



Context

Nepal is highly susceptible to earthquakes, flooding, landslides, droughts and glacier lake outburst floods (GLOF) due to its diverse topography and complex geography. Water-induced disasters, such as floods and landslides, cause on average 300 deaths each year, and have substantial economic damages, wiping out almost 1.5 percent of the country's GDP per year. They are occurring with increased frequency, intensity and scope, particularly during the monsoon season within the densely populated southern Terai plains. Flooding is a generally cyclical and consistent occurrence, and it is anticipated that flood-related disasters will increase. Monsoonal precipitation during June and September triggers regular flooding in the low-lying Terai Plains. In 2017, the heaviest rainfall in 60 years was recorded which caused flooding across 35 of the 77 districts. This affected 80 percent of the Terai region and approximately 1.7 million people, causing US\$ 584.7 million in damages (Government of Nepal, 2017).

Nepal is also vulnerable to climate change, as more than two thirds of the country's economy depend on climate-sensitive sectors such as agriculture and forestry (OPM, 2020). Models suggest that the number of people annually affected by river flooding could more than double by 2030 because of climate change, and the economic impact of river flooding could triple (World Bank, 2021). Unusual patterns of rain and droughts have caused yearly crop production losses ranging between 5 and 35 percent in 2001-2010 (apart from the years 2003 and 2007), amounting to a loss of approximately US\$ 1.5 billion (UNDRR, 2019).

The country also experiences high social vulnerability, with high levels of poverty and social inequality based on ethnic and caste-based discrimination. Nepal is classified as a low-income country, ranking 157 out of 187 on the Human Development Index. Rapid unplanned urbanisation and low-quality construction compound this social vulnerability by adding significant risk when natural disasters strike¹. The 2019 ND-GAIN index, which summarises a country's vulnerability to, *inter alia*, climate challenge and their readiness to improve resilience, ranks Nepal as 128th out of 181 countries².

¹ <https://www.opml.co.uk/projects/strengthening-climate-and-disaster-resilience-in-nepal>

² The more vulnerable a country the lower the score.

At the political level, a new constitution came into effect in 2015. A new federalised governance³ has led to a devolved structure of seven provinces⁴, 77 districts and 753 municipalities (*palikas*) that cover urban and rural areas. As a result, municipalities now have the authority and responsibility to plan and execute service delivery that was historically done at the district and national levels, including for disaster risk reduction and management and climate change.

³ The federal and provincial governments came into effect in the beginning of 2018

⁴ Province 1 (Proposed names: Koshi/Purbanchal), Province 2 (Proposed names: Madhes or Mithila), Province 3: Bagmati, Province 4: Gandaki, Province 5: Lumbini, Province 6: Karnali, Province 7: Sudurpashchim

Legislation and Policy Environment

Nepal has made significant achievements in terms of legal framework, policy instruments, and institutional arrangements for disaster risk management (DRM), shifting the focus from a reactive to a proactive approach. The **Constitution of Nepal** (2015)⁵ identifies disaster management as one of the key priorities of all tiers of government (federal, provincial and local). It stipulates that DRR/M is both the sole authority of the local government and a shared authority amongst all three tiers of government (OPM, 2020). The **Ministry of Federal Affairs and General Administration (MoFAGA)** is responsible for the coordination, cooperation, facilitation, and monitoring and evaluation of local government activities. It is the agency that implementation agencies have the most interaction with for FbF-related implementation at the local level. The **Ministry of Forests and Environment (MoFE)** is the focal point for climate change. Although there is some convergence in interventions at the local level, climate change and disaster related organisations tend to operate in silos (OPM, 2019).

Although the GoN has developed policies at the national level for DRR and CCA, the policies, regulatory framework and guidelines are different. DRR/M is guided by the **National Disaster Risk Reduction Policy 2018⁶**, **Disaster Risk Reduction National Strategic Action Plan (2018-2030)** and District and Local DRR planning guidelines. Climate Change is guided by the **Climate Change Policy 2019**, National Adaptation Programme of Action (NAPA)⁷ and Local Adaptation Plans of Action (LAPA) framework (OPM, 2019). A UNFCCC National Adaptation Plan (NAP) is also being developed. The DRR policy has a reference to AA, albeit vague - '7.4.2 Natural hazards like flood, landslide, drought, thunderbolt, windstorm, hot wave, cold wave, fire, epidemics and glacier lake outburst will be monitored and forecasted regularly and Forecast-Based Preparedness and Response Plans will be developed and implemented by developing early warning system' (GoN, 2018 p20).

