Scaling social protection in Nepal:

From hypotheses to reality

Exploratory brief

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This exploratory brief has been developed as part of the ongoing support that the Red Cross Red Crescent Climate Centre is providing to the UK Met Office for the Asia Regional Resilience to a Changing Climate (ARRCC) programme. The brief hypothesises how the social protection (SP) schemes in Nepal could have scaled up during the 2017 floods had the system been adaptive, flexible and scalable by nature. The objective of the brief is to provide the Nepalese government, humanitarian and development agencies, and other relevant stakeholders in the country with practical options to strengthen the SP system to be more adaptive in the context of shocks.

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Nepal forecast-based financing dialogue platform and drills, November 2019

1. Background

Nepal is one of the most hazard-prone countries in the world (Dangal, 2011). It is at risk from a multitude of natural hazards such as avalanches, droughts, earthquakes, floods, landslides and windstorms (Dangal 2011). However, floods can lead to some of the most severe impacts such as the displacement of people and the destruction of public and private infrastructure, which can lead to limited mobility, loss of services, limited availability of food, and increased food and transport costs (Dangal, 2011). Fortunately, it is becoming increasingly possible to predict floods and accurately estimate their location, intensity, duration and potential impact.

Nepal as the case study of choice

Among the four ARRCC project countries of Afghanistan, Bangladesh, Nepal and Pakistan, Nepal has been chosen for this exploratory brief, due to the vigorous data available on the country's SP system as well as the impacts of the 2017 flood. Additionally, in an ongoing project funded by the European Commission Humanitarian Aid Office (ECHO) on forecast-based action and shock responsive SP in Nepal, a series of activities – such as vulnerability and risk mapping studies; workshops on SP and Forecast-based Financing (FbF); and developing triggers, standard operating procedures and early actions lists etc. – have been conducted in 2021. These activities eventually led to the formation of the *Forecast-based Action and Shock Responsive Social Protection Community of Practice* in Nepal. Nepal was, therefore, chosen as a case study to add to the knowledge about the current situation in the country, while leveraging the ongoing momentum to advocate for national SP systems to become shock responsive.

In August 2017, Nepal experienced heavy and continuous rainfall that led to extensive flooding in 35 of the country's 77 districts, with 18 severely affected (NPC, 2017). The flood was active from 11–14 August and affected 14,060 families, resulting in 161 deaths, 17 injuries and 22 missing persons (Bhandari *et al,*. 2018; MoHA, 2019). In addition to the human impacts, the housing, agriculture and livestock sectors all sustained damages of 187.9 million US dollars, 69.5 million US dollars and 102.7 million US dollars, respectively (NPC, 2017). This specific flood incident was the result of a monsoon trough[2] that released heavy rain across the country's eastern and western districts leading to large-scale loss of life, displacement, damaged infrastructure and destroyed livelihoods (NPC, 2017). Many district informants anecdotally concluded that this event was the heaviest rainfall experienced in over 60 years (NPC, 2017).

2 A monsoon trough is an extended area of low pressure that, in Nepal, runs parallel to the base of the Himalayas (NPC, 2017). It is characterized by the presence of low pressure and moisture accrued from the Bay of Bengal, which results in extensive rainfall from the east to the western borders of the country (NPC, 2017).

The response measures implemented for this flood did not use the core SP programmes available in Nepal and the application of SP support programmes – such as healthcare, education and agricultural support – was limited in impact (Holmes *et al.,* 2019). However, there is increasing evidence of the impactful role of SP for climate risk management (CRM) and to support loss and damage remedial action at the national level (Aleksandrova *et al.,* 2021).

This brief will explore the existing SP system in Nepal and hypothesise how it could have been scaled up to address the impacts of the 2017 flood. The exercise is designed to be illustrative of the opportunities to use these systems to manage climate risk and does not intend to comment on or review the actual 2017 flood responses undertaken. In doing so, entry points to making the SP system more climate adaptive in Nepal will be identified and its potential use in future floods will be examined.

2. Social Protection programmes in Nepal

Nepal has two key SP programmes: the Social Security Allowance (SSA) and the Prime Minister's Employment Program (PMEP). While neither was used in response to the 2017 floods, additional support programmes in healthcare, education and agriculture were activated for mitigating some of the flood impacts (Holmes *et al.,* 2019).

- Nepal's SSA – the country's flagship SP programme – was launched in 1994, initially as a benefit for old-age pensioners. It has since been expanded to include children, senior citizens, people with disabilities, ethnic communities and single women. This cash transfer, which is distributed approximately every four months, reaches almost three million people (Holmes *et al.,* 2019).

