

Prospects for strengthening EU-India engagement in the field of natural disasters

Gareth Price

*Senior Research Fellow
Asia-Pacific Programme
Chatham House
London*

Mihir Sharma

*Senior Fellow and Head
Economy and Growth Programme
Observer Research Foundation
New Delhi*

John-Joseph Wilkins

*Public Information Officer
European Union Institute for Security Studies
Brussels*

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Executive summary

- While the EU and India have agreed to engage more comprehensively in relation to disasters, there are limits to potential cooperation. For instance, as India transitions from aid recipient to donor it is increasingly reluctant to accept foreign assistance in disaster response.
- Domestically, some Indian states lack the capacity to enforce standards and regulations in relation, for instance, to the construction industry. The EU could explore the possibility of extending support for specific disaster-related training initiatives.
- The use of satellite imagery could be explored through EU-India crisis-simulation workshops spanning the disaster cycle, from early-warning to response. This could provide a means of better understanding respective capacities, and of how satellite data is utilised by the EU and India.
- The potential for engagement with regard to disaster response in third countries might be higher outside of South Asia, given India's political sensibilities towards its smaller neighbours. ASEAN offers an alternative avenue through which the EU and India could engage, particularly given the close relationship between ASEAN's disaster response mechanisms and the UN system.

Introduction

In the past few decades, the approach to natural disasters¹ has been transformed: rather than simply reacting, it is understood that better preparedness coupled with better early-warning systems can help mitigate their impact. Moreover,² the frequency and impact of weather-related natural disasters appears to be increasing,² potentially as a result of climate change and certainly as a result of population increases and environmental degradation.

The EU's Common Foreign and Security Policy (CFSP) specifically mentions the Union's willingness to address natural disasters as a key part of its external action: Article 21.2 of the Treaty on European Union (TEU) states its objectives to be 'to ensure sustainable development, and assist populations, countries and regions confronting natural or man-made disasters; and promote an international system based on stronger multilateral cooperation and good global governance.'³ Furthermore, the EU already operates in accordance with the so-called 'disaster cycle', which foresees assistance at all stages of a potential disaster (see Figure 1). The EU-India Strategy also specifies that disasters are a concrete area for EU-India engagement, with the November 2018 Joint Communication noting that the EU and India had agreed to 'coordinate on humanitarian and disaster relief operations'.⁴

Of course, the nature of the EU-India Think Tanks Twinning Initiative encourages us to look specifically at India, but the broader South Asia region is also particularly prone to natural disasters.⁵ This paper therefore explores the potential for the EU and India to deepen their cooperation in relation to the phenomenon at various stages of the disaster cycle and in different geographies, in particular through the use of earth observation data sharing – an advanced technological tool which appeals to India's aspirations – to mitigate the potential effect of natural disasters.

Figure 1 – Disaster cycle

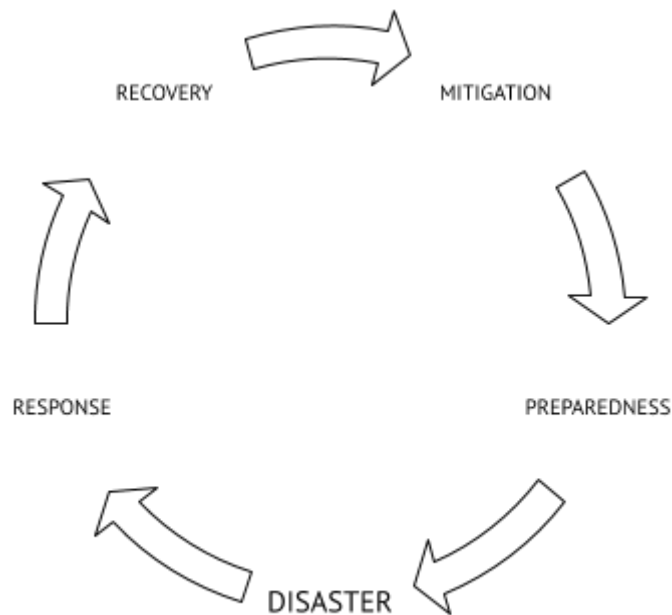
¹ This paper looks solely at natural disasters rather than man-made disasters, epidemics or conflict. While Germany is partnering with India on the issue of occupational safety and industrial accidents, for example, conflict-related disasters are a far more sensitive issue than natural disasters.

