



Government of Nepal
National Planning Commission
Central Bureau of Statistics

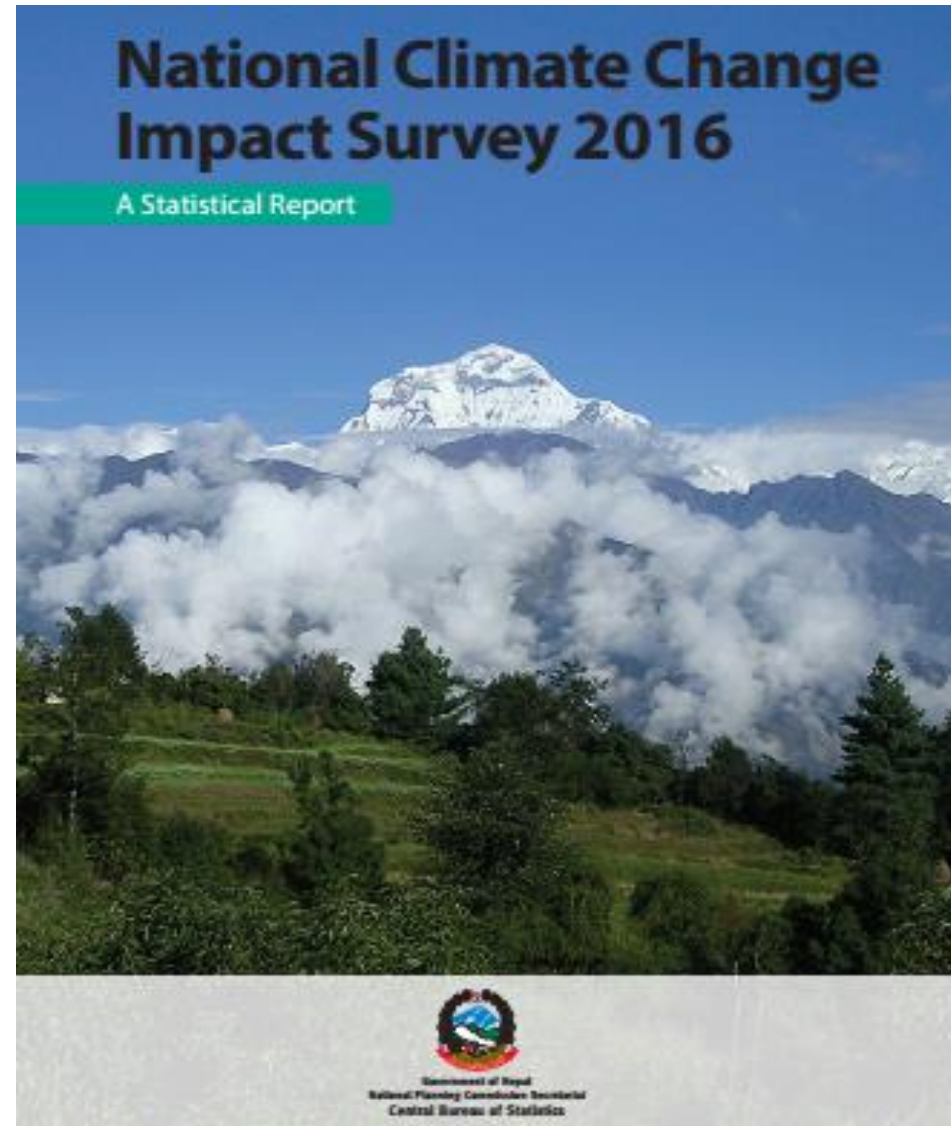
**National Climate Change Impact Survey 2016 Major Findings
&
other activities of environment statistics**

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National Climate Change Impact Survey 2016

Major Findings



Background

- Climate change impacts become highly visible affecting different aspects of human society and ecosystem across the globe
- Nepal experienced direct impacts of climate change and is one of the most vulnerable countries in the world
- Nepal government devised a number of policy instruments on climate change
- Effective implementation of such instruments is a challenge due to various limitations including lack of availability of integrated and reliable data
- CBS conducted a National Climate Change Impact Survey (NCCIS) aiming to contribute on bridging such gap and avail reliable data and information for regular planning process

