



Institute
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Disaster Risk Finance – A Multi-Disciplinary Approach

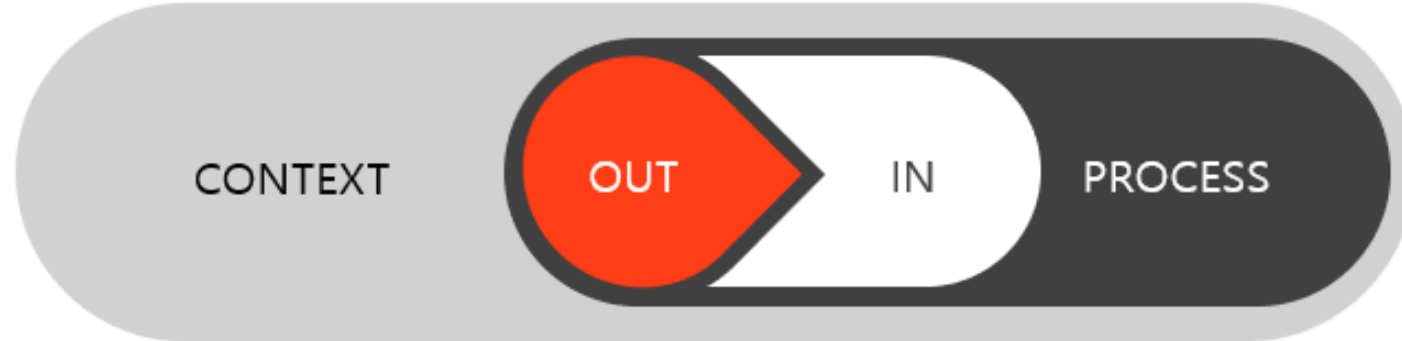
22 June 2022

Joanne Meusz & Chris Paterson, Government Actuary's Department (GAD)
Nazira Lacayo, International Federation of Red Cross and Red Crescent Societies (IFRC)

Disaster Risk Finance

Context – the underlying risk, need, and wider factors to consider when developing Disaster Risk financing (DRF)-based approaches.

Money-in instruments – the DRF instruments in place to supply the right amount of money at the right time.