Local governments are mandated with developing numerous plans. These include Local Disaster Risk Management Plans (LDRMP), Disaster Preparedness and Response Plans (DPRP) and the Local Adaptation Plans of Action (LAPA). Recently, a draft framework on Local Disaster and Climate Resilient Planning (LDCRP), taken forward by the MoFAGA, was circulated, as an attempt to integrate both DRR and CCA (Personal Communication). However, the draft LDCRP is inclined towards disaster risk and treats climate change shallowly (OPM, 2019). All 77 districts have formulated DPRPs, although many date back to 2011 (ADB, 2019).

The **2017 Local Government Operation Act (LGOA) 2074⁸** empowers local authorities to govern themselves and requires them to develop legal, institutional and fiscal frameworks and related DRR acts and policies (Mercy Corps, 2019). Some Provincial governments have developed their own disaster management act. In less than a year, three out of the seven provincial governments and around 83 out of the 753 local levels developed local disaster management committees, 77 established disaster management funds and 45 have formed disaster management acts and policies (GoN-MoHA, 2019).

The entry point for anticipatory action (AA) is the **2017 Disaster Risk Reduction and Management (DRRM) Act 2074** that replaced the response and relief 1992 Natural Calamity (Relief) Act. The more proactive Act and policies are aligned with the Sendai Framework and encourages a 'whole of society' approach and highlights the importance of DRR. Despite these gains, the Act still focuses on post-event activities, and it lacks sufficient mandatory provisions and accountabilities of federal, provincial and local government authorities to DRR and effective preparedness (Bhandari *et al*, 2021). Along with the DRRM

⁵ The Constitution officially institutionalised Nepal as a Federal Democratic Republic with three tiers of government.

⁶ <http://drrportal.gov.np/uploads/document/1476.pdf>

⁷ Published in 2010, this set out an ambition to disburse at least 80 percent of climate adaptation funds at the local level

⁸ Which classifies local governments into metropolitan, sub-metropolitan, urban and municipalities

Act, full responsibility for DRM policy and planning is devolved to the 753 newly formed municipalities/local governments.

The DRRM Act establishes a **National Council for Disaster Risk Reduction and Management (DRRM Council)** and similar councils at province and district level⁹. It also mandated a **National Disaster Risk Reduction and Management Authority (NDRRMA)**, operating under MoHA which is the nodal Ministry for the coordination of disaster management activities throughout the country, with a DRR mandate¹⁰. The NDRRMA oversees all phases of disaster risk management and coordination with all DRR stakeholders¹¹ and has been operational since 2019 – though national level DRR actors (NDRRMA, MoHA, MoFAGA) are still working on clarifying specific roles and responsibilities. The NDRRMA could therefore be the agency to take forward the national AA agenda (OPM KII).

In terms of potential budget allocations for AA, the state of disaster management funds under the devolved structure is currently quite nebulous (World Bank, 2019; Mercy Corps, 2019). The DRRM Act has a mandate for a **Disaster Management Fund**, to be capitalised in its annual budget. It is unclear whether this Act has replaced a range of previous funds that were mandated by various earlier acts which all focus on response¹². According to one informant, the Act neither recognises nor displaces the **Prime Minister's Disaster Relief Fund (PMDRF)**, mandated by another Act and established in 1988¹³. Funds can be received from multiple sources, approved by the Ministry of Finance and audited each year by the Auditor General. However, the details about how the funds are to be used still need to be set out in regulation (Shrestha. B and Pathranarakul. P., 2018). According to a government report "*it varies in fund volume as per the available resources and priorities*" (GoN-MoHA, 2019). There is also provision for funds at province, district and local level but they are not specified – a new regulation is currently under formulation. There is also a **'Central Disaster Management Fund'** operated by the Ministry of Home Affairs (MoHA) that is not mandated¹⁴. This fund is meant to be operated by the NDRRMA, but there is scope for another fund once regulation is passed. There are also disaster management funds run by each Provincial Governments, with varying names such as the Province DM Fund, Chief Minister DM Fund, Pradesh (Province) DM Fund, etc. There are **77 District Disaster Management Funds** run by the District Administration Office, under MoHA, with expenditures approved by the District Disaster Management Committee (DDMC). Each local government (753) should have established a DM fund to be run more or less independently (personal communication). An analysis of six municipality budgets showed that funds were dedicated mainly for response and relief (Mercy Corps, 2019).

