

# Conservation, Poverty Alleviation and Climate Change

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**and**

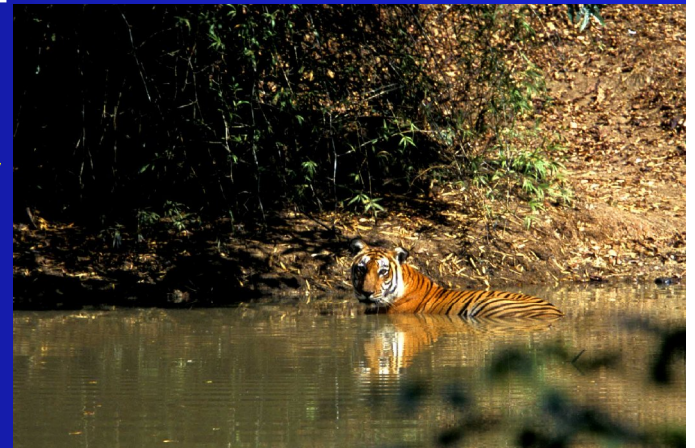
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Darjeeling, India**



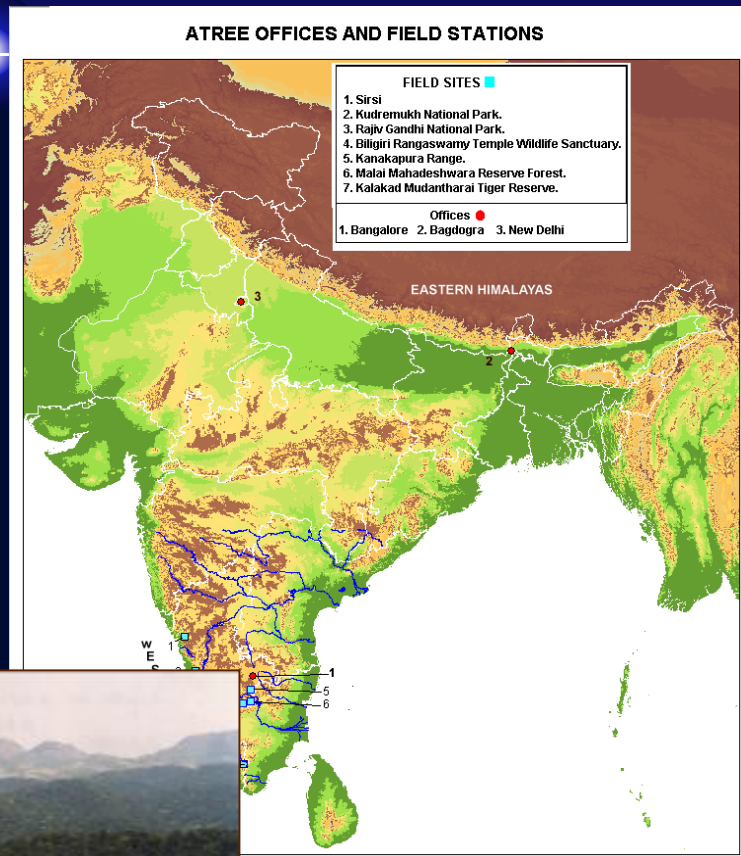
# ASHOKA TRUST FOR RESEARCH IN ECOLOGY AND THE ENVIRONMENT (ATREE)

## Goal

The main objective of ATREE is to enhance conservation through generation and application of **new knowledge**, improvement of **policies and institutions**, engagement of **civil society** and increase of **social and human capital**



# Staff and Facilities



Eastern Himalayas

## Offices

- Bangalore
- Darjeeling
- New Delhi

## Staff

- 20 Fellows (Faculty)
- 15 Honorary Fellows (Faculty)
- 80 Professional staff
- 10 Executive staff
- 30 Support staff

## Field Activities

5 Community Conservation Centers+ Permanent plots and instrumented watersheds



Western Ghats

## Laboratories

GIS/RS; Hydrology; Genetics; Entomology; Ecophysiology

# Organization

## Centre for Ecoinformatics

- Biodiversity Databases
- Conservation Planning
- Ecological Modeling

## Centre for Conservation Science

- Structure and Function  
of Biodiversity
- Human Impacts
- Ecosystem Management

## Centre for Conservation, Governance and Policy

- Conservation and Livelihoods
- Governance
- Policy Analyses



# ASHOKA TRUST FOR RESEARCH IN ECOLOGY AND THE ENVIRONMENT (ATREE)

## Eastern Himalayas Program

- Assessment and monitoring of biodiversity
- Environmental governance and biodiversity-based livelihoods
- Climate change
- Building capacity of NGO's through networking and grant making

