

Of Toolkits and Practice: Strengthening local governance responses through a Toolkit and the Adaptation Learning Highway

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For Planned Adaptation to be effective.....

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A fundamental requisite is a responsive local governance mechanism

This demands **an understanding** of :

- Community perceptions on change
- Impacts of such change on livelihoods
- Community responses & capability
- Institutional dependency & gaps in support system

And

An effective **two-way information exchange mechanism** for informed decision making and action



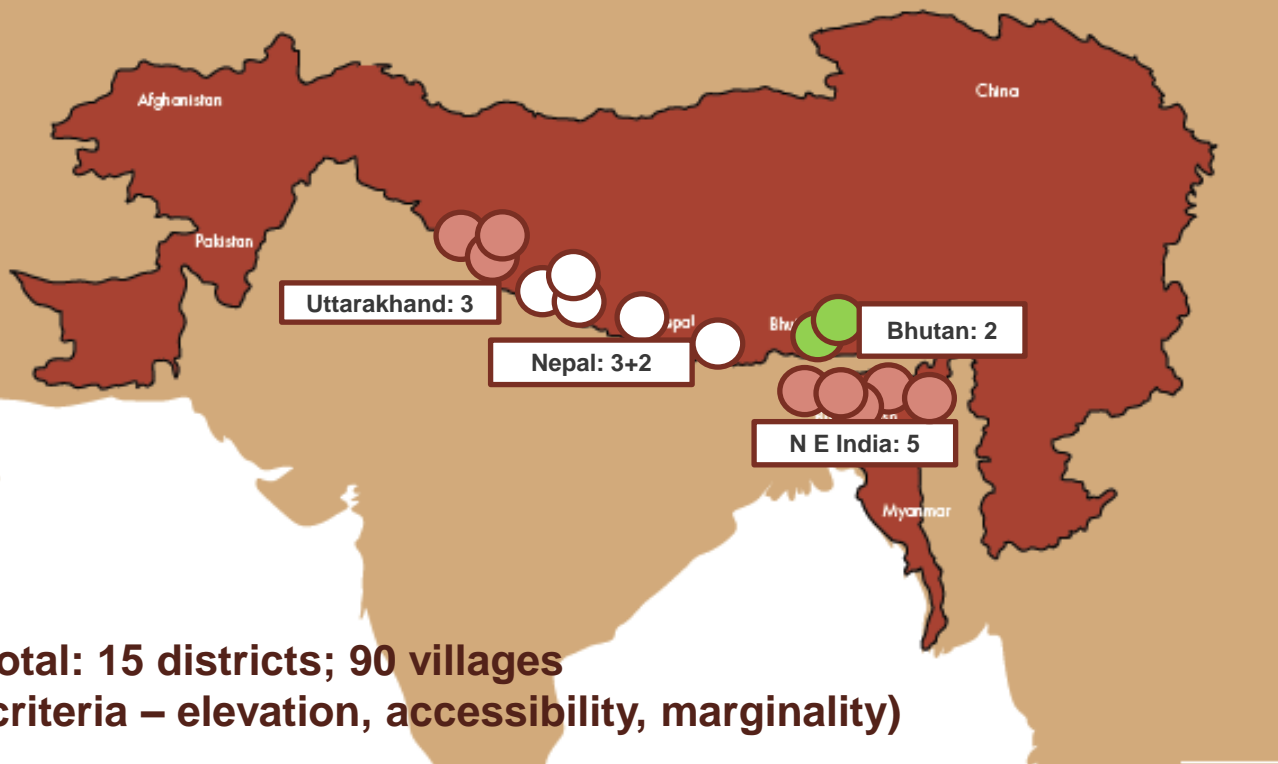
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*Participatory interpretation of
PRA results :
Impacts, coping/adaptive
mechanisms*

Assessments: The canvas....(where and with whom)