Objectives of Survey

1. Understanding and acquiring knowledge on effect and impact of climate change from social, economic & environmental perspective;
2. Exploring how the respondents are developing or making adaptive capacity to confront the impact of climate change
3. Establishing linkage of climate change and environment related indicator with the SDG (Goal 13) for taking urgent action to combat climate change and its impact

Preliminary work

- Technical committee formation under the chairmanship of Director General of CBS having representative from various stakeholders
- Pilot Survey conducted in 5 districts (2014/15)
- Organized the interaction workshop in different rounds with CBS officials, other stakeholders and expert of climate change and got feedback
- Finalized Questionnaire, Manual, indicators & Tabulation Plan
- Endorsed by the technical committee

Survey Methodology

- Sample Selection (Three Stage stratified Systematic Sampling)
 - Stage 1: Selection of Districts (26 districts by PPS)
 - Stage 2: Selection of PSU -Wards or sub wards- (253 PSU by PPS)
 - Stage 3: Selection of Households (20HHs for each PSU by Systematic Sampling)
- 16 Domain (5 Development region, 3 Eco belt and separate Kathmandu valley)
- Frame used the Population census 2011
- Large wards were splitting by cartography work
- Listing of the enumeration area
- Total enumerated: 5060 Households

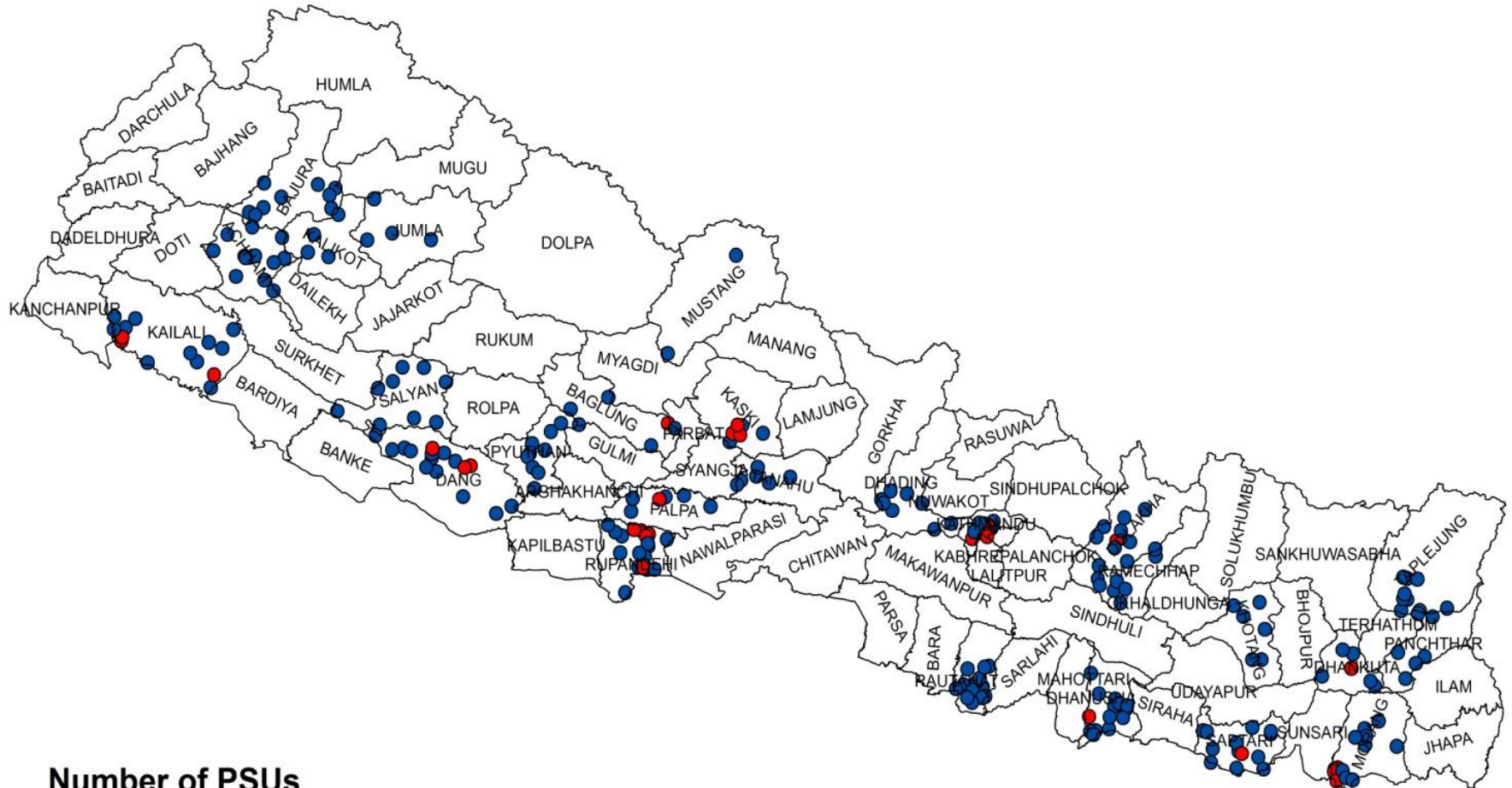
Survey Methodology

- **Selection criteria of the household**
 - Respondent should be 45 years or more
 - Respondent should be there since 25 years
- **Reference Periods**
 - Household income: 12 months
 - Impact on Daily life, Households and Business: 5 years
 - Impact of Climate change : 25 years

Characteristics of Survey

- Recall Method
- Various Analytical Domain