- The PMEP is a public works programme that was introduced in 2019 to provide short-term paid employment for unemployed people between the ages of 18 and 51 (Nygaard & Dreyer, 2021). The employment programme focuses primarily on the improvement or preservation of infrastructure and other assets through projects such as tree planting, the installation of public toilets, road construction and irrigation projects (Nygaard & Dreyer, 2021).

- Healthcare support includes access to antenatal care services for expectant mothers as well as free vaccinations for infants and financed treatment for: children under the age of 14, adults with acute non-communicable diseases and seniors undergoing the replacement of cardiac valves. During the 2017 flood, the government attempted to organize reproductive health camps in the affected districts to provide access to safe deliveries and pre- and post-natal care. However, there was a lack of available gynecologists and ultrasound sonographers in these camps (UNORC, 2017).

- Education support is a combination of free tuition up to class 10 in community schools as well as scholarship programmes and provisions for midday meals, school uniforms, books and stationery in community schools. During the 2017 flood, the Ministry of Education, Science and Technology faced difficulties in accurately recording the number of affected students per class-level in flood-affected areas, due to the vast variations in data collection and reporting across districts (UNORC, 2017).

- Agricultural support occurs in the form of fertilizers, seeds, tools and equipment. To encourage the smooth supply of essential foodstuffs – across the country, but mainly in remote areas – the subsidization of food transportation as well as iodized salt are provided by government-funded corporations (ILO, 2019). Prior to the 2017 floods, the Ministry of Agriculture and Livestock Development (MoALD) had prepared a 1.25 billion Nepalese rupees early recovery scheme, yet implementing the scheme proved to be difficult as the MoALD reported a lack of available funding for the early recovery initiatives (ILO, 2019).

3. The need for a shock responsive social protection system in Nepal

Recognition of the role of SP in managing covariate shocks, such as climate disasters, has been growing in recent years, with many countries implementing "shock responsive" or "adaptive" SP approaches (Holmes *et al.,* 2019). These frameworks move away from the traditional focus of using SP for idiosyncratic shocks (Holmes *et al.,* 2019). The term 'shock responsive social protection' in this brief acknowledges that SP could play an important role in alleviating the impacts of increasing hazards, shocks and stresses (Transform, 2020).

Furthermore, a flexible SP system that is nationally led, strongly aligns with the localization agenda and recognizes the role of the government and local organizations in responding to risks, rather than solely depending on humanitarian actors.

During the 2017 flood in Nepal, the government did not activate its flagship SP programme – the SSA. Instead, other SP support programmes were activated, but the post-response evaluations documented delays and inadequacies (Holmes *et al.,* 2019). Evidence suggests that there are opportunities to harness and scale-up existing SP programmes in the country (Holmes *et al.,* 2019). In Nepal, this would further strengthen the link between SP and disaster risk management.

4. The 2017 Nepal floods: What could shock responsive social protection have looked like?

This exploratory study was conducted in three stages to identify and recommend feasible shock responsive social protection options that could have been part of the response mix during the 2017 floods.

1. An extensive literature review was conducted to identify the scale and extent of damages caused by the 2017 flood in Nepal. This desktop review included a variety of post-flood assessment reports, academic papers and grey literature from national and international newspapers.

2. A brainstorming workshop was organized with SP practitioners to find suitable options on how the identified impacts could have been minimized by scaling Nepal's existing SP programmes.

3. Lastly, key informant interviews and consultations were completed with field workers from several organizations such as the Danish Red Cross, Nepal Red Cross Society and the Red Cross Red Crescent Climate Centre to assess the relevance and practicality of the proposed options.

Based on the findings from this three-staged approach, the next section outlines four hypothetical situations in which the different SP schemes in Nepal could have been scaled up during the 2017 floods. Each situation also lists the key steps that would have made such a scale-up possible.

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Hypothesis 1:

If the current lead time was improved with better access to Early Warning Systems and regular forecast updates in local languages, using all mechanisms – including SSA communication channels – where available, this could have prompted evacuations and minimized losses.

- Early Warning Systems could have been developed with strategically placed and timed communication messages, especially for hard-to-reach rural/tribal areas.
- Stronger linkages could have been fostered between Nepal's Department of Hydrology and Meteorology, the National Disaster Risk Reduction and Management Authority and SP actors, with regular meetings throughout the pre-monsoon season.
- As an information service, this could have allowed households to better prepare for the flood, including the planning of essential purchases, evacuations, etc. to reduce the probability of harm.

