

Collective Action for Water Security and Sustainability

Sonali Mitra, Rudresh Sugam, Arunabha Ghosh

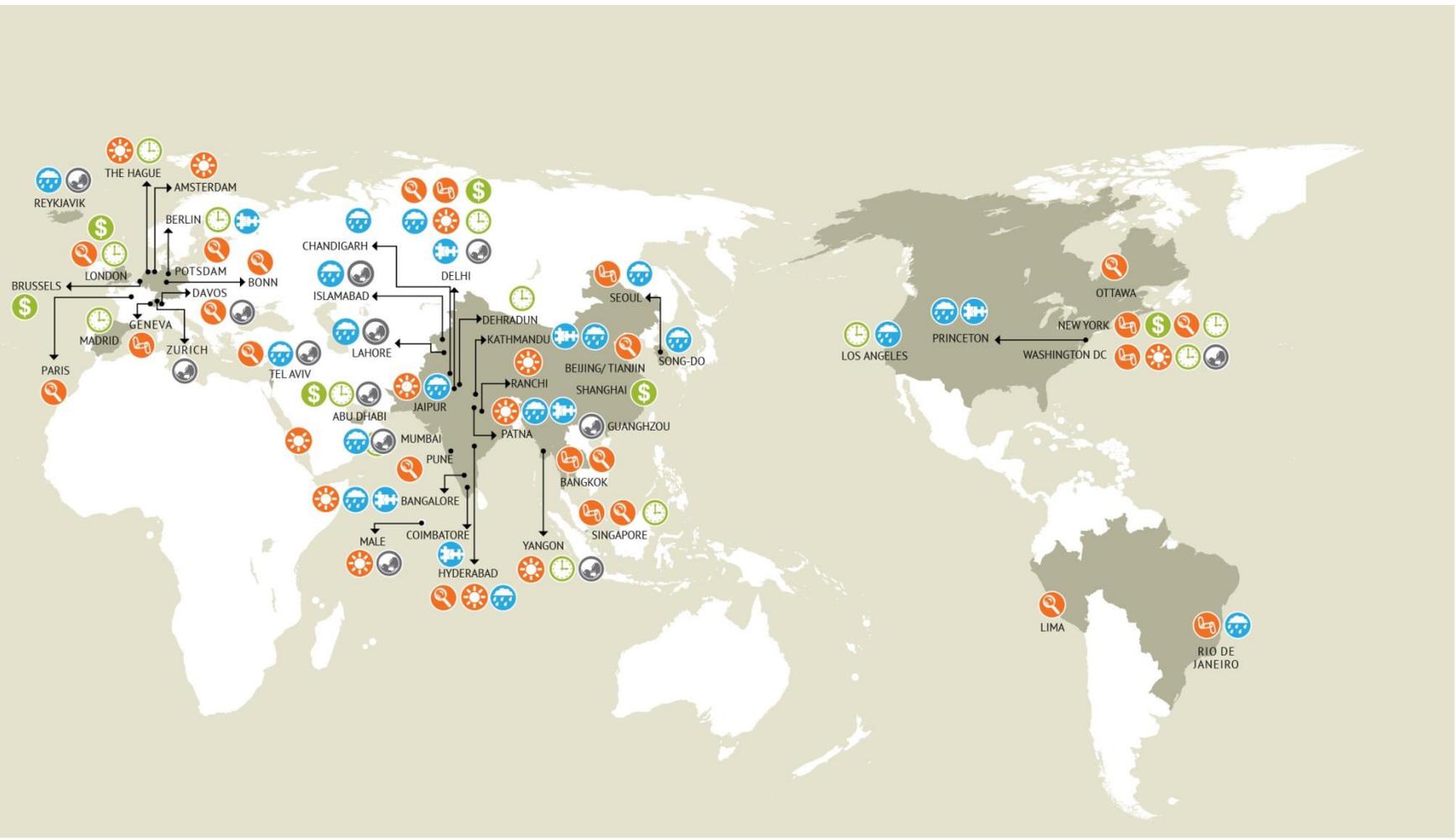
Dr Arunabha Ghosh

CEO, Council on Energy, Environment and Water

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A vertical flow diagram on the left side of the slide consists of four white circles connected by a blue line. Each circle is connected to a horizontal blue bar that contains text. The bars have a slight 3D effect with a gradient from light to dark blue.

