

Making Risk Insurance Approaches more effectual in the Hindu-Kush Himalayan Region

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***3rd Asia-Pacific Climate Change Adaptation
Forum***
Incheon, Republic of Korea

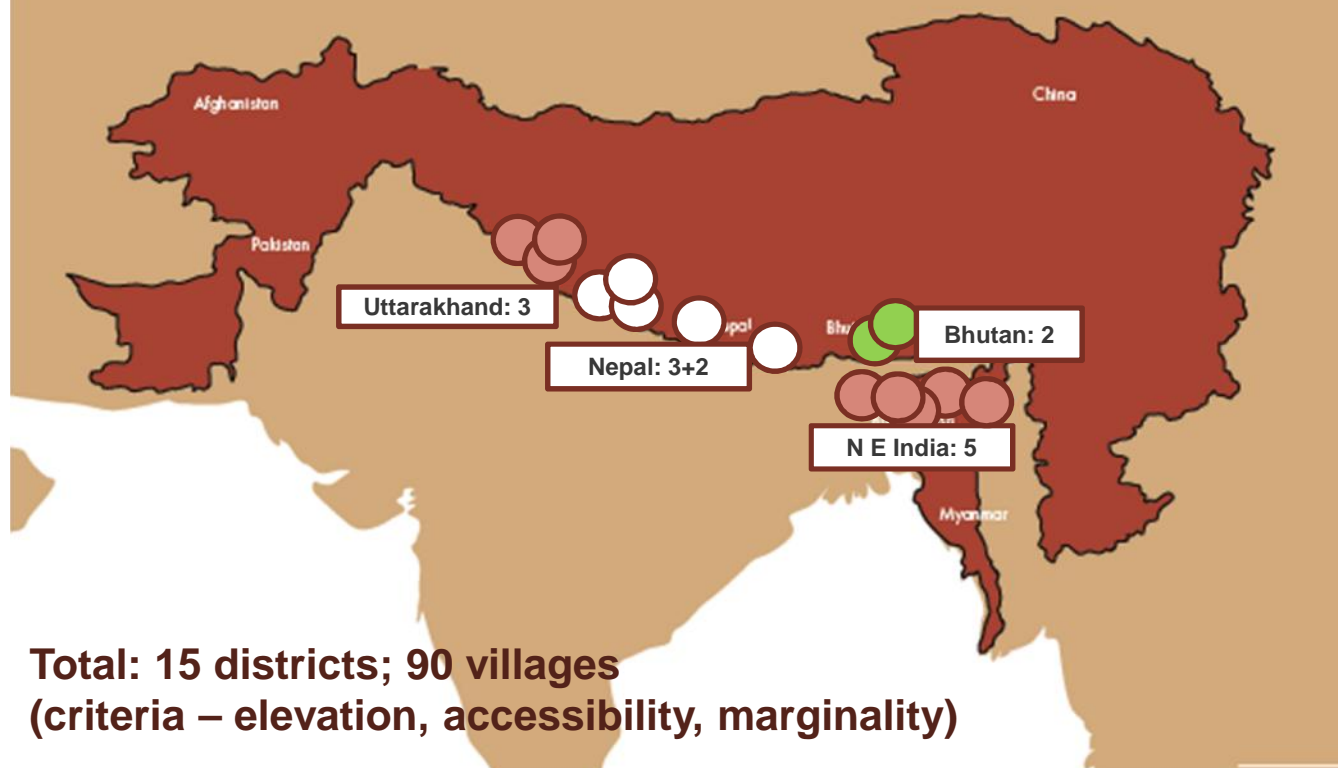
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Assessing Adaptive Capacities - Participatory assessments