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Survey districts



Bhutan

Pemagatshel
Trashigang



India

Uttarakhand
Almora
Bageshwar
Tehri



NE India

W Garo Hills
E Garo Hills
Ri Bhoi
Karbi Anglong
Ukhrul



Nepal

(Mid-west)
Humla
Bajhang
Dailekh
(West & East)
Tanahu
Terathum

Total: 15 districts; 90 villages
(criteria – elevation, accessibility, marginality)

Elevation range: 50-3,500 m

6 IFAD Projects:

Bhutan: AMEPP

India: Aajeevika, MRDS & NERCORMP

Nepal: WUPAP & LFLP

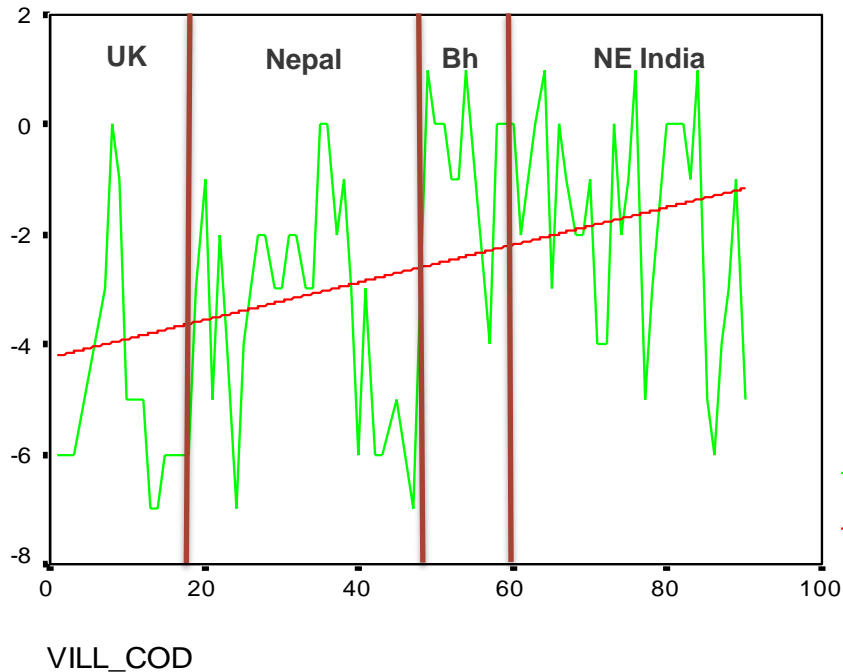
Climate variability – community perceptions: major outputs

- Major weather events
 - Time
 - Duration
 - Intensity
- Comparison with past (historical recall)
 - Weather shifts
 - Changes
 - Intensity variations
- Weather induced hazards
 - Droughts, Flashfloods
 - Pests