- Computer-assisted personal interviewing (CAPI) method
- Tablet was used for data collection
- Real Time Data Capture
- Computer Based Supervision
- Thematic Expert Contribution

Distribution of PSUs for Climate Change Survey, 2073



Number of PSUs

- Urban (42)
- Rural (211)

0

200 KM



CBS

Content of the Questionnaire

- More than 100 questions
- Trend & information since 25 & 5 years

12 Modules

1. Introduction
2. Demography & Household information
3. Land holding Information of household
4. Household Access to the socioeconomic services
5. Household Income Information

Content of the Questionnaire cont...

6. Knowledge and perception about climate change
7. Impact of natural disasters or events
8. Diseases and health impacts
9. Impact of climate change on water resources
10. Impact of climate change on bio-diversity
11. Impact of climate change on tourism
12. coping strategies/action adopted by households due to impact of climate change

Analytical Domains

Mountain	Hill	Terai
Eastern Mountain	Eastern Hill	Eastern Terai
Central Mountain	Central Hill	Central Terai
Western Mountain	Western Hill	Western Terai
Mid-western Mountain	Mid-western Hill	Mid-western Terai
Far-Western Mountain	Far-western Hill	Far-western Terai
Kathmandu Valley		

Additional Analytical Domains

NAPA Combined vulnerability Index	Very high	High	Moderate	Low	Very low
	(0.787- 1.000)	0.601- 0.786	0.356- 0.600	0.181- 0.355	0.000- 0.180

Bio Climatic zones:

- 1. Tropical (<1000m)**
- 2. Sub-tropical (1000m-2000m)**
- 3. Temperate (2000m -3000 m)**
- 4. Sub-alpine (3000m-4000m)**
- 5. Alpine (4000m-5000m)**

Analytical Domains-Income quintiles

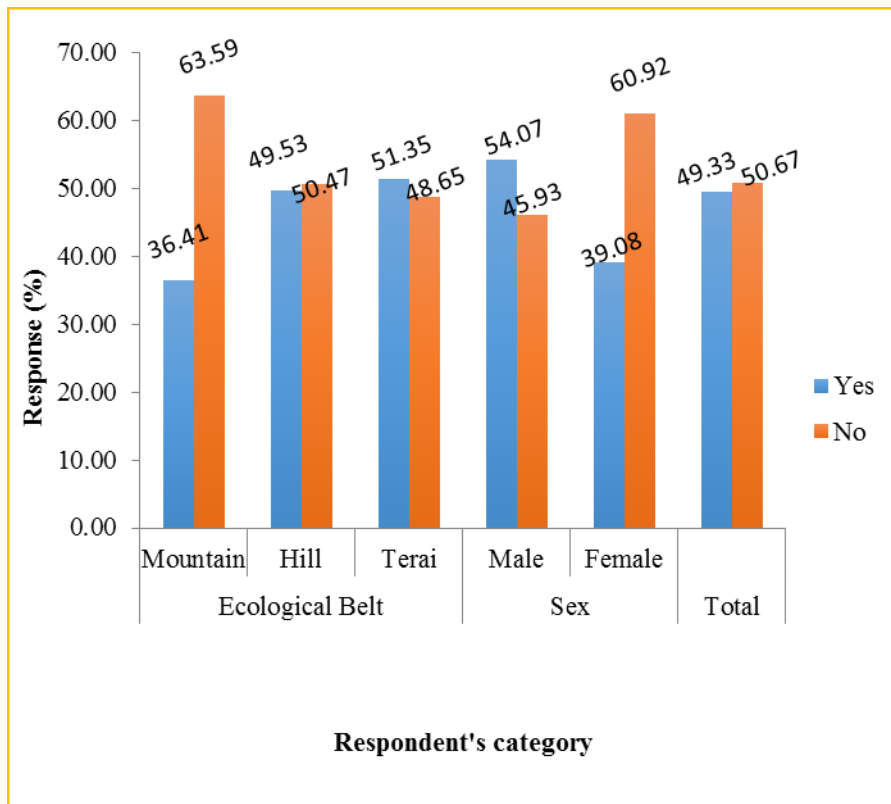
First Quintile (Lowest)	Lowest 20%
Second Quintile	20%
Third Quintile	20%
Fourth Quintile	20%
Fifth Quintile (Highest)	Highest 20%