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Elevation range: 50-3,500 m

6 IFAD Projects:

Bhutan: AMEPP

India: Aajeevika, MRDS & NERCORMP

Nepal: WUPAP & LFLP

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

Bridging the Information Gap: Consultative policy engagement process

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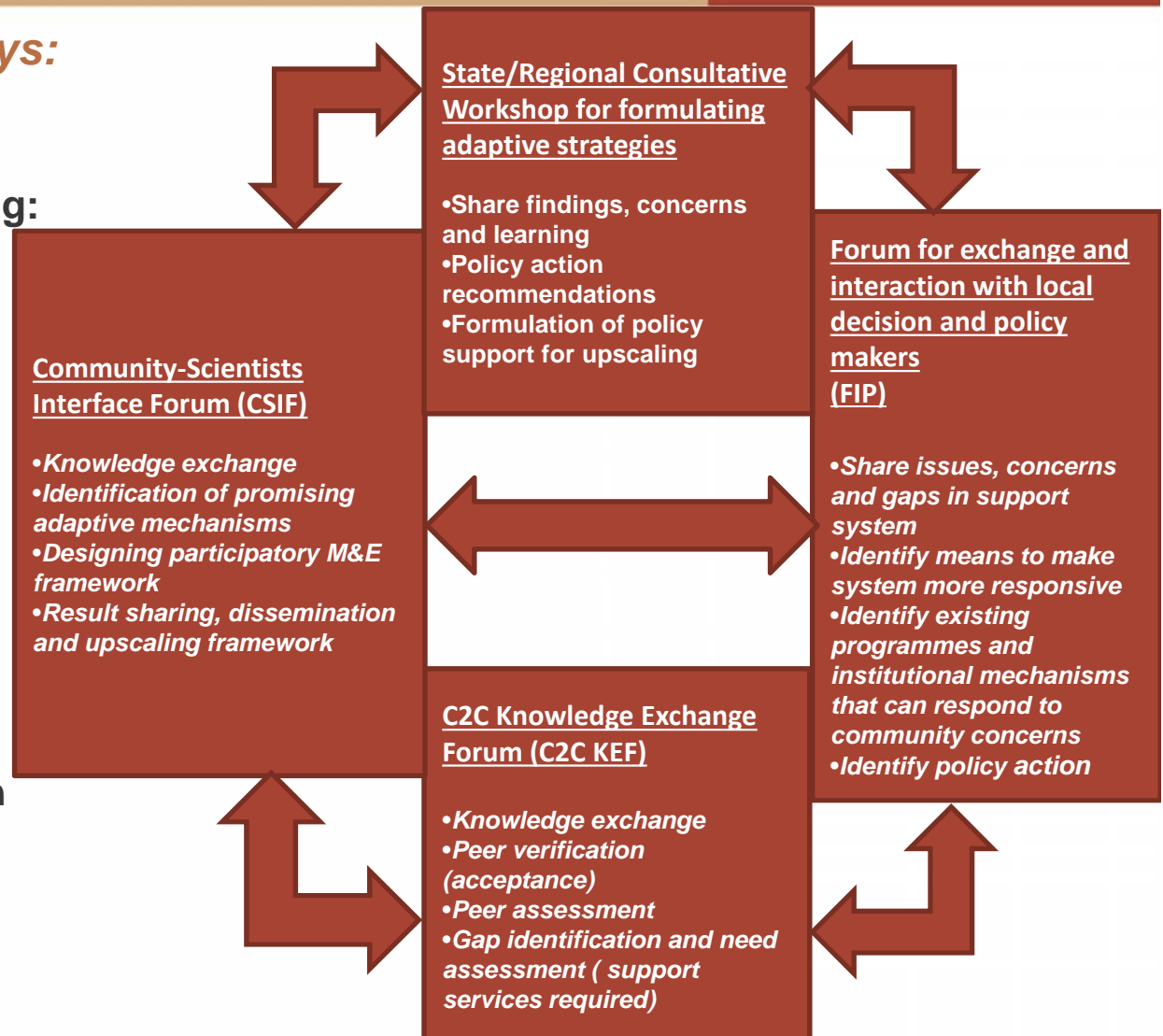
Adaptation Learning Highways:

Process framework for facilitating:

A horizontal and vertical exchange of information and knowledge to strengthen

- informed decision making
- making local governance more responsive; and
- to contribute to effective local adaptive strategies formulation

Implemented in India and Nepal



Identifying vulnerable communities: Sensitivity to exposures (% villages reporting high hazards)

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Exposure	Uttarakhand			Nepal					Bhutan		NE India				
	Tehri	Bageshwar	Almora	Bajhang	Humla	Dailekh	Tanahu	Terhathum	Pemagatshel	Yangtse	West Garo Hills	East Garo Hills	Ri-Bhoi	Karbi Anglong	Ukhrul
Hot	***	**	**				*				*	**	***	***	**
Rain		*							*	**	**		**	**	***
Dry	***	***	**	***	***	***	***	***		**	**	***	***	***	***
Hail						**	*	*	*	**	*		***		
Storm						***	*	*	***	**	*		***		
Pest	***	**		*		***		**			***	***	***	**	
S/E	3/3	1/4	0/2	1/2	1/1	3/4	1/4	1/4	1/3	0/4	1/6	2/3	5/6	2/4	2/3