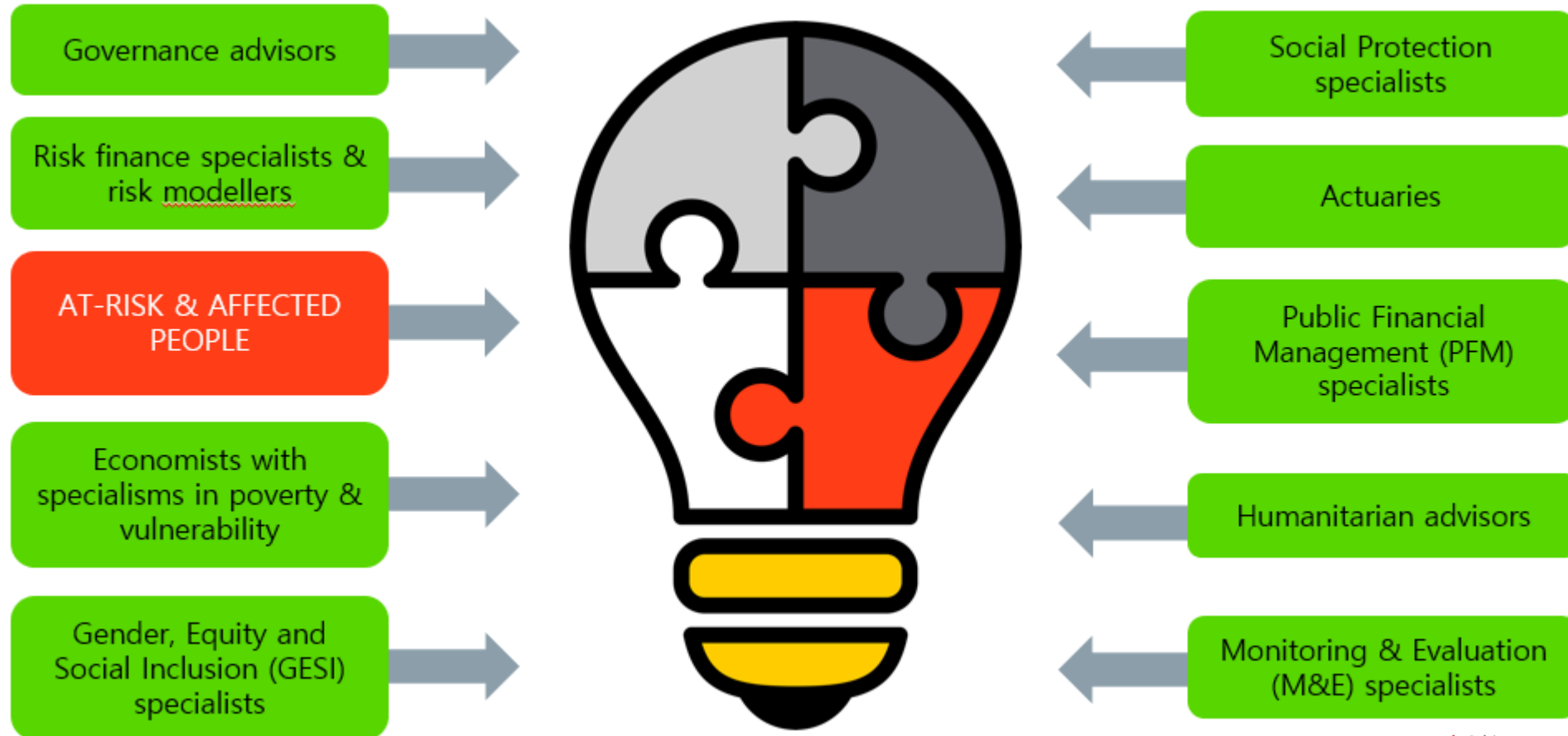


Money-out systems – the systems and plans in place that use money to reduce the impact of disasters on people.

Project management processes – practical considerations, including project implementation processes, costs, contingencies, and monitoring and evaluation.

Source: The Centre for Disaster Protection

Teamwork: The Right People and Skills



Source: The Centre for Disaster Protection



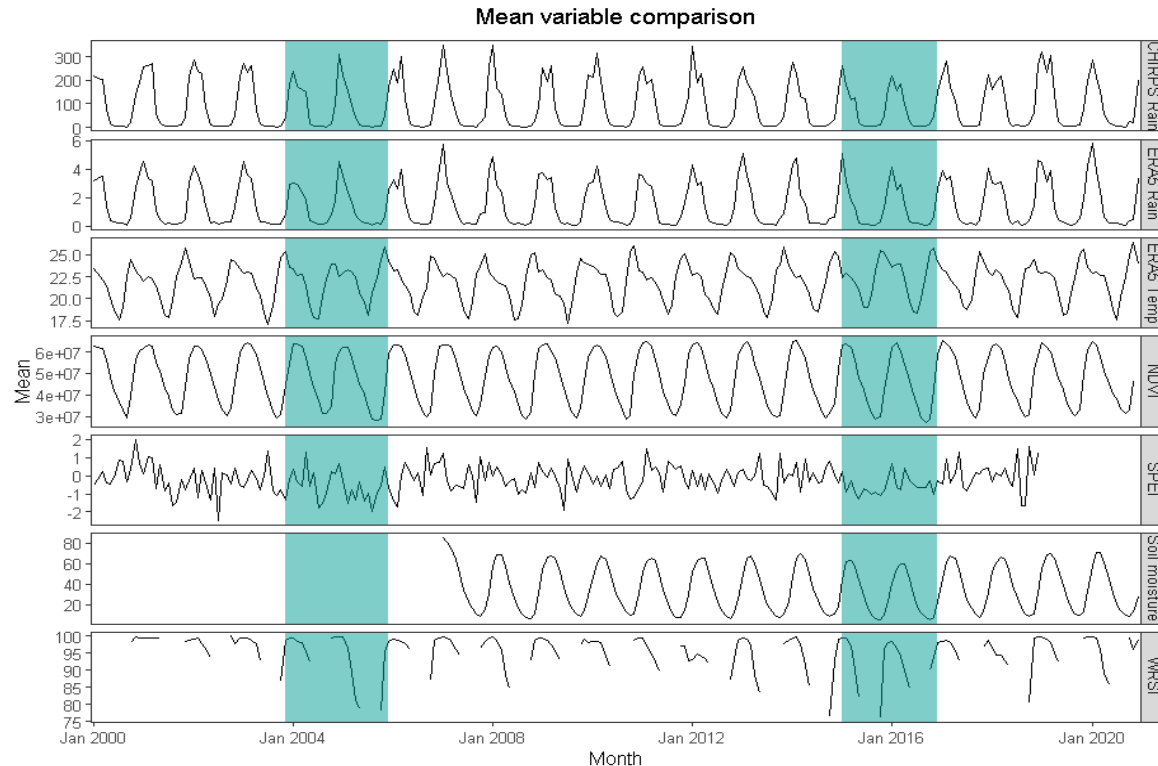
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Examples

