of this policy. However, the implementation is not being successful due to lack of institutional ownership and confusing jurisdiction of work among the government institutions, which is the major weakness of the policy. The policy should take opportunities for its improvements according to the new constitution, national policy for disaster risk reduction, and federal setup. Lack of political and institutional commitment, and implementing agencies at central, provincial and local levels, are the main threats to this policy. It is mandatory to implement this policy after successive improvement for sustainable water-induced disaster management in Nepal, in which SWOT analysis helps for decision-making and critical analysis of this policy.

Introduction

SWOT analysis is a strategic analysis tool used to analyze policies, programs, projects of any institution. SWOT provides insights to make policies and programs applicable, sustainable and effective from a public and stakeholder perspective. The SWOT analysis is a strategic planning technique used to help a policymaker or organization identify strengths, weaknesses, opportunities, and threats related to plans and policies or project planning (Nutt and Backoff, 1993). SWOT helps policymakers, policy executives to know what must be done well to address what is lacking, minimize risks, and take the greatest possible

advantage of chances for successful implementation of any plans and policies. SWOT analysis is an analysis method used to evaluate the 'strengths', 'weaknesses', 'opportunities' and 'threats' involved in an organization, a plan, a project, a person or a business activity (Gürel and Tat, 2017). SWOT Analysis is therefore a significant tool for situation analysis that helps the institution to identify institutional and environmental factors. SWOT Analysis is a simple but powerful tool for sizing up an organization's resource capabilities and deficiencies, its market opportunities, and the external threats to its future. The

SWOT matrix has also been used in policy analysis. Giusti and Maggini (2016) studied the policies and programs on prevention and management of diabetes across Europe using SWOT analysis. Ghazinoory and Ghazinoori (2006) used the SWOT analysis for developing Iran's government strategies for strengthening the national system of innovation and found more useful. The SWOT tool is being used by many researchers in the strategy planning, formulation and analysis of the policy and programs. Nepal is suffering devastating water induced disaster problems and loose huge number of human life and property every year due to the fragile geology, steep topography in hilly and mountain region and heavy rainfall in the monsoon season (MoHA, 2019). The government of Nepal is working through policies formulations and institutions establishment to manage the diverse types of disaster throughout the country. The government had formulated and implemented the water induced disaster management policy in 2072 B.S. to address and manage water induced disaster in the country (NLC, 2015). This policy has primary objective as to manage landslides, floods, and avalanche and soil erosion and to protect people's life and property through mutual coordination among community, private sector and government bodies. The policy had set up the Department of Water Induced Disaster Management (DWIDM) a main responsible primary government institution for the management of water induced disasters in the country (Thapa, 2021). However, after FY: 2075/76 the DWIDM which is the major implementing institution of this policy, was terminated by the Nepal government (Thapa, 2021). But the water induced disaster management work had been missing in the country since this date. The government initiatives are not sufficient to cover all disaster risk management cycles sustainably (Thapa, 2021). As soon as the monsoon starts in Nepal, people start losing their lives and property due to water related disasters. The expert's opinion stats that there is a lack of specific emphasis on planning and implementation of disaster management activities in disaster preparedness and mitigation work (Thapa, 2020). He also added that there are problems of institutional, structural and dedicated expertise in water induced disaster management. Many researchers state that there has been existence of many good public policies in Nepal, but their execution and implementation status is very poor (Paudel, 2013). Many factors play both positive and negative role during policy formulation, execution and implementation. It is necessary to analyze the existing policy, its strength and weakness to address the national priority in water induced disaster management in Nepal. In this circumstance, this research tries to explain about the SWOT analysis of water induced disaster management policy, 2072. This helps to analyze the current status of the water induced disaster management issues and policy practices in Nepal.

Methods

The analytical and descriptive research design was used to analyze the water induced disaster management policy specially focus on its strength, weakness, opportunity and threats. The policy document analysis method along with interview of key informants was used to devolve the better understanding of policy documents and acquire the views from the experts in related fields. During the SWOT analysis, discussion among 12 different key informants from government officials, university professors, water induced disaster affected community was carried out. The suggestions and opinions related to the SWOT of policy from the key respondents were analyzed from multidimensional aspects. The views of key informants covered the diverse aspects of this policy document. During the SWOT analysis, the following questions and issues were asked with the key informants, as shown in Table 1.

