

DISASTER RELIEF OPERATIONS: HUMANITARIAN ASSISTANCE BY THE IAF

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INTRODUCTION

In addition to offensive combat operations, the Indian Air Force (IAF) also delves into various non-combat exercises such as evacuation of civilians, operations,¹ taking part in international drills, contributing to UN peace-keeping operations, demonstrating aerobics, showcasing air assets, and participating in international relief operations, specifically overseas Humanitarian Assistance and Disaster Relief (HADR) operations. Whenever mankind suffers because of crises, conflicts or natural calamities, the IAF always steps in to alleviate the agony and trauma. The solemn objective of not only safeguarding our national interests but also dissemination of the message of “one earth, one family” throughout the world is adequately manifested in various instances, be it extricating Indian citizens from the turmoil in

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1. “Doctrine of the Indian Air Force”, IAP 2000-2022, p. 37.

Afghanistan when the North Atlantic Treaty Organisation (NATO) forces were withdrawing, or bringing back people of Indian origin from East European nations amidst the Russia-Ukraine skirmishes.

The IAF has also honed its skills and mastered the art of fusion of its efforts in consonance with other nations so as to project combined HADR capabilities. The IAF was able to provide succour to as many as 98 countries² by transporting COVID-19 vaccines. This earned tremendous goodwill for India. The important role being played by the IAF in mitigating transcontinental contingencies is being noticed the world over. The willingness to reach out to not only the neighbourhood but also to nations geographically at a distance without any bias, speaks volumes about the Indian ethos and living up to its motto of *Vasudhaiv Kutumbakam*.

The Indian Air Force tackles disaster relief operations effectively with advance planning and preparations. It carries out reconnaissance of routes wherever possible and positions efficient communications to ensure the success of these operations. It employs effective control and coordination of diverse forces and provides leadership of a high quality. The IAF has rendered yeoman service to the world with its disaster relief operations. The air warriors of the IAF proudly cherish memories of disaster relief operations undertaken by the Service and are ever willing to jump into action whenever needed by humanity.

THE DYNAMICS

The successful execution of HADR operations is a direct result of the collaborative efforts and coordinated actions of the HADR team. It would not be correct to ignore the components which are not generally in the limelight. In addition to the aircrew, many unheralded systems work relentlessly so that the HADR team can accomplish the desired objectives. These include:

- Security team.
- Medical personnel.
- Technical ground crew.
- Air traffic control personnel.

2. "MEA Annual Report 2022", pp. 10-11, 15-16, https://www.mea.gov.in/Uploads/PublicationDocs/36286_MEA_Annual_Report_2022_English_web.pdf. Accessed on February 1, 2024.

- Support workforce.

The effectiveness of disaster relief operations is contingent upon the effort exerted by all the elements of the HADR team. The IAF's transport fleet has consistently played an outstanding part in HADR operations³ by exhibiting its professionalism, adaptability, and reactivity. It has earned for itself tremendous admiration and respect from various nations and individuals through its outstanding endeavours during calamities. The impressive fleet of aircraft that can accomplish a wide range of HADR tasks consists of:

- The strategic heavy-lift transport aircraft C-17 Globemaster.
- IL-76, tactical load platform.
- C-130J Super Hercules.
- Medium transport aircraft AN-32.
- Medium-lift helicopter Mi-17 V5.
- Advance light helicopter Dhruv.

FORMIDABLE HADR MISSIONS

India has conducted humanitarian operations⁴ in response to upheavals caused by civil/military unrest or natural calamities. The significant HADR missions, regarded as profound achievements that indeed enthused a sense of pride among the Indian populace, encompass:

- Operation Maitri (2015) conducted in Nepal.
- Operation Rahat (2015) conducted in Yemen.
- Operation Sankat Mochan (2016) conducted in South Sudan.
- Operation Vande Bharat (2020) conducted overseas.
- Operation Ganga (2022) conducted in Ukraine.
- Operation Dost (2023) conducted in Turkiye.
- Operation Kaveri (2023) conducted in Sudan.

3. n. 1, p. 11.

4. Claudia Meier and CSR Murthy, "India's Growing Involvement in Humanitarian Assistance", *Global Policy Institute Journal*, Berlin, Germany, GPPI Research Paper 13, March 2011, pp. 6-7.