² "Weather-related Disasters Are Increasing", *The Economist*, August 29, 2017, <https://www.economist.com/graphic-detail/2017/08/29/weather-related-disasters-are-increasing>; Université catholique de Louvain, "EM-DAT: The Emergency Events Database", www.emdat.be.

³ European Union, "Treaty on European Union", Brussels, October 26, 2012, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012M%2FTXT>.

⁴ European Union, "Joint Communication: Elements for an EU Strategy on India", Brussels, November 20, 2018, https://eeas.europa.eu/headquarters/headquarters-homepage/54057/joint-communication-elements-eu-strategy-india_en.

⁵ World Bank, "Disaster Risk Management in South Asia: A Regional Overview", *Working Paper*, July 26, 2013, <https://reliefweb.int/sites/reliefweb.int/files/resources/Disaster%20Risk%20Management%20in%20South%20Asia%20-%20A%20Regional%20Overview.pdf>



Mitigation is intended to reduce the impact of disasters or reduce the likelihood that they may take place. Thus, better building regulations can reduce the impact of earthquakes. For example, around 700 people died in Chile in 2010 as a result of an 8.8 magnitude earthquake. The same year, Haiti was hit by a less powerful earthquake, yet 200,000 died; Chile’s more stringent building codes are largely responsible for the difference. Planning regulations are also a key element to mitigate the impact of disasters: properties constructed in floodplains are, unsurprisingly, more prone to flooding than those constructed elsewhere, and insurance can help spread risks among vulnerable communities.

Preparedness relates to the ability of government and other actors, along with citizens themselves, to respond in the event of a disaster. Thus, public education, coupled with logistical preparedness – stockpiles of food, water and medicine - are integral components. In addition, early-warning systems are crucial in reducing the impact of climatic events.

Response takes place immediately following a disaster. This may include search and rescue operations or the provision of emergency relief. It may involve the establishment of shelter for those affected, or the re-establishment of power and other essential services. Response efforts generally involve the local administration and in many cases, the military alongside humanitarian organisations.

Recovery encompasses the longer-term reaction to a disaster. In poorer countries this provides an opportunity to ‘build back better’, reducing likely future losses resulting from disasters. The affected communities should be closely engaged during the recovery phase, which continues until the situation has returned to that prior to the disaster or, ideally, something better.

The tentative conclusions of areas for potential cooperation are shown in Figure 2. As entry points for greater engagement, our research explored those areas in which EU capacities and Indian needs converged. This precludes some issues: for instance, India has made clear

its objection to foreign assistance in response to disasters *within* India.⁶ In a similar vein, India is confident in its ability to act as first external responder to disasters within South Asia and would seem unlikely to invest heavily in engaging with the EU on doing so. In third countries, recovery efforts are likely to be undertaken under a UN umbrella – again, the logic for bilateral engagement does not leap out.

Figure 2 – Potential areas for EU-India disaster relief cooperation

	India	South Asia	South-East Asia
Mitigation	✓	X	X
Preparedness	✓	✓	X
Response	✓	✓	✓
Recovery	✓	X	X

However, three specific areas appear to have significant potential for enhanced bilateral cooperation between India and the EU. The first involves the use of satellites at various stages of the disaster cycle: predictive, for weather-related disasters, and in the response phase. Both the EU and India have specific capabilities and building an understanding of how they use the assets at their disposal could generate mutual benefits. This could apply both within India and, potentially, elsewhere in South Asia and beyond. Creating awareness of available assets can only help establish more effective frameworks for dealing with disasters.

Second, building on the EU’s long-running work within India, there is scope to enhance support for state governments, particularly through building up local capacity. Both in longer-term recovery and in mitigation, there is scope to build up the cadre of people able to enforce building regulations and create actionable, long-term post-disaster recovery plans.

Third, while engagement in third countries creates an added layer of complexity to EU-India engagement, in the specific case of ASEAN there is scope to explore trilateral complementarities. ASEAN has a long-standing focus on tackling and mitigating disasters and is seeking to develop out-of-area response capabilities.