Hypothesis 2:

If the PMEP had been implemented prior to the 2017 flood and flood exposure maps were available during this time, then workers from highly exposed flood zones could have been targeted to receive employment under the PMEP.

- PMEP workers whose households are repeatedly affected by floods could have been pre-identified using flood exposure maps and given employment on public work activities for the fiscal year prior to the flood event.
- PMEP activities are determined before the start of each fiscal year; however, flood-vulnerable municipalities could be given the flexibility to adapt their activities to include those that promote flood resilience. Building flood resilient infrastructure in advance, like harvesting ponds and infiltration channels, along with other anticipatory activities could be included as part of the suite of actions permissible under the PMEP.
- Activities such as the early harvesting of crops, transporting rice grains from the field to storage centres, moving productive assets and cattle, could all have been carried out to minimize losses during the flood.
- The anticipatory use of the PMEP could have contributed to income security, produced climate change resilient infrastructure projects, and encouraged environmental regeneration.

Hypothesis 3:

If the school midday meal programme received an early warning three days in advance, then it might be possible to arrange take-home meals for a week instead of just the midday meals.

- Rather than forgo their midday meals, schoolchildren could have taken them home to share with other members of their households.
- In addition to ensuring the timeliness of the meals, the nutritional quality and size of the meals would need to be adapted (Borkowski *et al.,* 2021).
- This anticipatory relief response could have helped counter immediate threats to food security and nutrition.

Hypothesis 4:

If the overlap data between flood vulnerability and SSA beneficiaries had been used for vertical scale-up[3] of the SSA, then anticipatory cash top-ups for SSA beneficiaries in flood-affected areas would have been possible.

- SSA beneficiary lists could have been used to carry out vertical top-ups – providing a one-time transfer of cash. In addition to using beneficiary lists, SSA transfer mechanisms – such as using the same bank accounts – could also be used to enhance the link between SP and disaster risk management and provide more efficient and targeted support.
- As higher overlaps would mean higher coverage in targeting, this could have helped garner greater political acceptance of the use of cash transfers for anticipatory efforts to minimize the impacts of the flood. It could also have led to the acknowledgement that additional cash can increase beneficiary households' capacity to prepare for the flood and mitigate negative coping mechanisms such as reducing meals, selling productive assets, etc.
- In addition to support from humanitarian actors and donors, the municipal level disaster management funds could be used for funding the top-ups.
- Through strong links with FbF, cash transfers could have been triggered pre-emptively to strengthen houses, fund evacuations and buy readymade food to eat during evacuations, or while stranded on rooftops.

3 Vertical top-ups refer to giving top-ups to programme beneficiaries (O'Brien *et al.,* 2018)

- Field workers could have conducted repeat assessments at evacuation centres to ensure the viability of data and identify eligible households who may have been excluded.

These hypotheses reflect the ways in which Nepal's SP programmes could have been adapted to respond to the 2017 flood to minimize negative impacts. Based on these hypotheses, a case study on Bardiya – one of the worst-affected districts of Nepal in the 2017 flood – is presented here to show exactly how the four hypothetical situations could have potentially unfolded and helped to manage some of the challenges that were faced. In reality, different scale-up options could be used based on political will, institutional capacity and the availability of funds.

5. Case study: District of Bardiya, Nepal

The district of Bardiya was chosen for this case study as it is susceptible to a variety of climate-related shocks and is recognized as one of Nepal's most flood-prone regions (Desroches, 2020). In addition, there is robust and accessible flood data for this district.

The Early Warning System (EWS) in Bardiya is relatively well-developed, due to the frequency of floods in the area (Holmes *et al.,* 2019). Currently the EWS has a lead time of four hours. However, an analysis of available forecasts in Nepal indicates that the lead time for riverine floods is up to three days (Bailey *et al.,* 2019), which indicates that there could be a possibility of extending the lead time. A trigger is activated through a water-level measurement station by the Department of Hydrology and Meteorology and this information is given to a talu messenger who relays the warning to different communities (Holmes *et al.,* 2019). During the 2017 flood, the water-level measurement station was washed away, leading to minor delays in communication (Holmes *et al.,* 2019). Although it was later rebuilt through donor funding, **if Hypothesis 1 on improved EWS had been applied**, it could have led to the consistent provision of high-quality forecast data and real-time information on the flood event. In addition, this hypothesis would ensure more timely trigger updates using multiple communication platforms – including the municipal SMS broadcast – to minimize losses rather than relying heavily on one measurement station and a single messenger.