Results

Strength, weakness, opportunity and threats of water induced disaster management policy, 2072 were analyzed in multidimensional ways. This policy tries to address the water induced disaster issues as policy problems in the country, which is the main strength. Other strengths are strengthening policy, strategy, action plans and institutional as well as resource allocation, assessment and identification of hazard and vulnerabilities, definition of technical term to water induced disaster, landslide, floods, land reclaiming etc., classification of landslide and flood hazard level to enhance in understanding and implementation and management focus with respect to the watershed scale. However, the policy has many weaknesses, they are lack of institutional ownership and confusing jurisdiction of work among the government institutions. Lack of proper inter institutional coordination, lack of interlink between water induced disaster management and irrigation, lack of management techniques for flood management in Hilly and Terai region and lack of integrated data management mechanism related to water induced disaster are others weakness of this policy. This policy has many opportunities to strengthen its aspects, objectives and implementation strategies according to the new changing environment. The policy should take opportunities for its improvements from the new constitution, national policy for disaster risk reduction and federal setup. On the other hand, lack of proper commitment among political and administrative leaders and lack of implementation agencies central, provincial and local is the main threat to this policy. The detail of SWOT analysis outcomes is shown in Table 2. It is mandatory to implement this policy after successive improvement for sustainable water induced disaster management in Nepal, in which SWOT analysis helps for decision-making and critical analysis of this policy.

Table 1 : Questions and issues to SWOT analysis of WIDMP, 2072

SWOT Analysis Matrix		
Internal Environment	Strength (positive)	Weakness (negative)
	<ul style="list-style-type: none"> ▪ Does this policy do well? ▪ What resources do this policy have? ▪ Is this policy performing well? ▪ What are the positive impacts of this policy? 	<ul style="list-style-type: none"> ▪ What can be improved in this policy? ▪ Why these policies have less resource? ▪ What are the major weaknesses? ▪ Why is this policy not performing well?
External Environment	Opportunity (positive)	Threat (negative)
	<ul style="list-style-type: none"> ▪ What are the new approaches can use in this policy? ▪ How can it be implemented at the local level effectively? ▪ What other policies support this policy? ▪ What can be new opportunities? 	<ul style="list-style-type: none"> ▪ What threats can this policy have? ▪ Do the weakness exposed during implementation? ▪ What are the competitive policies to this policy? ▪ What new regulations threaten operations?

Table 2: Result of SWOT Analysis of water induced disaster management policy, 2072

SWOT Analysis Result Matrix	
Strength (internal, positive)	Weakness (internal, negative)
<ul style="list-style-type: none"> ▪ Addressing water induced disaster as a policy problem in Nepal ▪ Strengthening policy, strategy, action plans and institutional as well as resource allocation by government. ▪ Assessment and identification of hazard and vulnerabilities ▪ Definition of technical term to water induced disaster, landslide, floods, land reclaiming etc. ▪ Classification of landslide and flood and hazard level to enhance in understanding and implementation. ▪ Management focus with respect to the watershed scale. ▪ Provision of participatory approaches in disaster management ▪ Focusing and ensuring inter institutional cooperation and collaboration ▪ There is a strong mechanism for monitoring and evaluation and a coordination committee 	<ul style="list-style-type: none"> ▪ Not covering and accessing the concept of risk assessment and reduction ▪ Lack of clear work jurisdiction among the government institutions, which has brought duplication of work ▪ Not incorporated the new federal system of the country and constitution of Nepal. ▪ Could not link disaster effect in terms of financial/economic loss ▪ Termination of DWIDM after FY:2075/76 which main institution for the implementation of this policy ▪ Lack of proper inter institutional coordination ▪ Not addressing interlink of water induced disaster management to irrigation ▪ Does not have separate management techniques for flood management in hilly and Terai region. ▪ Lack of integrated data management mechanism related to water induced disaster.
Opportunity (external, positive)	Threat (external, negative)
<ul style="list-style-type: none"> ▪ New constitution in 2072 and national water resource policy 2075 could be the basis for this policy ▪ It will be easier and more effective for the policy implementation at local level since local governments are in action. ▪ National Disaster Risk Reduction and Management Authority (NDRRMA) can serve as the main supporting government institution of improvement of this policy ▪ Policy implementation institutional can be setup at all central, provincial and local ▪ Adequate budget allocation from the government will add more opportunities to this policy 	<ul style="list-style-type: none"> ▪ Termination of DWIDM after FY: 2074/75 was the main threat to this policy since there no any organization who takes it ownership. ▪ Policy implementation encounter the weakness and cannot function well ▪ Political instability, not giving due attention to water induced disaster management programs ▪ There is no any institution at central, provincial and local level to executive and implement this policy ▪ Landslide management is being more complex in hilly reason due to fragile geology, steep topography, complex mass movement and inadequacy of dedicated technical manpower.