Natural disasters in South Asia

South Asia is susceptible to cyclical disasters such as earthquakes, which can cause immense damage and loss of life. India, as a sub-continent in its own right, is itself vulnerable to a range of disasters including floods, droughts, earthquakes, tsunamis, landslides, avalanches and cyclones. Around 60% of the landmass is prone to earthquakes of moderate to high intensity; 12% is prone to floods and river erosion and almost 5,700 km out of India’s total coastline of 7,516 km is prone to cyclones and tsunamis.⁷ A 2018 study by the United Nations Office for Disaster Risk Reduction (UNISDR) calculates that India suffered economic

⁶ Amy Kazmin, “India’s Rejection of \$100m Foreign Flooding Aid Sparks Anger in Kerala”, *Financial Times*, August 27, 2018, <https://www.ft.com/content/86e4bb4e-a785-11e8-8ecf-a7ae1beff35b>.

⁷ National Disaster Management Authority, <https://ndma.gov.in/en/vulnerability-profile.html>.

losses equivalent to \$80 billion in the two decades between 1998 and 2017 as a result.⁸ Moreover, according to India's National Disaster Management Authority (NDMA):

'Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanisation, development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics.'⁹

Following the 1999 Orissa Super-Cyclone and the 2001 Gujarat earthquake, and notably since the 2004 Indian Ocean tsunami, India has taken wide-ranging steps to improve its capacity along the disaster cycle – improving its predictive capabilities through the development of early warning systems and its response following disasters and its mitigation efforts through, for instance, the construction of cyclone shelters. These capacities have also been extended within its neighbourhood, with Indian forces assisting, for example, in the response to the catastrophic 2015 Nepal earthquake. Substantial progress has been made, though capacity does vary by state – correlating not with levels of development but with vulnerability to disaster: in 1999, a cyclone caused damage worth \$5 billion and cost nearly 10,000 lives in the state of Odisha, a comparatively poor state in eastern India. The state subsequently focussed much of its development activities through the prism of disaster prevention, in addition constructing shelters and conducting drills in preparation. In 2013, cyclone of a similar strength hit the state and, as a result of preparedness, the death toll was less than 50. As a counter example, Kerala is less disaster-prone and wealthier than Odisha but, as the deadly floods of August 2018 demonstrated, is much less prepared.¹⁰ Moreover, any efforts made need to be sustained: climate change is likely to lead to more extreme weather events and countries vulnerable to disasters such as India will be among the worst affected.

With regard to the EU's ability to respond to such events, the Union has a number of instruments at its disposal to fund disaster relief efforts, some of them with significant budgetary envelopes. For instance, the Instrument for Humanitarian Aid, run by the European Commission's Humanitarian Aid and Civil Protection Directorate General (DG ECHO) has an annual budget of €945.4 million (2017), with €6.62 billion allocated to it for the period (2014-2020).¹¹ More recently, the European Commission's proposal to strengthen the Union's collective response to natural disasters, known as rescEU, entered into force on 21 March 2019. This upgraded the Union Civil Protection Mechanism (UCPM) – coordinated by the Emergency Response Coordination Centre (ERCC), an instrument which although focused on Europe, can also be activated worldwide. Specifically related to India, the EU has supported New Delhi in the development of its disaster-related capacities, engaging with state governments and at district level and with civil society through a number of programmes since the 1990s. In addition, the EU has provided assistance in response to

⁸ Pradeep Thakur, "Disasters Claimed Economic Losses Worth 80 Billion in India Between-1998-2017: UN Report", *Times of India*, October 10, 2018, <https://timesofindia.indiatimes.com/india/disasters-claimed-economic-losses-worth-80-billion-in-india-between-1998-2017-un-report/articleshow/66154037.cms>.

⁹ National Disaster Management Authority, <https://ndma.gov.in/en/vulnerability-profile.html>.

¹⁰ "Why the Kerala floods proved so deadly", BBC News, August 21, 2018, <https://www.bbc.com/news/world-asia-india-45243868>.