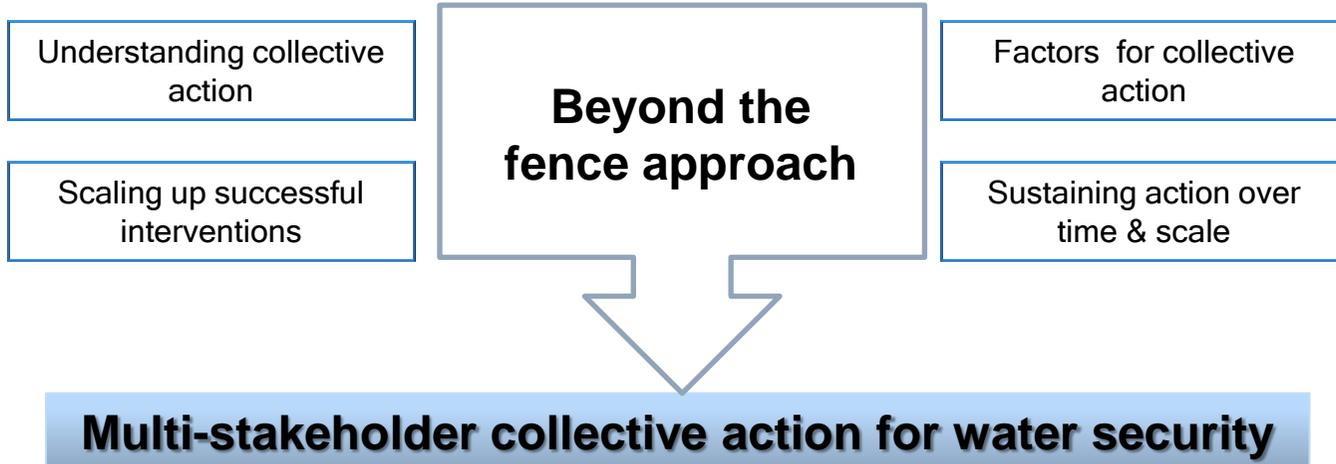
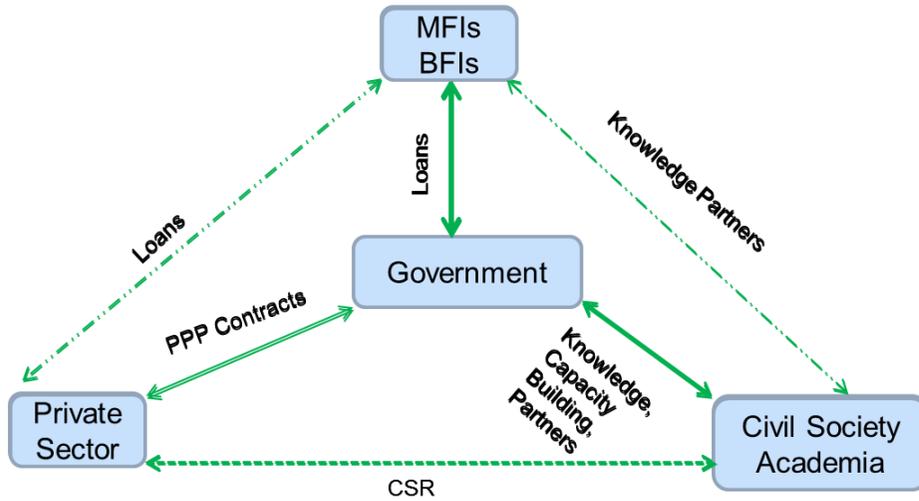
Motivation for the project

