

BOOK REVIEW

Disaster Management: Optimising the Global Military Response

This manuscript reviews the newly published book: Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2022. A soldier and scholar of international repute, Major General Amardeep Bhardwaj, PhD (Retd.) has enjoyed a distinguished military career in the Indian Military. This has encompassed the field of disaster and emergency operations, including its planning, policy and advocacy. He had researched this field for over 10 years, critically investigating how various national militaries have sought to engage in disaster response.

His last military assignment was as Chief Instructor and Head of Faculty at the Indian Defence Services Staff College, a globally recognised institute of military excellence and one of the world's premier defence training establishments. Prior to that, he had held portfolios at successively higher levels, including that of Assistant Chief of Integrated Defence Staff and Additional Director General at the Indian Ministry of Defence, Chief Planning Officer of the United Nations Mission in Angola, Director Operational Logistics at Army HQ, Senior Faculty and Directing Staff at the Army War College and Colonel General Staff at the Army Training Command.

Having received two distinguished service awards, he has had extensive military operations command and staff experience. General Bhardwaj is a graduate of the Indian Defence Services Staff College and of the Higher Command courses. He has served on the Board of Management of the Centre for Strategic Studies and Simulation at the United Services Institution of India, which India's pre-eminent strategic think-tank. His memberships have included The International Emergency Management Society, the All India Management Association, the Board of Examiners for PhD of the University of Madras, and the Experts Committee of the Indira Gandhi National Open University – INMAS – HQ IDS (Joint Initiative).

General Bhardwaj holds academic credentials including, a Doctor of Philosophy degree in Defence Studies, a Masters of Philosophy degree, a Masters of Science degree and a Senior Level Diploma in Management. General Bhardwaj is an experienced public speaker, having lectured extensively at prestigious institutions both in India and abroad. He has a number of published scholarly articles to his credit and has served on the editorial boards of two leading defence journals, the *War College*

Journal and Pinnacle. General Bhardwaj now now written the published work *Disaster Management: Optimising the Global Military Response*.¹

General Bhardwaj's Chapter 1 of *Disaster Management: Optimising the Global Military Response* is entitled Disaster Trends and Future Projections. It provides an objective global overview of disaster trends as well as predictions for the future. The sources referred to have been specially selected for their authenticity, objectivity and credibility, and are therefore among the most widely respected all over the world.² The compilation is essentially factual, based on the latest available data and analyses. The overall thesis of the book appears to be the worrisome proposition that since all the studies corroborate and reinforce each other,³ leading to an unequivocal and obvious conclusion that mankind is propelling Planet Earth to its early doom,⁴ and in this process, endangering its own survival,⁵ implying an imperative to involve the military in disaster response.

Chapter 2 is entitled Why the Military Must Get More Involved, and it examines a number of reasons commonly cited in making a case for the military to play a more prominent role in disaster response. General Bhardwaj analyses about a dozen different arguments and perspectives, each time coming to the very same conclusion, that there is strong merit in augmenting the role of the armed forces in disaster management.⁶ General Bhardwaj concludes that the arguments in-support far outweigh those against. An upscaled and synergised global military disaster response offers perhaps the best option to reduce the current deficit in disaster-coping-capability.⁷ Extrapolating to the future, this capability gap grows even wider, therefore incremental approaches to improving existing capabilities will not suffice. Transformational change is needed in disaster management thinking as well as in current response mechanisms.⁸ Augmenting, optimising and synergising the world's militaries for higher efficiencies in disaster response implies a bridging of this capability gap.

Chapter 3 is entitled Optimising Roles and Tasks, an argument seeking to bring-in role clarity and define a more practical, as well as pragmatic, role for the Armed Forces, premised more on their

1 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019.

2 Inter-Governmental Panel on Climate Change, United Nations, *Sixth Assessment Report*, Geneva, 2022.

3 Ibid.

4 Ibid.

5 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019, p. 57.

6 GW Bush, 'Address to the Nation by President George W Bush from New Orleans', *Washington Post*, 15 September 2005.

7 H Taylor & P Yadav, 'Dissolving Interagency Silos: The WPS Agenda on the Disaster- Conflict Continuum', *Global Observatory*, 2021.