# *Conceptual Design*

## **Assumptions: Hurdles for Sustainability**

- **Environmental degradation**
- **Economic (Poverty)**
- **Social (Political, Institutional)**

***Climate Change***

# Conceptual Design : Model

• Describe system parameters

(participatory process)

↓  
• Drivers

↓  
• Interventions → Resilience

↻  
↓  
• Evaluation and monitoring

↓  
• Scaling

# *Successes*

## Conservation and Livelihoods Program



















# **Small farmers in biodiversity rich areas: sustainability issues**

- Small Land holdings ( < 1 ha )
- Low income (< \$ 1 per day)
- Poorly defined tenure
- Lack of credits and markets
- Reliance on local ecosystems



# **Conceptual Design**

## **Interventions-Institutions**

- **Green micro-enterprises, value chains (economic gains)**
- **Village level bodies, cooperatives (economic and social gains)**
- **Stewardship of local ecosystems (ecological gains)**

# Successes: Economic Green Micro-enterprises, increase in incomes....





# Successes: Economic Federations, Corporations





# Successes: Social Institutions

- Self-help groups
- Gender representation
- Village level elected bodies
- Traditional institutions and knowledge; rights; tenure



# **Successes: Ecological**

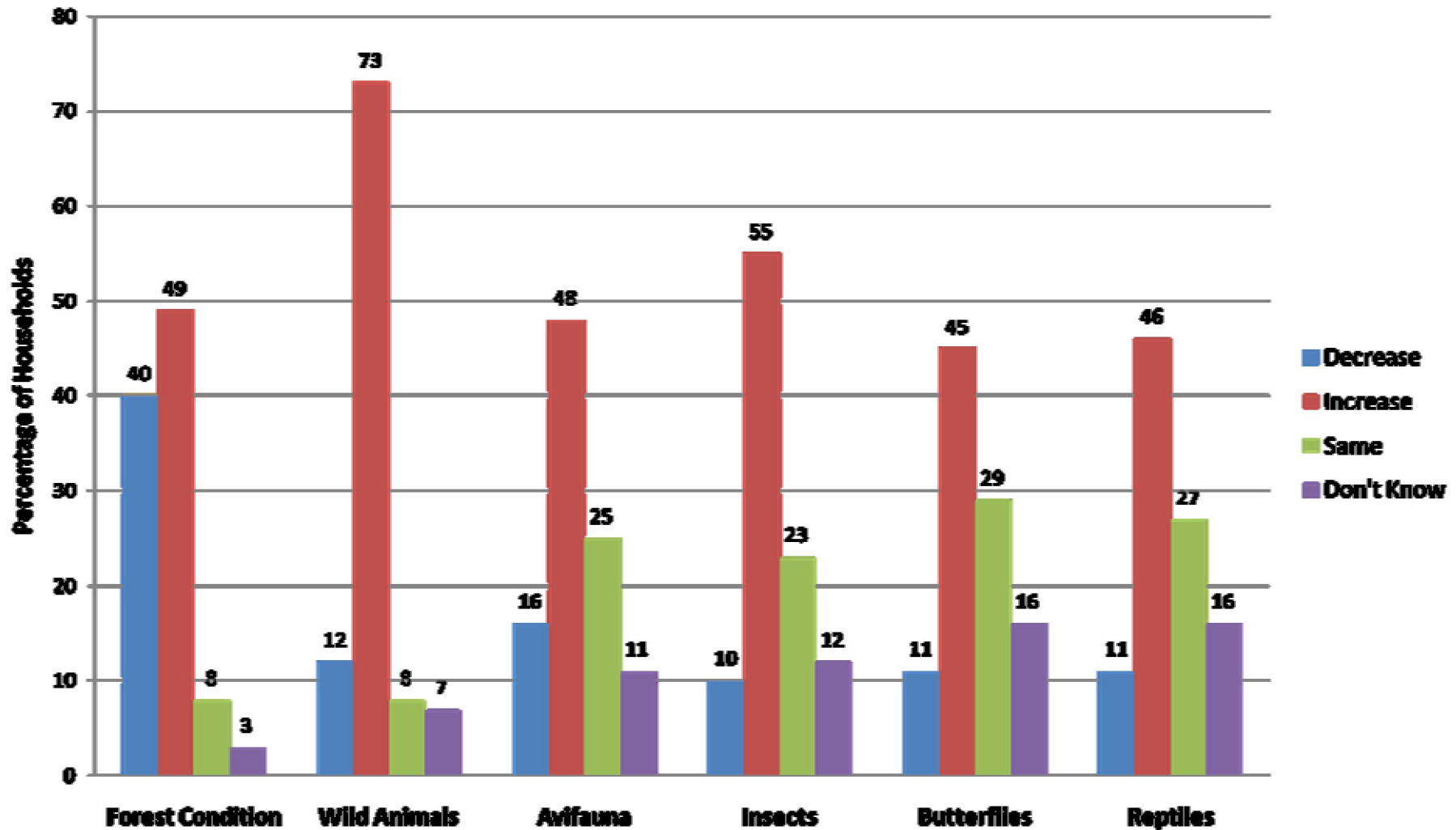
- **Curtailment of forest degradation**
- **Stewardship of local resources**
- **Participatory resource monitoring**
- **Education**
- **Community conservation centers**