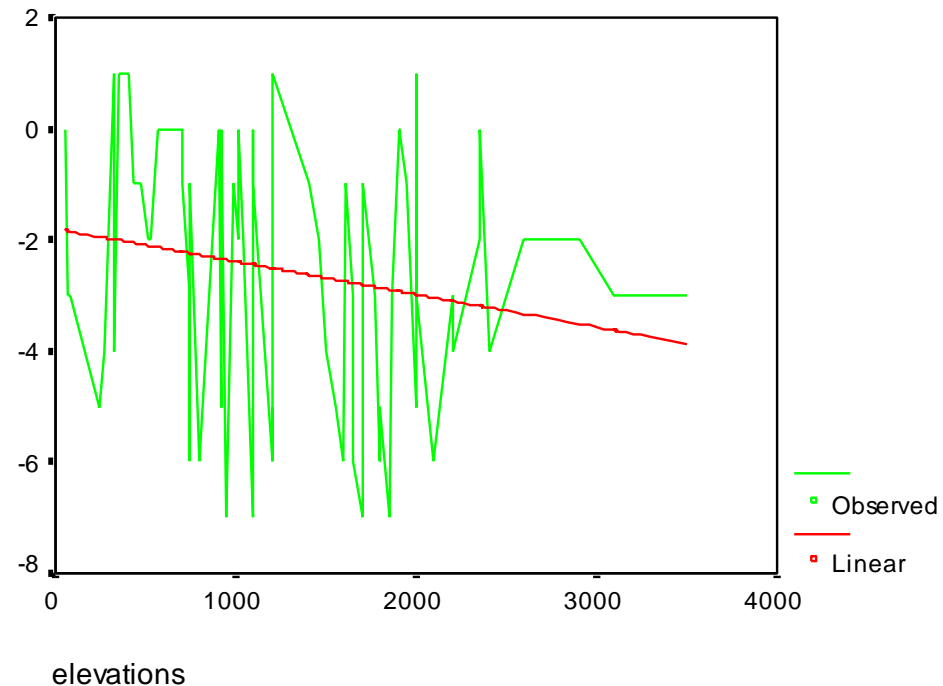


Trends: Longitudinal and altitudinal change in annual duration of rainfall

Rainfall duration change

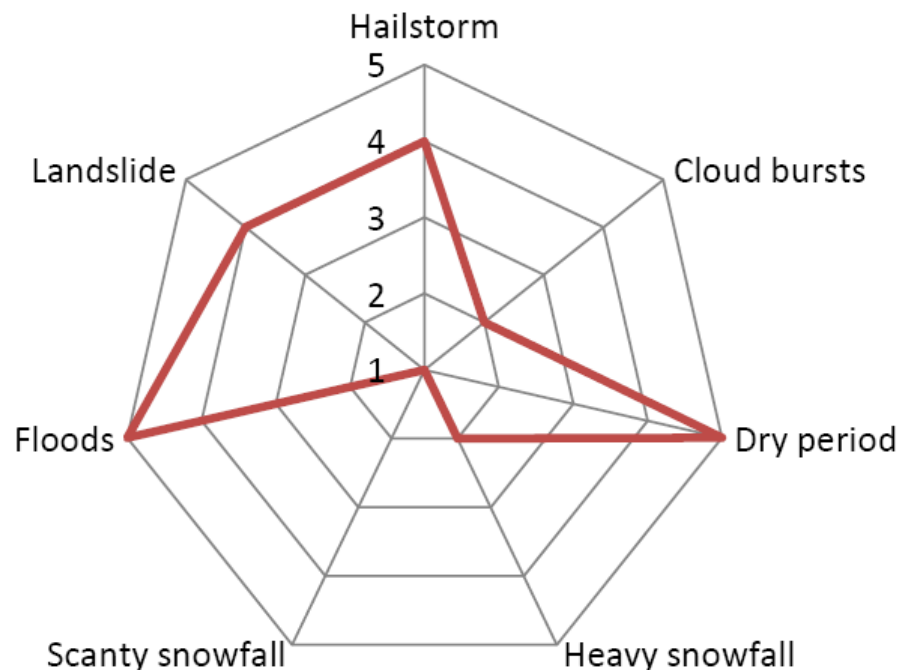


Rainfall duration change



Assessing exposure: Hazard ranking (Spider web)

Community hazard ranking



**Which weather events severely impact livelihood activities?
Ranked by degree of severity of impact on a scale of 1 to 5**

