

Community and Ecosystem based Adaptation: *Experiences from the Hindu Kush Himalayas*

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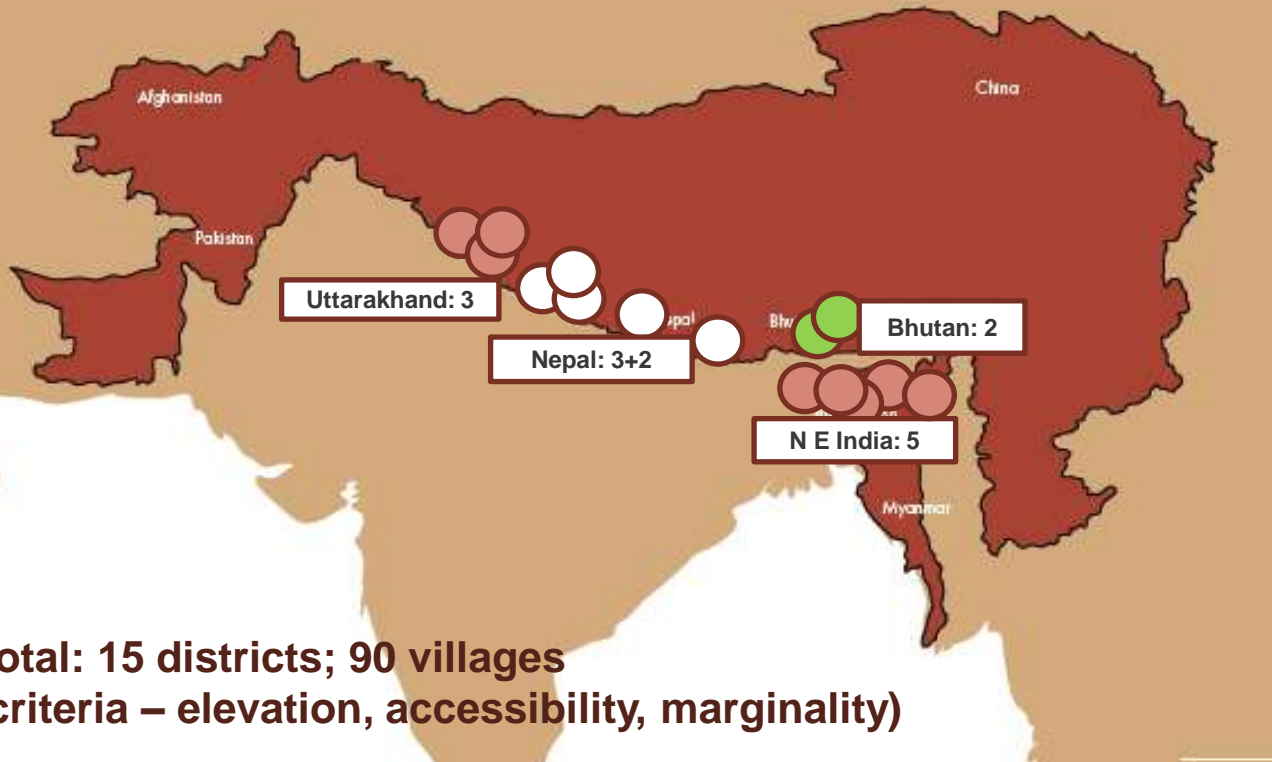
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Community and Ecosystem based Adaptation: Basic Tenets

- *‘Two sides of the same coin’*
- *Issue of ‘Supply and Demand’ management*
 - **Ecosystem services**
 - Provisioning
 - Regulating....
 - **Community Adaptation**
 - Livelihood security
 - Risk management