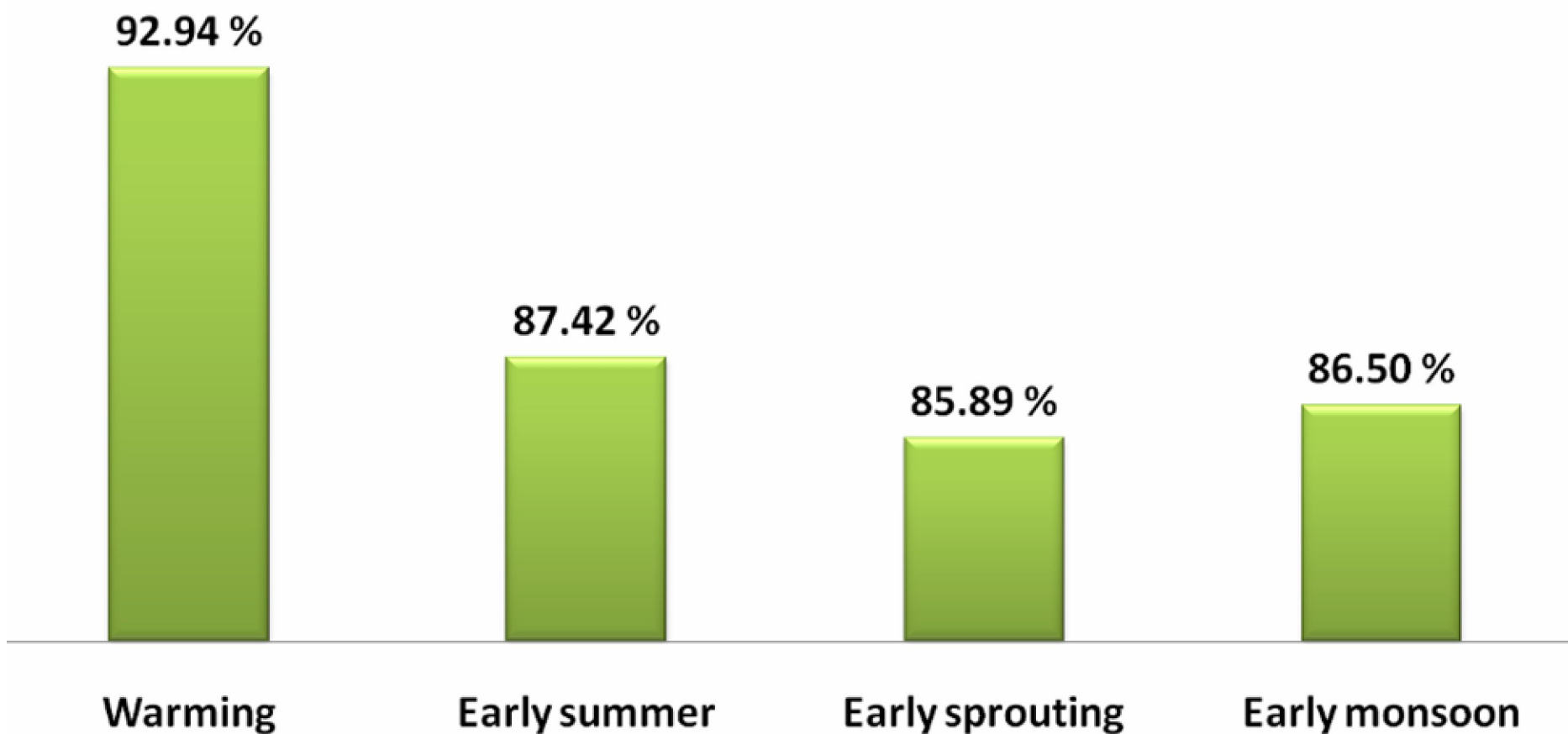
# **Uniqueness**

- Primacy to local ecosystems
- Interdisciplinary
- Traditional knowledge and practices
- Participatory

