READY PAKISTAN

Resilient Early Actions to Disasters Around the Year

PART OF START NETWORK

READY PAKISTAN

A GLOBAL HUMANITARIAN NETWORK

84
MEMBERS

10 HUBS

THEORY OF CHANGE

START NETWORK

PROBLEMS

CENTRALISED
Too much power is held by a handful of international institutions

REACTIVE
Humanitarian action is often reactive and slow to reach people in need

UNABLE TO CHANGE
Too many rules make it hard for aid agencies to be flexible

SOLUTIONS

LOCALISATION
We enable local decision-making and more direct access to funding

NEW FINANCING
Our funds enable fast & early action to tackle many crises that often go overlooked

COLLECTIVE INNOVATION
We enable innovation and the sharing of learning and expertise

OUTCOMES

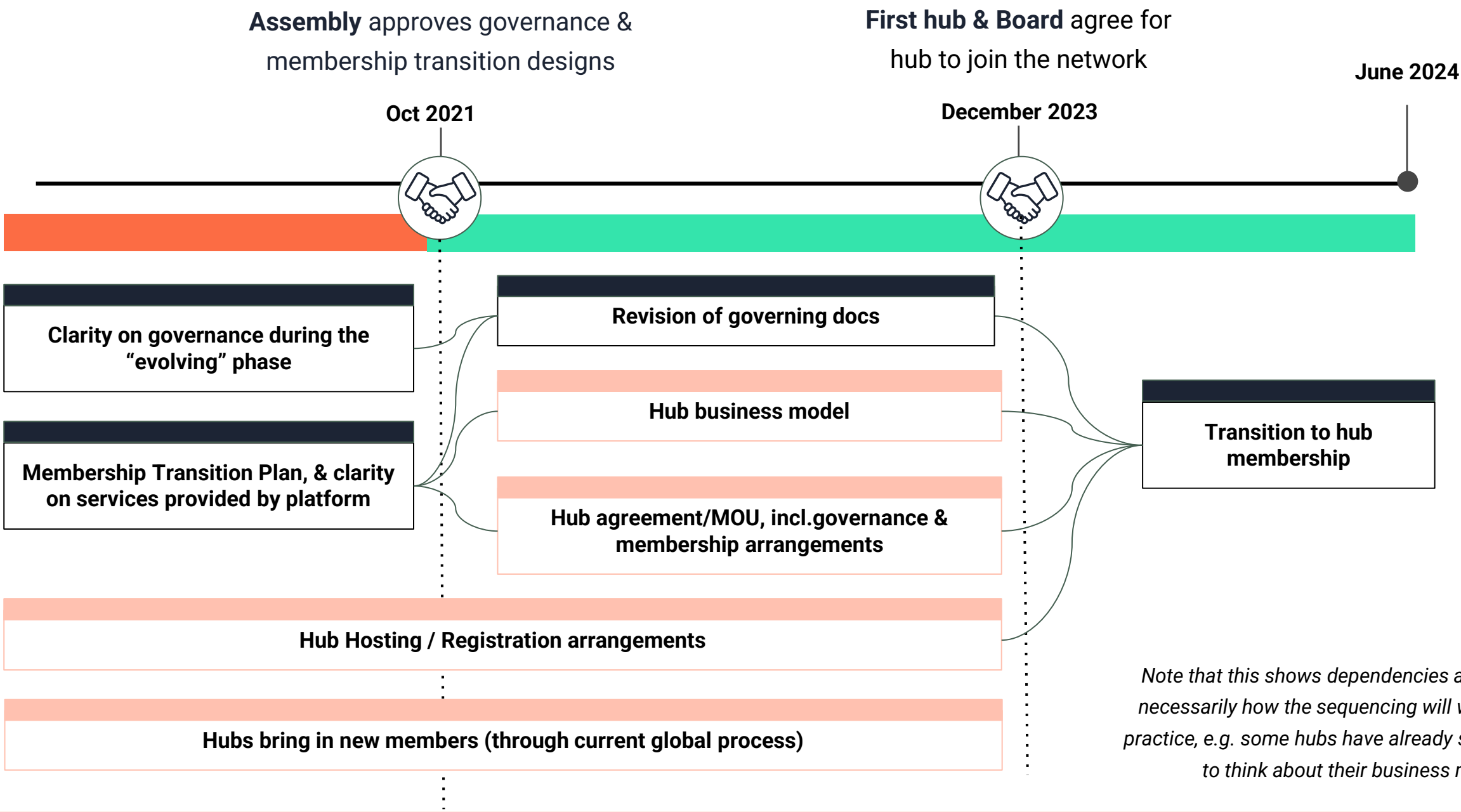
Shifting power closer to the crises means more appropriate responses