Understanding collective action

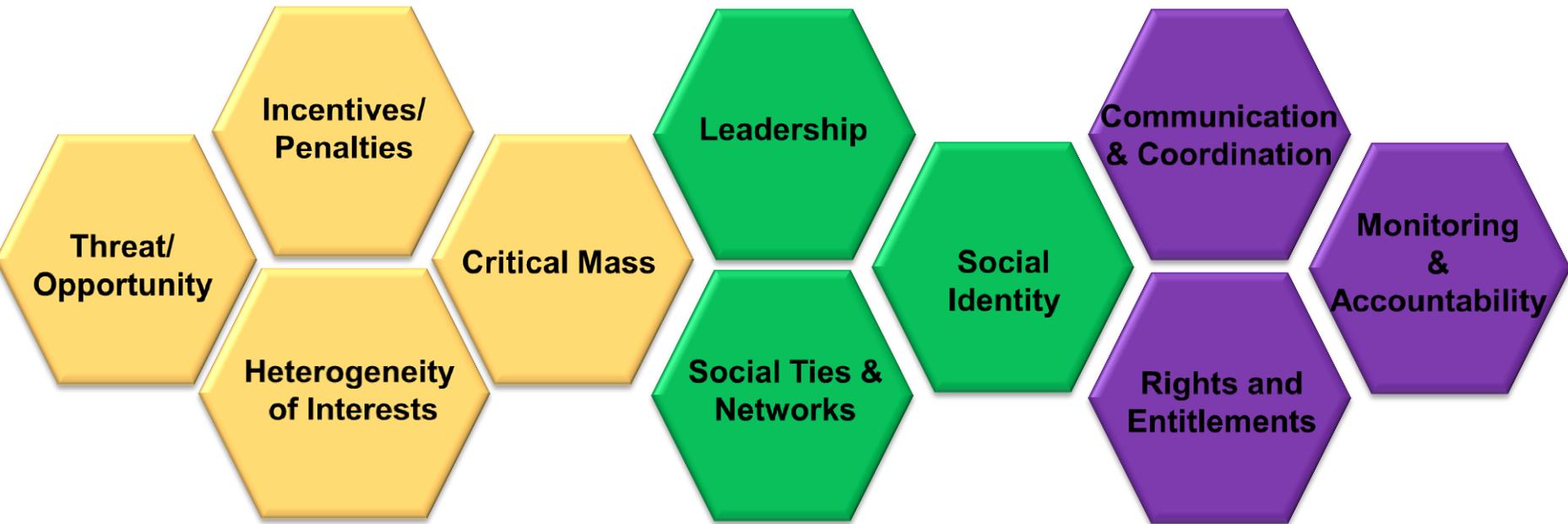
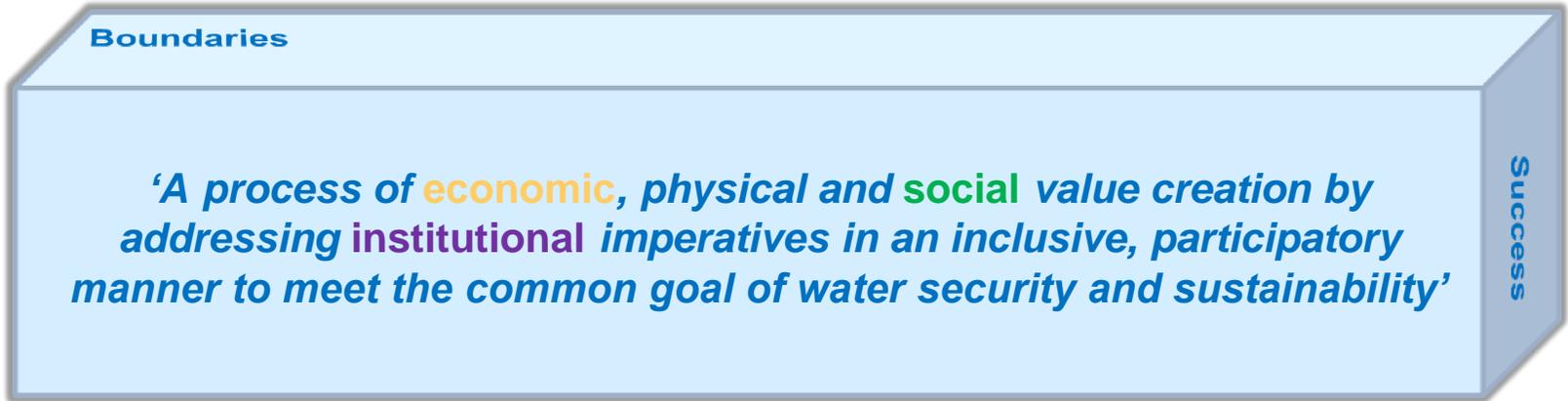
Findings

