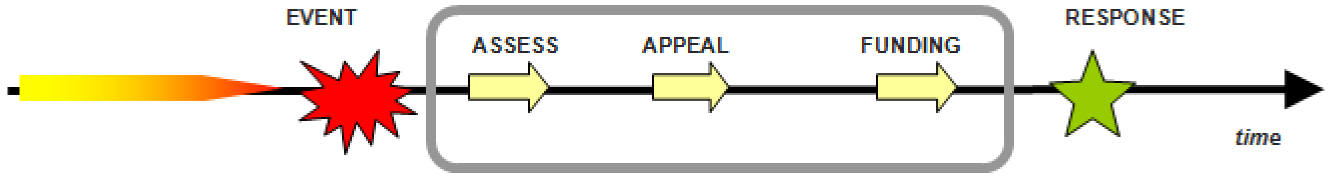
African Risk Capacity

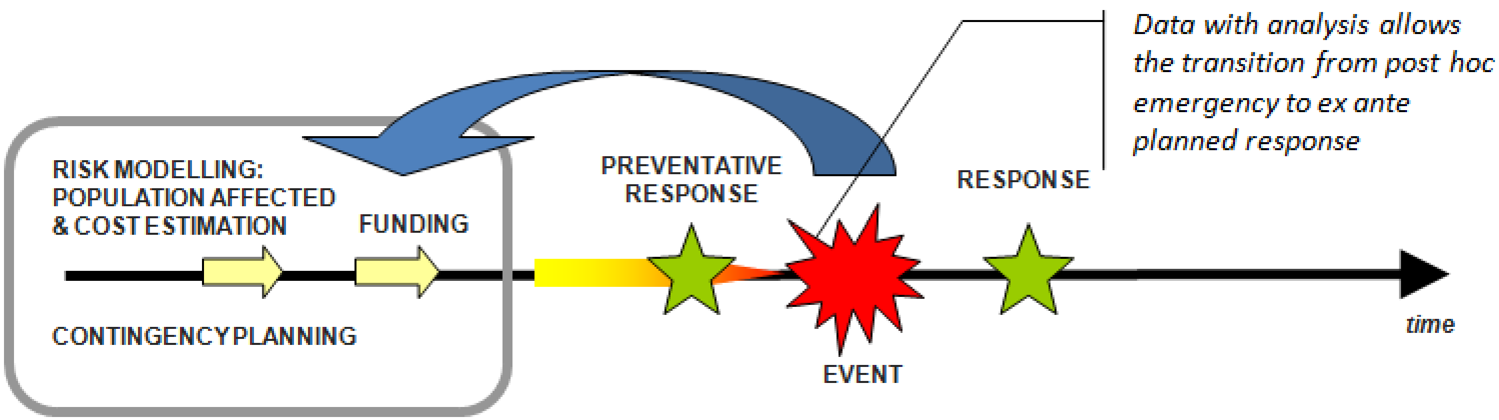
Sovereign Disaster Risk Solutions
A Project of the African Union

The Way Disaster Assistance Works Now

The way disaster assistance works now…



The way disaster assistance could work…



What is ARC?

The African Risk Capacity (ARC) is a Project of the African Union to design and establish an African-owned, financial entity that would provide participating AU Member States contingent funds in the case of drought