Communities have the means to become better prepared and more resilient

New ideas allow the system to adapt to the needs of those affected by crises

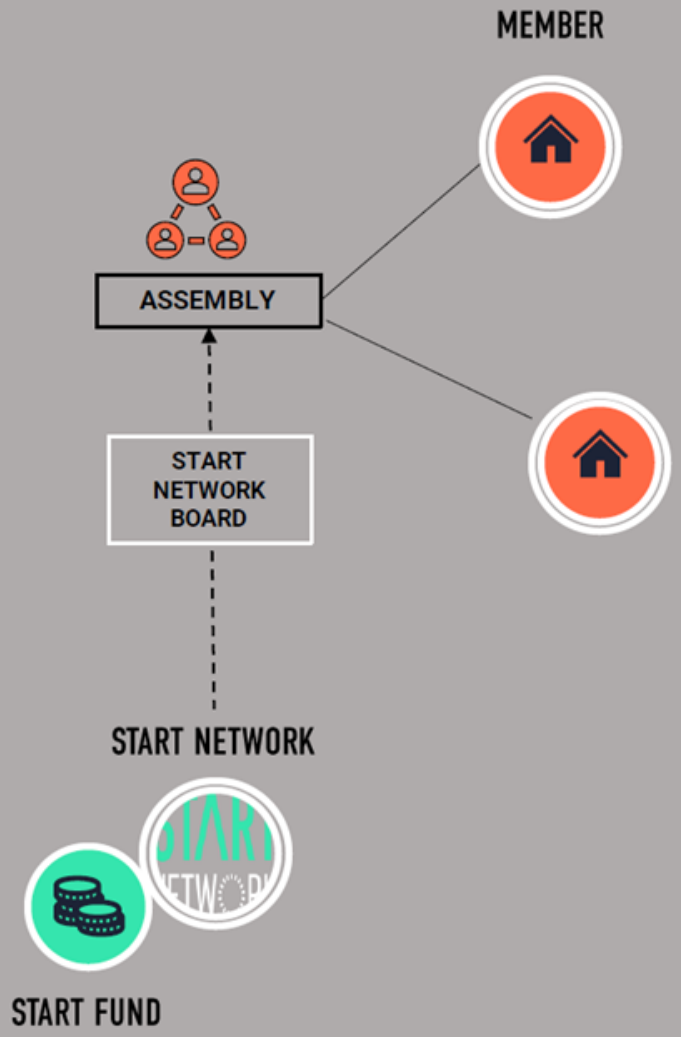
THE ULTIMATE IMPACT OF OUR WORK MEANS THAT MORE LIVES CAN BE SAVED IN TIMES OF CRISIS

Hub Transition: Next Steps + Dependencies

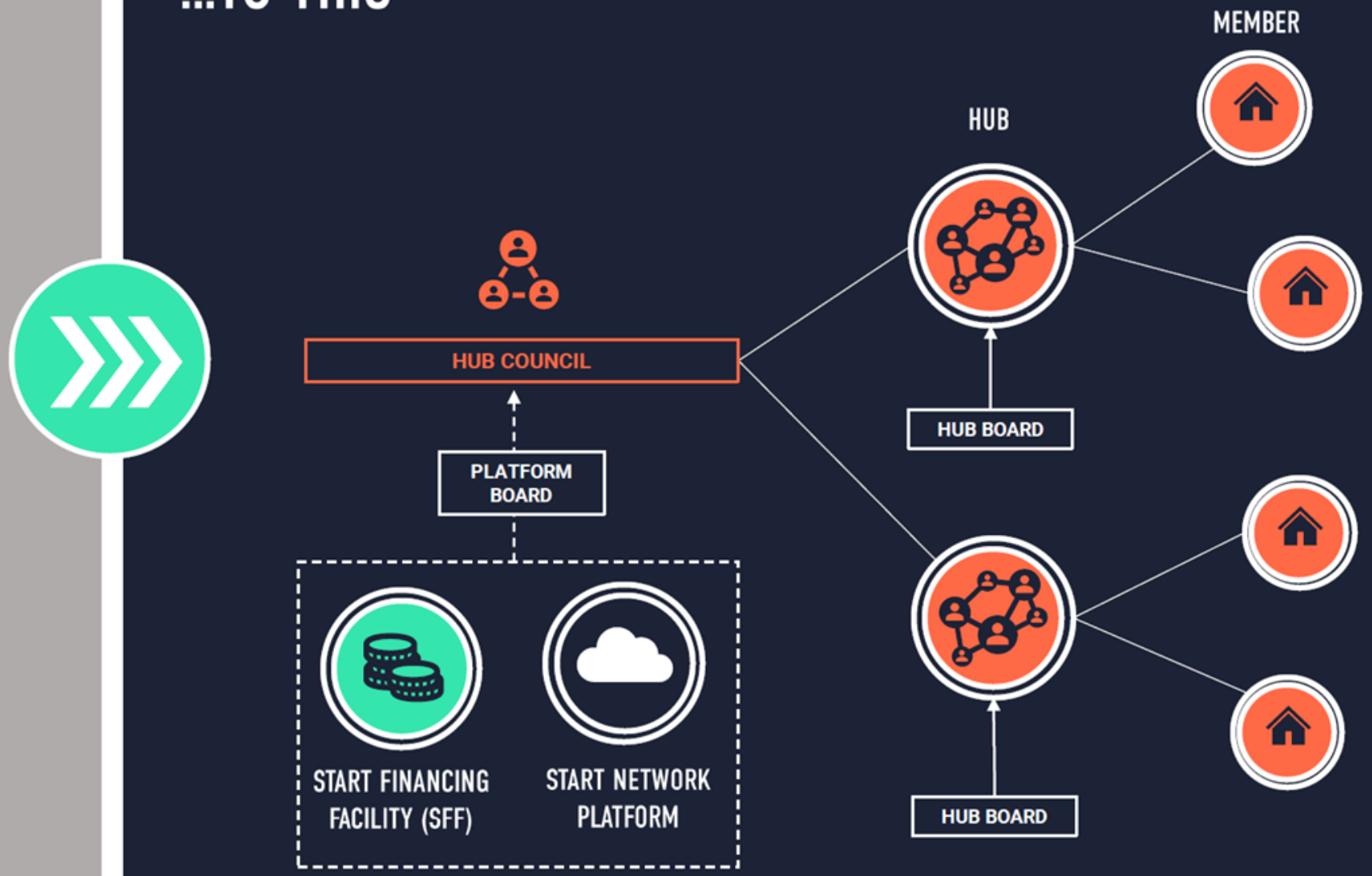


Note that this shows dependencies and not necessarily how the sequencing will work in practice, e.g. some hubs have already started to think about their business models