Currently there is no legislation around communicating early warnings. Such legislation would help to delineate roles and responsibilities around the communication of warnings and the responsibility of implementing response actions both between different agencies and different levels of government (personal communication). The jurisdiction for disseminating warnings at the district level rests with the Chief District Officer with implementation by the National Emergency Operations Centre (Red Cross Climate Centre, n.d; WFP Communication).

⁹ This is the highest policy making body in the Country, chaired by the Prime Minister (at the federal level) and the Chief Minister at Province level. The mayor or chairperson of local levels lead the local disaster management committees. An Executive Committee enact policies and plans approved by the Council (MoFAGA is part of this committee).

¹⁰ The Nepal Government (Work Division) Regulation, 2017.

¹¹ Key work areas include: to work with relevant federal ministries and departments in order to improve capacity in forecasting, monitoring and search and rescue; maintain disaster information management system along with national disaster database system.

¹² A Prime Minister's Disaster Relief Fund, Central and District Disaster Relief Funds, and a Natural Disaster Relief and Reconstruction Fund established in 2008 - for the Koshi floods. All districts were required to reserve at least NR 100,000 in case a disaster occurred.

¹³ Administrative Functions Regulation Act.

¹⁴ It is operated based on MoHA procedures and approval of the Executive Committee (previously there was - Central Natural Disaster Relief Committee (CNDRC) equivalent to current EC).

Anticipatory Action Pilots

AA pilots in Nepal have been funded by international donors. Although not technically FbF, the Department of Hydrology and Meteorology (DHM) and the NDRRMA are piloting impact-based forecasting for landslides and floods in a few local governments this year (Personal communication). This is in addition to texts that get sent to at risk communities based on forecasts since 2014. A mass alert system is generally operated in partnership with NTC and NCell telecom service providers of the affected areas (GoN, 2019).

- **The OCHA CERF Anticipatory Action Framework** aims to provide assistance to over 80,000 people across 23 flood-prone *palikas* in two provinces: Province No.1 and Lumbini¹⁵ and two river basins - Karnali in Western Nepal and Koshi in the Eastern part (OCHA, 2021). This is being implemented by five UN agencies – UNFPA, UNICEF, UN Women, WFP and WHO – with the help of the Nepal Red Cross Society (NRCS) and national NGOs. The pilot relies on a two-step trigger system: **Stage I:** A readiness trigger based on the GloFAS forecast, that will provide a maximum of 7 days' lead time. **Stage II:** An action trigger based on the datasets from the government system's flood warning system and the GloFAS forecast, which can provide a lead time ranging from 3 hours to 3 days. Early actions include cash (WFP and UNICEF¹⁶ will provide households with approx. US\$113/Rs 13,500¹⁷), in-kind assistance (UNICEF will distribute hygiene kits, water purification tablets etc and UNFPA/UN Women will distribute dignity kits and comprehensive relief packages) and service delivery (UNFPA and UNICEF) will deploy trained personnel to provide gender inclusive services). Funding for the pilot comes from different sources. The CERF will provide up to US\$6.7 million once the defined triggers have been reached in each basin. It was not possible to determine the communities' engagement in the process. The pilot builds on the 2020 AA pilot for monsoon flooding in Bangladesh. However, unlike Bangladesh, separate systems needed to be set up for each river basin since they are not linked. The lead times in Bangladesh were also longer. Another issue is that compared to Bangladesh, GloFAS in Nepal is widely fluctuating so less helpful (Eco, 2020). In July 2021, the threshold for the readiness trigger would have been reached, but it was a false positive (WFP KII). In August 2021, at the time of writing, the readiness trigger was activated again.
- **The World Food Programme (WFP)** has been working on AA since 2015, engaging from the district to the ward level in an effort to build the evidence base on the benefits of investing in AA. This is being done through capacity building, advocacy, policy and then implementation. Between 2016 and 2018, FbF for flooding was piloted in 19 *terai* districts and District Disaster Management Committees (DDMCs) were supported in developing Standard Operating Procedures (SOPs)¹⁸ for forecast-based flood preparedness with the engagement of the DHM and National Emergency Operation Centre (NEOC). Given the new structure of government, a bottom-up approach was implemented, and significant advocacy and capacity was done at the lowest level of government engaging Mayors and community representatives. SOPs were developed building on existing flood EWS and DPRPs in each district (WFP n.d.). Based on the SOPs, early actions around prepositioning of NFIs Community Owned Warehouses are being used since 2019 in Jhapa,