Notations: * <33%, ** 33-66%, ***>66% of surveyed villages (= indicates degree of sensitivity to the exposure)

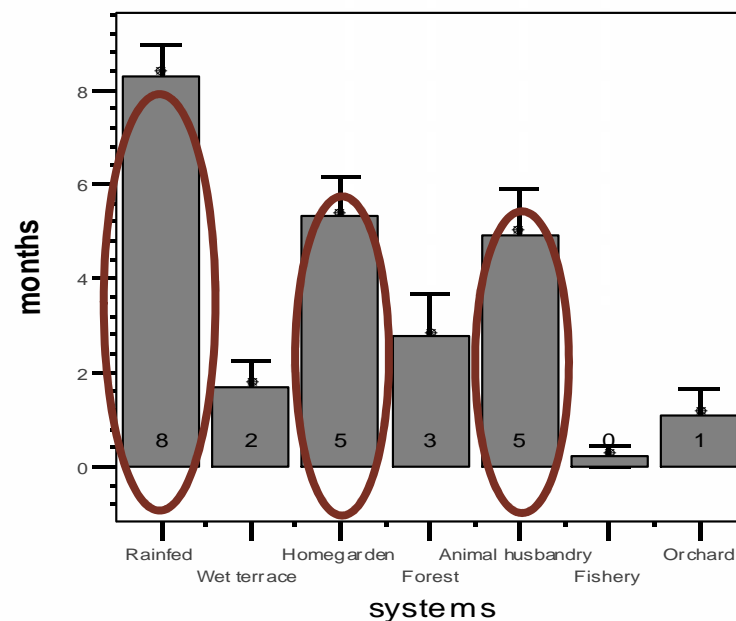
Reality Check

Support Systems for food & income (dependencies)

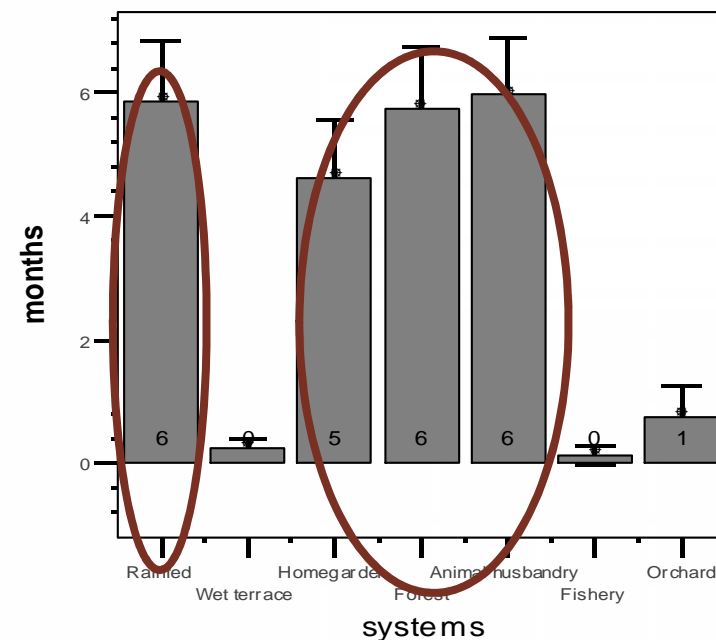
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Food resource availability (months)



Income resources availability (months)



**Rainfed agriculture, homegardens, animal husbandry & forests critical support systems for rural communities in the mountains,
*despite the strong policy focus on irrigated systems and plantations.***

Community responses: Coping & Adaptive mechanisms

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Responses	Uttarakhand	NE India
Coping mechanisms	<ul style="list-style-type: none"> •Cropping delayed <ul style="list-style-type: none"> ○ 15 days – 1 month ○ Sown seeds covered with litter, FYM • Replanting alternative crops : <ul style="list-style-type: none"> ○ Rice – pulses, soya, sesame, coarse grains (<i>mandua/ragi</i>) or <i>madira</i> (fodder) ○ <i>Mandua</i> –ginger, soya, urad (pulse), potato, or <i>madira</i> 	<ul style="list-style-type: none"> •Cropping delayed <ul style="list-style-type: none"> ○ 15 days ○ Seeds dibbled (deep sown); seeds soaked, broadcast • Pest control <ul style="list-style-type: none"> ○Use of Pomelo (citrus) peels, <i>Samsneng</i>, <i>Magvit</i>, <i>So-ik</i>, <i>jarman</i>, <i>I-upo</i>, bamboo shoot extract • Flash floods <ul style="list-style-type: none"> ○ Bamboo matting mesh to avoid siltation of fields