Participatory assessments: The canvas



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

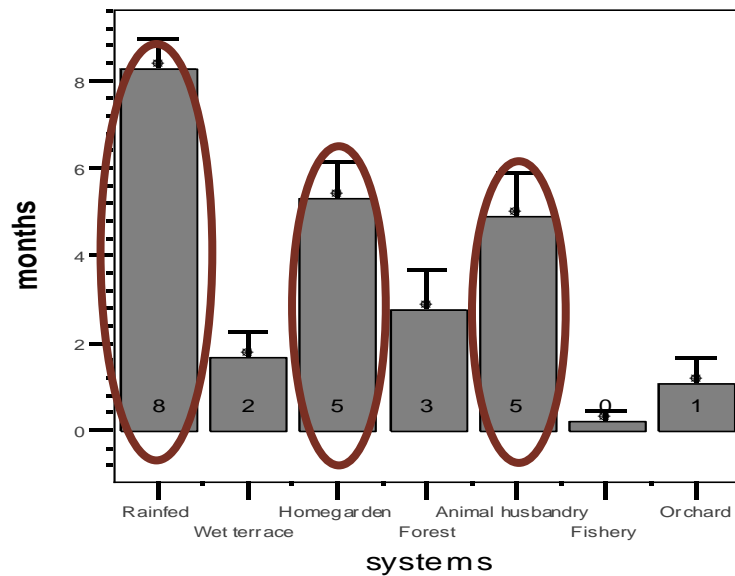
India: Aajeevika, MRDS & NERCORMP

Nepal: WUPAP & LFLP

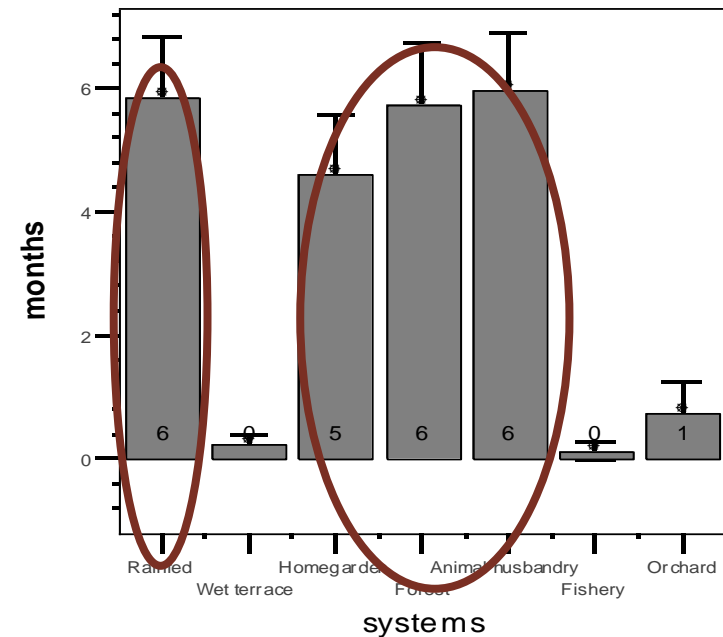
Reality Check

Support Systems for food & income (dependencies)

Food resource availability (months)