¹¹ Daniel Fiott, Jakob Bund, "Yearbook of European Security 2018", *EUISS*, <https://www.iss.europa.eu/content/euiss-yearbook-european-security-2018>.

each of the major disasters which India has faced, including the 1999 Orissa Super-Cyclone, the 2001 Gujarat earthquake, the 2004 Indian Ocean Tsunami, the 2005 Jammu and Kashmir earthquake, and the 2008 flooding in Bihar and Cyclone Phailin in 2013. Since 1995, the EU has provided around €130 million to India in humanitarian assistance. Between 2001 and 2014, DIPECHO (the EU's disaster preparedness programme) provided more than €8 million to support vulnerable communities and reduce the impact of natural disasters through community-based initiatives, while disaster risk reduction initiatives have become integral to humanitarian response. As a final example, the EU also contributes to the Indian Red Cross Society. However, as India has transitioned to middle income-status these interventions have gradually been reduced and the relationship has shifted from a donor-recipient relationship towards a partnership.

However, the EU's traditional focus on civil society engagement in third countries presents some difficulties in the present Indian context:

'The emergence of India as an international humanitarian donor in its own right together with the passing of legislation to regulate the activities of civil society organisations in both countries had a significant influence on ECHO country programmes. In India, the effect was to call into question ECHO's operating model, even while needs remained unmet and their intervention strategy continued to be relevant.'¹²

¹² "Evaluation of the European Union's humanitarian interventions in India and Nepal, 2013-2017", Analysis for Economic Decisions, February 2018, <https://www.alnap.org/system/files/content/resource/files/main/kr-04-18-059-2a-n.pdf>.

Figure 3 : *This map should not be used for legal purposes. It is intended for general reference use only.*

States of India

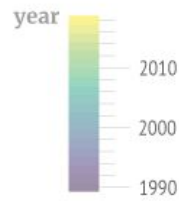


Data: Natural Earth, GADM, 2019

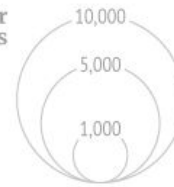
Figure 4 : This map should not be used for legal purposes. It is intended for general reference use only.