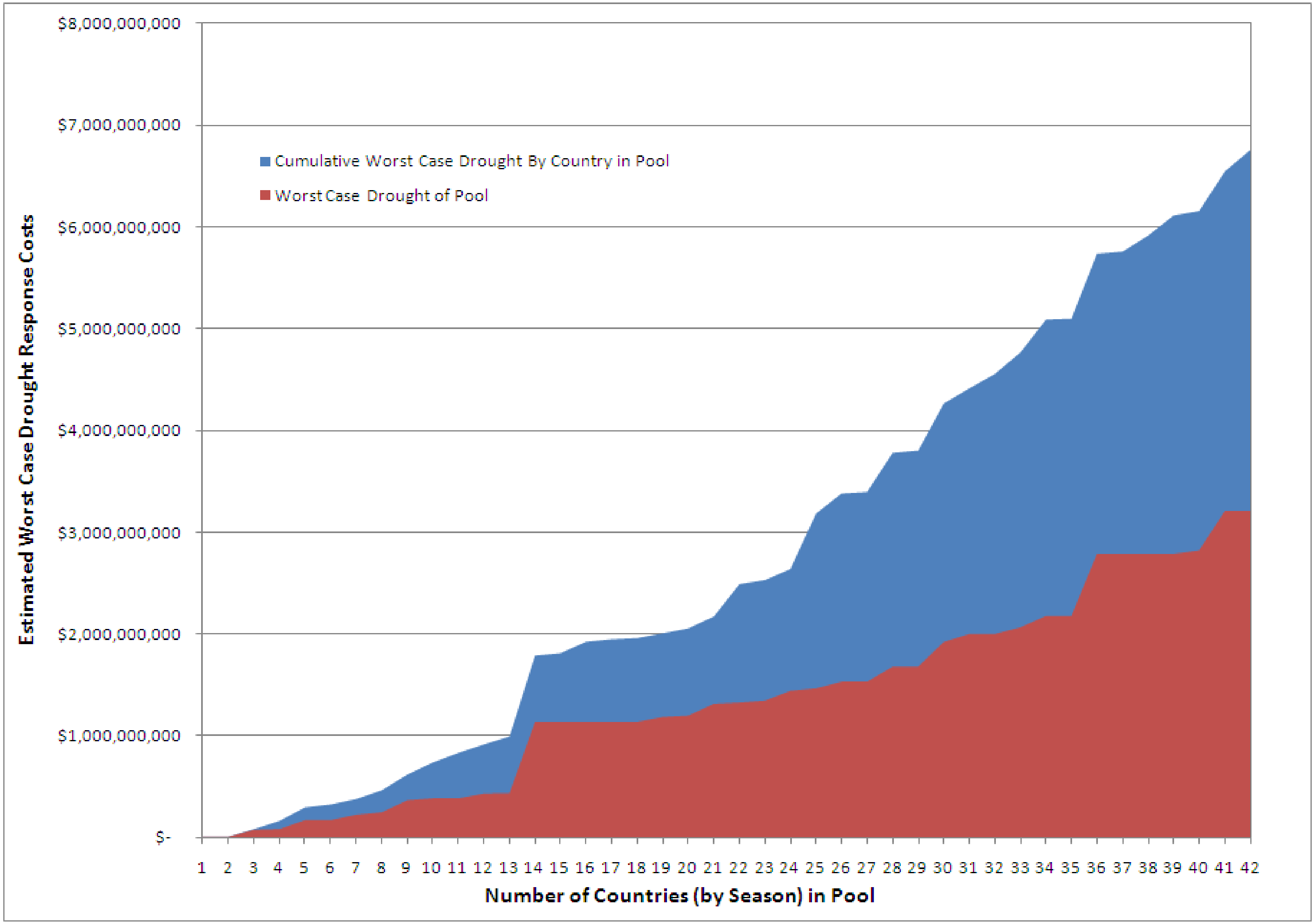
In concept, the ARC risk pool is designed to

- Provide quick-disbursing funds after drought enabling a more timely response
- Reduce risk management costs by pooling risk across regionally diverse weather systems
- Lower the cost to governments of disaster relief and impact of drought

By doing so, ARC

- Transfers resources and decision-making to African governments
- Shifts risk away from vulnerable populations and their governments to the ARC which will be better equipped to handle it

Pan African Solidarity is Cost Efficient



DFA Results: Ethiopia + Malawi + Others

- The covariance of the portfolio decreases as more countries are added to the pool
- Geographical diversification results in ***lower covariance for the pool*** translating into ***lower cost of capital***

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	Annual Average Loss	Standard Deviation	Covariance of Portfolio
Ethiopia									3.35M	8.8M	2.63
	Malawi								5.18M	11.04M	2.13
		Kenya							6.97M	12.68M	1.82
			Mali						8.41M	13.71M	1.63
				Senegal					9.69M	15.41M	1.59
					Zambia 1				11.42M	17.72M	1.59
						Zambia 2			12.81M	20.37M	1.55
							Tanzania		14.37M	21.57M	1.50
								Mozamb.	15.96M	23.44M	1.47

Indicative Premium Rates

- Direct benefit of geographical diversification is **savings in premium paymentsof up to 52%** as illustrated below:

COUNTRY	1-IN-5 YEAR RETENTION	1-IN-7 YEAR RETENTION	1-10-YEAR RETENTION
KENYA	20%	15%	11%
ETHIOPIA	18%	15%	11%
MALI	16%	12%	10%
SENEGAL	18%	14%	10%
MALAWI	18%	15%	12%
NIGER	21%	16%	12%
ZAMBIA	20%	13%	9%
TANZANIA	16%	13%	10%
MOZAMBIQUE	17%	14%	11%
MARKET SAVINGS	35%	44%	52%