8 PK Gautam, *Role of the Indian Military in disasters*, Institute for Defence Studies and Analyses, New Delhi, 2013.

capabilities and competencies than on dogma, theory or academic constructs.⁹ It further suggests a three-step process, based on competency-matching, task-analysis and overview of the traditionally assigned tasks, in order to evolve a better task lists for the military in disaster response. In the process, it uncovered many weaknesses and grey areas, which currently exist in defining roles and assigning tasks to the military.¹⁰ General Bhardwaj states that these sometimes constitute the major reasons for sub-optimal performance of the military in such operations. Thus, he suggests that this chapter seeks to offer to policy makers and practitioners, in the field of disaster management, a more efficient and improved alternative to the present system.

The Armed Forces also need to develop a clearer and more precise role-articulation by government at the apex level, as well as more pointed, competency-linked task-assignments at the tactical level.¹¹ General Bhardwaj advocates that the key issue is to be at all times cognisant of the intimate relationship between capabilities and competencies of the Armed Forces vis-à-vis their role definition and task-allocation. While articulating roles and tasks, attention needs to be paid to specificity and clarity as well as the need to optimise the military's task-list for efficient execution.¹²

Chapter 4 is entitled Optimising Education and Training and is based on the author's extensive study of how various militaries engage in disaster management training. In this chapter, General Bhardwaj argued for taking a trans-national view of the subject, with a view to substantially upgrading the military's efficiency in disaster response, using a 15 point skillset.¹³ Putting in place an institutionalised system of disaster management education and training for the militaries of the world, while allowing for individual variations and idiosyncrasies, will enhance significantly their effectiveness in disaster management operations.¹⁴

Chapter 5 is entitled Optimising Organisational Structures. It focusses on the military's organisational optimisation for disaster tasks.¹⁵ General Bhardwaj carefully dwells on a number of structural and functional issues that presently dog the armed forces, often leading to sub-optimal outcomes in such operations. He observes that the Armed Forces are structured and organised

9 International Institute of Strategic Studies, *The Shangri-La Dialogue*, International Institute of Strategic Studies, London, 2010.

10 I Prakash, *Disaster management, societal vulnerability to natural calamities and man-made disasters: preparedness and response (Indian Scene)*, Rashtra Prahari Prakashan, India, 1994.

11 Ministry of Home Affairs, *India Disaster Resource Network Dashboard*, New Delhi, 2019.

12 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019, pp. 193, 194.

13 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2022, pp. 230-233.

14 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019, p. 235.

15 P Singh, *Changes required in Army organisation & structures to respond effectively to disasters*, Centre for Land Warfare Studies, New Delhi, 2007.

primarily for the fighting of wars, whereas disaster response operations demand somewhat different organisational structures. The chapter considers how to reconcile these diverse requirements, starting with the basic policy choices available and proceeded to analyse various re-structuring options, with a view to their practicability and ability to be implemented.¹⁶ Finally, in this chapter, General Bhardwaj discusses some structural inadequacies which hamper the military's functioning whenever it engages in such operations. Different militaries are organised differently, however a closer look at their legacy structures shows that congruities may well outweigh differences between them. Adapting these combat-optimised structures for disaster response is not only possible, but it is necessary and can be done with finesse.¹⁷ Only militaries which are sensitive to these issues, and take concrete action to optimise their organisational structures better for disaster response, will show far greater efficiencies in such operations.¹⁸

Chapter 6 is entitled Optimising Equipment, Leveraging Technology. General Bhardwaj describes equipment as a vital necessity for disaster-relief and is often needed in large numbers. Its quality and quantity directly impact the efficacy and reach of the relief operations. According to General Bhardwaj, as per policy, the military should be provided the required wherewithal for disaster response duties by the civil authorities, but this seldom happens in practice. As a result, the armed forces invariably end up using some of their combat stores and hardware to meet the shortfall of specialised equipment. Often, such equipment cannot be retrieved when the military disengages, or else, it may be rendered unserviceable by that time. Since this dilutes the military's wartime operational efficiency, the military needs to be compensated quickly. Such compensation is usually done only in the account books, through 'paper transactions', with no equipment or funds being physically given to the military units who came to render aid. While such an arrangement may work well in bureaucratic circles, it acts as a disincentive for the military to engage in disaster response operations. This system needs refinement. Many other equipment related issues also need ironing out, since their collective impact is to negate the efficiency of the military in disaster operations. This chapter dwells on such issues and endeavours to show how workable solutions can be found to address these problems. It raises the interesting idea of *Disaster-Relief Bricks*, as practiced by the Indian military, which has several considerable merits.¹⁹ It also touches on a host of other relevant aspects, such as equipment procurement, its management, accountability, usage and serviceability.