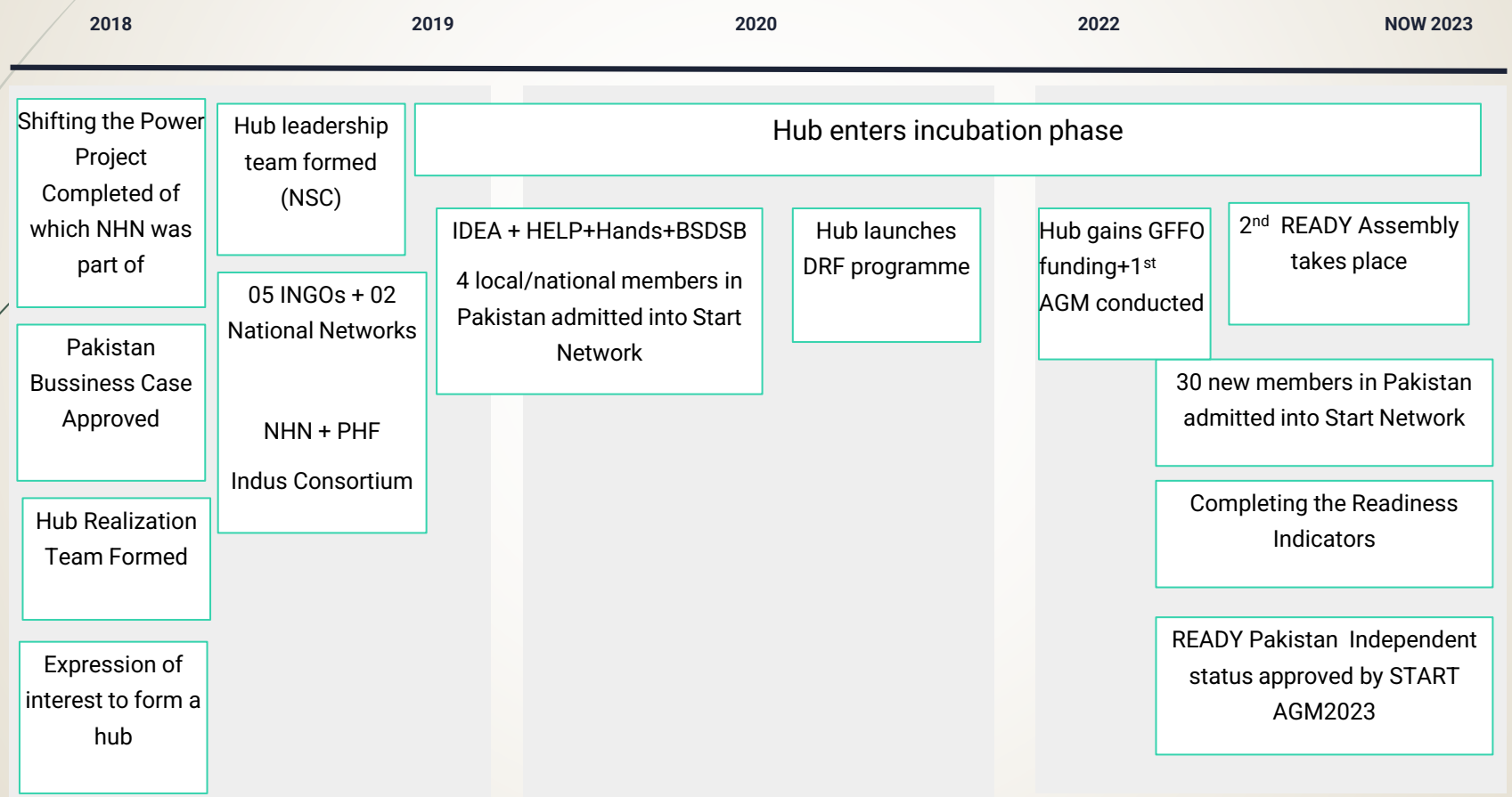
TRANSITIONING FROM THIS...



...TO THIS



READY Pakistan | History



READY Pakistan HUB Secretariat Staff – Islamabad, Pakistan

READY PAKISTAN

Vision: *A proactive, resilient, people- centred, locally-led and innovative humanitarian ecosystem in Pakistan*

Mission: *Shift the humanitarian system in Pakistan through demonstrating the impact of anticipatory and innovative action to strengthened preparedness and predictable response to crises.*

Membership Categories

The membership is based on the criteria of diversity, parity, geographic coverage and the size of the organization.