Operation Maitri

This humanitarian mission was conducted in Nepal⁵ after the devastating earthquake in April 2015. The Indian government promptly initiated a response to the earthquake,⁶ mobilising ten teams from the National Disaster Response Force (NDRF), as well as medical teams, engineering task forces, and aircraft. The objectives of this response were to facilitate the evacuation of both Indian and foreign nationals, provide essential supplies such as food, water, and tents and restore electricity in the areas affected by the earthquake. The Indian Air Force acted with alacrity and sent as many as 295 NDRF personnel along with approximately 46.5 tonnes of load. The collaborative efforts of the Indian Air Force and Indian Army were fructified in bringing back close to 170 foreign nationals of the US, the UK, Russia and Germany, in addition to 5,000 Indians, by air force planes such as the Globemaster (C-17), Hercules (C-130J) and Gajraj (IL-76). After the devastation which took place, rebuilding Nepal was a mammoth task. The Indian Air Force was utilised in sending as much as 24 tonnes of relief material to the interior areas.

Operation Rahat

In April 2015, the IAF was mobilised for Operation Rahat, a mission aimed at facilitating the evacuation of Indian citizens stranded in Yemen due to the ongoing civil conflict.⁷ The IAF put its C-17 Globemaster aircraft to effective use and transported evacuees, exceeding 4,000 individuals, from Djibouti to India. The fighting between the Houthi rebels and the Yemen government was quite fierce. On top of that there was incessant aerial bombardment by the Saudi-led coalition in support of the incumbent government. In such a scenario, deploying IAF assets and coordinating efforts to bring back the Indians was quite an ambitious endeavour. Acknowledging

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5. Alistair DB Cook, et. al, "International Response to 2015 Nepal Earthquake: Lessons and Observations", NTS Report, no. 5, S Rajaratnam School of International Studies, Singapore, October 2016, p. 7.
 6. "Nepal Earthquake: Operation Maitri Reaches Relief to Epicentre", *The Times of India*, April 28, 2015.
 7. Lingamgunta Nirmitha Rao, "From Yemen to Sudan: India's Rescue Operations Since 2015", *Hindustan Times*, April 21, 2023, <https://www.hindustantimes.com/india-news/yemen-to-sudan-conflict-india-rescue-operation-kaveri-101682739413742.html>. Accessed on January 5, 2024.

the effectiveness and demonstrated ability of India in carrying out such a complex operation, as many as 26 countries, including the UK and the US, sought India's help.

Operation Sankat Mochan

An enormous mission was undertaken by the IAF to bring home the Indian natives and foreign nationals from the conflict-ridden arena of South Sudan during the South Sudanese Civil War in July 2016. The military manoeuvre was executed in response to the 2016 Juba clashes and entailed the deployment of two C-17 Globemasters from the Indian Air Force. These C-17s were routed to Juba and all the Indians in South Sudan were instructed to contact the Indian Embassy in Juba, to get information about the arrival and departure of Indian aircraft so that they could avail of this special provision on July 14. They were also assured of additional flights being arranged, if needed. In all, more than 600 people were evacuated.

Operation Vande Bharat

The operation comprised the ambitious civilian evacuation of Indians stuck overseas due to COVID-19 travel restrictions. It exceeded the 1990 Gulf War airlift of 1,77,000 passengers. The mission's 10th phase began in May 2020, and inbound and outgoing travellers totalled 32 lakhs. The rescue mission gave priority to Indian residents with "inevitable reasons to return," such as those whose jobs had been forfeited, whose visas were no longer valid and were not likely to be extended, or whose family members had expired.

Operation Ganga

On hearing the news of Russia invading Ukraine in 2022, the global fraternity was divided into two camps. While one camp justified the Russian action, the other sympathised with Ukraine. India displayed tremendous restraint and following a prudent approach adopted a neutral stance. India launched an ambitious mission, Operation Ganga to provide succour to the Indians stranded in countries in the vicinity of Ukraine. In addition, the Indian government also had to respond to the distress call of Indian students in Ukraine.

Following a “Leave Kharkiv Immediately” embassy advisory⁸ on March 2, 2022 the Indian Ministry of Defence (MoD) issued a survival advisory for those still in Ukraine and, specifically, Kharkiv. By March 6, about 16,000 Indians had been flown to India on 76 flights. On March 8, the Ministry of External Affairs (MEA) announced that all stranded students had been moved, facilitated by humanitarian corridors. India, as a humanitarian signal, sent relief assistance to Ukraine, including medicines and essentials. The Indian government assured that nationals from neighbouring and developing countries in Ukraine would be provided assistance, if sought. Under the mission, India operated 46 evacuation flights till March 8 to bring back its citizens who had managed to make it to Ukraine’s neighbouring countries. The Indian Air Force flew from Delhi to Romania. There were 29 flights from Bucharest, 10 from Budapest, six from Rzeszow, and one from Kosice, dedicated to this rescue operation.