Drought Modelling

Past:



Future:



Organisations: **Centre for Disaster Protection, World Bank**

Disciplines: **Humanitarian experts, data scientists, catastrophe modellers**

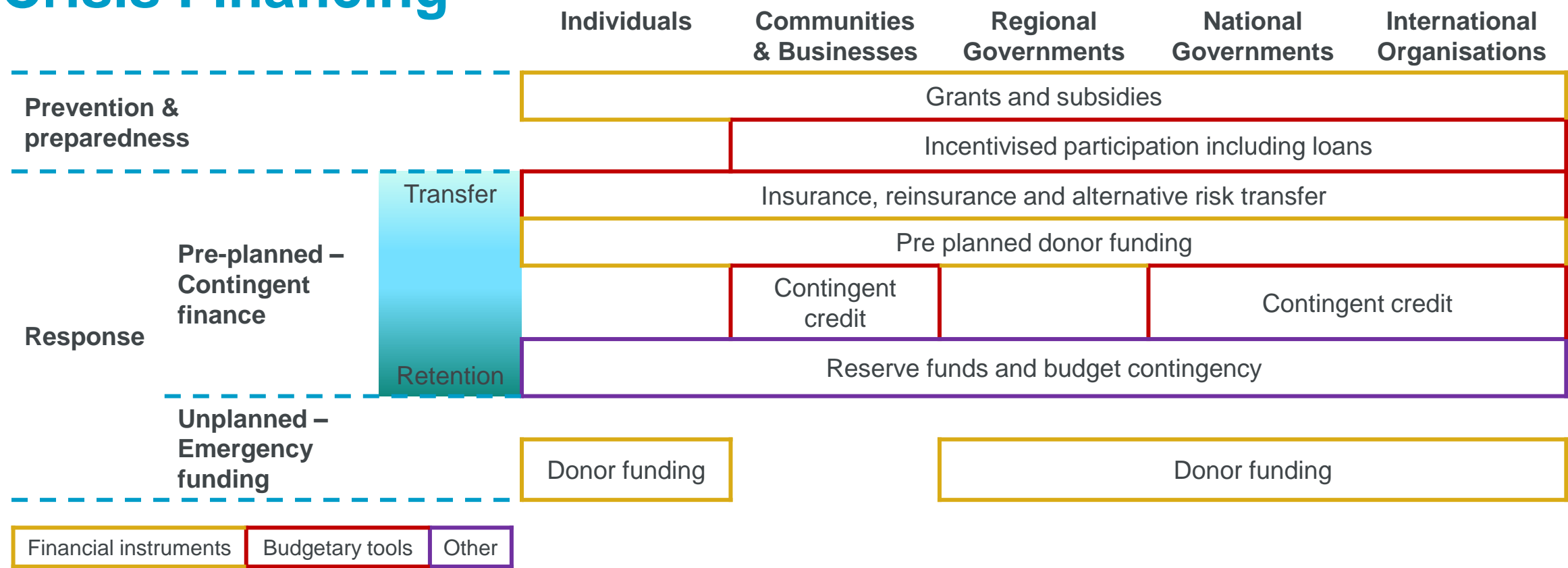


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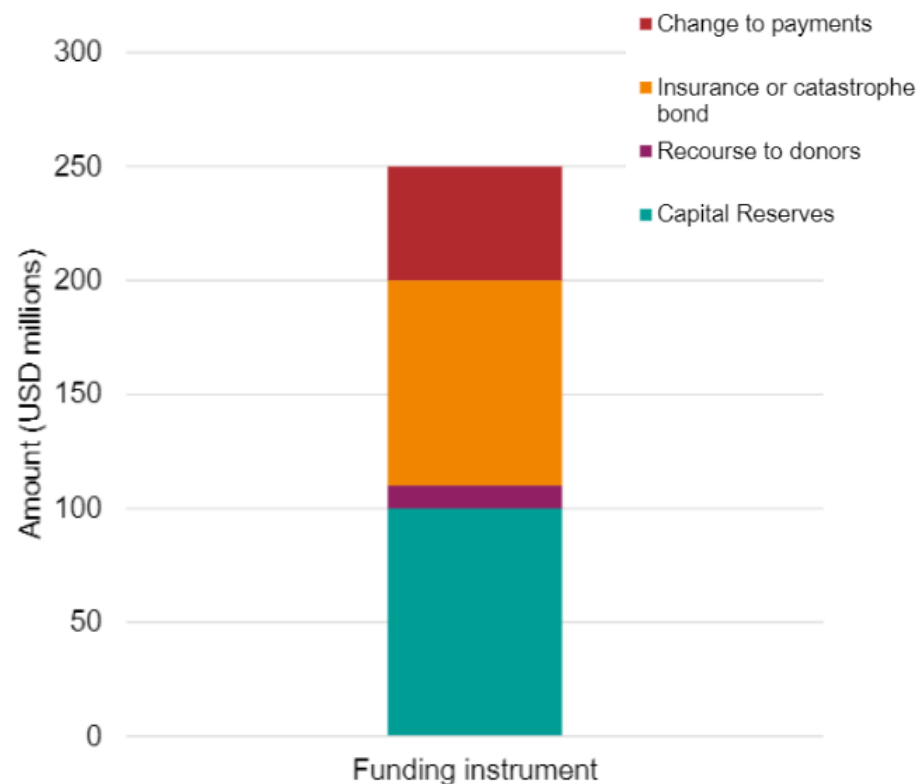
Crisis Financing



Organisations: **Centre for Disaster Protection, World Bank, UN agencies ...**

Disciplines: **Humanitarian and development experts, climate scientists, public financial management, policy advisors ...**

Risk Pooling



Summary of outcomes:

Total annual payment	Likelihood	Outcome