Membership is processed through a Tier Due Diligence and categories as:-

Tier-1 = Basic Membership to build the capacity to next Tier

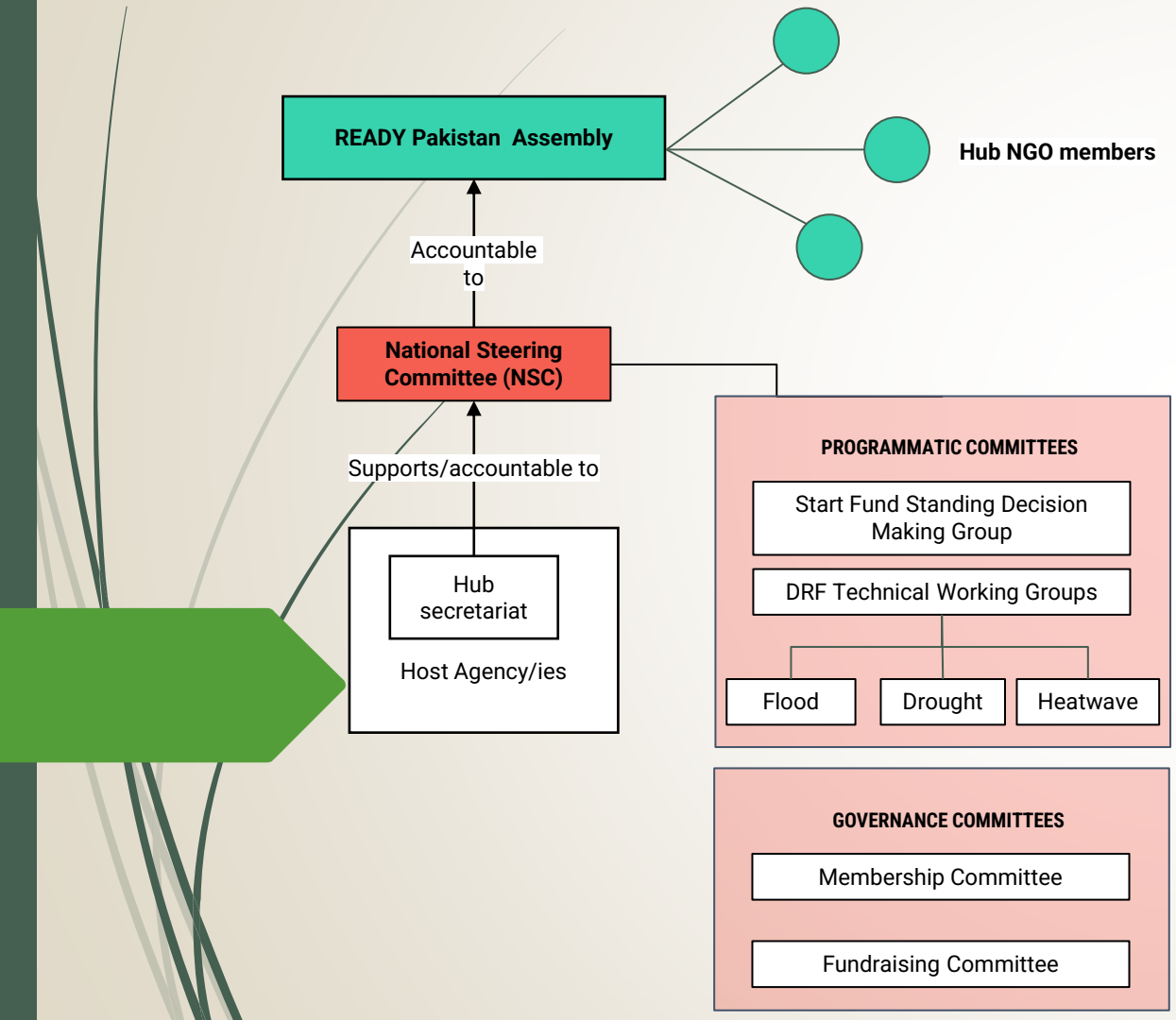
Tier-2 = To Access Funds by their self to some limitation 60K

Tier-3 = Big Organization with some big liberty to access funds

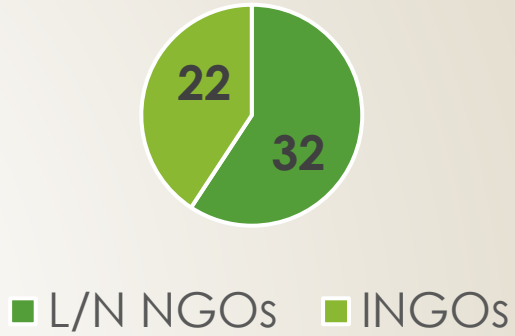
Promoting the Agenda of Localization

- ✓ Local Organization is the chair of the READY Pakistan
- ✓ Local Organization is hosting the Secretariat of READY Pakistan
- ✓ Governance is being steered @ 50% as mandatory with the representation of Local Member Organization (National Steering Committee- Technical Working Groups and Sub-committees).
- ✓ Funds Allocation to access @ 50% of the total for the Local Member Organizations.
- ✓ Tier-3 Organization's Project Implementation is capped to engage the local organization.
- ✓ Tier-3 Organization's funds utilization is caped to 50% through local implementing organization
- ✓ Tier-3 Organization's ICR cost is capped to 50% to share with the local implementing organization
- ✓ This way now 75%funding will go to local organizations

Pakistan Hub | Governance & membership



READY Pakistan membership composition



READY Pakistan NSC composition

Name	Organisation
Jamshaid Farid (Chair)	Help Foundation
Muhammad Amad	IDEA
Liaqat Ali	Indus Consortium rep (Doaba Foundation)
Aisha Jamshed	WHH
Syed Sulaiman	Concern
Jonathan Johnson	Tearfund
Hameed Kakar	National Humanitarian Network
Anis Danish	HANDS