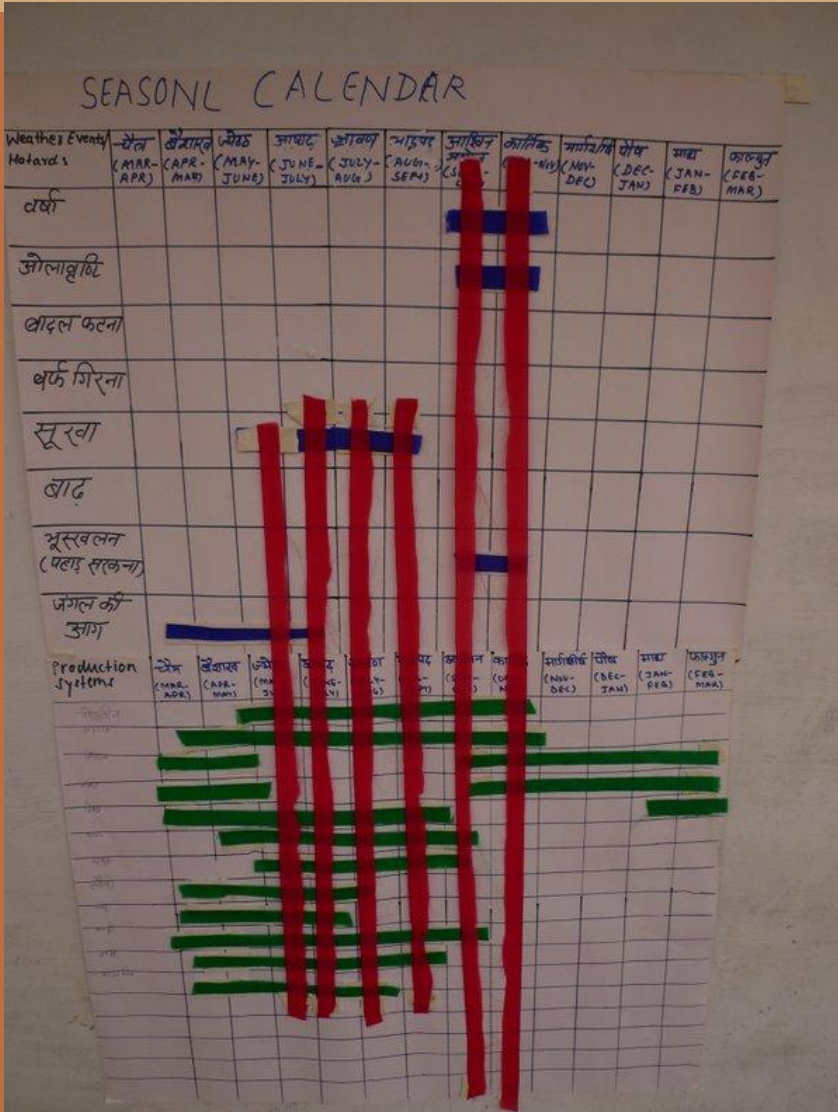
1 = 'negligible impact', 5 = 'strong impact'

Seasonal activity calendar

Production systems	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
Agriculture												
Rice			S	T	W	W	H	H				
Potatoes						LD	S	W	W	H	H	
Animal Husbandry												
Milk		FC						FC	FC	FC	FC	FC
Meat												
Wool												
Forest												
NTFP	C		C		C/S	C/S	C/S	s	s	C/S		

S= sowing; T= transplantation; w=weeding; H=harvesting; LD=land dev.; FC=fodder collection; c=collection; c/s= collection/selling