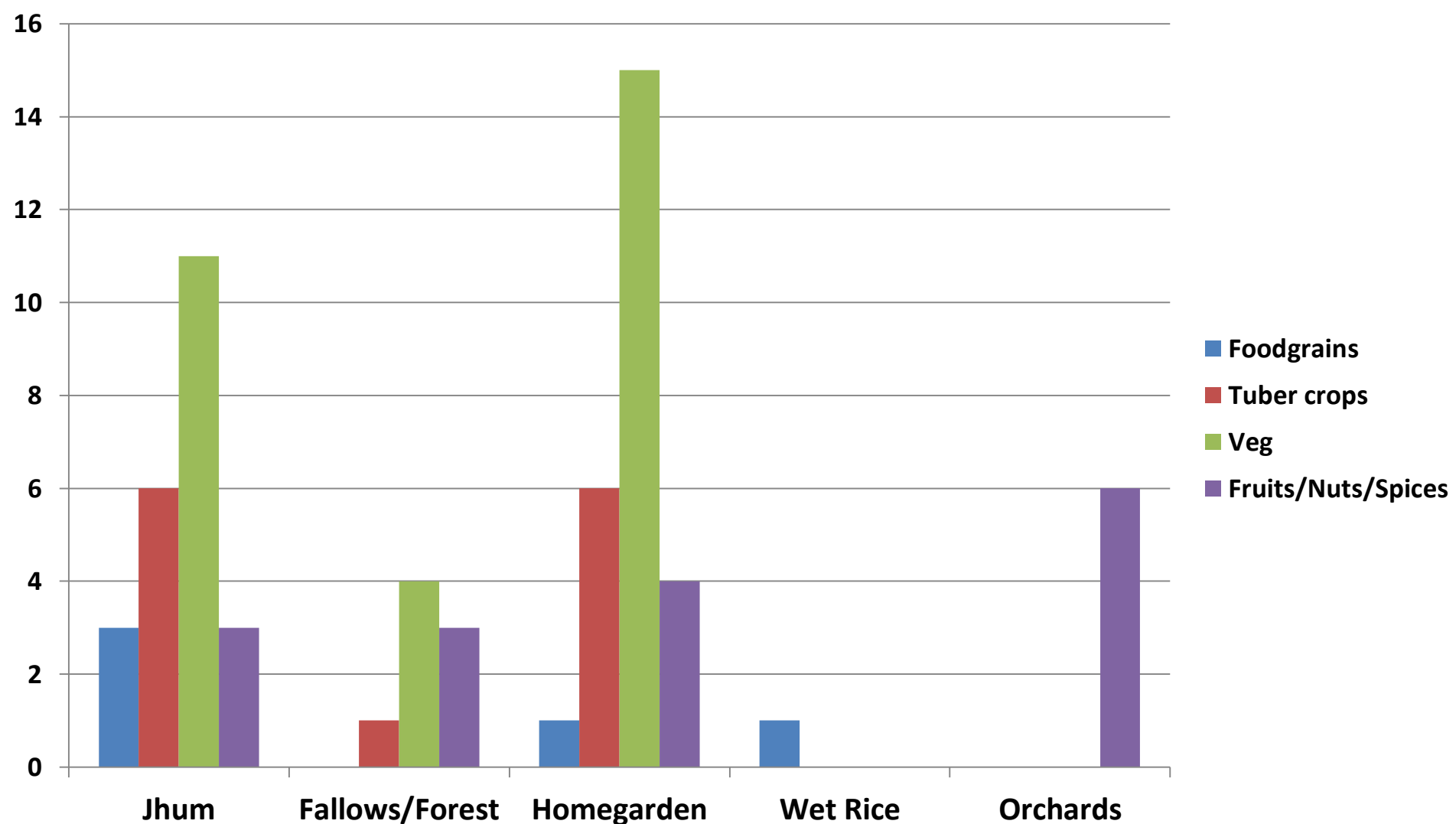


Income resources availability (months)



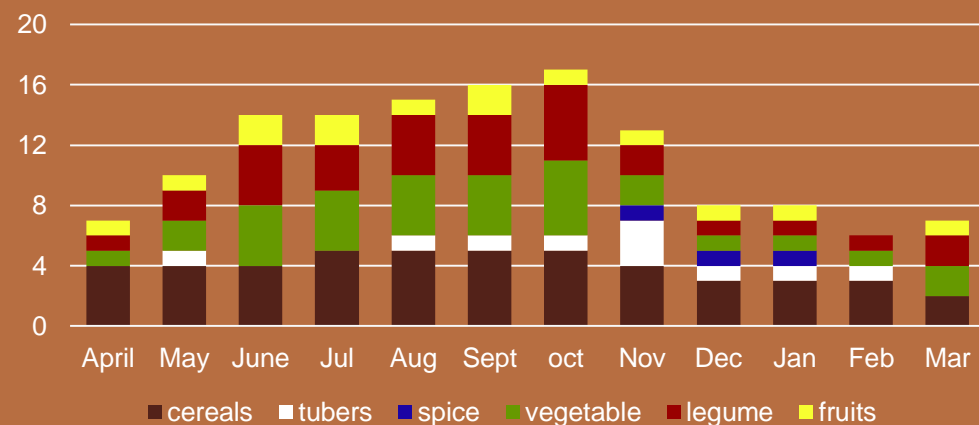
Rainfed agriculture, homegardens, animal husbandry & forests critical support systems for rural communities in the mountains, despite the strong policy focus on irrigated systems and plantations.