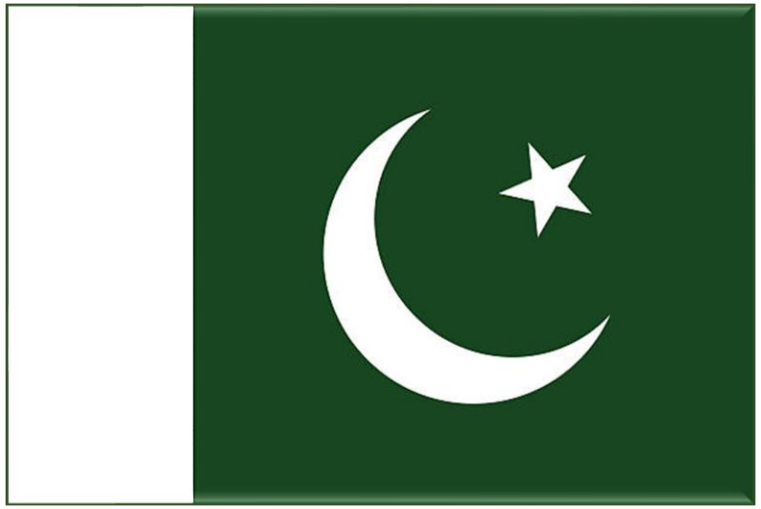
HUB's PARTNERSHIP MODEL

- Under the strategic direction of NSC:
- Use DRF as leverage for the HUB and create government buy-in
- Advocacy and continuous process of dialogue/consultation with all stakeholders
- Defining local due diligence process and local membership criteria
- Setting up rules of business
- Inducting new members
- MoU with Govt department
- Appropriate resource mobilization,
- FOR
- *"A continuous and inclusive process of planning and take decisions based on the country context, controlling of own resources and defining own responses to various crises, under the overall policy framework of Start Network"*

Resilient Early Actions to Disasters Around the Year

READY PAKISTAN

PART OF START NETWORK



A SUCCESS STORY: MULTI-HAZARD DRF SYSTEM

Hazard Prediction Model

Heatwave, Floods and Drought

Pre-positioned Funds

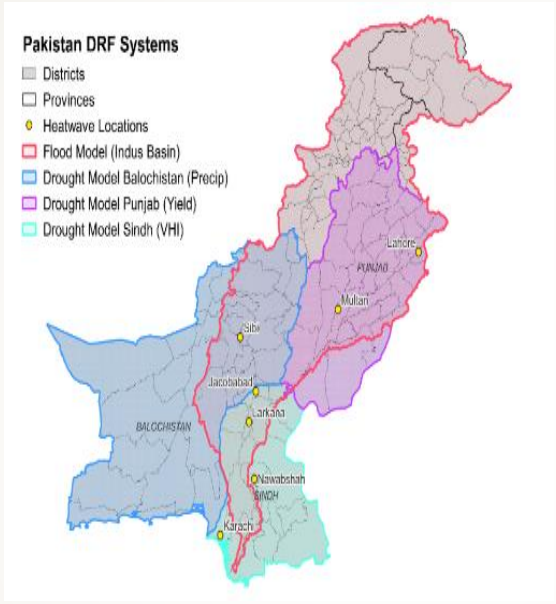
READY Pakistan

Coordination and Governance Structures

Joint Preparedness and Contingency Planning by I/NGOs and Govt

Drought Model

The model covers the provinces of Punjab, Sindh and Baluchistan.



What data is used?

The model uses Normalized difference vegetation index (NDVI), Vegetation Health Index (VHI) and precipitation (CHIRPS) as indicators of drought for Punjab, Sindh and Baluchistan, respectively.

When does monitoring take place?

The model is monitored from October to early April to coincide with the Rabi wheat season. The threshold window is in March as the first reliable yield estimates occur in late Feb / early March.

How is the system monitored?

A web-based dashboard is used to monitor heatwaves throughout the season (192.248.167.129). The dashboard is updated daily and indicates if the threshold has been reached in each province.

Summary of drought model output
Driving data end date: 2023-09-30
Date table created: 2023-10-11

	Punjab	Sindh	Balochistan
No. of districts activated	0	0	1
Total Rural Population*	69239516	21139083	8740869
Population affected	0	0	294373
Population affected (%)	0	0	3.4
Threshold reached?	No	No	No
Level**	-	-	-

Ready Pakistan Risk Models

When is action triggered?

For the DRF to trigger, the district threshold and province threshold must both be satisfied:

District threshold – is breached when there is ≥ 50% probability that the 20th percentile threshold is breached. For vulnerable districts, the probability threshold is lowered to ≥ 40%. This only applies for Punjab as NDVI is used to generate probabilistic yield estimates. For Sindh and Baluchistan. VHI and precipitation estimates are deterministic, thus the probability can be only 100% ("activated" district) or 0% (not "activated").

Province threshold – is breached when the sum of the "activated" district's population must be ≥ 25% of the province total rural population. The total number of people affected in a province is calculated by combining the rural population data for each activated district. We assume that all rural people in a district are affected if a trigger is breached.