Recommendations

Departure from “within the fence” approach



Pieces of the collective action puzzle



SOURCES: Olson 1970, Barry 1970, Gordon 1971, Silver 1974, Fireman and Gamson 1979, Dawes, Orbell et al. 1980, Hardin, Elster 1982, Hetcher 1983, Axelrod & Keohane 1985, Muller & Opp 1986, Taylor 1987, Hetcher 1987, Bendor & Mookherjee 1987, Poteete and Ostrom 2002, Leibrand 1986, Van De Krag et al. 1986, Marwell et al. 1988, Coleman 1988, Elser 1989, Macy 1990, Axelrod & Keohane 1990, Stoebe, Frey, Coleman, Ostrom 1990, Udehn 1993, Merton 1938

Distribution of selected cases of water management practices

	Micro-watershed	Macro-watershed	Sub-basin	Basin
National Cases	Phagi sustainable Supply of Water, Rajasthan	Andhra Pradesh Farmer Managed Groundwater Systems (APFAMGS) 	Revival of traditional tank cascade systems in Gundar Basin, Tamil Nadu	
	Cross-cutting Agra Programme (Slum development)	 Ground Water Management at Neemrana, Rajasthan		
	Hiware Bazaar groundwater management project, Maharashtra			
Global Cases			Clear Creek Watershed Project, Colorado	Mara River basin project, Kenya, Tanzania