16 P Singh, *Changes required in Army organisation & structures to respond effectively to disasters*, Centre for Land Warfare Studies, New Delhi, 2007..

17 PK Gautam, *Role of the Indian Military in disasters*, Institute for Defence Studies and Analyses, New Delhi, 2013.

18 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019, pp. 269, 270.

19 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2022, p. 301.

Equipment cannot be separated from technology, since a machine, device, or any gadget, is merely the end product of technological innovation.²⁰ Also, the spinoffs from technology help to improve situational awareness, make cumbersome manual processes quick and efficient, facilitate decision-making and empower agencies to execute operations on the ground with enhanced effectiveness.²¹ The latter part of the chapter devotes itself to this technological aspect, linking it with disaster response and offering a number of technology samples for possible adoption by various militaries, with a view to optimising their efficiency.²² General Bhardwaj cites Tae Yoo, Senior Vice-President, Corporate Affairs and Corporate Social Responsibility, Cisco, who had observed as follows.

In many cases, technology is the easiest part. The challenge is to create a long-term, digital foundation for humanitarian organisations that enables them to invest in, test and scale technology solutions prior to disasters so they are prepared when they need it the most. While technology cannot replace the vital resources people need in disaster – food, water, shelter, or comfort from loved ones - it is transforming disaster relief efforts and paving the way for an evolving approach to international aid: one that can reach more people, faster, and help communities to develop resilience for when the next disaster strikes.²³

General Bhardwaj advocates for technology preparedness as a priority.²⁴ Chapter 7 is entitled Learning from each Other and the Experts. In the field of disaster management, the main issues facing all nations are, to a great extent, the same.²⁵ What concerns the military the most are aspects like forging civil-military synergies, precise role-definitions, an effective ‘Command and Control’ HQ at the apex level and modalities of inter-agency coordination at the field level.²⁶ Studying the manner in which various militaries have applied themselves to solve these attendant problems can prove very beneficial and highly instructive to all. In this regard, the chapter clearly brings out the main learning points for all militaries. The United Nations is perhaps the biggest repository of knowledge, expertise and experience in the field of disaster management. This chapter probes the United Nations system to identify its major strengths. The chapter also draws out vital and insightful lessons for world policy makers, to consider for incorporation into their countries’

20 J Loeffler, ‘Technology used in disaster relief saving more lives every year’, *Interesting Engineering*, 2019.

21 T Nace, ‘How technology is advancing emergency response and survival during natural disasters’, *Forbes*, 2021.

22 N Torres, ‘Three emerging technologies to improve emergency management’, *Data-Smart City Solutions*, 2018.

23 T Yoo, ‘4 ways technology can play a critical role in disaster response’, World Economic Forum, 2018.

24 Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2019, p. 348, pp. 352-354.

25 C Sutton, *State and local disaster management within the US and US – PACOM plan for foreign disaster relief*, Seminar Report, International Seminar on Disaster Management, New Delhi, 2005; Y Tian, *Chinese Army’s participation in emergency rescue and disaster relief*, Seminar Report, International Seminar on Disaster Management, New Delhi, 2005; YBM Daud, *National structure and the role of the Malaysian Armed Forces*, Seminar Report, International Seminar on Disaster Management, New Delhi, 2005; R Ando, *Japanese structure for regional response in disaster management*, Seminar Report, International Seminar on Disaster Management, New Delhi, 2005..

26 I Nordstrom-Ho, *Humanitarian military coordination structure in the UN. OCHA, Geneva. Seminar Report*, International Seminar on Disaster Management, New Delhi, 2005.

existing plans, policies, structures and procedures, and in particular, those which concern the military.²⁷

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Taylor, H & P Yadav, 'Dissolving Interagency Silos: The WPS Agenda on the Disaster- Conflict Continuum', *Global Observatory*, 2021.

²⁷ Amardeep Bhardwaj, *Disaster Management: Optimising the Global Military Response*, Partridge, New Delhi, 2022, pp. 432, 433.

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