Community responses: Adaptive mechanisms

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Responses	Uttarakhand	NE India
Adaptive (Crops & Livestock)	<ul style="list-style-type: none"> •Crop replacements Wheat – ginger, tumeric, mustard Maize – cauliflower, peas, soya, vegetable climbers Cereals – potato Groundnut – ginger Cereals – horticulture •New opportunities (due to warmer weather): Groundnut, beans Peas, cauliflower (after potato harvest – additional income) •Livestock: reduced numbers, smaller ruminants 	<ul style="list-style-type: none"> •Hang crab carcass against rice bug •Cropping season shift or early harvests •Use of dwarf or early maturing varieties •Banana intercropping with areca and <i>litchi</i> (diversification) •Crop replacements Sesame, soyabeans, rice beans, cowpea •Varietal replacements: Rice -<i>Sapa, Methungia, Amosa, Chuibok, Soksu, Naka</i> Millet – <i>Alika</i> •Systems shift – WRC to shifting cultivation •Increased NTFP dependency •Livestock: piggery, poultry, goats
Adaptive (Occupational shifts)	<p>Non-farm (carpentry, masonry) Wage earning Migration</p>	<p>Non-farm (sand mining, weaving) Seasonal wage earning (mines, plantations, road building) MGREGA</p>

Assessing adaptive capacities: Correlating responses with resource base & Support System Index

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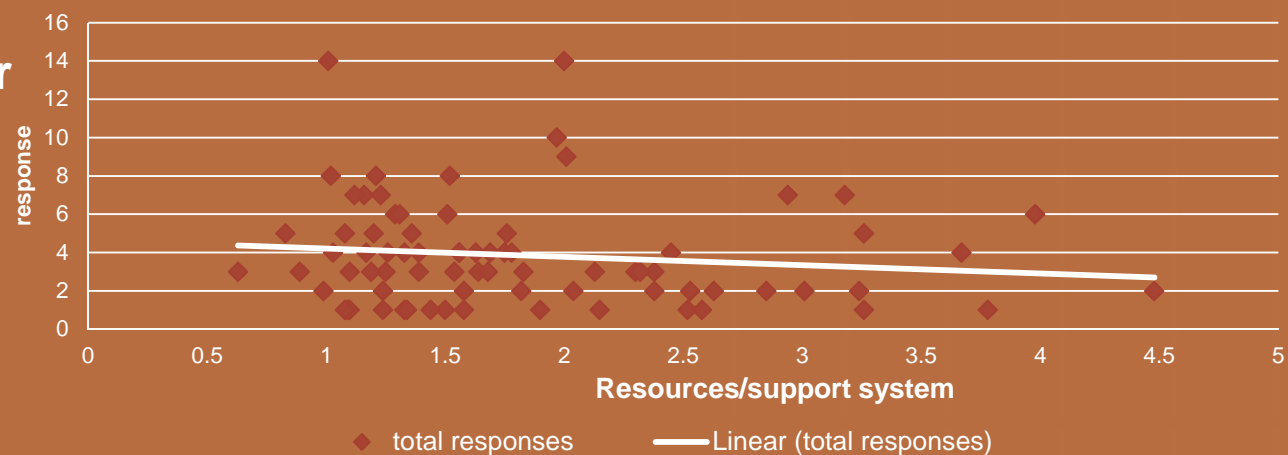
**Higher the provisioning
services less the need for
responses to shocks/
exposures**