Resource availability (no. of crops) from different systems

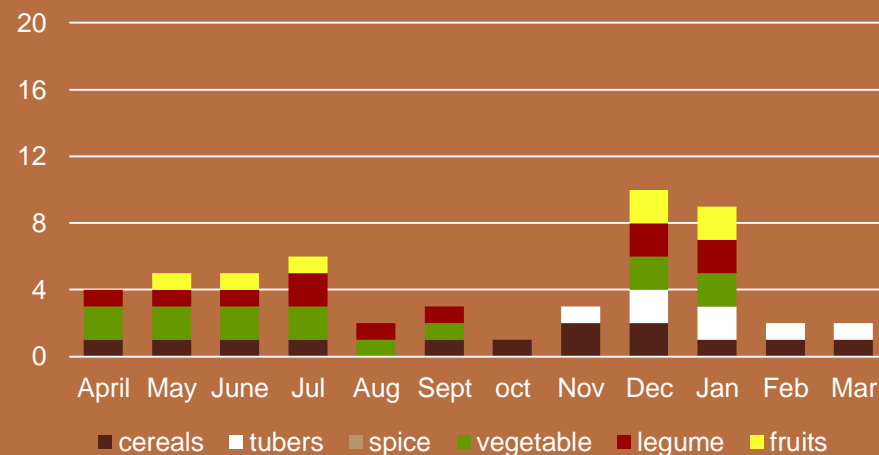


Seasonal resource availability (Diversity): Rainfed system (No. of crops in each category)

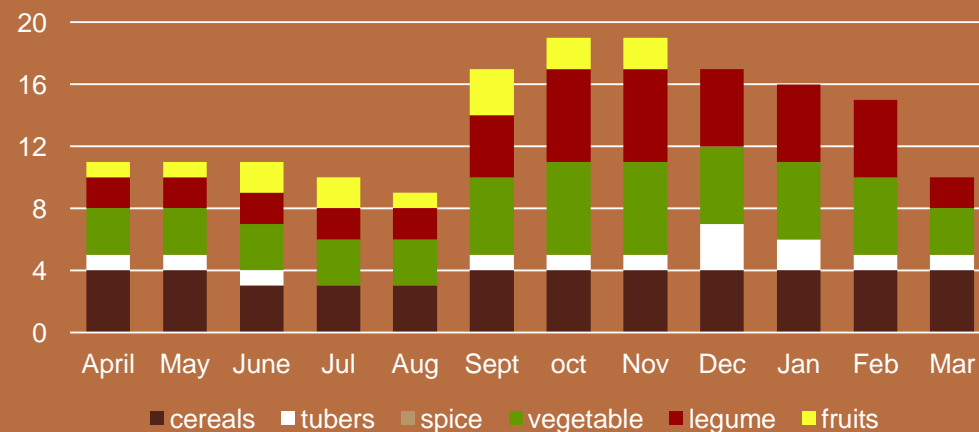
Availability of resources from rainfed agriculture (Tehri)