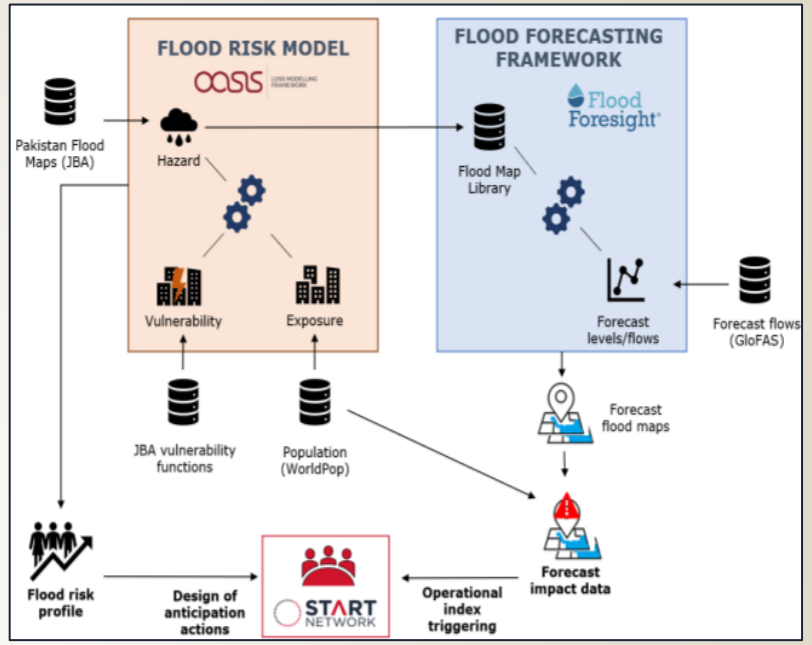
Flood Model

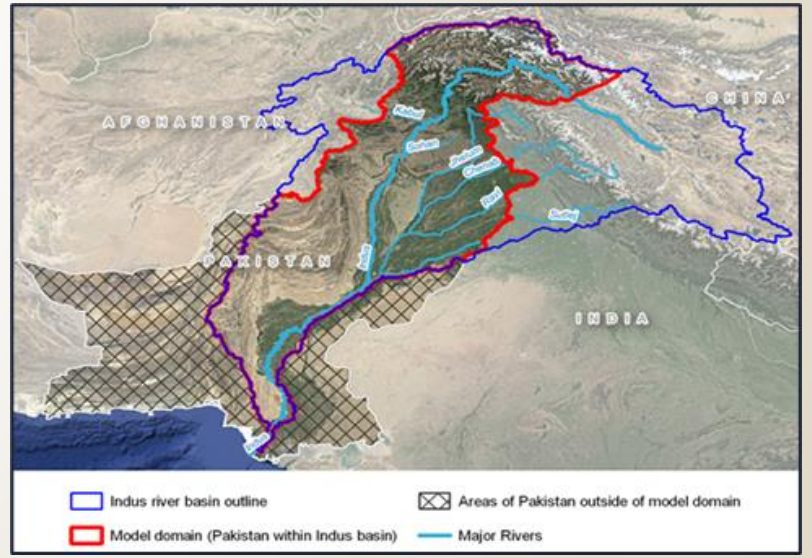
What regions does the system monitor?

The model currently runs for the whole of the Indus Basin. The percentage of Pakistan within the Indus River basin is approximately 58%; it includes 132 districts but does not include all the area of each district. For example, the district of Karachi is included in the Indus Basin, but the city of Karachi is not.

How does the model work?

Jeremy Benn Associates (JBA) host and maintain the flood model for Pakistan. Using the Copernicus Global Flood Awareness System (GloFAS) streamflow conditions and JBAs Flood Foresight technology, the model quantifies the flood risk to the estimated population at risk (at flood depths of at least 0.2 m) for a 10-day lead time. Running a full hydraulic flood model in real time is not feasible so Flood foresight uses a flood map 'simulation library' approach where pre-computed flood inundation maps are selected based on the available forecast river discharge data. The system selects a different flood map for each impact zone to create a regional flood estimate map for each time period and ensemble member of the GloFAS model. GloFAS couples weather forecasts with a land surface and hydrological model to generate forecasts of river conditions.





- **Does the model capture flash flooding?**

- **GloFAS and thus the DRF model, cannot capture well the impact of surface water flooding or small-scale intense rainfall storms (flash floods). Over the monsoon months high volumes of rainfall can leave the ground over saturated which can cause surface water flooding and run-off directly into the Indus. These sources of water are not factored into the model forecast outputs. If flash flooding impacts are observed on the ground, then members are encouraged to raise an alert via the Start Funds.**

- **How does monitoring take place?**

- **The monitoring period starts in July and ends in September. The model runs once per day and the outputs of the model are sent to stakeholders. For each forecast lead day, the impact data is summarized as the number of people affected at the national and district level. JBA maintain a simple email notification system which sends a daily summary of the model output and flags when the national and district thresholds have been breached. Key members of the TWG and the CARF members at Start Network have been added to the email notification system.**

- **When is action triggered?**

- **A two-step threshold is in place with both thresholds required to be simultaneously breached to activate financing:**

  - **National threshold – is breached if the forecasted countrywide impact exceeds the severity of a 1-in-3.5 year return period. This corresponds to ~1.5 million people affected.**

  - **District threshold – is breached if the forecasted district impact exceeds its district threshold. Each district has its own threshold, calculated as the total population at risk of fluvial flooding in the district, multiplied by its Critical Proportion of Population (CPP). The CPP accounts for vulnerability by setting a lower threshold in areas with higher vulnerability. It only takes a minimum of one targeted district to reach its population threshold to activate the district threshold. At least 75% of ensemble forecasts must agree that the threshold is breached. A minimum district threshold of 1000 people is included, having been identified as a suitable minimum number of people feasible for early action activities.**

Heatwave Model

What regions does the system monitor?

Six urban districts are currently monitored: Larkana (Sindh Province), Multan (Punjab Province), Sibi (Balochistan Province), Jacobabad (Sindh province), Nawabshah (Sindh Province) and Karachi (Sindh Province). Lahore (Punjab) is also monitored by the system but cannot be considered for an activation due to limitations on data and a strong existing capacity in the city.

What data is used?

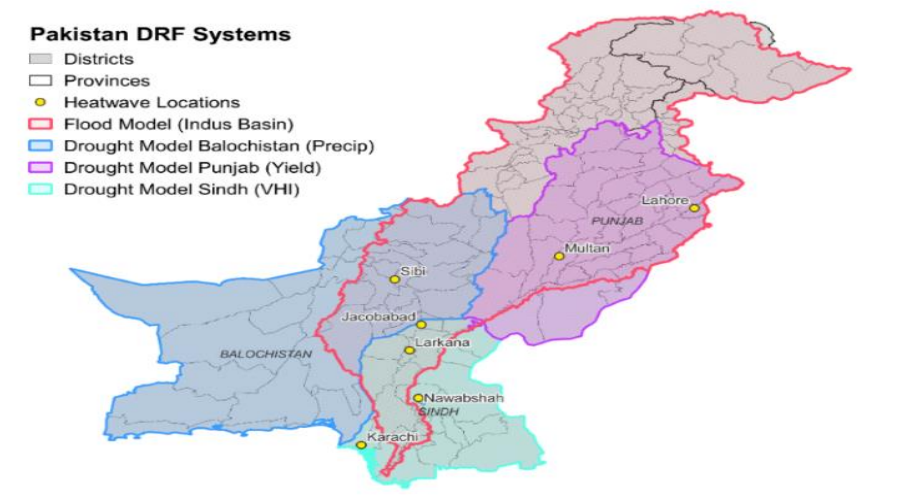
Temperature data is used from NOAA's Global Forecast System (GFS). The GFS data has a 1°x1° resolution (~100km x ~100km).