**More diverse the
'portfolios' – more
effective the risk
management**

***High diversity increases
resilience***

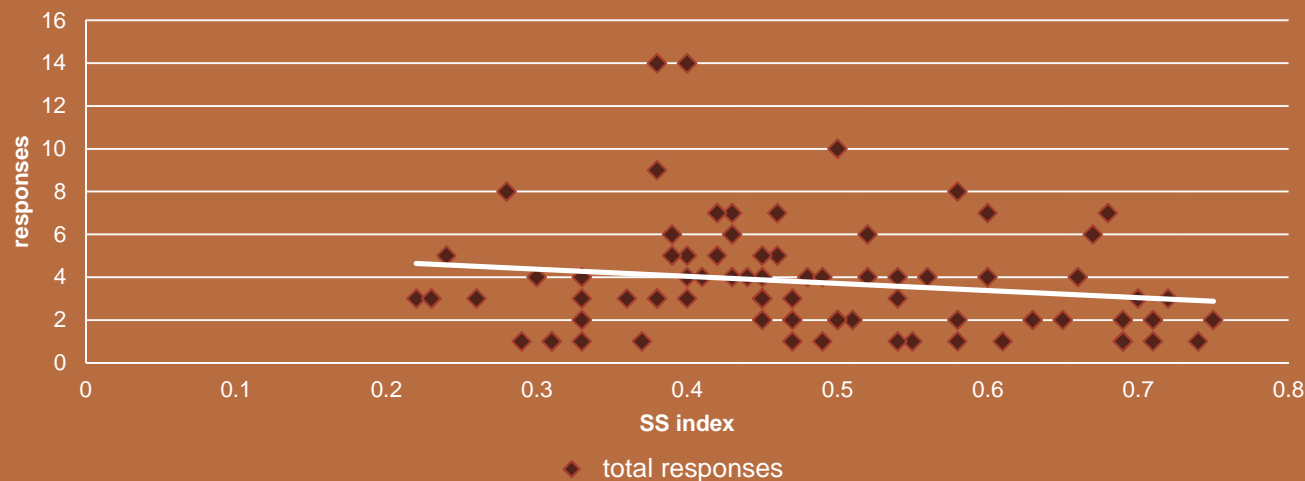
Correlating response with resource base

$$y = -0.4349x + 4.6517$$
$$R^2 = 0.0166$$



Correlating SS index with responses

$$y = -3.3358x + 5.3804$$
$$R^2 = 0.0288$$



The need for financial risk management approaches.....

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Limitations of Current Risk Insurance.....

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Crop Insurance or Index-based weather insurance

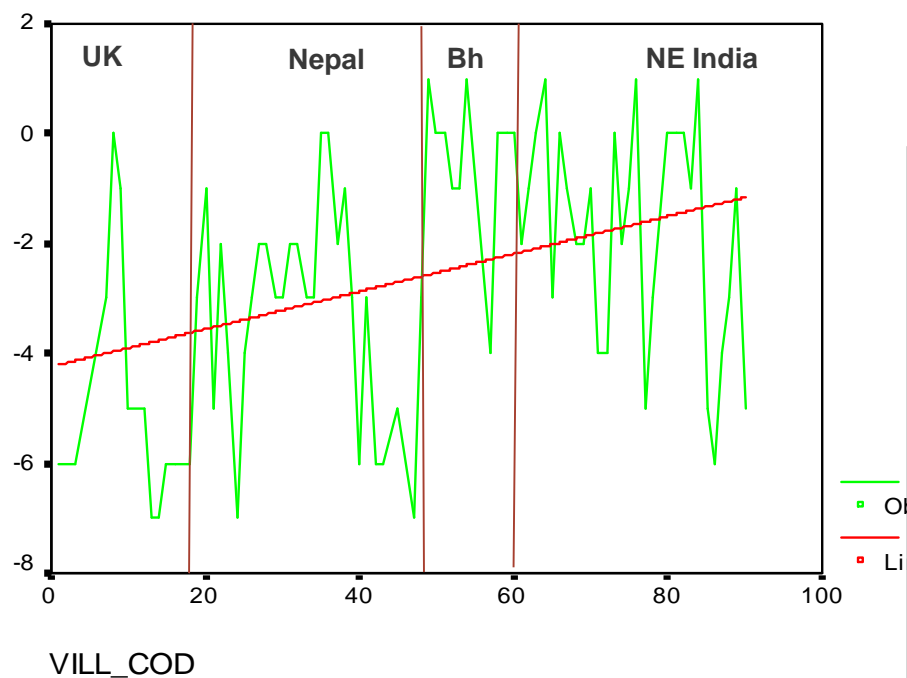
- Poor promotional efforts, inadequate awareness (serious information gap)
- Access limited – not enough agencies, premium often unaffordable
- Non-coverage of remote, “difficult” and marginal areas
- Ignorant of mountain attributes, specificities
- Inadequate understanding of ‘non-conventional’ areas, absence of instruments or packages tailored to mountain specific needs