Inclusive decision-making & participatory data collection

Photo @ Rudresh Sugam



Milakpura Village, Neemrana Groundwater project



Photo @ Sonali Mitra

Rainwater measurement demonstration, R.K Puram Village

Photo @ Sonali Mitra



Rainwater measurement demonstration, Kurnoor District, A.P

GW data display, R.K Puram Village, A.P



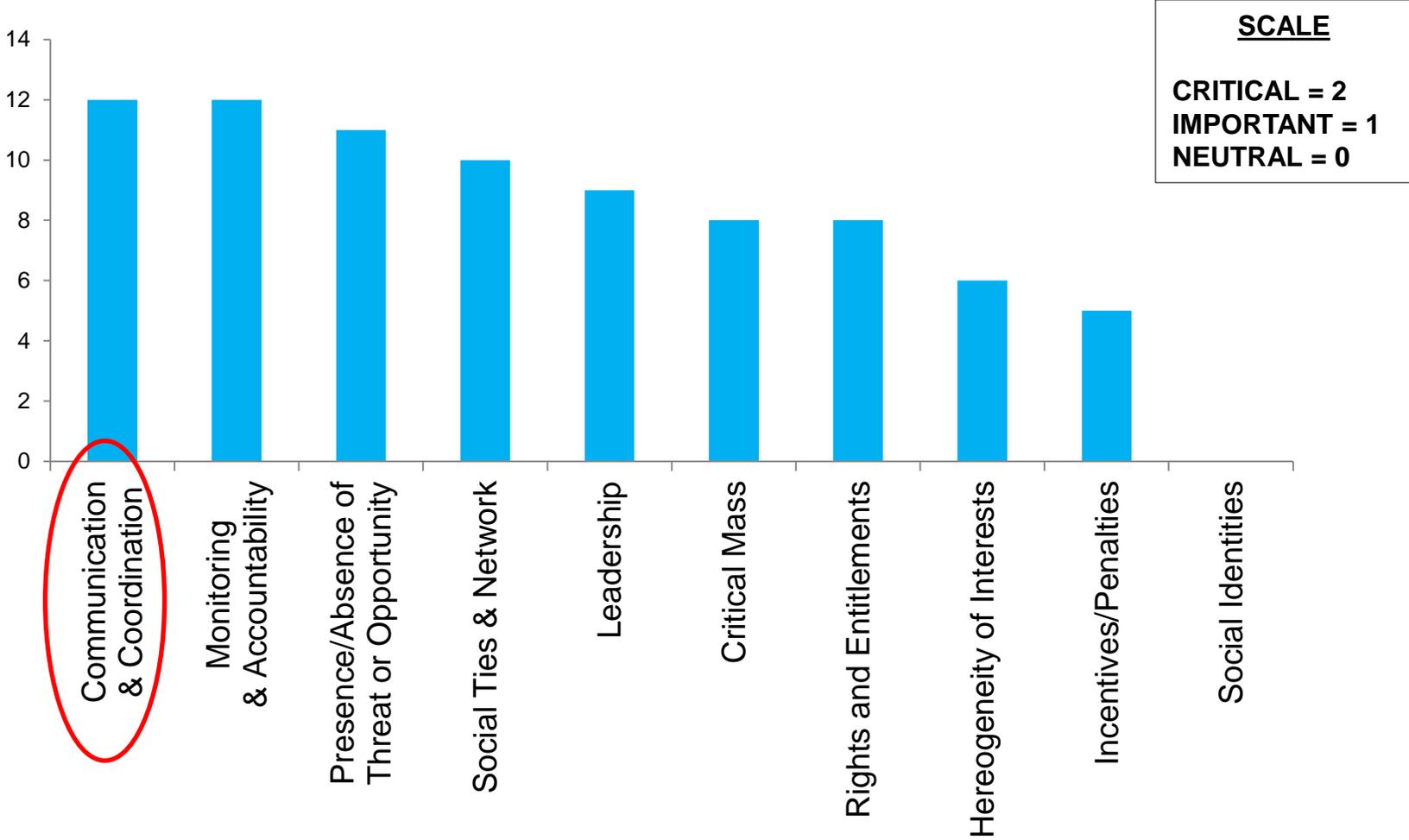
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Summary of case analysis

CASE ANALYSIS	GUNDAR	APFAMGS	PHAGI	NEEMRANA	MARA	CLEAR CREEK
Hydrological Level	Sub-basin	Macro-watershed	Micro-watershed	Macro-watershed	Sub-basin	Sub-basin
Is there presence of a common water threat/opportunity?	Yes	Yes	Yes	Yes	Yes	Yes
Are there incentives/penalties towards water management/ pollution?	No	Yes	Yes	Yes	Yes	Yes
Is the heterogeneity of interests among stakeholders narrow?	Yes	Yes	No	No	Unknown/Ambiguous	No
Are rights and entitlements regarding access and use of water resources clearly defined	Yes	Yes	Yes	Yes	No	Unknown/Ambiguous
Is there a presence of strong leadership?	Yes	No	No	No	Yes	Unknown/Ambiguous
Are the social ties and network between stakeholders strong?	Yes	Yes	Yes	Yes	Yes	Unknown/Ambiguous
Is there a critical mass?	Yes	Yes	Yes	Yes	Yes	Yes
Is common interest stronger than individual social (group) identities?	Yes	Yes	Yes	Yes	Yes	Yes
Is there a strong communication and coordination mechanism?	Yes	Yes	Yes	Yes	Yes	Yes
Are there effective accountability and monitoring mechanisms?	Yes	Yes	Yes	Yes	Yes	Yes

