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### Strengthening capacity for disaster risk reduction in Ghana

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Joseph Glover Quartey

## Abstract

The impacts of disasters are rapidly increasing globally. However, capacity has been identified as a critical approach to significantly reducing losses as a result of disasters (Kovalesvki, 2024). Though the relevance of capacity is extensively acknowledged and adopted, many policymakers find it difficult to effectively strengthen capacity for disaster risk reduction (CaDRi, 2011). Therefore, this study explores how capacity can be strengthened for reducing disaster risks in Ghana.

## Introduction

Ghana is vulnerable to various kinds of disasters including natural and human-caused such as floods, wildfires, earthquakes, storms, drought and landslides. Climate change, deforestation and poor urban planning are the major causes of these disasters (Asamoah, 2023).

Table 1. Natural Disasters in Ghana from 1900 to 2015

Disaster	No. of Events	Killed	Total Affected	Damage (US\$)
Drought	3	0	12,512,000	100,000
Flood	18	415	3,885,695	108,200,000
Epidemic	19	875	33,799	-
Wildfire	1	4	1,500	-
Earthquake	1	17	-	-

(Asumadu-Sarkodie et al., 2015)

## Methodology

The researcher focused on a qualitative study. Data was ascertained from articles, research papers, newsletters, books and web pages.

## Findings

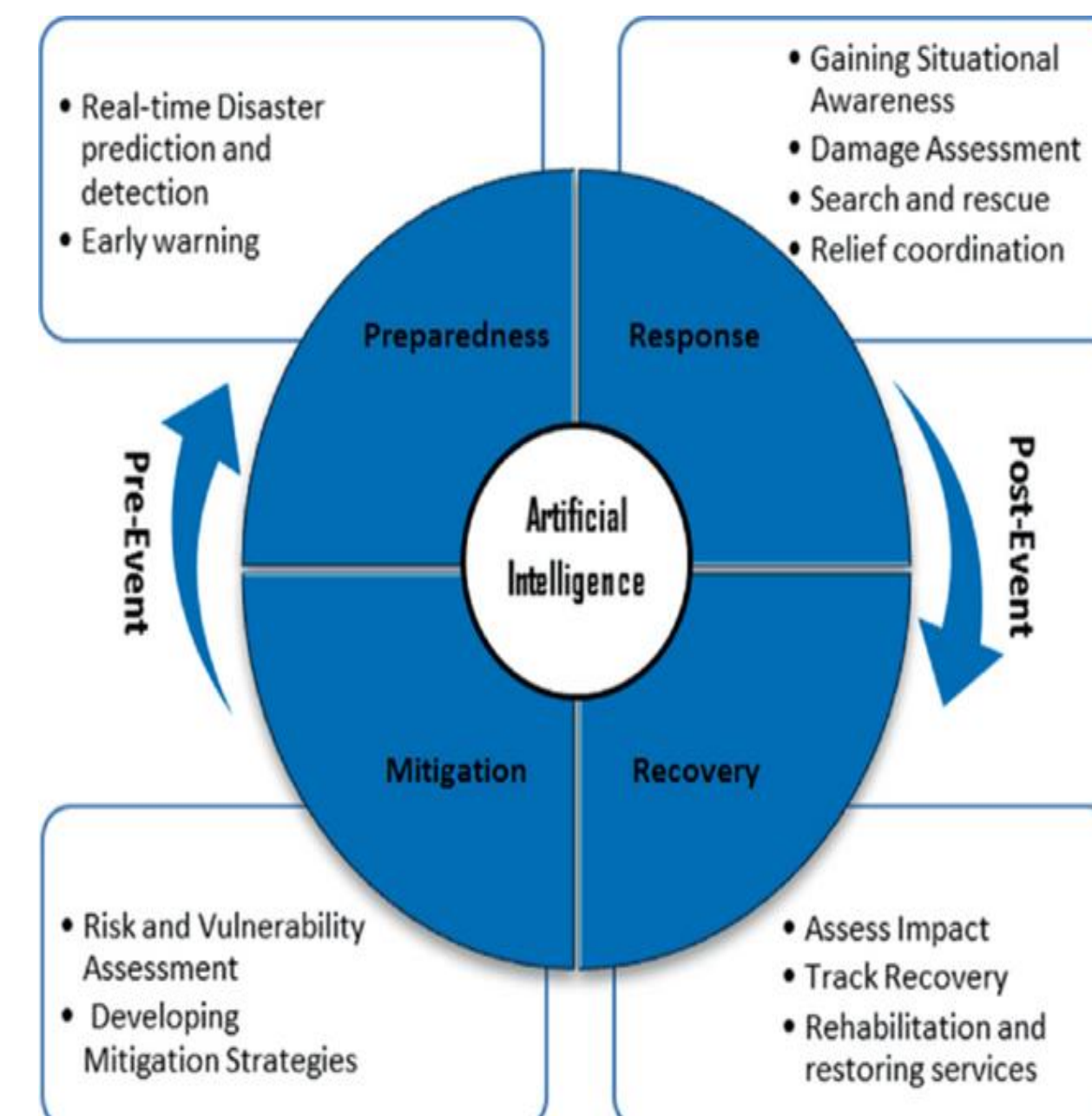
### How to strengthen capacity for disaster risk reduction in Ghana

- **Mainstream disaster risk reduction instruction into school curriculum at the Junior and Senior high school level**

Disaster risk reduction courses could be developed and inculcated in the school curriculum for Junior and Senior high school students as a way of informing young people about disasters and its impacts. Mitchell, et al., (2009) revealed that the impact of children in developing countries on the issue of disaster risk cannot be overlooked. Their efforts in reducing disaster risk could be positive.



- **Use of Artificial Intelligence (AI) for disaster management activities**



Saleem & Methrotra (2022)

AI could be employed before, during and after disasters to prevent or mitigate the impacts of disasters. Samuel (2023) pointed to the growing use of AI in the management of disasters. According to him, AI has helped in reducing disaster risks by improving disaster planning activities. The use of AI can help reduce disaster risk via prediction.

## References

- **Build Public-Private partnerships for disaster management activities**

The majority of developed countries were able to fund and implement plans that effectively mitigated the impacts of disasters through public-private collaboration (Linnerooth-Bayer and Mechler, 2007 as cited in Auzzir et al., 2014). Expertise of both the public and private sectors could team up to ensure effective disaster planning.



Source: Sakal Relief Fund (2023)

- **Continuous capacity development programs for disaster risk reduction practitioners and stakeholders**

Need-based training and workshops may be organised for disaster management practitioners and relevant stakeholders periodically. This can increase their skills and competencies. Hagelsteen & Becker (2014) argued that effective capacity development can help a nation to sustainably reduce losses related to disaster risk.



## Conclusion

This study shows that Ghana can strengthen its capacity for disaster risk reduction by mainstreaming disaster risk reduction into school curriculums, building public-private partnerships, continuously organizing capacity building programs and using AI for disaster management activities.



References

## Biography