Index-based insurance: Challenges - High variations, diverse micro-climates

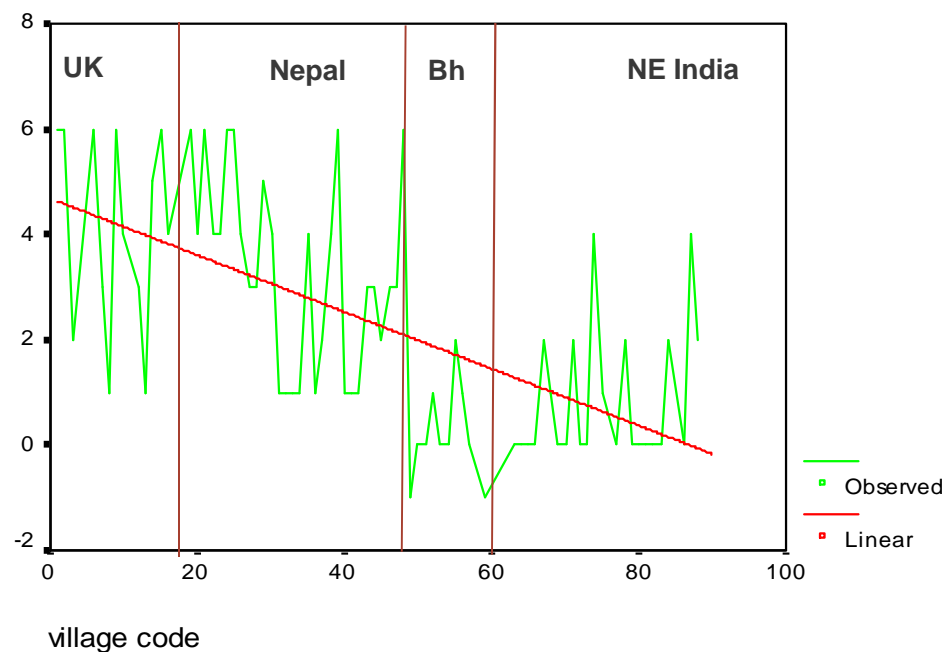
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Rainfall duration change



Dryspell duration change



Making Risk Insurance Approaches more effectual.....

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- Participatory weather monitoring – increase weather monitoring network
- Link to Met database and forecasts (weather index)
- Tap ICT for promoting 'Climate services' & risk aversion



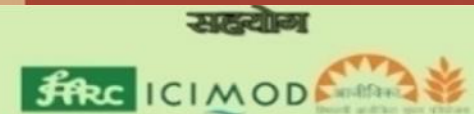
Improved Access to Information Uttarakhand, India

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सामुदायिक सूचना केन्द्र राजगढ़ी
सप्तऋषि कृषि स्वायत्त सहकारिता राजगढ़ी
विकासखण्ड - जौनार, जलपट उत्तरकाशी
उत्तराखण्ड प्रदेश



November 25, 2011

सरकार की योजनाएं
(Government Schemes)

ऋण व बीमा योजनाएं
(Credit & Insurance)

तकनीकीय सेवाएं
(Technical Services)

बाजार से सम्बन्धी
जानकारी (Market)

जन अधिकार (Right)

इनपुट सप्लायर (Input
Suppliers)

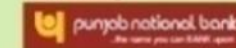
रोजगार व स्वरोजगार
(Income Generation)

विभिन्न विभागों के पते

सामुदायिक सूचना केन्द्र ध्येय

- आमोपयोगी सूचना का प्रभावी प्रसार करना।
- स्थानीय संसाधनों के बेहतर उपयोग के लिए तकनीकी एवं जानकारी का प्रसार।
- लोगों को आम नागरिक के अधिकारों एवं कर्तव्यों के प्रति जागरूक करना।

योजनाएं



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- Information on government/bank/insurance schemes and programmes
- Guidelines for application; forms, contact details
- At SHG Federation offices in pilot sites
- Online www.infodev.in/
- Sustainability: Advertisements from agencies

Making Risk Insurance Approaches effectual.....



- **Improve promotional efforts, bridge information gap**
- **Increase agencies, harness community institutions (SHG Federations)**
- **Make premiums affordable: group insurance, micro-insurance**
- **Tailored instruments for ‘non-conventional’ areas – expand portfolios to cover multiple systems**
- **Specific instruments for mountain areas tailored to mountain specific needs**

Thank you

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