¹⁵ In eastern Nepal: Province No. 1, Sunsari district – 5 palikas; Province No. 2, Saptari district - 7 palikas • In western Nepal: Lumbini Province, Banke district - 3 palikas; Lumbini Province, Bardiya district – 6 palikas; Sudurpaschim Province, Kailali district - 2 palikas.

¹⁶ UNICEF will use existing social protection mechanisms whereas WFP will use its SCOPE beneficiary system.

¹⁷ The transfer value was developed by the cash coordination group, and is equivalent to 80% of a 30-day minimum expenditure basket for a family of 5

¹⁸ These SOPs spell out various anticipatory actions to take at different lead times, including evacuation of at-risk populations, activation of early emergency protocols, and preparation of assistance for at-risk or affected communities

Saptari, Banke and Bardiya, and anticipatory cash assistance was piloted in 2020 in Banke and Bardiya for about 2700 households (WFP KII).

A challenge that WFP faced during the development of the SOPs was that it defined the beneficiary criteria and the basis for selection of at-risk people (combining both risk and socio-economic vulnerability), in addition to roles and responsibilities of actors. This went against the local authorities' preferences, during emergencies, for a 'blanket approach' in supporting an entire constituency, so adopting the final SOPs took considerable advocacy. The creation of local emergency centres at the local level helped to facilitate information flow and establish a chain of command. Although only a few were established, they helped getting SOPs drafted and accepted. An advantage of the SOP was highlighted when the readiness trigger was activated in a *pallika* and a local party accused the government of choosing beneficiaries by political affiliation versus need. The transparency of the SOPs soon clarified the matter (WFP KII). A return-on-investment analysis in 14 districts showed that for each dollar invested, US\$34.39 is saved (after deduction of the investment costs, over 20 years) (WFP, 2019). FbF has only been implemented in two districts in the Lumbini Province in 2020 and in July 2020, trigger was activated, and anticipatory cash was provided to over 2,700 households. The CERF pilot intervention design reflects WFP's experiences with AA approaches gathered since 2015, as well as lessons learnt from the 2020 anticipatory cash intervention in Lumbini province (OCHA, 2021).

- **The Nepal Red Cross Society (NRCS) and the Red Cross Climate Centre** implemented a Danish-funded pilot program for the 2018 monsoon season in the Babai river basin in the district of Bardiya, targeting 80 households. However, it did not trigger since 2018 was not an extreme year for flooding. One of the lessons learnt from the pilot was that *'too little focus was placed on action selection as compared to the operationalisation of the triggering mechanism'*. Without the right actions, beneficiaries would not be helped by the FbF system (Red Cross Climate Centre, n.d.). In 2019, 17 flood-prone wards in the same Basin were targeted. A ten-day readiness trigger and a seven-day activation trigger was incorporated in the new approach. However only the readiness trigger was reached in July 2019. Although there were plans to cover 72 wards in three river basins, according to interviewees there are no current pilots. The NRCS is looking to improve the current three-day window (Red Cross Climate Centre, 2019¹⁹). The pilots also highlight hardware limitations since Nepal has a limited density of hydro-met stations, particularly in remote or hard to access areas. This means that some flood-prone areas don't have a corresponding upstream gauge (Smith P. *et al*, 2016). An ECHO-supported AA pilot is underway.
- **The International Centre for Integrated Mountain Development (ICIMOD)**, under its SERVIR-HKH Initiative, is collaborating with Brigham Young University, NASA's Jet Propulsion Laboratory, and national partners to enhance flood early warning systems in Nepal. Forecasting tools used include the Streamflow prediction Tool which downscales global flood discharge forecasts with routing models. It provides Nepal with a 10-day streamflow forecast for major rivers in Nepal. The HIWAT Streamflow Prediction Tool provides 48-hour forecasts for river streams in Nepal. This is being done in partnership with In the DHM and Practical Action Nepal to further calibrate and validate the results from the tools and to also engage different stakeholders including local governments and at-risk communities.²⁰