Approximately 600 stranded Indian citizens from Ukraine’s Sumy were rescued and brought to Rzeszow airport in Poland on March 10, 2022 via 13 buses. On March 11, they were rescued and repatriated to India via three flights, accomplishing the operation with elan and finesse. Indian External Affairs Minister (EAM) Dr S Jaishankar, the same day, commended the precision with which the entire operation was carried out. He mentioned by name everyone who had contributed to the successful accomplishment of this mission. Through video conferencing, Prime Minister (PM) Narendra Modi had a dialogue with the Indian diaspora who were at the helm of the operation in the corresponding neighbouring countries. The world was full of praise for the Indian government for rescuing not only Indian nationals but also those of several other countries. PM Modi said that the mission was a success due to “India’s increasing goodwill”. He further elaborated that it was carried out against all odds. The Indian EAM informed the Parliament that Operation Ganga was the indeed the most mammoth rescue operation carried out by an Indian government.

8. “Leave Kharkiv Immediately, Proceed on Foot if You Must: MEA”, *The Times of India*, March 3, 2022.

Operation Dost

When the Turkey-Syria earthquake devastated both nations on February 6, 2023, in spite of Turkey's anti-Indian and pro-Pakistan stance in numerous diplomatic forums, the Indian government decided to reach out in the larger interest of humanity.⁹ It immediately initiated the HADR effort. It carried out continuous search and rescue operations and extended medical aid to Syria and Turkey. The operation is denoted by the term derived from the Hindi and Turkish lexeme denoting 'friend'. This symbolised the Indian vision of the "Whole World is One Family". India sent a total of six C-17 aircraft. An additional aircraft was sent with medical supplies. Disaster relief material and supplies for rescue teams along with mandatory medical devices like patient monitors, and ECG machines were sent through this flight.

Operation Kaveri

The Indian government launched Operation Kaveri in the year 2023, to repatriate Indian nationals stranded in Sudan. In addition to various other rescue missions from the country, on the intervening night of April 27 and 28, an IAF C-130J heavy-lift aircraft successfully executed a courageous mission and rescued a total of 121 individuals from a tiny airstrip located in Wadi Sayyidna. This airstrip is situated approximately 40 km north of Khartoum, the capital of Sudan.¹⁰ Plagued by the ongoing violence, the flight strip encompassed a deteriorated surface lacking navigational aids, and on top of that, without landing lights, which are mandatory for enabling nocturnal aircraft landings. In such adverse conditions, landing an aircraft was next to impossible. The Indian aircrew thought of an ingenious plan. While approaching the airstrip, the aircrew employed their electro-optical/infra-red sensors to make sure that there were no obstacles on the runway. Through this

9. Press Release, Embassy of India, Tokyo, https://www.indembassy-tokyo.gov.in/public_files/assets/pdf/Operation%20Dost_PR_09022023_1.pdf. Accessed on January 9, 2024.

10. Lingamgunta Nirmitha Rao, "'A Daring Rescue': 10th Batch of 135 Indians Departs from Sudan Under 'Operation Kaveri'", *Hindustan Times*, April 28, 2023, <https://www.hindustantimes.com/india-news/sudan-war-conflict-operation-kaveri-10th-batch-of-135-indians-mea-101682647681482.html>. Accessed on January 9, 2024.

measure, they also verified that there were no hostile entities in the surrounding area. After ascertaining the requisite preparations, the aircrew executed a strategic manoeuvre employing Night Vision Goggles (NVG) under limited visibility in a pitch-dark night. This utmost professionalism exhibited by the IAF team amply proved the mettle they are made of.

CHALLENGES OF HADR OPERATIONS

HADR missions have a multitude of variables. These variables are a mix of external as well as internal factors. The HADR team faces unexpected and intricate factors¹¹ such as adverse weather conditions and charged political and civil dynamics at the destination. There are inherent factors like crew fatigue, the physical and mental health of the HADR team, and the aircraft's technical health which the supervisor must be conscious of for air safety. The effective implementation of HADR operations in challenging weather conditions and during night-time requires adding on measures that ensure the smooth completion of the mission. The successful completion of the mission necessitates the employment of a cohesive team that shares the same strategy.