Indirect and Direct Cost Savings

Benefits of Contingency Funds

- **Immediate liquidity** that contingency funds provide reduces the time between EVENT and RESPONSE so that appropriate assistance can be mobilized quickly and efficiently to those in need
- **Lower cost of intervention:** evidence from studies across the continent indicate that spending 1 dollar in early response using existing response mechanisms versus a late response to drought can avert approximately 2 dollars of long-term economic losses for affected households (International Food Policy Research Institute commissioned study)
- **Financial and budgetary management:** Knowing ahead of time the potential amount of funds available allows for direct cost savings (e.g. through locking in favorable priced options contracts on the commodity markets)

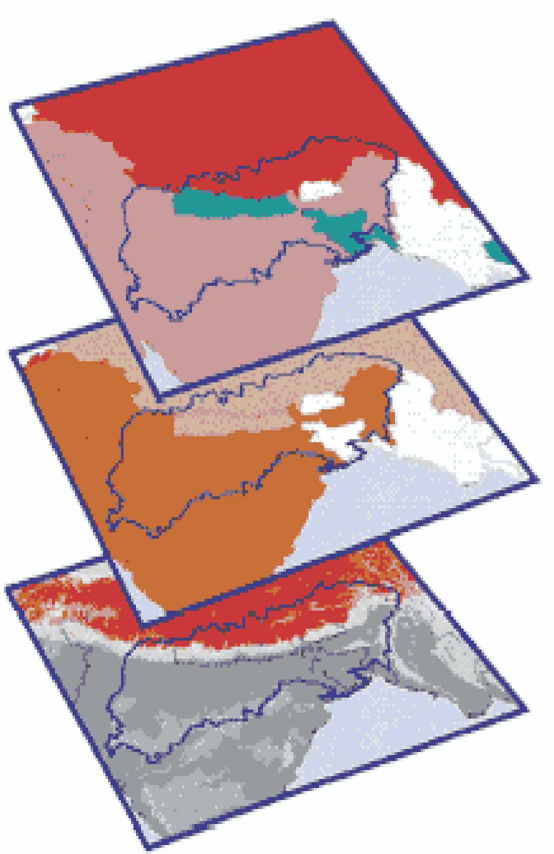
Benefits of Risk Pooling

- Countries save on **administrative costs** of risk transfer when in a pool, since each bilateral deal would require the design of a bespoke product
- Countries save on **cost of capital** (premium), given the diversification of a pool

Quantifying the Risk

HAZARD

Satellite-based rainfall data for over 261,000 satellite pixels over Africa (0.1 dg x 0.1 dg or 10x10km sq near the equator) updated every 10 days.