¹⁹ <https://www.climatecentre.org/661/first-national-dialogue-on-forecast-based-financing-in-nepal/>

²⁰ <https://servir.icimod.org/news/covering-all-bases-nepals-karnali-province-plans-for-multi-hazard-early-warning-systems>

Given the learning from pilots, the government revised the Disaster Preparedness and Response Planning Guidelines (DPRP)²¹ and incorporated forecast based preparedness as one of the three components - the others being general preparedness and hazard-specific preparedness and response activities. This therefore provides a strong basis to implement Forecast-based Actions (FbA) (personal communication; Bhandari, D. *et al*, 2021). In addition to this, MoFAGA recently circulated a model outline of the Disaster Preparedness and Response Plans (DPRP)²² for local governments which also highlighted Forecast-based preparedness plans in Section 3 of the document (Personal Communication).

Disaster Risk Financing

The GoN has limited ex-ante DRF instruments in place (ADB, 2019). In 2020, the World Bank approved a US\$50 Catastrophe Deferred Drawdown (Cat DDO) with a soft trigger of a declaration of a State of Disaster (“upon imminent or occurring adverse natural event) by either MoHA or in the cause of a health-related shock, the Ministry of Health and Population (World Bank, 2020). Contingent budget allocations are limited relative to total public expenditure of NRS 1 billion (approx. US\$8.4 million) per annum. All district treasuries are provided with an appropriation of approx. NRs 1 million (US\$8,400) to respond to disasters such as floods and landslides (ADB, 2019). Ex-post funding includes the Prime Minister’s Fund and international appeals²³ to the fund (NRs 304 million/US\$2.5 million was received in response to the 2017 funds). In addition, the GoN has carried out post-disaster budget allocations after each major disaster. This has largely focussed on stopping capital works programs (ADB, 2019). There are also various insurance programmes being developed such as ClimateRe initiative “Enhancing the resilience of smallholder rice farmers in Nepal” using index-based crop insurance (Act Alliance, 2020) and local ones such as the Natural Disaster Risk Group Insurance Program covering 1.7 million people, launched by the Government of Karnali Province (World Bank, 2020). A draft National Disaster Financing Strategy has the goal “to ensure Pre-arranged Financial Mechanisms for providing adequate financial resources immediately at the onset of a disaster by maintaining financial risk sharing of stakeholders, while reducing financial, physical, social and human losses from disasters” (World Bank, 2019).

Social Protection

A key challenge in Nepal is the intersection of predictable chronic or seasonal poverty and vulnerability, with rapid-onset and acute shocks. Although social protection plays an increasing role in tackling chronic and seasonal poverty and wider vulnerability and exclusion, recent disasters in Nepal, such as the 2015 earthquake and more recently COVID-19, highlight how making social protection more flexible and adaptive could allow a more effective and efficient development and humanitarian response (World Bank, 2018; ILO, 2021). Although Nepal’s new Constitution guarantees social protection for the poor and vulnerable, social assistance is fragmented, with many eligible populations not receiving entitled benefits (ILO, n.d)²⁴ and limited in reach compared to other countries (World Vision, 2020). Currently within the Social Security Allowance (SSA) Scheme there are five cash transfer programs to different groups²⁵, administered at the centre by MoFAGA except for the Department of Civil Registration, which has now been moved under the MoHA as Department of National ID and Registration (ODI, 2019). Although there have been attempts to

²¹ Chapter 3.1 (page 5-6), and annex 3 Suggested Table of Contents of the DPRP (Document in Nepali) <http://drrportal.gov.np/uploads/document/1608.pdf>

²² <https://mofaga.gov.np/news-notice/2408> (In Nepali)

²³ Following the 2015 earthquake and its aftershocks, pledges totaling \$4.4 billion were made at the International Conference on Nepal’s Reconstruction in June 2015 . Of the total amount, donors pledged \$2.2 billion in grants and \$2.2 billion in loans.