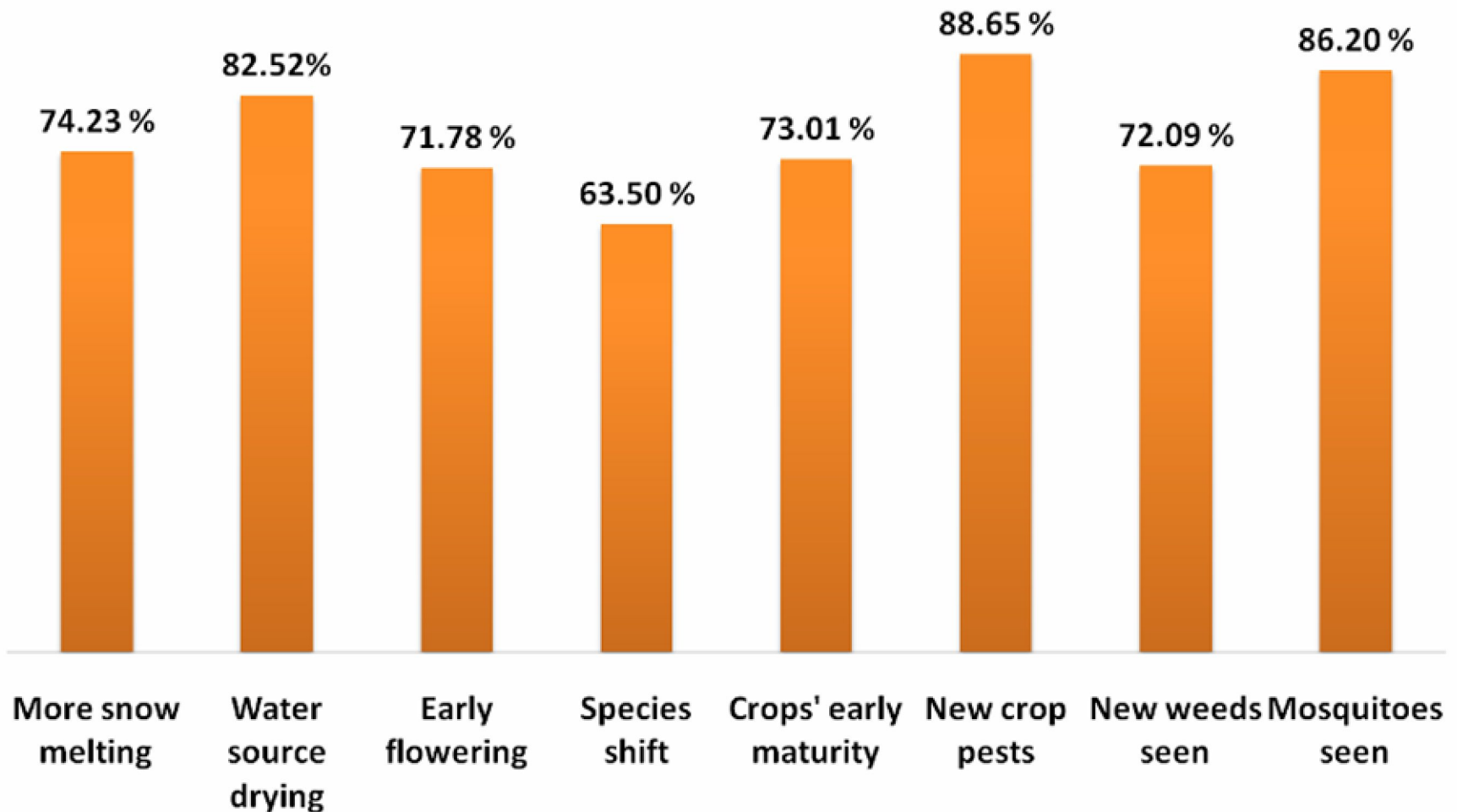
# Community Perceptions About Biodiversity Status



# Perceptions about Climate Change



## Respondents experiencing change on ecosystem and biological processes likely caused by climate change



# **Uniqueness**

- **Primacy to local ecosystems**
- **Interdisciplinary**
- **Participatory**
- **Traditional knowledge and practices**
- **Adaptive**

# **Lessons Learned**

- **Success-Governance and policies**
- **Decentralization**
- **Integration**
- **Traditional knowledge and practices**
- **Institutions and Networking**



# Challenges

- Long term commitment
- Human resources
- Scaling up



# Scale 2004-2007

<b>Groups</b>	<b>Number of Training sessions/ workshops</b>	<b>Participants</b>
<b>SHG (BRT and MMHills)</b>	<b>188</b>	<b>8369</b>
<b>NTFPs harvesters (harvest techniques)</b>	<b>301</b>	<b>8626</b>
<b>Lantana craft centre</b>	<b>36</b>	<b>1134</b>
<b>LAMPS (members)</b>	<b>35</b>	<b>3950</b>
<b>LAMPS (officers)</b>	<b>3</b>	<b>79</b>
<b>Farmers</b>	<b>25</b>	<b>392</b>
<b>TOTAL</b>	<b>588</b>	<b>22550</b>