

nce upon a time in Madeupsville, people came from far

and wide for a fireside convening... Why did they come, some from over tall mountains, and others across vast expanses of desert or water? We first need to rewind and give a bit of history about Madeupsville. Madeupsville is a special place. It's one where there is a deep culture of creative problem-solving, one where its inhabitants think collaboratively in fearless and unconventional ways to solve the biggest humanitarian issues of the day. Madeupsvillians are all guided by a humanitarian vision which aims at the prevention and alleviation of human suffering, and the maintenance and the promotion of human dignity and peace. How did this society come to be like this? You might find it curious

that it a result of the challenges that they have gone through. Madeupsville is also prone to a range of natural hazards which have historically had a significant impact on its communities.

Madeupsville is like many other places in the world, in that Madeupsville is prone to a range of natural hazards which have historically had a significant impact on its communities. But long ago, the Madeupsville took a dramatically different turn in what is called the Great Collaboration. It took place after a particularly severe drought year, several record fires that caused the most significant damage seen to date, and all that followed by an apocalyptic flood that engulfed three major communities. Seeing the damage of the Year of Devastation, several prominent scientists, humanitarians, and community members with different skills and perspectives got together to make a radical plan of change. Included in their plan were ambitious goals of making use of the very best scientific advancements to predict natural hazards, support communities in anticipation of their arrival, and do so with eyes toward future generations. The group called this approach "forecast-based financing and action".

Over the years, the idea grew and grew, bringing people together from different government branches, local and international organisations, universities, and more, and this diverse group grew and grew until everyone knew about forecast based financing and this is how a truly revolutionary culture change was ushered into Madeupsville

Truth and speaking candidly

Today, one of the most important - and perhaps most revolutionary - values of Madeupsville citizens is upholding a deep culture of the truth and sharing. This virtue is passed on down through generations and is the foundation upon which Madesupville became a community of trust. Trust between community members, between leaders and scientists, between different actors within the vast web of climate resilience. As forecast-based financing developed, a range of triumphs and lessons learned started to emerge. True to their beliefs, the Madeupsville forecast-based financing community wanted to share their stories, their triumphs, their mistakes, and their lessons learned to make sure that everyone else could learn and benefit from these teachings.

A call to a coffee chat

That brings us to the present day. In the Summer of 2021, the people of Madeupsville decided by way of virtual town hall that it was time to do a stock-take of all they had learned about forecast-based financing the hard work. Wanting to keep this informal and light, they decided to have a gigantic coffee chat where all could share, listen, and be heard. They invited everyone to come from far and wide for this outdoor story festival. They came with all talk about this over many coffee days. All would bring their favourite hot drinks and, sit down in their favourite chairs, and settled in to share with each other their "tales from Madeupsville". Through these chats, a magical space was created where all were safe to talk about their stories and their private thoughts, and share candidly all they had experienced. They used these moments to connect, reflect, and share. Someone from the group took notes to share around and they all hoped that, from this stock-take, everyone might learn from their experiences. These are the stories you will read now.



Chapter 1 Understanding the weather forecasts

he first brave person took the floor: "You know", he said, "Forecast-based action means that we need to actually understand the weather forecasts. That's tricky..."

Usable forecasts are the cornerstone of all forecast-based financing programmes - information they provide has to be accessible, significantly accurate, and provide enough time for action. Everyone involved also has to understand that they are inherently uncertain. Many different pieces of scientifically robust analysis are required to build the forecast-monitoring system required for anticipatory action. However, these can sometimes be quite tricky and sometimes the scientists get it wrong.

Misguided analyses

"This reminds me, piped in another person, "We once hired consultants to do an assessment of the meteorological model used for our FbF triggering mechanism. But we completely forgot to give them guidance about the goal of the work and they didn't ask us either. So they just evaluated the uncertainty of the model, forgetting to evaluate the different hydrometeorological forecasts that fed into this model."

The analysis then showed completely false conclusions about the nature of the hazard but nobody in the team caught the mistake because they were not experts. So they finalised the action plan including this analysis and submitted it. Luckily for everyone involved, however, early action protocols are always revised by experts in a validation committee who noticed the mistake and asked the scientists to revise their work, and the mistake was rapidly fixed.

"That's great when there's a right answer", said one man "but what do you do when you have different forecast systems telling you different things?" All nodded, this was a problem they had often faced.

Differences between local knowledge and official forecasts

In fact, in Madeupsville, the top levels of governance in each region use hazard maps and early warning systems that were developed by the hydromet department but, secretly, they trust the local knowledge and observations much more. When the local knowledge signals and observations do not match the official Madeupsville triggers or vice-versa, everyone gets confused and angry. This is a major gap in the forecast-based financing discussions, one that has yet to be fully addressed. Someone then mentioned an often told legend in Madeupsville that illustrates disconnects even more starkly.