Thematic Areas Included

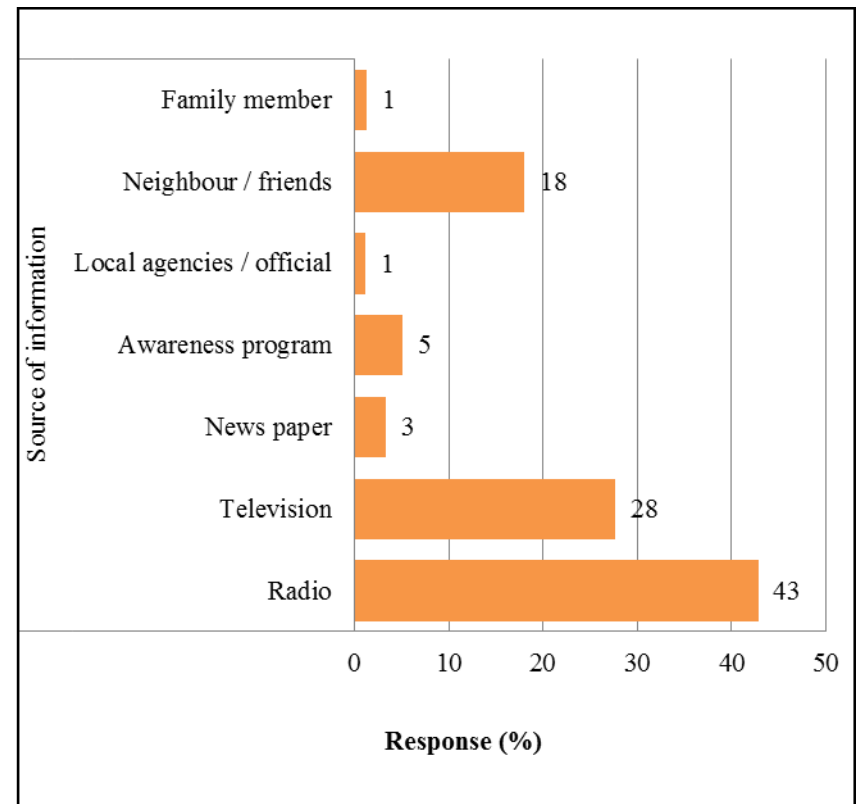
1. Agriculture
2. Forest
3. Disaster
4. Urban
5. Health and WASH
6. Water Resources and Energy
7. Gender
8. Tourism