Select disasters in India

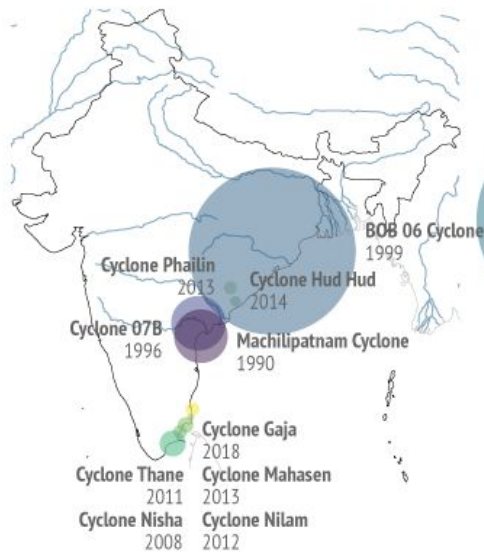
number of fatalities



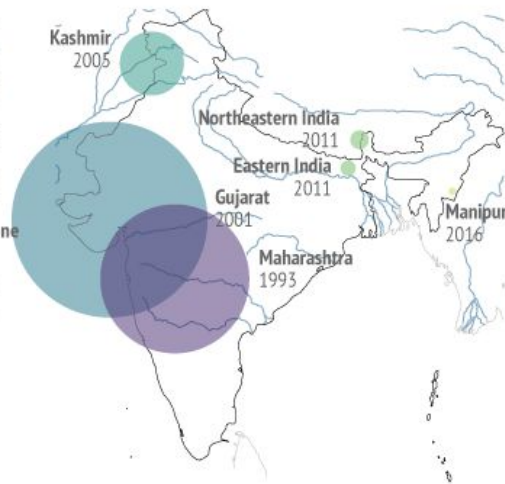
number of deaths



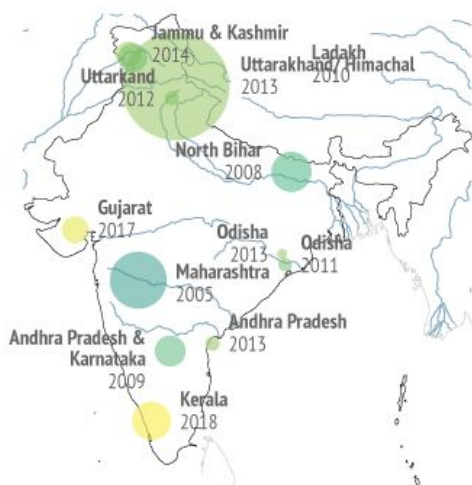
Cyclone



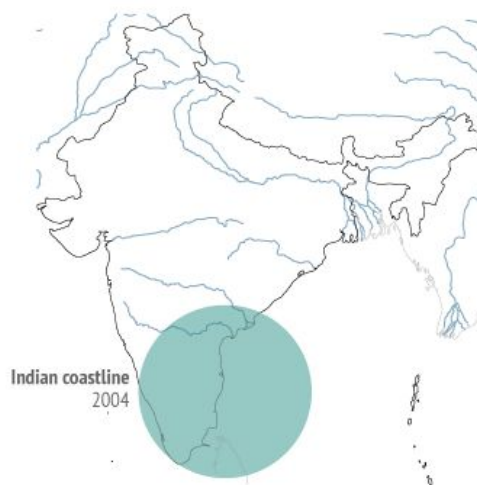
Earthquake



Floods



Tsunami



Data: National Disaster Management Authority (NDMA) of India, Reuters, BBC, Indian Express

Satellite capacities and scope for cooperation

One area which appears to hold untapped potential for greater cooperation in the event of natural disasters could be in the use of satellites. While efforts have been undertaken by specialised organisations such as the World Meteorological Organisation (WMO) in this area - including the availability of satellite imagery in support of predictive weather patterns ahead of potential disasters through the Global Observing System (GOS)¹³ – the EU has also demonstrably developed its own space and satellite capacities in recent years.¹⁴ The Copernicus Service in Support to EU External Action (SEA), a ‘European geointelligence service which assists the EU and its Member States in its operations and interests outside EU territory’ is one such development.¹⁵ With the EU Satellite Centre (SatCen) as the ‘Entrusted Entity’ for its operational management, Copernicus SEA has proven to be an effective tool in supporting EU external action, including humanitarian aid and disaster relief: as a response to Hurricane Irma, the EU activated both the Copernicus satellite system to assist populations in Haiti and the Dominican Republic in 2017, for example. A tool to distribute such products is the geospatial portal developed by the SatCen in a collaboration project with European Defence Agency (EDA). It can be used internally within the EU and also be opened to external partners, e.g. in situations of humanitarian distress. Immediately following the Nepal earthquake on 25 April 2015, SatCen activated this portal for international support to international operations (the integration of such a portal into Copernicus SEA is currently ongoing).¹⁶

Copernicus SEA services cover various product options related to disaster relief: damage assessment (change detection with pre- and post-event images etc.), evacuation planning support (including maps of sensitive and key political points (embassies, safe areas in event of flooding), or infrastructure analysis (roads, airports, fields for helicopters to land etc.). If implemented on the online portal (when eventually available in SEA), information can be added and shared in near-real time: e.g. in cases of evolving crises, qualified staff can plot status changes and/or highlight road blocks, chokepoints or other impediments.

Current Copernicus products are unclassified and can thus – under specific conditions – be shared with non-EU partners, following the relevant approval process. At the request of the EU Delegation to India and Bhutan, for instance, products resulting from SEA services could therefore also be shared with the Indian authorities – this is subject to authorisation from the SatCen tasking authority, the Space Task Force in the European External Action Service (EEAS). There is also precedent here, with EU satellite material having been shared with other third parties in the past. In addition to SEA, Copernicus also provides an Emergency Response Service for maintaining support throughout the disaster cycle.¹⁷

Other Copernicus services could provide support to relevant Indian entities in order to strengthen early-warning systems, issue atmospheric and weather warnings, and prepare

¹³ World Meteorological Organisation, Global Observing System (GOS), <http://www.wmo.int/pages/prog/www/OSY/GOS.html>.

¹⁴ Indeed, the EU also cooperates in its own right with the WMO, as do a plethora of intergovernmental bodies. For more, see:

<https://public.wmo.int/en/our-mandate/how-we-do-it/partnerships/agreements-and-arrangements>.

¹⁵ Copernicus SEA, <https://sea.security.copernicus.eu/about-copernicus-sea/>.