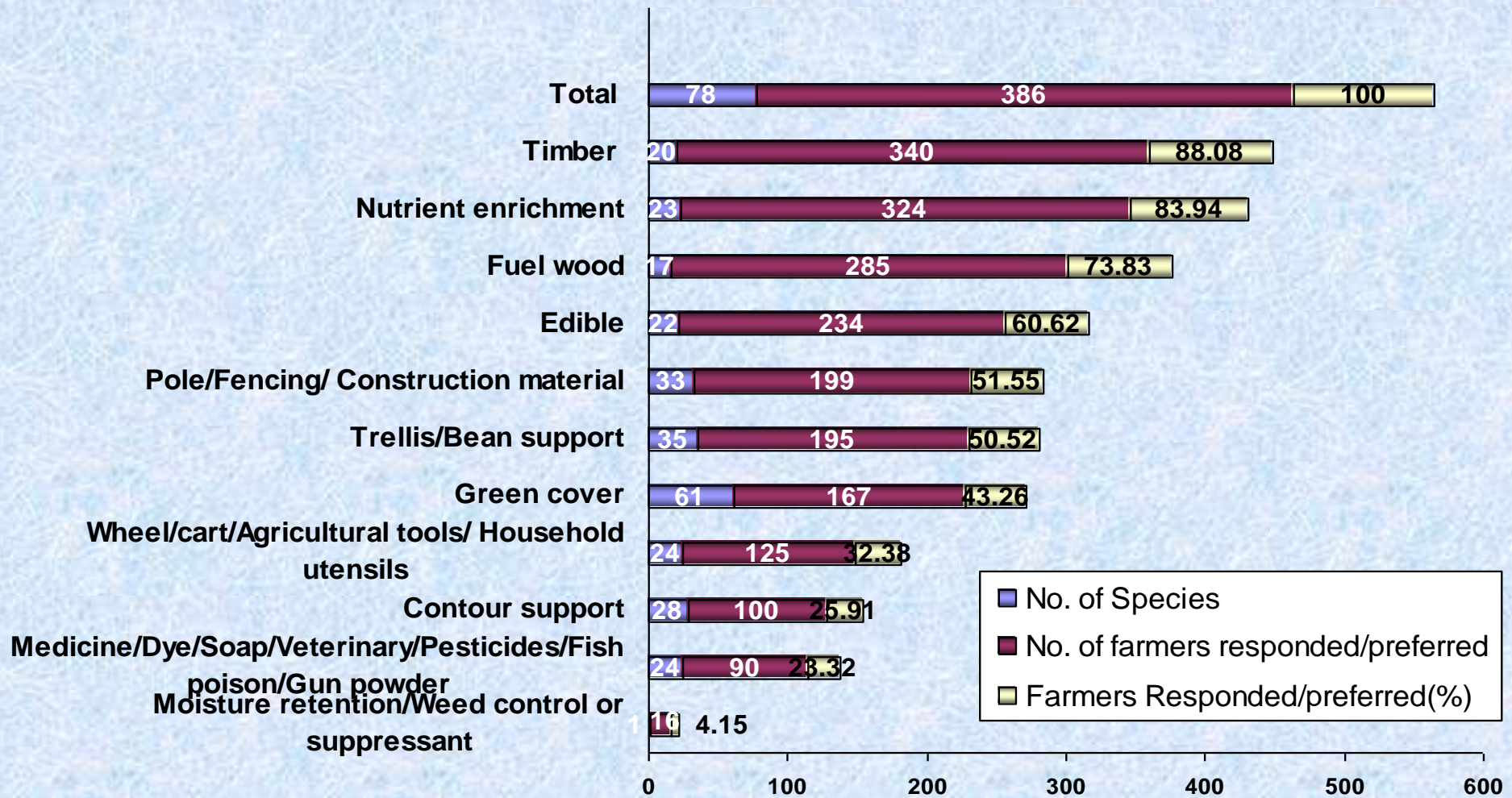
Availability of resources from rainfed agriculture (Almora)



Availability of resources from rainfed agriculture (Bageswor)



Utility value of tree species retained in fallows at clearing (Ukhrul, Manipur)