VULNERABILITY

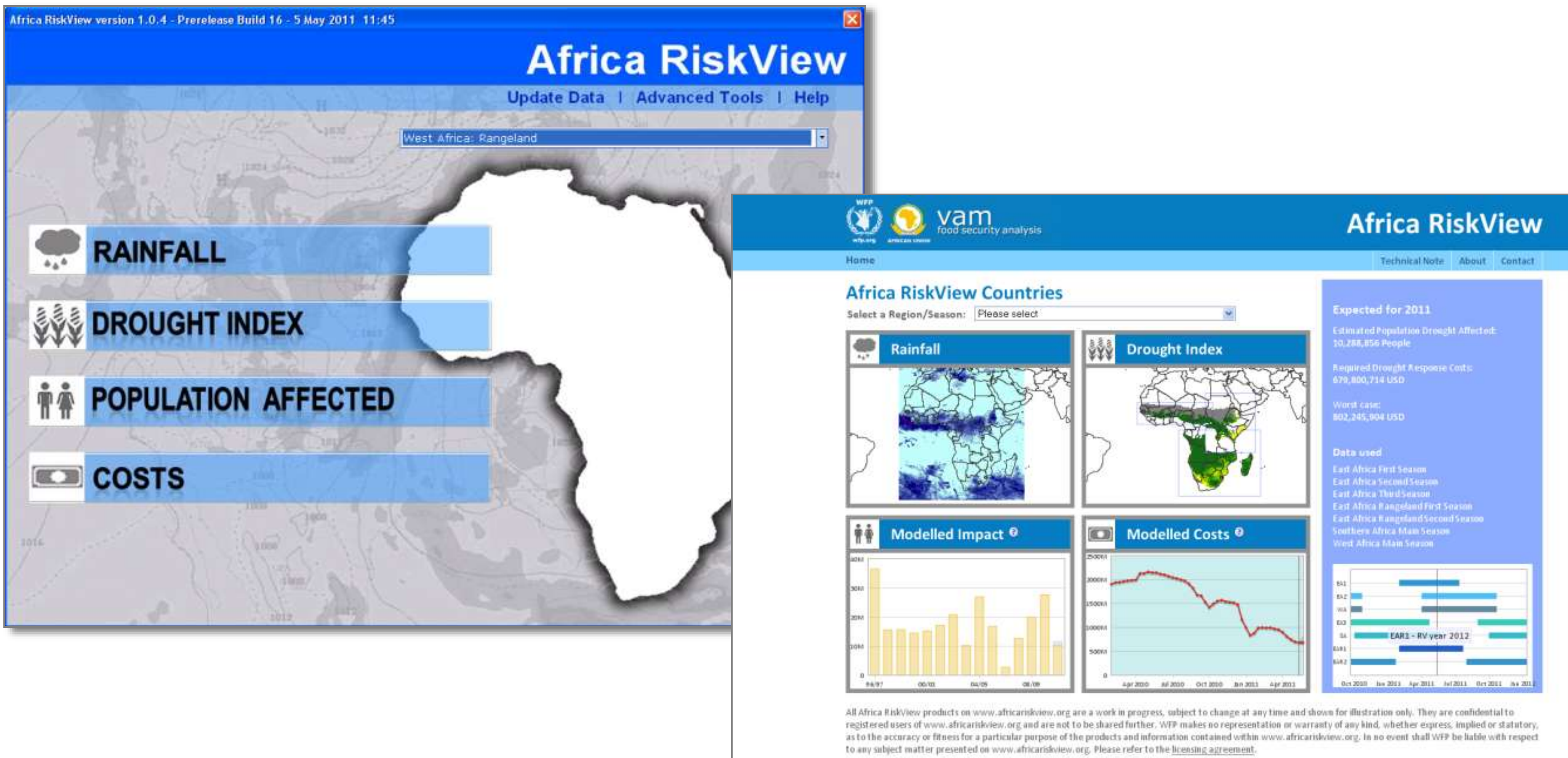
Who’s at risk? Where are they? What are they growing or where do their herds graze?

EXPOSURE

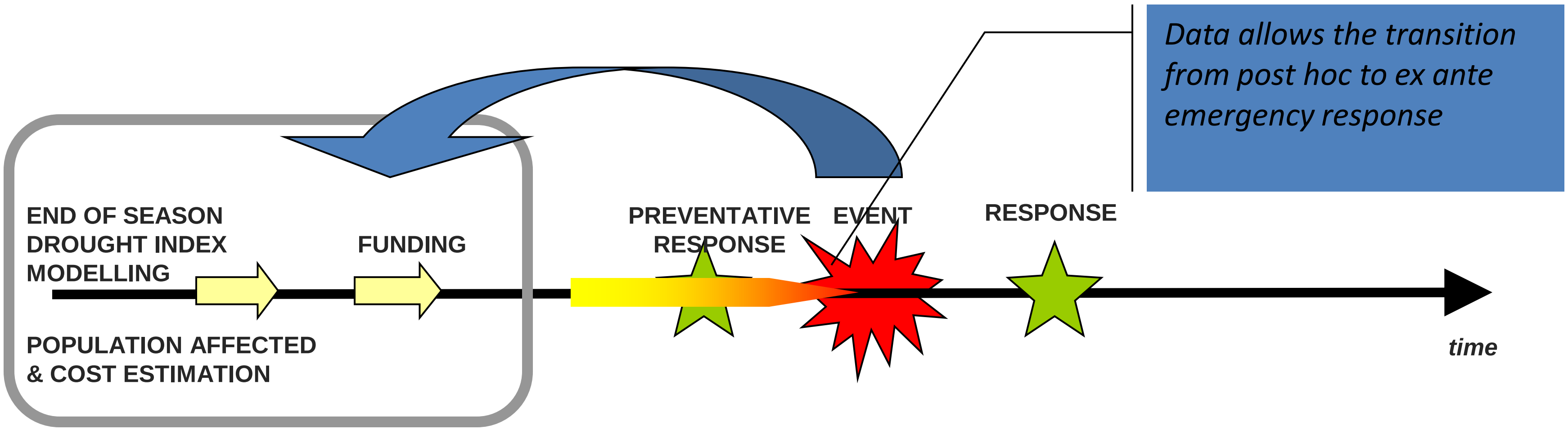
In today’s procurement and logistic costs, how much will it cost to assist each potential person affected?