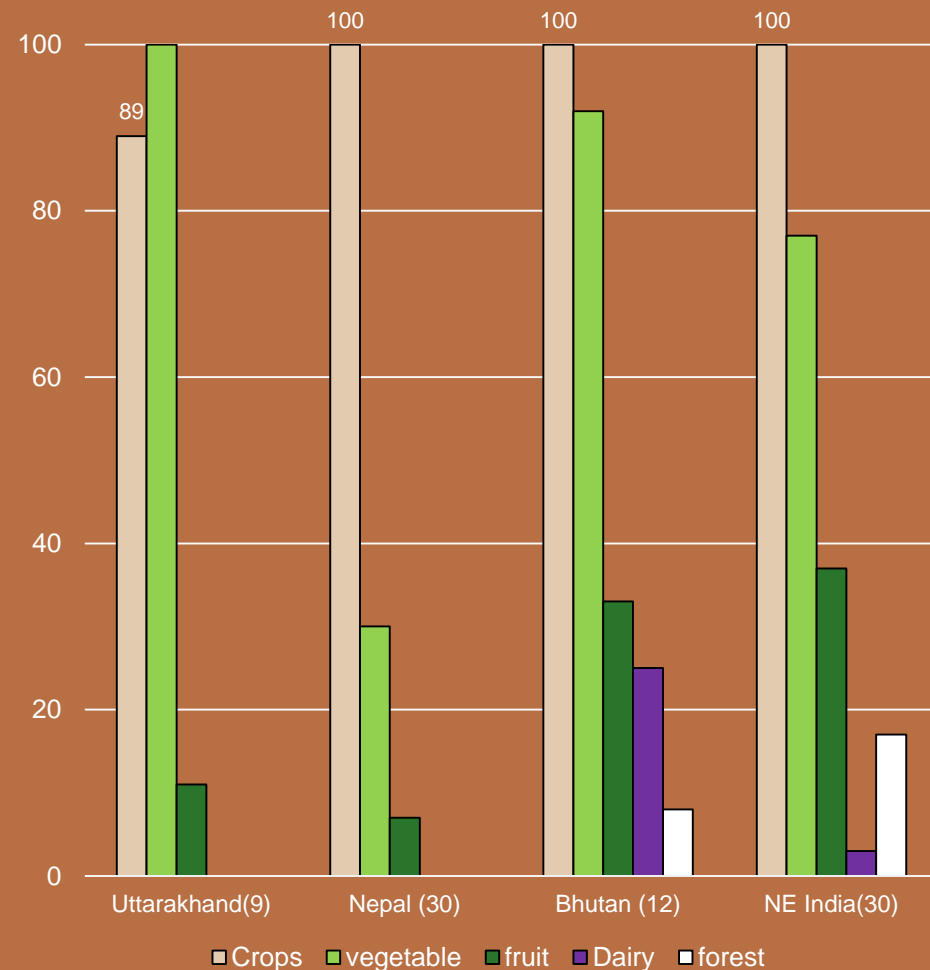
Assessing impacts & responses



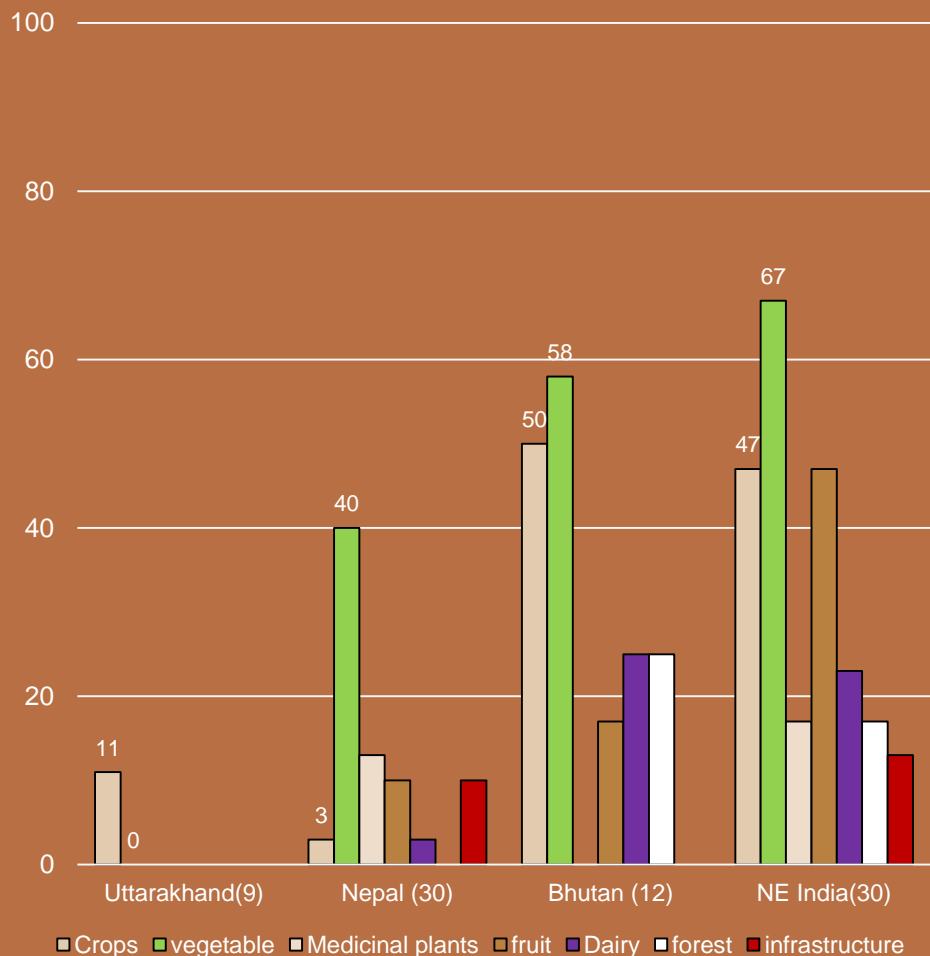
- Overlay seasonal weather events (Tool I) and seasonal activity matrix (Tool III) to identify
 - Impacts of major hazards (Tool II)
 - Responses (coping and adaptive mechanisms)(Iterative process)