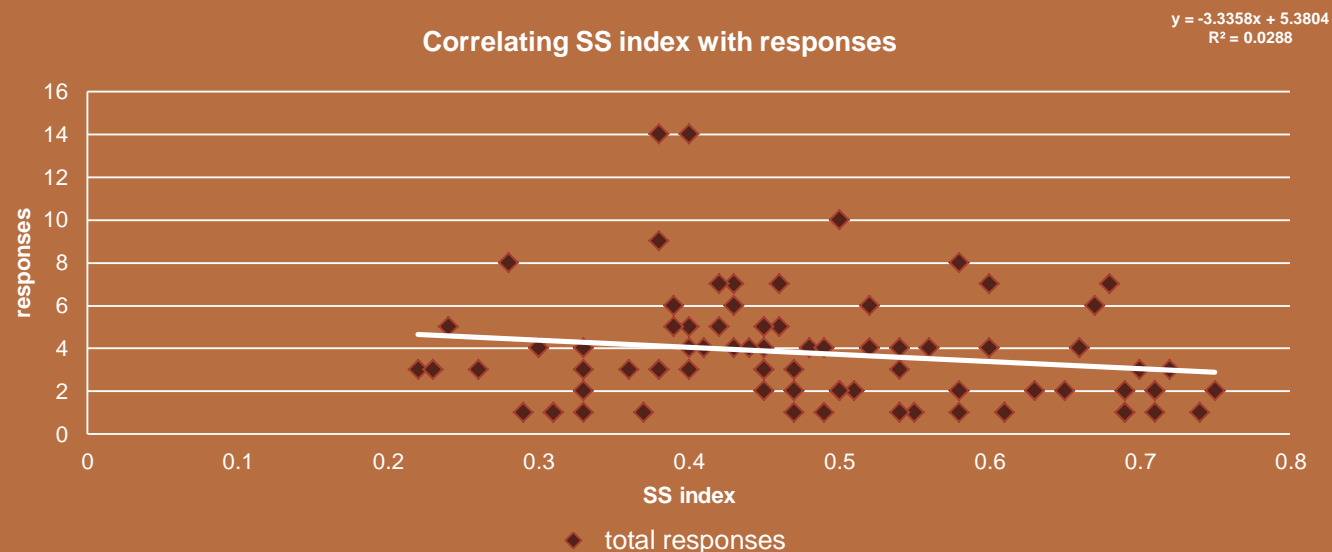
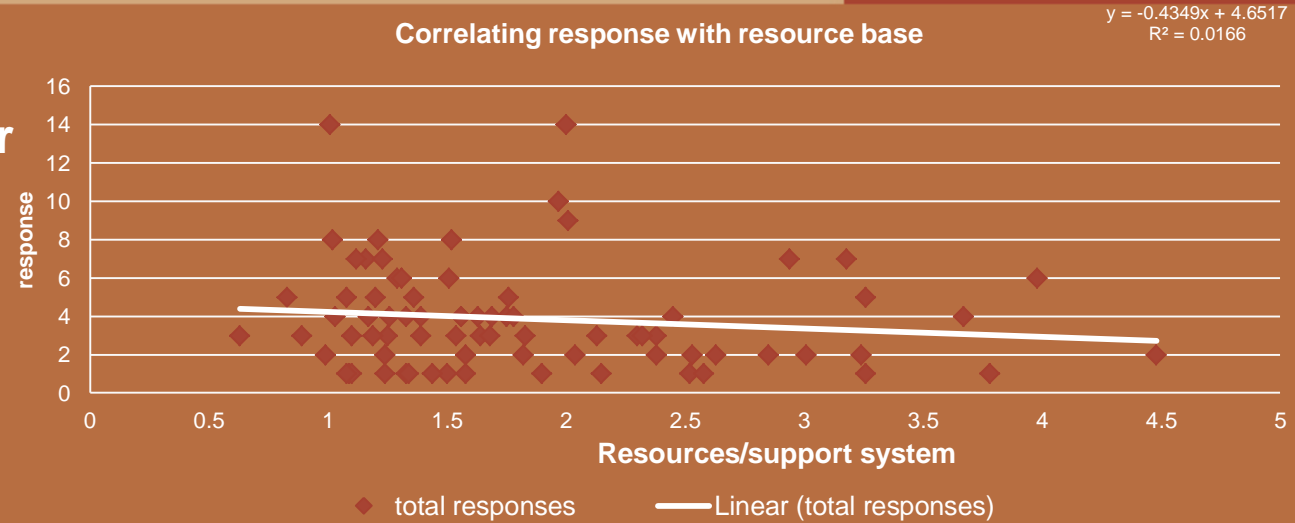


Assessing adaptive capacities: Correlating responses with resource base & Support System Index

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



Managing Change: *Perspective Land Use Mapping* (Garo Hills, India)

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Managing land use change in shifting cultivation areas

- Accommodating livelihood and income needs
- Participatory resource management at the landscape level
- Promoting community management and conservation of forests, water, and ecosystem services



Grounding EBA and CBA: *Managing Change in Shifting Cultivation - Participatory 3D*

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“I have been with the Nokma for over 50 years...this is the first time my A'khing has come alive in front of my eyes...”