Mismatches between official forecasts and real experience

International and local scientists who made a field trip to a rural area of the country where anticipatory action was being piloted. The local Red Cross society had already been active for decades and the local communities knew the humanitarian landscape well. The scientists badly timed their visit in the middle of the flood season - as they were touring around the local villages in their Red Cross cars, the water levels were rising and the scared villagers would ask them why they were not doing anything to help. "We're sorry, " said the scientists, but our forecasts say that these floods are not happening so we cannot do anything."



Chapter 2 Triggering Early Action

nother theme discussed a lot around the fire that night was that these

forecast-based action programmes often boil down to someone making a decision to trigger or not. The robust automatic trigger is meant to help with this decision but it is not perfect. Sometimes, changes in external circumstances complexify the development and deployment of forecast-based financing. Hazards are by nature fickle and unpredictable, despite the best science. Uncertainty has to be dealt with flexibility. And often, despite the strong focus on forecasts and robust pre-agreed methodologies, the decision to trigger a system always comes down to a "go or no go" moment.

Acting in vain and missed events

A story that the group really enjoyed telling happened just in the first pilot years of forecast-based financing. There was a forecast of a hurricane that fell just underneath the threshold laid out by the forecast-based financing plans. For a week, the forecasts kept changing, showing the hurricane track this way or that, at this intensity or more, or less, and nobody knew what to do. 72-hours before it made landfall, there was chaos in the situation room at the local Red Cross branch. Eventually, everyone turned to the focal person and told them to make the call: "Let's do it", he said, picking up the phone to call his volunteers. When asked afterwards what had prompted this decision, the focal person explained that he had just read about another hurricane that hit another country far away - people there had decided to do nothing because the forecast was not certain enough and many people had died as a result. He did not want to repeat that same mistake. But hurricanes are fickle and this one did not hit nearly as much as predicted.

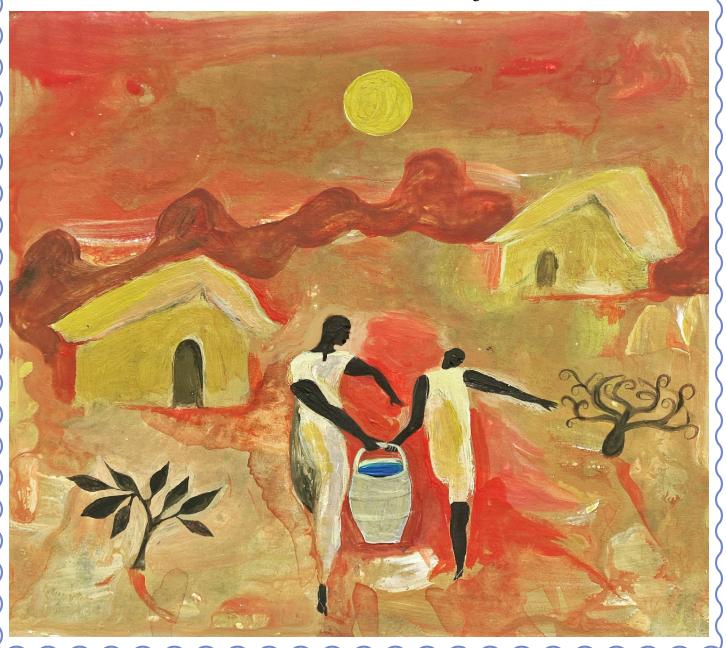
"You know..." someone interjected "this also happens for our slow-onset hazards as well. Let me tell you"

Same impact, different hazard

There was a forecast-based system for drought. So many different humanitarian agencies were involved so it was decided that, in order for them all to best collaborate, the forecast-

based action trigger was built in the simplest possible way, pegged to food insecurity projections. However, that very same year, we experienced a 1 in 70 year locust invasion, record flooding, and a 1 in a thousand year pandemic. The country was projected to experience heightened food insecurity, but this without any drought-conditions ever occurring. The experts needed to make a quick decision: would they trigger the system or not? In the end, they decided to do it, with the logic that the impacts that people were feeling were more important than following the protocol, and they distributed cash and food supplies. However, this did lead to a lot of confusion and not much was learned about the drought itself.

The group sitting around the fire had many opinions about whether or not the right thing was done in this situation, and the debate continued far into the night.



Chapter 3 Financing Early Warning and Early Action

et me tell you about a big frustration of mine" said one woman, as the conversation waned a little.