Impacts on resources (Food & Income resources)

Percentage of villages reporting of impacts on food resources



Percentage of villages reporting of impact on income resources



Community responses: Coping & adaptive mechanisms

Coping mechanisms

- Agricultural practices
- Shifts in agricultural calendar; changes in agricultural practices
- Alternative crops
- Compliment income through non-agricultural resources (NTFP, minerals)
- Seasonal migration

Adaptive mechanisms

- Crop replacements
- Varietal replacements
- New opportunities (due to warmer weather)*
- New crops (Groundnut, beans); new cropping season*
- Shift to smaller ruminants
- Occupational shifts (Farm to Non-farm)
- Seasonal migration
- Long-term migration

Institutional Dependency (VENN diagram)



Which institutions do households turn to during their time of need?

- Immediate relief
- Consumption needs
- Access to
 - Land resources
 - Credit needs
 - Extension
 - Government programmes/ schemes

Does institutional access vary between rich & poor ?

Institutional dependency & support service provisioning

Purposes	Locations	Institutions				
		Civic			Public	Private
		Informal		Formal		
		Social	Customary			
Basic needs	Uk	**			**	*
	Nepal	*		*	*	**
	Bhutan				***	*
	NE India	**	*	*	*	*
Access to resources	Uk			**		**
	Nepal	*		**		*
	Bhutan	*			*	**
	NE India	*	*	**		*
support services	Uk			**	**	
	Nepal			**	**	*
	Bhutan		*		***	
	NE India		*	**	**	*
Social capital/support	Uk	**		**		
	Nepal			*	***	
	Bhutan	*		**	**	
	NE India	*	*	**	*	
		Notations: * <33% , ** 33-66% , *** >66%				

Seasonal Dependency Matrix: outputs (Endowment)

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- Resources
 - Food security
 - Income security
- Resource availability
 - Time
 - Duration
- System dependency
- Off-farm dependency, time, duration
- Vulnerable months
 - Food
 - Income