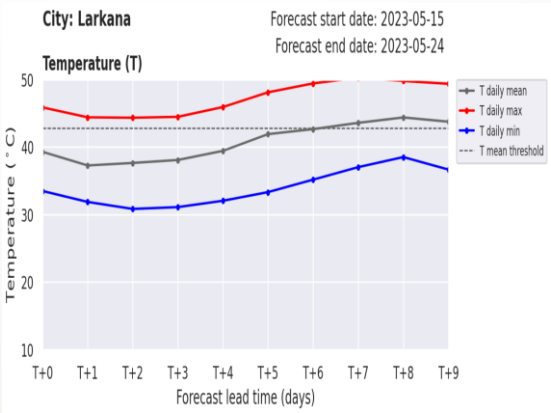
When does monitoring take place?

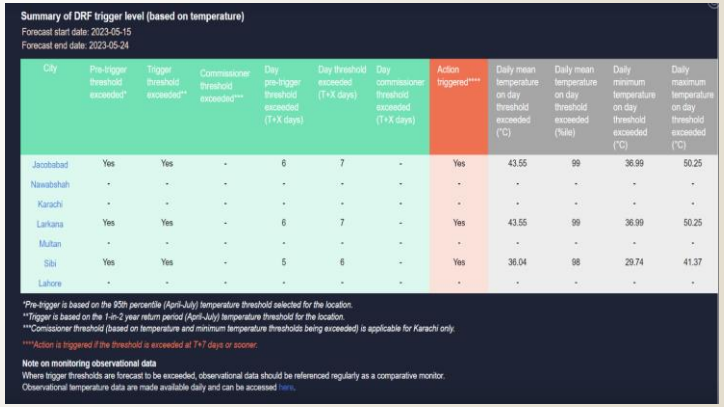
Monitoring takes place from mid-April to the end of July.

How is the system monitored?

A web-based dashboard is used to monitor heatwaves throughout the season (192.248.167.129). The dashboard is updated daily and indicates if a heatwave event is forecasted at each location. A monitoring rota is in place for the members. The member responsible posts in a Skype group each day with an update and will notify the other members if a threshold is breached.







City	2-year return period temperature threshold (°C)	Maximum monthly mean temperature (°C)
Lahore*	40.50	36.9 (Jun)
Multan	42.00	38.9 (Jun)
Sibi	35.75	32.2 (Jun)
Jacobabad	42.75	40.1 (Jun)
Larkana**	42.75	N/A
Nawabshah	39.75	36.2 (Jun)
Karachi	34.00	31.5 (Jun)

- **When is action triggered?**

- **Action is triggered when two or more consecutive days show a daily mean 2-metre temperature above the 2-year return period threshold (°C). These temperatures are shown in Table 1. The below temperature value does not apply for Karachi as this trigger has been altered to align with the Karachi Commissioner Office government heatwave plan that was established after the 2015 heatwave event. In Karachi the maximum temperature must exceed 42°C and the minimum temperature must exceed 30°C for two consecutive days. A lead time of 0-7 days is possible for a heatwave event. Each district can only trigger once per season.**

- **Table 1: 2-year return period temperature thresholds (°C) and maximum monthly mean temperatures (°C) for the seven districts in Pakistan monitored for heatwaves.**

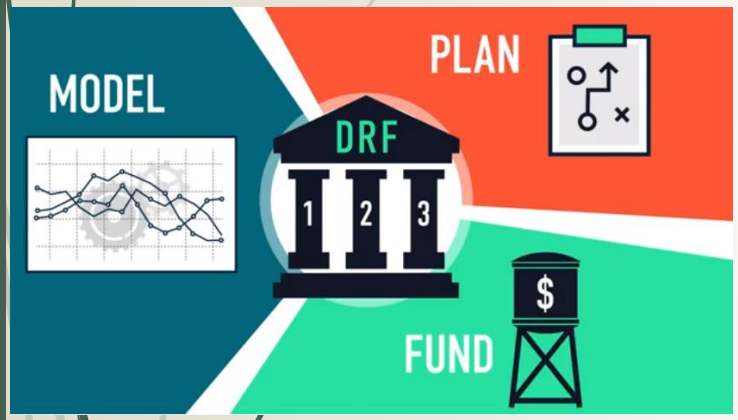
- ***Lahore is not considered for an activation due to limitations on data and a strong existing capacity in the city.**

- ****The maximum monthly mean temperature is not given for Larkana as no observations are available. Given the proximity to Jacobabad, and the similarity in results between the in-land cities (Jacobabad, Multan and Lahore), the thresholds computed for Jacobabad are used for Larkana.**

Awareness Session with Local Community on Heatwave Preparedness and Response

Achievements DRF Programme- 3 Years

Achieving Program Vision & Aim



- Establishing a well defined and organized Governance structure at country level to include NSC and hazard specific TWGs.
- Deploying 3 hazard prediction models and their subsequent operational and technical management
- Successfully implementing 12 anticipatory responses over 3 years- 10 for heatwave and 1 each for flood and drought.
- Assisting Start Fund Team in raising 3 successful alerts including one for floods 2022.