<\$100m	92%	Payouts are paid out from capital reserves. Donor tops up reserves at the end of the year so that capital position is restored (otherwise SFF's activities have to be reduced)
>\$100m	8%	As above but donor is also called upon to provide additional \$10m during the year to meet the high level of payouts
>\$110m	5%	As above but insurer/bond holders start to experience losses
>\$200m	Negligible (<0.1%)	As above but SFF scales back or stops payments to recipients

Organisations: **START Network**

Disciplines: **Catastrophe modeller, Policy adviser, Analysts**

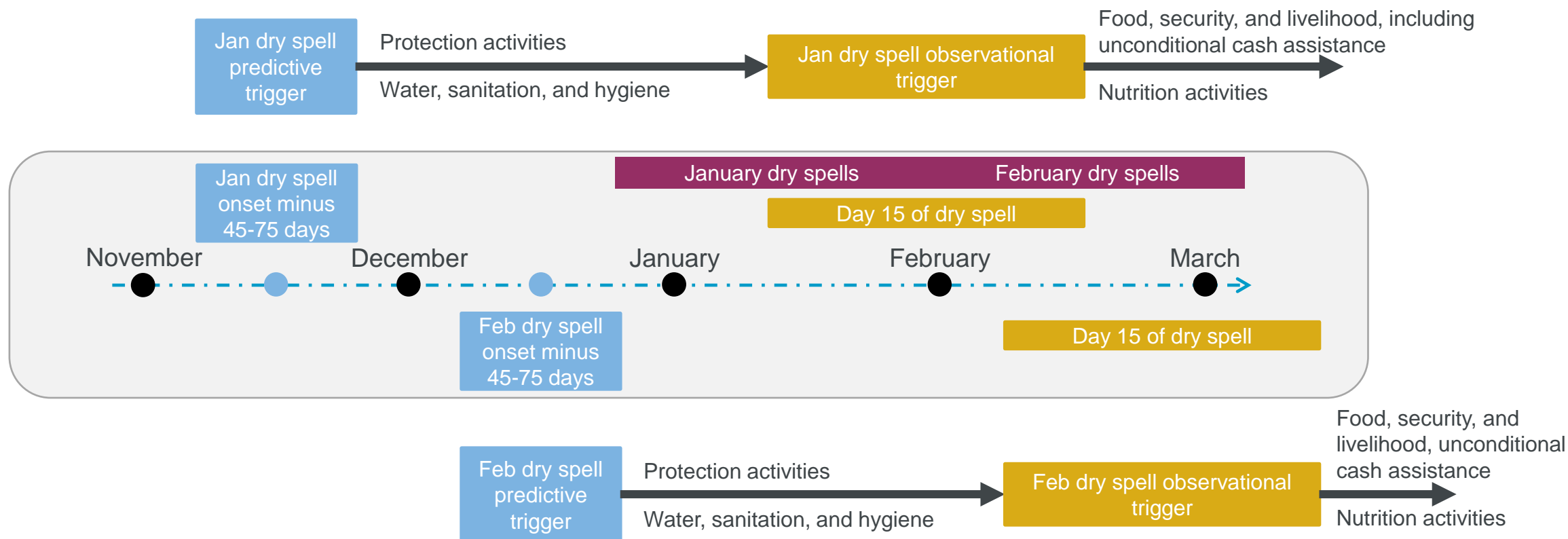


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Anticipatory Action Trigger Quality Assurance