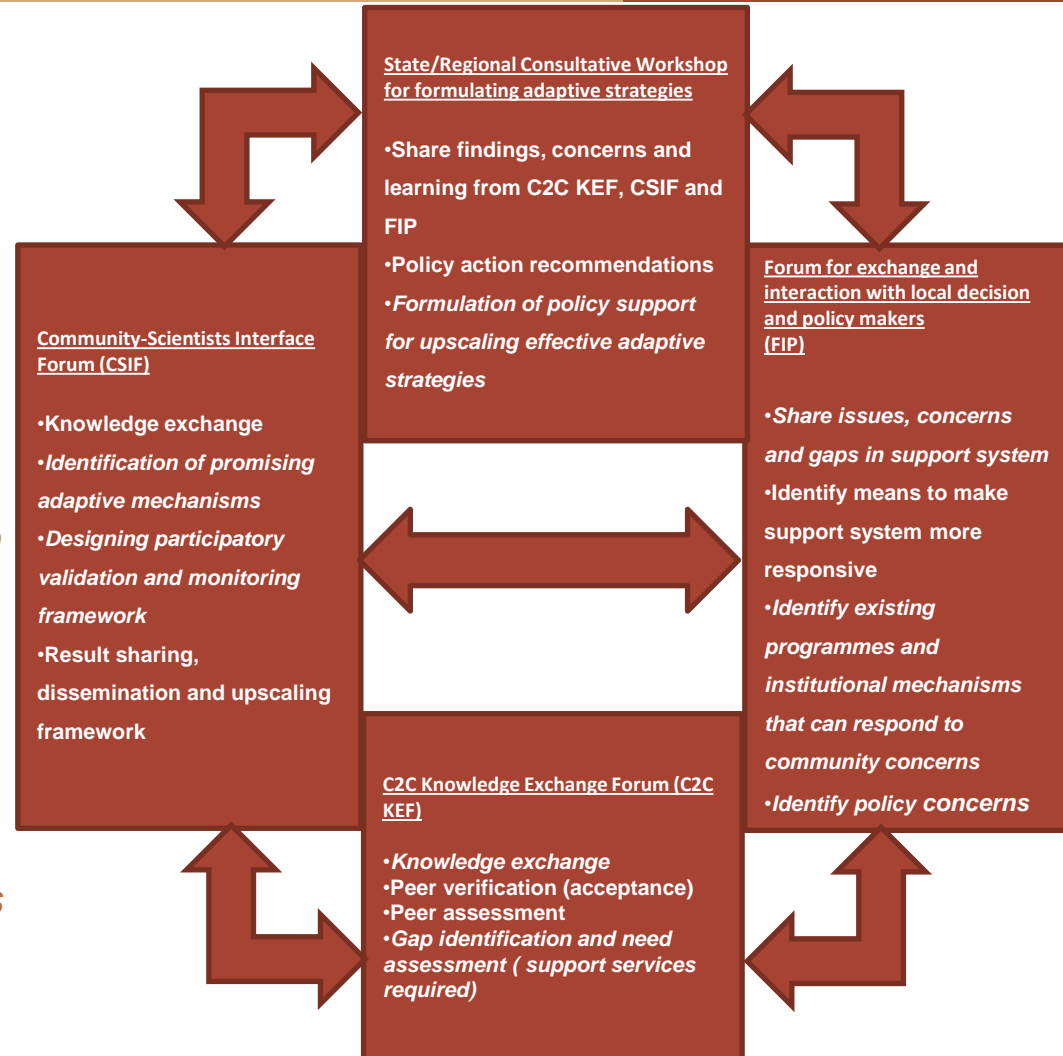


Bridging the Gap: Making Local Governance more responsive

Adaptation Learning Highways:

A horizontal & vertical information and knowledge management approach

- **C2C (Community to community & local govt technical agencies)**
 - Adaptive mechanisms; peer evaluation
 - Need identification, support services assessment
- **CSI (Community-Scientists Interface)**
 - Knowledge interface, validation of community mechanisms
 - Participatory technology development and assessments designing
- **Policy/Decision makers Forum (Interface with policy makers)**
 - Inform administration/policy makers of support service gaps & needs
 - Identify mechanisms to address gaps (action plans, policy)



Thank you

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Panel 22: Synergies between Adaptation Toolkits and Methods in Practice

- What has been learnt from using adaptation toolkits in practice?
- How can they be combined or further improved for greater effectiveness?
- What type of knowledge and information are required to facilitate synergies between tools/approaches and methods in practice (or to overcome challenges)
- Is research required? If so, what type of research?
- What type of capacity building efforts are required to improve synergies?
- How do you take the idea forward?
- What are the missing links (stakeholders/sectors)