Africa RiskView: Technical Engine of ARC

Africa RiskView **is a software tool that allows financial management of ARC's weather risk in one portfolio by bringing existing information on food security together to assess and quantify weather-related risk using a standard setting methodology.**



African Risk Capacity



The ARC transfers risk away from vulnerable communities that shoulder the bulk of this burden to the pool and then to international financial markets that can handle it much better.

The ARC transfers ownership of disaster risk management from the international community to African governments, creates incentives for risk reduction and ensures more objectivity, transparency, accountability and fairness in the humanitarian assistance system.

ARC Mandate

The ARC Project takes its mandate from African Heads of State and Government captured in the following decisions endorse by the Assembly:

"Member States resolve to support efforts towards enhancing national and regional capacities to mitigate exposure disaster risk through institutionalizing effective financial and other instruments such as strategic grain reserves, budgeted contingency funds as well as through sharing risk across regions." (Ministers of Finance, March 2010)

"Calls upon Member States, under the auspices of the African Union Commission, to explore the feasibility of continental financial risk pooling in working towards the creation of an African-owned pan-African disaster risk pool, building on existing and emerging tools and mechanisms for financing disaster risk reduction;" (Ministers of Disaster Risk Reduction and Management, April 2010)

Most recently, African Ministers of Finance resolved to establish ARC as a specialized agency of the African Union.

"RECOMMENDS that ARC should be established as a Specialized Agency of the African Union and accorded the privileges and immunities specified in the OAU General Convention on Privileges and Immunities; REQUESTS the Commission to convene a meeting of government experts and subsequently a conference of plenipotentiaries before the end of the year to consider and adopt the establishment agreement."

The Road to ARC Establishment

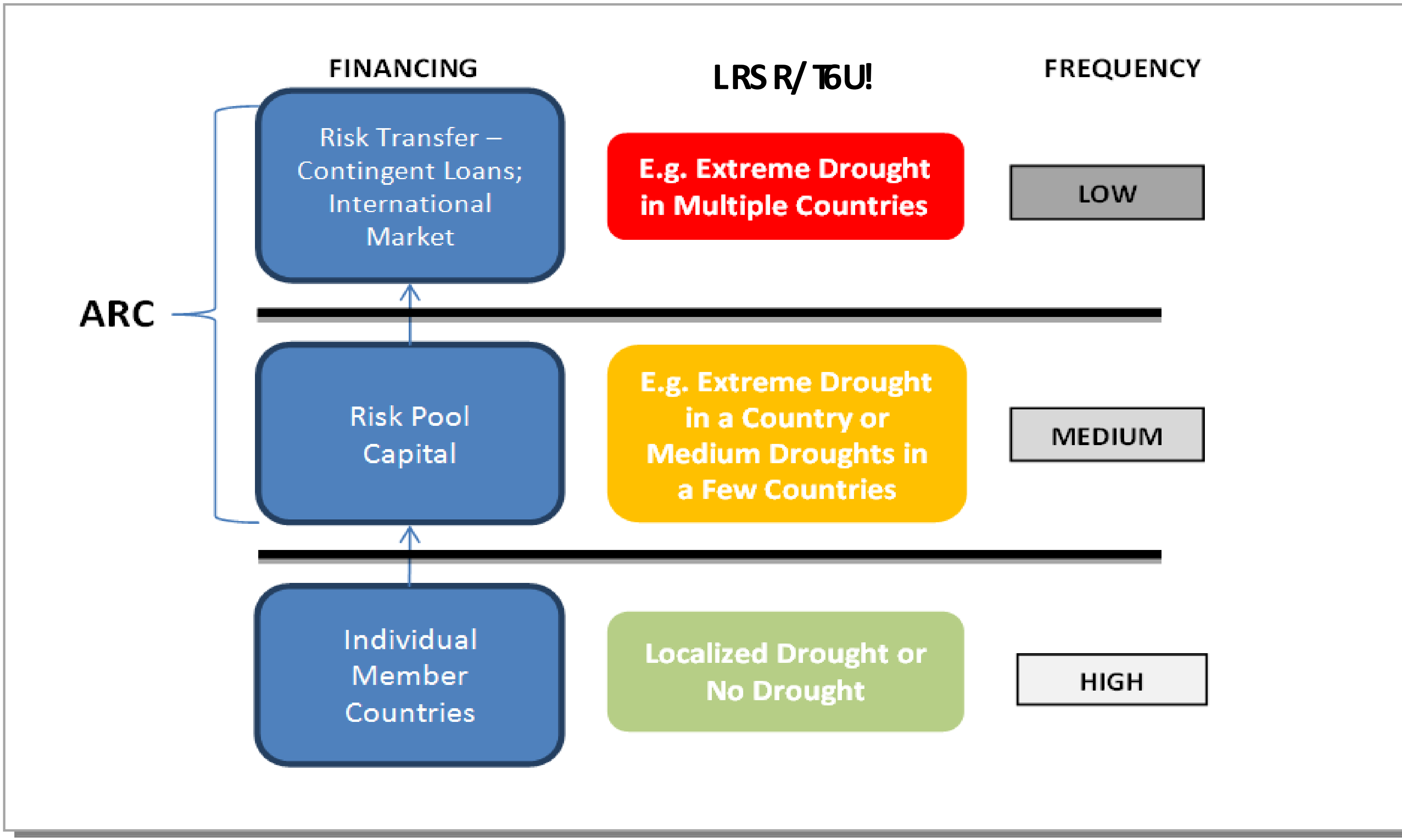
1. **Country Consultations and Engagement**