Organisations: **Centre for Disaster Protection, Centre for Humanitarian Data, UN OCHA**

Disciplines: **Data scientists, policy and humanitarian experts, development economist**

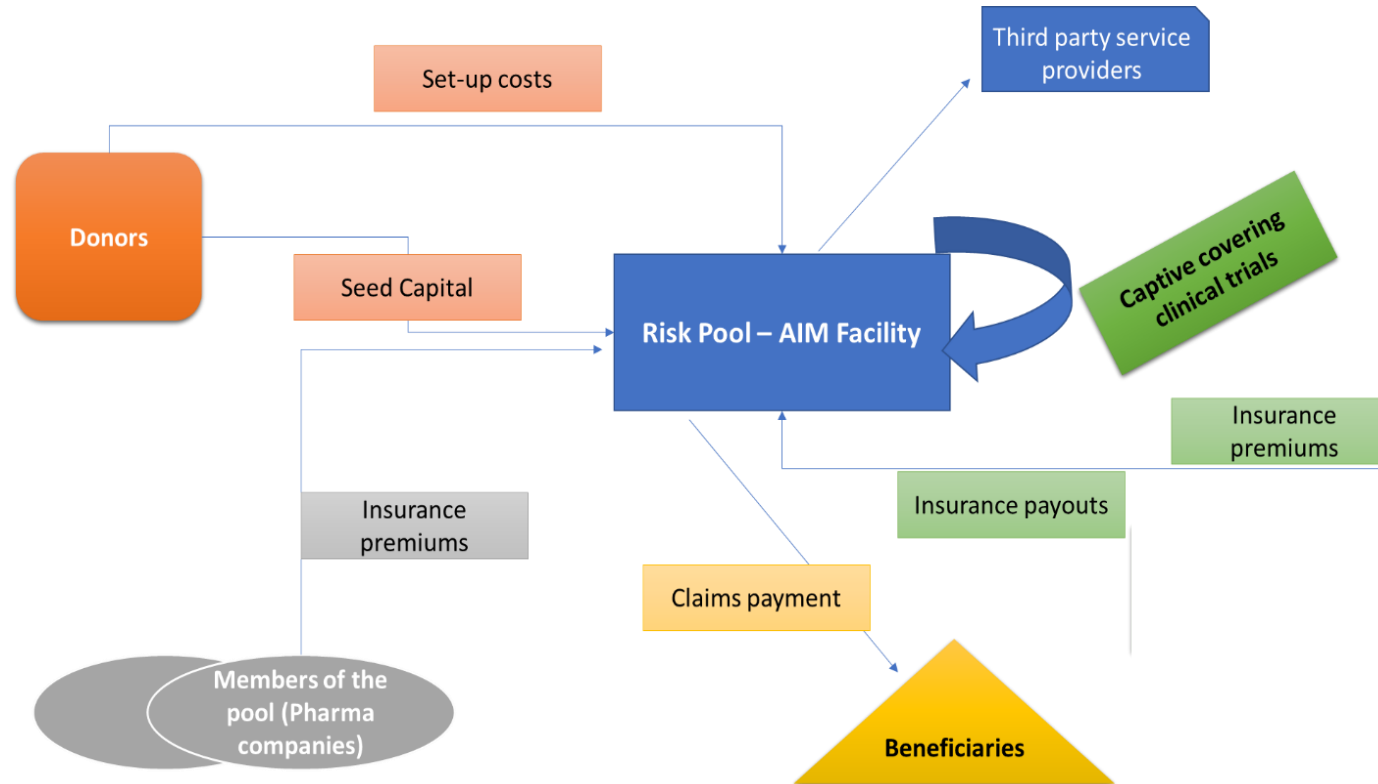


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De-Risking Maternal Drug Development



Organisations: **Centre for Disaster Protection, Concept Foundation**

Disciplines: **Insurance brokers, legal advisors, medical researchers**



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Disaster Risk Finance – A Multi-Disciplinary Approach

Intervention by Nazira Lacayo, IFRC

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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