Yes
 No
 Unknown/Ambiguous

Communication & coordination: most critical factor for collective action



SOURCE: CEEW analysis (Based on cumulative scores of 6 case studies)

Potential role of the factors for collective action at different stages



	Factors for collective action	Examples from case Studies
Triggers	Presence of threat or opportunity	APFAMGS, Mara River basin, Clear Creek, Phagi Tehsil, Gundar basin
	Incentives/penalties	Neemrana
	Social ties and networks	Phagi Tehsil, Mara River basin
Facilitators	Leadership	Hiware Bazaar, Gundar basin, APFAMGS
	Critical mass	APFAMGS, Neemrana
	Defined rights and entitlements	APFAMGS, Neemrana
Sustainers	Communication and co-ordination	APFAMGS, Mara River basin, Clear Creek, Phagi Tehsil, Gundar basin, Neemrana
	Monitoring and accountability	APFAMGS, Mara River basin, Clear Creek, Phagi Tehsil, Gundar basin

Which factors trigger collective action?

Factors for collective action	Analyse	Convene	Transform
Threat/opportunity	<p>Analyse Threats/Opportunities: Deploy analytical tools: water footprinting tools, water risk assessment, lifecycle assessment tools, EIA, SEA</p>		<p>Convene Stakeholders: Participatory data collection; combination of traditional knowledge and technical scientific skills; training for data collection and assessment</p>
Incentives and penalties		<p>Voluntary Standards and Codes: Review and establish voluntary standards and certification systems (AWS & UN CEO Mandate)</p>	
Social ties and networks		<p>Transform Collective Decision-making: Organise 'Jal Bandhu' movements (water friends) and 'Pani Mela' (information fairs on water)</p>	

Which factors facilitate collective action?

Factors for collective action	Analyse	Convene	Transform
Leadership		<p>Identify and Nominate Leaders: Evaluate and nominate specific institutions to lead on initial stages of a planned intervention, based on the interest, capacity and capabilities of the institutions available</p>	<p>Build Leadership skills at local levels: Build technical, financial, organisational and management capacities of local representatives through training workshops and modules for continuous skill improvement</p>
Critical mass		<p>Build Critical Mass for Different Programme Stages: Convene key representatives from each of the relevant stakeholder groups to form critical mass. Specified roles for each of the groups should be determined, as per their skills and expertise, for executing different phases of the project</p>	
Rights and entitlements		<p>Formulate Rights and Responsibilities through Participatory means: Define clear rules and norms for water allocation and distribution in an inclusive participatory manner</p>	<p>Formalise Rights with Local Governments and Stakeholders: Through involvement of relevant government departments and political leaders</p>

Which factors help sustain collective action?

Factors for collective action	Analyse	Convene	Transform
Communication and coordination		Establish Forums for Communication and Learning: Maintain a continual and interactive process between funders, technical and scientific bodies, project participants and partners by creating forums, committees or federations	Formalise Communication and Coordination Channels: Facilitate involvement of government organisations/departments/ministries etc. in the process
Monitoring and accountability		Commission Independent Third Party Evaluations: Through periodic reporting and demanding disclosure statements	Formalise Legal Accountability: Facilitate involvement of government organisations/departments/ministries etc.
		Facilitate Collective Review and Accountability Procedures: Convene all relevant stakeholders to review the evidence provided by the independent monitoring report and create accountability measures for addressing the concerns.	
Exit strategy			Develop and Communicate Exit Strategies: Ensure that all relevant stakeholders devise their respective exit strategies, in consultation with all other stakeholders

THANK YOU

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