Gonath Sangma,
Nokma
Traditional custodian,
Sasatgre

Livelihood Diversification Options: Building on existing resources with comparative advantage

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Income enhancement and diversification through Value Chain approaches:

- Promotion of niche products from mountain systems
- On-farm and non-farm opportunities
- Market linkages
- Access to commodity pricing
- Support services
- Extension and technical services



Improving Institutional and governance mechanisms - Consultative policy engagement process

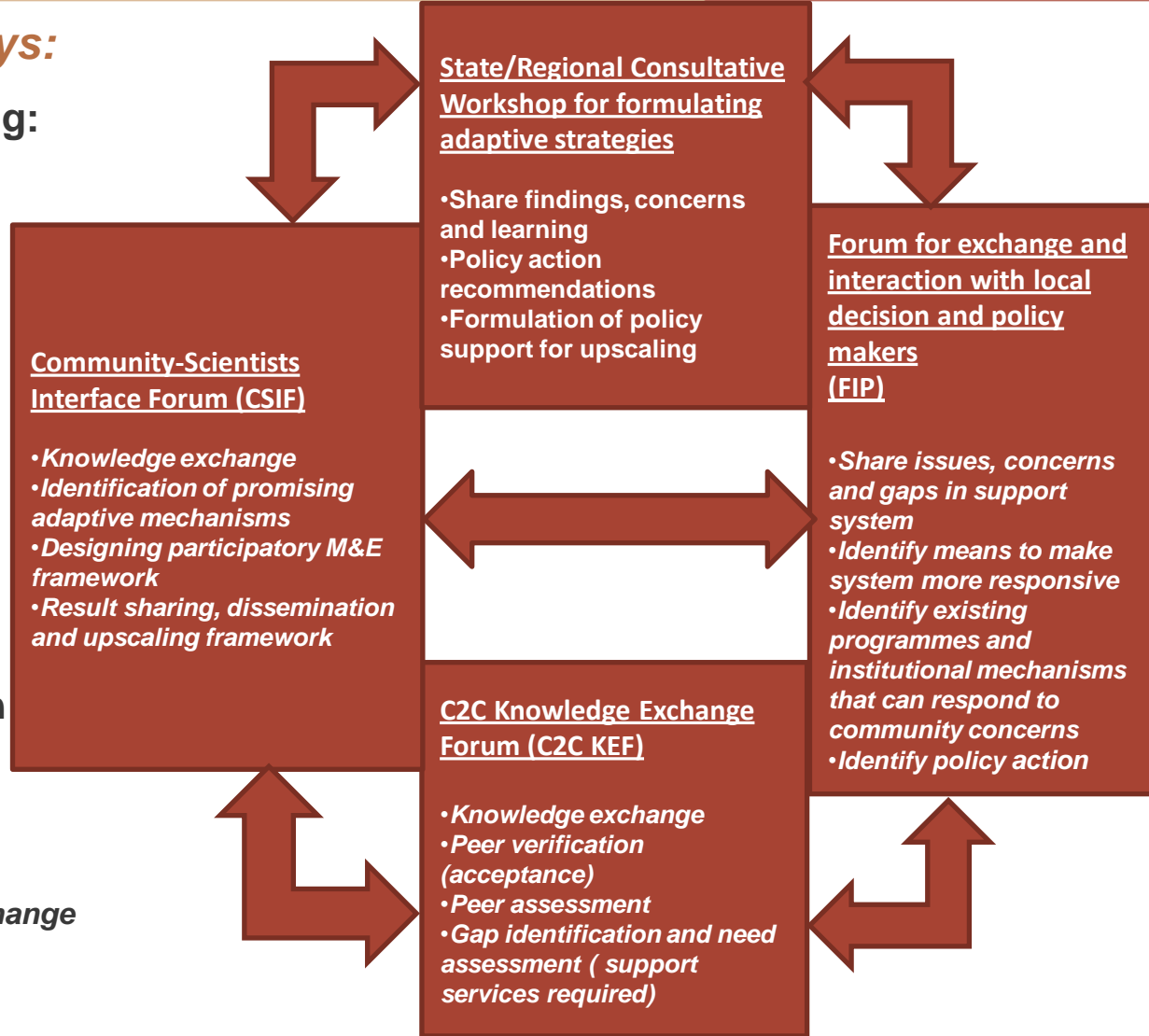
Adaptation Learning Highways:

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
(supported State Action Plan for Climate Change Adaptation of Uttarakhand, India)



- Communities fully recognise the centrality of ecosystem services for ensuring adaptation and livelihood security
- Strengthening partnerships with communities central to synthesis of CBA & EBA

Thank you

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