Once, an international organization set up an innovative, flashy, and high-level forecast-based action programme in Madeupsville. Everyone got really excited when they saw the system but the consultants had not considered developing basic capacity in the implementing body. When the international organization left, the flashy new system sat in a box gathering dust, unused. Nobody thought to follow up with the Madeupsville authorities and the project was forgotten. Similarly, another programme was designed in such a technically complicated and financially heavy way that the whole forecast-based action team burned out or decided to quit, discouraged. The momentum around anticipatory action then stalled significantly.

Unforecastable hazards

"Have you noticed that we still try to blueprint FbF plans?", asked a man at the front of the room.

This is something that happened quite often in Madeupsville. Neighbouring countries would see the amount of funding that Madeupsville received from the international community to fund anticipatory action and would decide that they wanted it too . However, they would not read the lessons learned documents and ask any questions before jumping into it, and it would sometimes turn out that the hazards that this country experienced could not be forecasted and there were not effective early actions that can be taken. A lot of money was often lost to realise this, leaving countries more vulnerable than ever.

Money and the capacity to use it in time

In one instance, there was a lot of money available to a local Red Cross branch, but there was so little time between the forecast of the extreme weather event and the event itself that the branch could not use the funds in time. Most of the money got converted to response. The donors were angry and threatened to withdraw their support.

Chapter 4 Governance

here are real governance dimensions to forecast-based action in Madeupsville.

Defining roles and collaborations

Scientific capacity on forecasts is mostly found in the national hydro-meteorological department as well as in the local universities. Other universities and experts from countries far and wide also work in Madeupsville and support the local Red Cross Red Crescent national societies in developing early action protocols. These collaborations generally work quite well, they bring additional resources and expertise to the question. However, sometimes, these international collaborations replace the role of the national hydromet departments and this leads to dissatisfaction and maligned programmes. It works best when attention is spent to work in close collaboration with the local experts at the local hydro-met department and universities.

Accountability

Another Madeupsville legend showed the importance and pitfalls of accountability for forecast-based decisions. The story tells that one day, a local forecaster was reading his weather forecasts and decided to deploy his disaster management teams to evacuate people before a flood that he believed was coming. The flood did not happen, and he went to jail for releasing funds and deploying teams without justification. Not too long afterwards, in a nearby village, there was a forecast of an extreme weather event but this forecaster, knowing what had happened to his colleague, thought that he would also get in trouble if he got it wrong. He smoothed the data out to make it seem like there was no forecast. The extreme event happened and he got in trouble anyway.

Hazards are political

Every four years, September brings the start of the political season in Madeupsville. It also coincides with the beginning of the lean season, when drought impacts can begin to be felt. However, one year, the local government, at risk of being overturned by a general election, refused to declare

a drought in the fear that the population would lose faith in their abilities and that this would lose them votes. The drought progressed and was only officially declared three months after the election had passed.

"Oh my goodness" sighed a young man sitting cross-legged on the floor in front of the fire, "a lot of things can go wrong with this amazing idea, can't they."

"Yes", responded an old woman, turning her head, "but then we learn, and we do better."

What can happen in Madeupsville - Reflections and Conclusions

These are but a few tales of Madeupsville - there are a million more to tell. In every story, there are many lessons, big and small. The forecast-based action community in Madeupsland enjoyed their fireside coffee chats so much that they decided to have them regularly. While at first they found it uncomfortable to tell each other about things that did not go quite as planned, the more stories they told, the easier they found it to tell them. They learned that they could laugh at themselves a little and they built stronger relationships through these moments - and perhaps most importantly, forecast-based action became so much better. While this story compiled things that went wrong, a parallel book should be written about things that went right. But that will be for another time.



A note about the method

There is a dual aim to this report. First, the process and report identify key learnings about effective forecast-based early action from and relevant to SHEAR projects - the integration of these lessons learned into the canon of literature was the overarching aim of this process. The second aim was to test out the format of virtual coffee chats as a medium for learning and sharing. Recognizing the difficulty of speaking comfortably about things that have gone wrong, each participant was invited to share their stories in a virtual bubble, under Chathman House rules of anonymity. The format of "Tales from Madeupsville" made this informality and anonymity possible: the concept was first presented in 2019 and described in detail here. The success of these virtual coffees also postulates about the importance and potential of building personal relationships virtually, and allowing conversations and ideas to grow from these spaces - this was identified as a direct need in the forecast-based financing community by most of the participants.

All in all, 15 conversational interviews took place during this study. Participants included both academics and practitioners related to the SHEAR programme. Notes from the interviews were then analytically coded and written into storybook format. The conceptual design and illustration of the final report were completed.