Discussion and conclusion

There are many strengths of this policy to address water induced problems in the country, but the implementation is not being successful due to lack of institutional ownership and confusing jurisdiction of work among the government institutions. The policy should be amended and improved according to the new constitutional and federal setup that is the major opportunity of this policy. Lack of proper attention and lack of implementation agencies central, provincial and local are the main threat to this policy. For sustainable water induced disaster management in Nepal, it is mandatory to implement this policy after successive improvement in which SWOT analysis helps for decision-making and critical analysis of this policy. SWOT analysis is a very useful tool in the formulation of strategies, plans and policies of an organization and country. Many researchers have used SWOT tool in policy analysis and strategic planning. Paliwal (2006) studied Environmental Impact Assessment (EIA) policy of India using SWOT analysis and highlights several constraints, ranging from improper screening and scoping guidelines to ineffective monitoring and post project evaluation. This present study also covers and points out several aspects of the water induced disaster management policy using SWOT analysis. Giusti and Maggini (2016) studied the policies and programs on prevention and management of diabetes across Europe using SWOT analysis and suggested that in order to be a success, a policy or a program needs to be built on a bottom-up approach and the process should be flexible and dynamic. SWOT analysis is used for the formulation of strategies, plans and policies of the country. Ghazinoory and Ghazinoori (2006) used the SWOT analysis for developing Iran's government strategies for strengthening the national system of innovation and found more useful. Using the SWOT analysis, strengths, weaknesses, opportunities and threats, the problems facing by Venezuela are identified (Duarte *et al.*, 2006). Karyono and Agustina (2019) used SWOT tool to determine the priority strategy in the implementation of e-government and found that SWOT is an indispensable tool in responding to challenges and weaknesses to maximize strengths and opportunities. Terrados *et al.* (2007) studied the regional energy planning through SWOT analysis and strategic planning tools and found that SWOT is a useful tool for region development and territorial structuring which can be harnessed by politicians and public administrations, at the local level.

SWOT analysis critically examines the strength and weakness within the internal environment and associated opportunities and threats in the external environment. There is need for significant improvement of this policy, basically in its organizational arrangement, federal setup, compliance with the new constitution, accessing and managing risk, dedicated technical personnel, technology for early warning

system, and disaster in terms of economic and financial loss etc. This policy has great importance in this country, so its weakness could not be underestimated. The establishment of major implementing government at central, provincial and local is the primary need of this country to address water induced disaster management in the country. There should be clear provision for policy frameworks and institutional setup for disaster preparedness, disaster response, and recovery and mitigation activities.

References

- Duarte C, Ettkin LP, Helms MM, Anderson MS (2006) The challenge of Venezuela: a SWOT analysis. *Competitiveness Review: An International Business Journal* 6: 233-247.
- Ghazinoory S, Ghazinoori S (2006) Developing Iran's government strategies for strengthening the national system of innovation using SWOT analysis. *Science and Public Policy* 33(7): 529-540.
- Giusti A, Maggini M (2016) SWOT analysis of policies and programs on prevention and management of diabetes across Europe. *European Journal of Public Health* 26(suppl_1).
- Gürel E, Tat M (2017) SWOT analysis: a theoretical review. *Journal of International Social Research* 10(51).
- Karyono O, Agustina K (2019) Determining the Priority Strategy in the Implementation of E-Government through Swot Analysis Model. *Budapest International Research and Critics Institute (BIRCI-Journal)* 2(2): 66-74.
- MoHA (2019) Nepal Disaster Report 2019. Ministry of Home Affairs, Government of Nepal.
- Nepal Law Commission (NLC), (2018). Water Induced Disaster Management Policy 2072. Nepal Law Commission, Government for Nepal.
- Nutt P C, and Backoff R W (1993) Transforming public organizations with strategic management and strategic leadership. *Journal of management* 19(2): 299-347.
- Paliwal R (2006) EIA practice in India and its evaluation using SWOT analysis. *Environmental impact assessment review* 26(5): 492-510.
- Paudel L K (2013) Public Policy Perspective. Rama Adhikari (Paudel) Dhapasi Kathmandu Nepal.
- Terrados J, Almonacid G, and Hontoria L (2007) Regional energy planning through SWOT analysis and strategic planning tools. Impact on renewables development. *Renewable and sustainable energy reviews* 11(6): 1275-1287.
- Thapa I (2020) नेपालमा जल उत्पन्न प्रकोप व्यवस्थापनमा देखिएका समस्याहरू. <https://www.researchgate.net/publication/344106375>.
- Thapa I (2021) An analysis of water induced disaster management policy, 2072 in Nepalese context. 10.13140/RG.2.2.28631.14245.