²⁴ <https://www.social-protection.org/gimi/ShowCountryProfile.action;jsessionid=959TaVrcJaBFZvWbGH-HUMri82mYzpfNuCQwv1-aT8yna1MazhX8!337808379?iso=NP>

²⁵ These are children of Dalit under five years of age (or child grant) 2. widows and single women over 60 years of age (or single women’s allowance) 3. people with disabilities (or disability allowance) 4. senior citizens over 70 years of age (over 60 years of age in the case of Dalit) (or senior citizens’ allowance) 5. highly marginalised indigenous ethnic groups (janajatis) (or endangered ethnicities allowance) ODI, 2019.

create a social registry since 2012, this appears to be donor-led with little government ownership. In 2016, the World Bank approved a US\$150 million credit to help develop a population register (World Bank, 2016)²⁶. By 2019, out of 1.22 million households that registered, only 38,000 were given cards that would have identified them as poor (Kidd *et al*, 2021). The GoN had planned to introduce biometric national identity cards, with support from the Asian Development Bank, to identify poor households in 25 districts, so that social protection and assistance programs could be better targeted (ADB, 2019). However, following security and privacy concerns, it is unclear what the status is. Separately, an interviewee mentioned that since approximately 20 percent of the population doesn't have citizenship, the social registry would not include all vulnerable households. Research also indicates that women are 75 percent less likely to own a citizenship certificate compared to men (Saferworld, 2016)²⁷.

The devastating floods of 2017, which affected 1.7 million people, were a catalyst for discussions about the future of shock-responsive social protection (SRSP) approaches in the country. This followed the successful delivery of emergency response by the GoN and UNICEF to beneficiaries of the SSA schemes affected by the 2015 Ghorka earthquake. A 2019 ODI-led study looked at the potential of Nepal's SSA schemes to support emergency flood response. It found that coverage of the flood-affected population using the *existing* SSA beneficiary list would be relatively low. An analysis of the 2016 Nepal Household Risk and Vulnerability Survey (NHRVS) data shows that only 25 percent of the flood-affected population are currently in receipt of an SSA (ODI, 2019). Another case study investigating the floods in the Bardiya district found that only 7 percent of SSA flood-exposed individuals are likely to be SSA beneficiaries. The study also highlights the need to go beyond cash-based action and argues that by combining cash interventions with non-cash action meeting the needs for anticipatory relief can be more effective. The research concludes that *"by combining social protection and FbF in the context of floods would contribute to social protection that is both sensitive to shocks and aids climate resilience overall"* (Dasroches, S., 2020)²⁸.

Analysis

The transition of the country to a federal state and the 2017 DRRM Act, on one hand provides unique opportunities to shape policy, yet on the other hand pose challenges to the DRR/M and AA agendas. One of the biggest challenges, as highlighted by both key informants and the literature review, is that the roles and responsibilities of local governments, relating to interventions such as AA and social protection, are in flux during this transition period. Despite provisions to decentralise and empower local government, there are conflicting provisions that have created vague and overlapping roles and responsibilities. This makes coordination among government actors at the three levels a challenge (ODI, 2019 ; WFP, n.d.). In addition, having an AA action plan in place doesn't automatically mean that it will be used effectively by the authorities and communities. Given that the government is in a transitional phase, there needs to be continued advocacy and exercises to sensitise new government actors (WFP, 2019). Therefore, the operationalisation of any DRR/M/AA related policy formulation and institutional set up needs more 'competence' among the three levels of government (UNDRR, 2019; OPM 2020).

WFP was relatively successful in getting SOPs accepted by municipal governments, but UN agencies appear to have had less success in advocating for AA modalities at the federal level, especially with the NDRRMA/MoHA. The NDRRMA references Forecast-Based Preparedness and Response Plans in the national DRR policy, which gives a basis for early warning systems and preparedness, but still leaves AA less clear (WFP KII). One key informant mentioned that there is confusion about what constitutes early

²⁶ Strengthening Systems for Social Protection <https://projects.worldbank.org/en/projects-operations/project-detail/P154548?lang=en&tab=overview>

²⁷ <https://www.saferworld.org.uk/resources/news-and-analysis/post/678-women-citizenship-and-vulnerability-in-nepal>

²⁸ <https://reliefweb.int/report/nepal/fostering-anticipatory-action-floods-through-social-protection-nepal>

action, or the difference between preparedness and AA, compounded by the terminology used by different agencies, which in turn can lead to debates as to what constitutes FbF/FbA (RCO KII).