Pakistan Disaster Risk Finance –DRF Program

In the Numbers

We are a network of

54

Local National and International Organisations operating in Pakistan

Since 2020

12 mil

People have been protected by the DRF system in Pakistan

Over

£689k

In Pre-Agreed Financing has been released in a timely manner to protect communities at risk

We have developed **3**

Multi-hazard system covering Heatwaves, Floods and Drought

Allocating

47%

To local members and their partners

Achievements

3 Years

- Training and capacity building of all TWG members on anticipatory response, DRF and Building Blocks and localization of hazard models
- Representing Pakistan DRF system at national, regional and global events.
- Advocating and aligning DRF system with United Nations by inclusion of **anticipatory response in humanitarian program cycle and UN emergency response plan for 2021**
- Recognition of DRF system by UN RC Office and OCHA and **opportunity of coordinating DRR TWG at national level as Co-Chair**
- Recognition of Pakistan DRF Model at regional and global level ,the proof is **UNDRR letter acknowledging SN Pakistan efforts in DRF**
- Recognition of DRF system by National and Provincial Disaster Management Authorities, MoU with NDMA has been principally agreed and similar agreement are underway at provincial level.
- Actively assisting and supporting SN partner countries on building their DRF systems
- Establishing a network of Researchers and Academia for promoting anticipatory response

Steps to Preparedness & Action Before Hazard Season

- Coordination & Info Management - data collection to identify gaps (geo areas & thematic)
- Resource Mapping of all actor's public & private (5 Ws from OCHA)
- Preparedness & Contingency planning along with Govt to cater to the needs of people for each individual hazard based on information and data. The action plans to include AA & humanitarian response plans.
- Identifying root causes of vulnerability which are diverse across districts & take steps to address them. (Physical & socio-economic) during the preparedness phase & also as part of AAs.
- In time setting up of early warning & hazard info dissemination systems down to community levels in coordination with government authorities at the district level. It is a part of overall AA hazard models.

READY Pak International & Regional Representation

National Meetings/ Events:

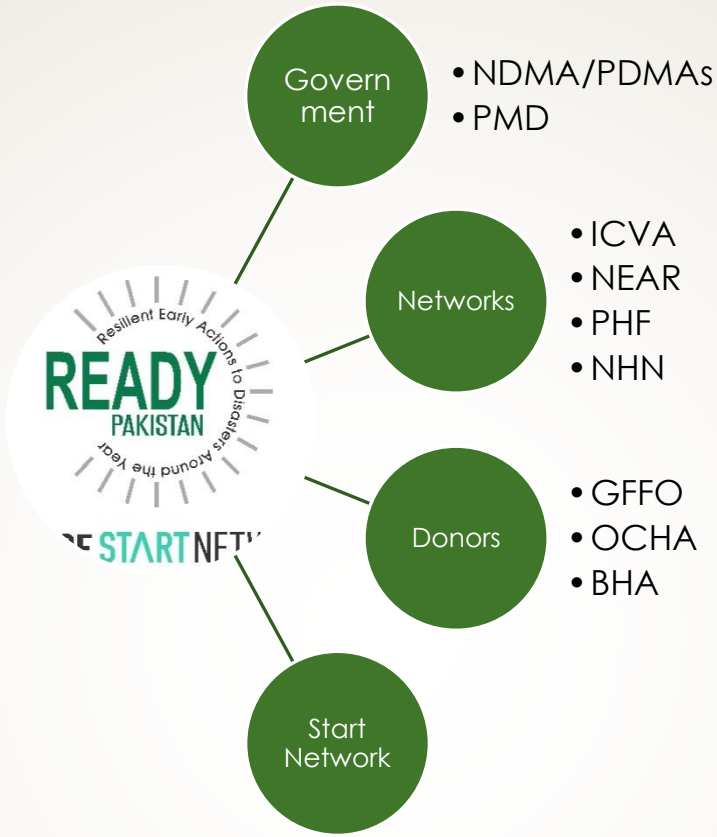
- Representation at NDMA, NDMFR and PDMAs
- Regular representation at national platforms like NHN and PHF meetings
- Representation of DRF with national organization like Red Cross, German Red Cross, AKF national UN agencies including FAO and OCHA and Norwegian NRC and UN HCT

Regional Meetings/ Events:

- Yearly representation at Asia Pacific Regional Dialogue Platform under anticipation Hub
- Meetings with German Red Cross Nepal and Bangkok on Forecast based financing
- Meetings with UNDRR Bangkok Office on Disaster Risk Financing Mechanism
- Meetings with Regional Office OCHA and UNDRR Bangkok on inclusion of anticipatory actions in humanitarian response planning at national level in Pakistan
- Meetings with Regional office of FAO, Bangkok on drought DRF Mechanism

International and Global Meetings and Events:

- Yearly representation at Global Dialogue Platform under anticipation Hub
- Meetings and representation at events of World Bank Group
- Meetings with international media like BBC, Sky News-UK and Climate Home Intl
- Webinar guest speaker at Bonn DRR Network, Anticipation Hub and Start Network events
- Quarterly Global Forewarn Events with regional hazard experts invited for sharing knowledge



LINKAGES DEVELOPMENT WITH STAKEHOLDERS

INFLUENCING ENGAGEMENT

NDMA's DRR Expo

Working group on Anticipatory action in Pakistan (consultations for 1st National Dialogue Platform)

Meeting on anticipatory action

HCT approval of READY Pakistan as lead on Anticipatory action in Pakistan

All Hubs calls

Start Network Connect

Start Network Assembly 2023

Thanks on behalf of READY Pakistan/Start Network Members Pakistan