¹⁶ For more information, see: www.satcen.europa.eu.

¹⁷ For more information, see: <https://emergency.copernicus.eu/>.

evacuation plans. 3D modelling and videos can also be prepared as crisis simulations, which could potentially be held in the form of workshops to play out scenarios and share best practices and ideas between India and the EU. Crucially, apart from the security and emergency domains where sensitivity restrains the access to some services, all Copernicus services are full, free and open. Other classified material produced by the EU SatCen can be released, although this would require a decision by the EU's Political and Security Committee (PSC).

Figure 5 – EU satellite map of New Delhi



occimicus

New Delhi
India
Indira Park
Dwarka

Scale: 1:50,000

North arrow

Legend:

- Green: Open spaces
- Purple: Buildings
- Red: Roads
- Yellow/Orange: Shaded areas

Project Information:

Project Name: ...

Client: ...

Contract No: ...

Scale: 1:50,000

Date: ...

Author: ...

Reviewer: ...

Approval: ...

Enhancing EU cooperation at state-level in India

If real progress is to be made, it is important that the EU recognises that India is a union of states, and the first line of disaster resilience, recovery and rehabilitation is the state government. It is for this reason that engagement must also occur at this level.¹⁸

Although India has signed up to the Sendai Framework for Disaster Risk Reduction – and, to that end, released a National Disaster Management Plan in June 2016¹⁹ – the fact remains that much of the hard work involved in building resilience and resistance will have to take place at the state level in India. Few states have put in the required effort to create a comprehensive plan – as was tragically made clear in the recent floods in Kerala, one of India’s best-managed states. Paradoxically, it is a state that is generally short of capacity – the northern state of Bihar – that has produced the first comprehensive state-level plan, called the Road Map on Disaster Risk Reduction²⁰. This is possibly related to the fact that Bihar constantly suffers from devastating floods, including one in 2016 that killed over 200 people and affected almost 10 million, and in 2017 that killed over 150 and affected almost 11 million people.²¹ An examination of the plan, and action taken since its introduction, shows that much of the effort required is related to capacity-building at the last mile, creating the necessary systems, and training the appropriate functionaries. Builders and real estate regulators have to be trained about earthquake resistant construction, for example. The problem is essentially: who does the training? And who trains the trainers? There is a clear capacity crunch here, and disaster resilience and risk reduction may well be de-prioritised as a consequence.

Some multilateral agencies have supported risk reduction efforts in Indian states, which indicates the openness of state governments to cooperation in this arena. The United Nations Development Programme (UNDP) has, for example, run a multi-year project on ‘Enhancing Institutional and Community Resilience to Disasters and Climate Change’ that focused on capacity-building in the implementation of disaster risk reduction plans. Much of the work focused on the coastal state of Odisha, which has – as mentioned above – been repeatedly hit by cyclones. This cost the UNDP \$4.5 million, while USAID also spent \$1.735 million.²² The World Bank has also been an active player in this area.

The EU’s engagement with state governments should not focus primarily on aid, or on the amount of financing that is necessary. The critical component is capacity and expertise. States are, for example, trying to improve their analysis of community needs (‘Post Disaster Needs Assessment’, or PDNA) after a disaster on the basis of the 2008 joint declaration between the United Nations Development Group (UNDG), the EU, and the World Bank on

¹⁸ Though not conflict related, it also aligns with the EU’s desire to engage at all levels of governance as expressed in the EU Global Strategy. For more, see: *Shared Vision, Common Action: A Stronger Europe – A Global Strategy for the European Union’s Foreign and Security Policy*, Brussels, June 2016.

¹⁹ United Nations Office for Disaster Risk Reduction, “India Pus Sendai Framework into Operation”, June 1, 2016, www.unisdr.org.

²⁰ Government of Bihar, “Roadmap for Disaster Risk Reduction, 2015-2030”, disastermgmt.bih.nic.in.

²¹ “Bihar flood hits 10.8 million people, 17 districts”, *Business Standard*, August 19, 2017, https://www.business-standard.com/article/current-affairs/bihar-flood-hits-10-8-million-people-17-districts-death-toll-rises-to-153-117081801467_1.html.