Another issue is the reliability and downscaling of the forecasts to community level. Very few organisations are engaged with DHM in improving the accuracy of early warnings as it is the key factor towards implementation of this approach at scale and in a sustainable manner (WFP Communication). Another informant mentioned that there can be a lack of understanding at all levels about the difference between preparedness and AA

A recent study indicates that although communities and local authorities appear to have welcomed the opportunity to have greater decision-making afforded by decentralisation, many feel overwhelmed by complex portfolios, including how to ensure a functioning governance system (IFRC, 2020; Mercy Corps, 2019). INGOs such as the NRCS have reported a lack of funding to implement FbA that were included in plans. It is unclear how DRRM and LGOA may limit local authority spending towards AA. According to a recent report the GoN has an early action financial mechanism built into its existing DRR policy allowing for five percent allocation pre-event. However, there are no clear guidelines on how to spend this pre-positioned funding (ECO, 2020). According to another report, the current legal provisions provide mandates to spend on response and relief only after a disaster has occurred. Therefore, AA actions – such as advance stockpiling of materials or cash transfer – is not in the provisions (WFP, n.d). Another report corroborates this and cites, *“none of the federal, provincial and local governments have funded the forecast-based actions citing that there is lack of clear regulatory mechanism to fund FbF and existing legal provisions only allow spending the fund for post-event response and recovery”* (Bhandari *et al.* 2021: p.9). A recent op-ed by the head of the NDRRMA²⁹ highlights a ten-year campaign called *“Suraksit Nepal”* (a disaster resilient Nepal) and a prominent DRM budget line in this year’s budget (Nepali Times, 2021). The disaster risk financing strategy could potentially include funds for AA (OPM KII). Another challenge reported was a lack of institutional capacity to implement the SOPs once a forecast/warning has been received (Bhandari, D. *et al.*, 2021).

In terms of shock-responsive social protection, interviews seem to indicate limited government appetite for it at this stage. The blanket, universal approach currently adopted by the government is not sustainable given limited government funds, and such an approach does not give priority to the most socio-economically vulnerable, who also tend to be the ones that are hit the hardest. The existing national social registry is still incomplete and therefore not a good source for beneficiary lists at present. A more efficient process could be to develop a risk-informed database for AA that incorporates flood risk with socio-economic vulnerability. This could then be absorbed within the social registry (WFP KII). A new pilot, that could provide interesting lessons learned, is looking to combine the anticipatory aspects of FbF with SRSP³⁰, covering riverine floods and cold waves in five municipalities lying in the Babai and Karnali river basins in two provinces, Lumbini and Sudhur Paschim (Nepal Red Cross Society, 2020).

Another, more scientific challenge relates to Nepal’s diverse topography, which makes forecasting in Nepal more complex than flatter countries of the region like Bangladesh, with a shorter timeline for intervention. The reliability of the forecasting is exacerbated by the changing climate system which is causing extreme weather events. Last year, although forecasts indicated that interventions should be triggered in one area, the flood occurred in the neighbouring area. Due to the extreme topography, strong winds pushed the clouds further than predicted, into the neighbouring area. Better accuracy of forecasts, hopefully enabled

²⁹ <https://www.nepalitimes.com/opinion/a-disaster-resilient-nepal-is-possible/> Accessed 21 August 2021

³⁰ Financed by the European Union Civil Protection and Humanitarian Aid Operations; Implemented by the Nepal Red Cross Society, Danish Red Cross and Humanity and Inclusion. Technical partners include Red Cross Red Crescent Climate Centre and UNICEF (June 2020-May 2022)

with new technological advancements, will help generate findings that can be confidently presented to the governments and donors (WFP KII). Coordination between and within municipalities is critical as disaster events such as floods, extend beyond administrative boundaries (Mercy Corps, 2019).

Within the CERF pilot, there are different approaches to distributing cash. UNICEF disbursed funds directly to municipal governments, filtering the social registry through a risk and vulnerability criteria, but with a residual risk of missing out a proportion of the most vulnerable. In parallel, UNICEF has approached NDRRMA directly with the aim of developing a SRSP guidance note with them. WFP has taken a two stage-targeting approach: 1) geographical targeting based on historical flood incidents and socio-economic impacts, municipalities were selected, and 2) households-at-risk were jointly identified with local *Palikas* based on exposure and socio-economic vulnerability. Beneficiary lists are endorsed by the *Palikas* as is the distribution plan and modality (in AA CERF remittance agents). UNWomen on the other hand will be providing *dalit* female headed households with an in-kind relief kit with a similar cost to the cash intervention. Therefore, one of the important learnings from the pilot will be to see what intervention people prefer. Despite WFP's experience and emphasis on the need to engage all three levels of government, the CERF pilots showed that engagement with the wider government system can be complex (WFP, RCO KIIs; OCHA, 2021).