   - **Scoping Missions (Oct 2011-June 2012): 18 missions conducted**
   - **Technical Workshops (Jan 2012-Aug 2012): 7 completed**
   - **Pre-Participation Agreements: 6 anticipated by Sept 2012**
   - **Coverage for Seasons in 2013**

2. **Capitalization**
   - **Goal: $200 million**
   - **Initial commitments of c.$90m**

3. **Institution Building**
   - **ARC Decision referred to AU Summit**
   - **Meeting of Government Experts**
   - **Meeting of Plenipotentiaries**
   - **Conference of Parties and Incorporation of Financial Subsidiary**

Additional Explanatory Slides



FINANCING
FREQUENCY
Risk Transfer – Contingent Loans; International Market
E.g. Extreme Drought in Multiple Countries
LOW
ARC
Risk Pool Capital
E.g. Extreme Drought in a Country or Medium Droughts in a Few Countries
MEDIUM
Individual Member Countries
Localized Drought or No Drought
HIGH

ARC is One of Many Risk Management Options

Several tools are available to manage this risk as part of a layered financial risk management strategy and comprehensive disaster management plan:

1. **Risk Retention:**
   Countries could use existing resources and programs to retain some risk and manage the impact of less severe, localized or frequent events in-country, e.g. through national reserves, annual contingency budgets and mechanisms such as safety nets, SGRs etc.

2. **Risk Financing:**
   Contingent lending could also be considered. Countries could borrow to finance responses for more extreme events on pre-agreed terms from International Financial Institutions (IFIs) and repay back over a long period of time.

3. **Risk Transfer:**
   Countries could choose to transfer risk, selecting to only receive compensation for drought events that are more extreme and less frequent in return for an annual fee, e.g. by entering into a transaction with a donor, reinsurer or by joining ARC

4. **Risk Reduction:**
   Longer-term DRR and climate proofing investments by countries could reduce the overall financial cost of this risk over time, however while these investment take effect the risk of disasters remains

Determination of ARC Premia for Member States

PREMIUMS

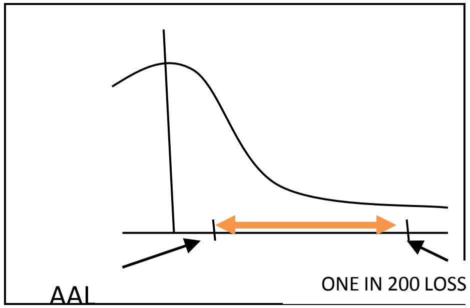
THE HISTORICAL AVERAGE ANNUAL LOSS

Definition: Average amount that country could have recieved from ARC in the past 15-30 years

THE COST OF CAPITAL

Definition: Cost of capital is based on the Coefficient of Variation (COV). COV determines how risky a country is. The higher the risk the more capital required to support that country

calculating cost of capital: % of the difference between the one in 200 loss and the average Average Annual Loss (AAL)



When the coefficient of variation is high, the distance between the one in 200 year loss and AAL is big -leading to a higher cost of capital

AN ADMINISTRATION COST CHARGE