The most visible repercussion of any disaster is the enormous physical devastation of the site. Physical structures hitherto considered safe for shelter might no longer be so. Even earthquakes that cause little damage and destruction can cause people to experience emotional distress (especially in areas not accustomed to these events). Aftershocks can continue to occur for months afterwards and can be just as stressful.

Another challenge with relief operations is to obtain the assent of the recipient country. At times, despite having strong political will and allocating the resources for a humanitarian gesture, the HADR operation may have to be abandoned because the recipient country refuses to accept the help offered due to international dynamics.

11. Saneet Chakradeo, "Neighbourhood First Responder: India's Humanitarian Assistance and Disaster Relief", *Policy Brief*, Brookings Institution, India Centre, August 2020, p. 9.

CONCLUSION

The efficiency and effectiveness of IAF HADR operations have garnered international praise. The IAF is in proud possession of a very highly skilled and able group of pilots, aircrew, and ground personnel fully capable of promptly and appropriately reacting to emergencies. The IAF also has numerous aircraft and instruments to cater to HADR mission requirements.¹² The IAF is dedicated to delivering humanitarian aid and relief efforts during natural disasters and other emergencies. HADR operations have been pivotal in saving numerous lives and alleviating the distress of millions of individuals.

The credibility of the Indian HADR team was enunciated in Prime Minister (PM) Modi's words:

Whether there is a cyclone or any disaster in any part of the world, when people see you, your uniform, even from afar, their faith is restored. They trust you because they feel protected. Your credibility increases exponentially. We must step forward. We need to be the world's top rescue teams.

The IAF has consistently played a leading role in aiding the civil administration and relieving affected civilians. However, there are still areas that require the IAF, in collaboration with the civil administration, to effectively utilise its capabilities in mitigating the impact of natural disasters. The efficacy of conducting disaster relief operations can be further enhanced through the implementation of immaculate foresight and proactive measures. The meticulous surveying of pathways, precise establishment of designated landing areas for helicopters, flawless meteorological predictions, strategic placement of fuel resources, and last but not the least, effective communication systems all play key roles in ensuring the success of these endeavours.

Consistent training for a diverse range of personnel, encompassing aircrew, medical staff, administrative support, and security teams, is imperative. Furthermore, ensuring the proper upkeep and

12. A Shajahan, "Doctrinal Approach to HADR by Indian Armed Forces: Time For Reorientation For Effective Disaster Response", *Air Power Journal*, vol. 14, no. 1, Spring 2019 (January-March), pp. 111-113.

maintenance of the technical inventory utilised for HADR operations is of paramount importance. Foresight and readiness to minimise injuries and damage is important. International disaster relief efforts need to be better coordinated. This merits partnerships among governments, Non-Governmental Organisations (NGOs), and the commercial sector. The requirement for a synergised international response to disasters is more crucial than ever before as the world has become much more interconnected.

The need of incorporation of cutting-edge tools for boosting HADR efficiency can never be overemphasised. The development of new technologies will continue to play a role in the evolution of HADR, as they will help improve disaster effectiveness of response operations. Evolution of HADR is a continuous process. Natural disasters are occurring with greater frequency and intensity. A well-coordinated worldwide response, supported by new technologies, is the need of the hour and, indeed, the *sine qua non* of HADR. HADR evolution is an intricate and continuous process.. The future of HADR will certainly be affected by significant factors like the technological advancements, the rising frequency and intensity of natural disasters, and the increasing acceptance of the need for a coordinated global approach.

Universally, nations express a great deal of respect and regard for the capabilities of the IAF since it is a major proponent of HADR in the area. Its extremely high level of professionalism in HADR missions has been exhibited by implementing meticulously executed strategies that have been tested and refined time and again. The UN has sought the IAF's help on multiple occasions, and the IAF has always delivered the goods, including as peace-keepers to the conflicts in Sudan, Congo and Somalia. In these missions, the IAF has supported UN troops with technical assistance, transportation and medical care. The IAF has provided succour not only to India and but also other countries, particularly in disaster relief operations, which have been efficient and effective. These operations have efficaciously contributed to preserving human lives, helping individuals requiring support, and facilitating global peace and stability. HADR has truly provided an interface for strengthening the diplomatic relationship with other countries, thereby enhancing India's soft power.