In Nepal, emergency/humanitarian unconditional cash transfers are allowed to be transferred by UN agencies (not NGOs) in advance of an incident, however there are no national guidelines and operational procedures. At the local level, it is understood that cash transfers are an important part of emergency response and AA. But at the national level, Nepal lacks country-wide guidance³¹ and NDRRMA seems to prefer in-kind assistance in emergencies, limiting cash interventions on a case-by-case basis. The default approach seems to use existing social protection systems for non-emergency cash assistance. However, as mentioned earlier, given the specific criteria for SSA beneficiaries, and the time and social networks to get registered, many who are vulnerable to floods fall through the cracks. An attempt by the cash working group to provide national standardized guidance was signed off by MoFAGA but the endorsement by NDRRMA is still pending.

There should be a strong basis for implementing FbA in Nepal, but hesitancy at the local level remains. Both authorities and stakeholders have indicated concern about how to justify expenditures if the forecasts don't materialise and a fear of being held accountable or accused of corruption (personal communication). Therefore, authorities should be sensitised to no- or low-regret early actions in the context of climate change and a growing uncertainty of extreme events (Bhandari, D. *et al.* 2019).

The level of the federal government's appetite for AA is unclear from informants and the literature review along with the role further evidence from pilots such as the CERF AA framework can play. Evidence-based policy advocacy drawing on the lessons from other countries and demonstration of successful examples in the country could help to shift the focus and help incorporate innovative approaches such as FbF (Bhandari *et al.*, 2019). One informant stated that it is hard to gauge whether the government is interested in the evidence - however gathering solid evidence is the only way, since without it there is nothing to build on. Opportunities for dialogue with the government on AA do appear to exist. The first National Dialogue Platform for Forecast-based Financing and Anticipatory Humanitarian Action in Kathmandu³², organised by MoHA, NRCS and WFP, was held in November 2019. In September 2021, the Head of the NDRRMA spoke at the High-level Humanitarian Event on Anticipatory Action and highlighted risk-based planning and committed to scale up AA closely with UN, Red Cross and civil societies (WFP KII). One informant stressed

³¹ A guidance note has been in the works for a while

³² <https://www.climatecentre.org/661/first-national-dialogue-on-forecast-based-financing-in-nepal/>

that partnership is key to successful AA implementation. In terms of coordination, an institutionalised community of practice of all implementing partners and government counterparts on AA doesn't appear to exist like in the Philippines. Collaboration on a framework for a joint approach to AA could be a good way to move forward. Advocacy as 'one UN' led by the Resident Coordinator's Office (RCO) could be the most constructive way to engage (WFP KII). Other opportunities to clarify existing confusion around issues such as the use of local DRR funds for AA, preparedness and response. Procedural laws could be enacted to enable the transfer of funds for the advanced stockpiling relevant materials (WFP, n.d.).

From a political economy perspective, one of the biggest challenges in Nepal is the need for a fundamental shift in how emergency flood response is perceived. Disaster response, and development planning in general, is heavily politicised and local authorities project their agendas onto the response (WFP II). The priority is often set on investments with short term visible results. Municipal budgets prioritise funds for road, irrigation, electricity, water, and education (Mercy Corps, 2019; OPM, 2020). Also, although pilots can provide evidence, experience and confidence to upscale innovations, a project mindset is a challenge and can inhibit longer term thinking (personal communication). Informants also mentioned that competition between government ministries can lead to continued confusion about roles and responsibilities. Lastly, AA needs to be framed in the context of DRR issues in Nepal. Ignoring disaster risk both in land use and physical infrastructure development hinder effective preparedness in response and can introduce new disaster risk. Poorly designed roads, for instance, can distort the natural drainage pattern, which can then cause landslides and deposit debris in rivers. This has led to riverbeds in the *terai* to rise even during normal rainfall (Bhandari, D. *et al*, 2021).

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