²² UNDP, “Enhancing Institutional and Community Resilience to Disasters and Climate Change”, www.in.undp.org/content/india/en/home/operations/projects/environment_and_energy/enhancing-institutional-and-community-resilience-to-disasters-an.html.

post-crisis assessment. The 2008 declaration explicitly committed the EU to ‘mobilise our institutions and resources to harmonise and coordinate post-crisis recovery frameworks’. This has traditionally been activated at the national level, and the PDNA tool has been made available in the South Asian Region to Sri Lanka after a flood in 2015, to Myanmar/Burma in 2018, and to Nepal after the 2015 earthquake. The PDNA framework – in particular, training under the PDNA – could be made available directly to state governments without having to go through the central NDMA in New Delhi to address this.

Cooperation in third countries

The scope for better cooperation in third countries would seem to vary according to geography and in relation to the various stages of the disaster cycle. Both the EU and India have assisted in disaster response within South Asia: India played a pre-eminent role in providing assistance following the 2015 earthquake in Nepal, while the EU issued €1.5 million to victims of Tropical Cyclone Mora in Bangladesh and Myanmar/Burma in July 2017 through its Instrument for Humanitarian Aid, for instance.²³ The UCPM was also activated twice in Asia in 2017, for instance: in Bhutan as part of disaster preparedness mission and Bangladesh in response to an epidemic.²⁴

In addition, the EU is already supporting two regional projects. One is being implemented by the International Centre for Integrated Mountain Development (ICIMOD) and seeks to support rural livelihoods adapt to climate change in the Himalayas. This project, to which the EU is contributing 10 million euros, spans eight countries, including India. The other is the EU-South Asia Capacity building for Disaster Risk Management, also costing 10 million euros and running from 2015-2020. This is being managed by the Global Facility for Disaster Reduction and Recovery and implemented by the World Bank.

However, concerns over Indian sensitivities over activities in its own backyard notwithstanding, the likelihood of further major disasters in countries such as Nepal and Bangladesh, coupled with governance capacities (certainly in Nepal), make issues such as coordination in disaster response a significant concern. For instance, following the Nepal earthquake:

‘similar to what happened after the 2010 Haiti earthquake, simply the sheer number of humanitarian organisations and relief goods put pressure on the logistical capacities of the Nepalese government and on the coordination and coherence of the relief efforts. This is part of a wider trend, with an increasing worldwide number of humanitarian actors and organisations, all with different missions, mandates and agendas, posing a number of great challenges to the relief system.’²⁵

Despite the need for more effective coordination, disaster response frequently involves teams from different countries working in parallel, ideally using international standards in

²³ “EU provides €1.5 million to victims of Tropical Cyclone Mora in Bangladesh and Myanmar” DG ECHO, July 6, 2017, https://ec.europa.eu/echo/news/eu-provides-15-million-victims-tropical-cyclone-mora-bangladesh-and-myanmar_en

²⁴ For more, see: https://ec.europa.eu/echo/what/civil-protection/mechanism_en.

²⁵ “The Crisis Response to the Nepal Earthquake: Lessons Learned”, *European Institute for Asian Studies (EIAS)*, May 1 2016, <http://www.eias.org/wp-content/uploads/2016/02/The-Crisis-Response-to-the-Nepal-Earthquake--Lessons-Learned-colour-1.pdf>.

areas such as search and rescue. For India within its neighbourhood, the sense that India would wish to gain credit and recognition for its bilateral support is likely to remain strong.²⁶

Disaster preparedness – in particular early-warning systems – is therefore likely to provide an easier area in which to explore synergies than response. There are several initiatives intended to develop better early warning systems within South Asia, and the EU has supported several initiatives intended to boost the connectivity of early warning systems. Frequently, the imminence of disasters is not effectively communicated to those most at risk.

Collaboration may well be easier outside of the South Asian region: Indian sensitivities towards its neighbourhood suggest that it would prefer to play a leading and independent role within its neighbourhood. Both the EU and India have contributed both to preparedness and to response in the event of disasters in Africa: for instance, in September 2018 the European Commission provided €9 million for disaster preparedness initiatives in Madagascar, Malawi, Lesotho, Mozambique, and Zimbabwe, while in March 2019, following a cyclone in Mozambique, India provided relief material, including food, clothes and medicine, along with medical help. Though the EU places greater emphasis on longer-term disaster preparedness, though under its Pan Africa E-Network, for example, India is also implementing the second phase which includes a Data Centre and Disaster Recovery Centre to be established in India along with ‘Learning Centres’ in African countries.