The flood also caused significant impacts on other infrastructure, such as croplands and schools, in Bardiya (Holmes *et al.,* 2019; NPC, 2017). **If Hypothesis 2 on targeted employment activities under the PMEP had been applied**, municipalities could have shifted their PMEP activities to actions that boosted flood resilience – such as the early harvesting of crops. While if the lead time had been extended, the PMEP could have focused on preparing evacuation centres and shelters (subject to an extended lead time of five to seven days). Furthermore, **if Hypothesis 3 on adapting the school midday meal had been applied** and the EWS lead time could be extended to three days, then schoolchildren could have taken home a week's worth of meals at least three days prior to the flood event. This would have helped to ensure that the immediate dietary needs of the child and family were met, until cash transfers or other forms of support reached the affected households.

The Government of Nepal distributed three separate sets of cash transfers in response to the 2017 flood, which included cash transfers by the District Disaster Management Committee of 2,100 Nepalese rupees per person (15 euro) in the flood-affected areas to provide up to two months' worth of food (Holmes *et al.,* 2019). This cash transfer was distributed by municipal police stations with oversight from a committee of elected officials and members of civil society organizations (Holmes *et al.,* 2019). Shortly afterwards, another cash transfer was distributed by the Ministry of Home Affairs (MoHA) of 10,000–25,000 Nepalese rupees (74–184 euro) for food and 15,000 Nepalese rupees (110 euro) for clothes to households whose homes were assessed as damaged by the flood (Holmes *et al.,* 2019). A few months after the peak of the flood, cash assistance of NPR 100,000 (743 euros) was provided to support the reconstruction of fully destroyed homes (Holmes *et al.,* 2019). However, these three distinct cash transfers did not make use of the SSA beneficiary list or transfer mechanism (Holmes *et al.,* 2019).

These cash transfers faced criticism from the residents in Bardiya due to delays in receiving the cash; discrepancies between names on citizenship cards and in municipal beneficiary lists; and the exclusion of vulnerable groups such as women and households with young children or the elderly, who faced difficulties in receiving the larger cash grants (Holmes *et al.,* 2019). As the SSA already covers some of the vulnerable groups that were missed by the above-mentioned cash transfers; **if Hypothesis 4 on the vertical scaling of the SSA had been applied**, and if the EWS could be extended to three days, those groups could have been more easily included in receiving support. Triggers could have been activated up to three days in advance, based on flood and rainfall forecasts, and this would have released the pre-emptive cash into their existing SSA bank accounts to manage the flood's impacts.

Current evidence indicates that the overlap of SSA beneficiaries with the flood-affected population of Bardiya is 21 per cent. However, Nepal is soon expected to expand its coverage of the Child Grant universally to include all households with children under 5 years of age. Targeting this category, combined with a vertical expansion of SSA transfers to individuals aged 60 and above, is expected to lead to matching coverage of up to 60 per cent (Holmes *et al.,* 2019). In the scenario of the 2017 floods, this targeting approach for a vertical expansion of the SSA could have potentially covered 60 per cent of the flood-affected population in Bardiya (with the caveat that adequate funding was available). With regards to the timing of the transfer, once the top-up value has been decided through consultations with national stakeholders and the Regional Cash Working Group in Nepal, the target beneficiaries could have received a one-time cash transfer within 24–48 hours of trigger activation.

6. Conclusion

Attaining the hypothetical situation outlined above would require: investment in expanding SP coverage; parallel investment; strengthening forecast and early warning capacities; building coordinated and aligned systems; and rallying political will for using SP schemes as well as cash-based early action. Current evidence indicates that governments are trending towards a 'no regrets' approach, which acknowledges that cash transfers – regardless of whether the shocks manifest – produce positive impacts in building climate resilience (Siegel, 2011). In October 2021, a Forecast-based Financing trigger was activated in Nepal and the Nepal Red Cross Society administered a one-time vertical top-up for people with disabilities, from the SSA beneficiary lists, who were verified as having lost their home, partially or fully, due to the floods.
A transfer amount of 13,500 Nepalese rupees was decided by the Regional Cash Working Group and was expected to cover the expenses of an average household over the course of one month. It is significant that the authorities allowed the transfer amount to be distributed through the existing bank accounts of SSA beneficiaries for the very first time. This represents a growing shift in the acceptance of cash transfers that are distributed quickly ahead of an incoming hazard. Based on the findings of this study, it can be suggested that now is a conducive time to promote the relevance of flexible and scalable SP schemes. The use of vertical top-ups for flood response is becoming a popular instrument of response in Nepal, and future implementation of anticipatory cash transfers using SP is recommended. That is why the hypotheses in this brief conceptualize different recommendations for making the SP system in Nepal more adaptive, in the pursuit of reducing impacts of future floods.

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