While the EU and India may have differing emphases, making their respective approaches towards disasters a subject for discussion in bilateral talks regarding Africa and Indian Ocean littoral states may be a useful starting point to see if there are synergies which could be further explored. In particular, focusing on technical aspects, exploring synergies between respective capacities in terms of early warning systems, appears an approach which may be productive. Smaller island nations in the Indian Ocean (such as the Seychelles) might provide particular opportunities in this field, given the overlap of EU and Indian economic and security interests. Again, satellite capabilities in order to plan during the preparedness phase of the disaster cycle could be a way forward.

Elsewhere, in 2017 the EU and the Association of South-East Asian Nations (ASEAN) celebrated 40 years of relations. At the annual post-ministerial EU-ASEAN conference in Manila, the High Representative/Vice President (HR/VP) Federica Mogherini and 10 ASEAN ministers adopted an EU-ASEAN Plan for Action for 2018-2022, which focused on maritime security, humanitarian and disaster assistance and crisis management cooperation. This could also provide a basis for further EU-India-ASEAN trilateral cooperation given that both India and ASEAN are developing out-of-area disaster response capability. ASEAN’s disaster response is closely tied to the UN system, providing an additional potential entry-point for dialogue. Given that India is developing the same, and given the closeness of the EU-ASEAN relationship, there is scope for the EU and India to cooperate in the framework of the ASEAN Regional Forum (ARF), to which both are parties and which conducts regular high availability disaster recovery (HADR) exercises. The EU is also involved in the work of the AHA Centre, an intergovernmental organisation established by the ten ASEAN Member

²⁶ While not the focus of this paper, this is equally true for evacuation from conflict situations: India has taken a leading role in evacuating its own citizens, other South Asians and in some cases Europeans and North Americans from several conflict zones in the Middle East and again, appears unlikely to want to dilute the credit it receives for doing so.

States to facilitate cooperation and coordination of disaster management.²⁷ Finally, the EU is continuing efforts to join the ASEAN Defence Ministers' Meeting Plus (ADMM+) as an observer, both for the 2020-2023 cycle and beyond, although membership is not assured. Given that it is the military that often distributes aid in the event of a natural disaster in the region, the EU aspires to join the group to maximise its impact in this field.

Conclusions

The combination of climate change, unplanned urbanisation and population growth means that the frequency and impact of natural disasters are likely to increase in the future. This paper has identified a number of Indian sensitivities in the field, and attempted to identify ways which acknowledge them while focussing on results-orientated outcomes which will help save lives. Accordingly, the EU and India could:

- Foster EU-India cooperation on disaster relief cooperation (particularly in the response phase of the cycle), including through use of satellite imagery which can help predict disasters and assist in rapid reaction;
- Increase understanding of Indian and European capacities in this field by sharing knowledge of how various technologies can be used – possibly through some kind of simulation exercise involving practitioners and relevant authorities. This could provide insights into opportunities for further cooperation, while also respecting the Indian desire to be treated as an equal partner, relaying as it does on high-end technology;
- Build synergies on disaster response between the EU and key Indian states. At state level in India there is a significant need for capacity building. While regulations are in place, many of India's more disaster-prone states lack enforcement capacity. Building on its pre-existing work at state level, the EU could focus on providing training to enable building standards, for instance, to be enforced. Satellite imagery-based disaster scenarios could help galvanise interest;
- Explore a trilateral EU-ASEAN-India dialogue relating to disasters. Both ASEAN and India are developing extra-territorial disaster response capacity; the EU has partnerships with both ASEAN and India, and ASEAN and India have a long-standing dialogue relationship. As disasters are a priority area for cooperation in each of these relationships, trilateral cooperation might also form a potential basis for further discussions;
- Tentatively explore scope for synergies between the EU and India on disaster response in neighbouring countries;
- Set up an informal EU-India working group on what are the next steps - and the concrete measures - that could be implemented by the two sides to boost EU-India cooperation on disaster relief.

²⁷ For more, see: <https://ahacentre.org/about-us>.