Perception of Climate Change

Households' knowledge on climate change

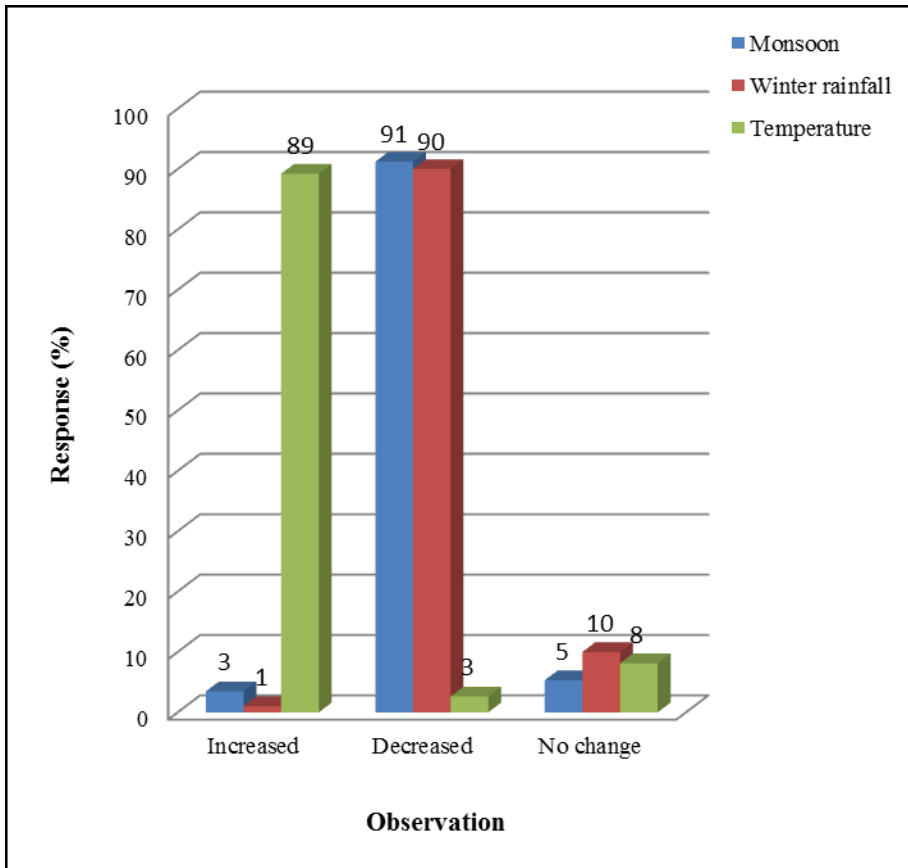


Main source of information about climate change

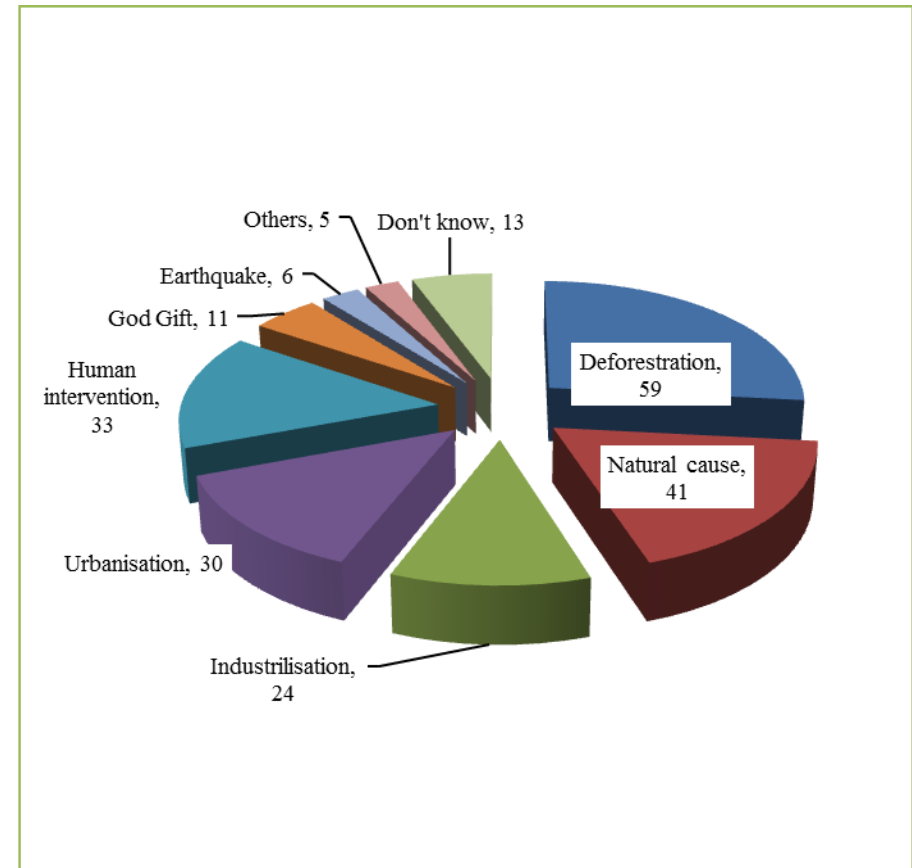


Perception of Climate Change...

Change on climatic variables in last 25 years

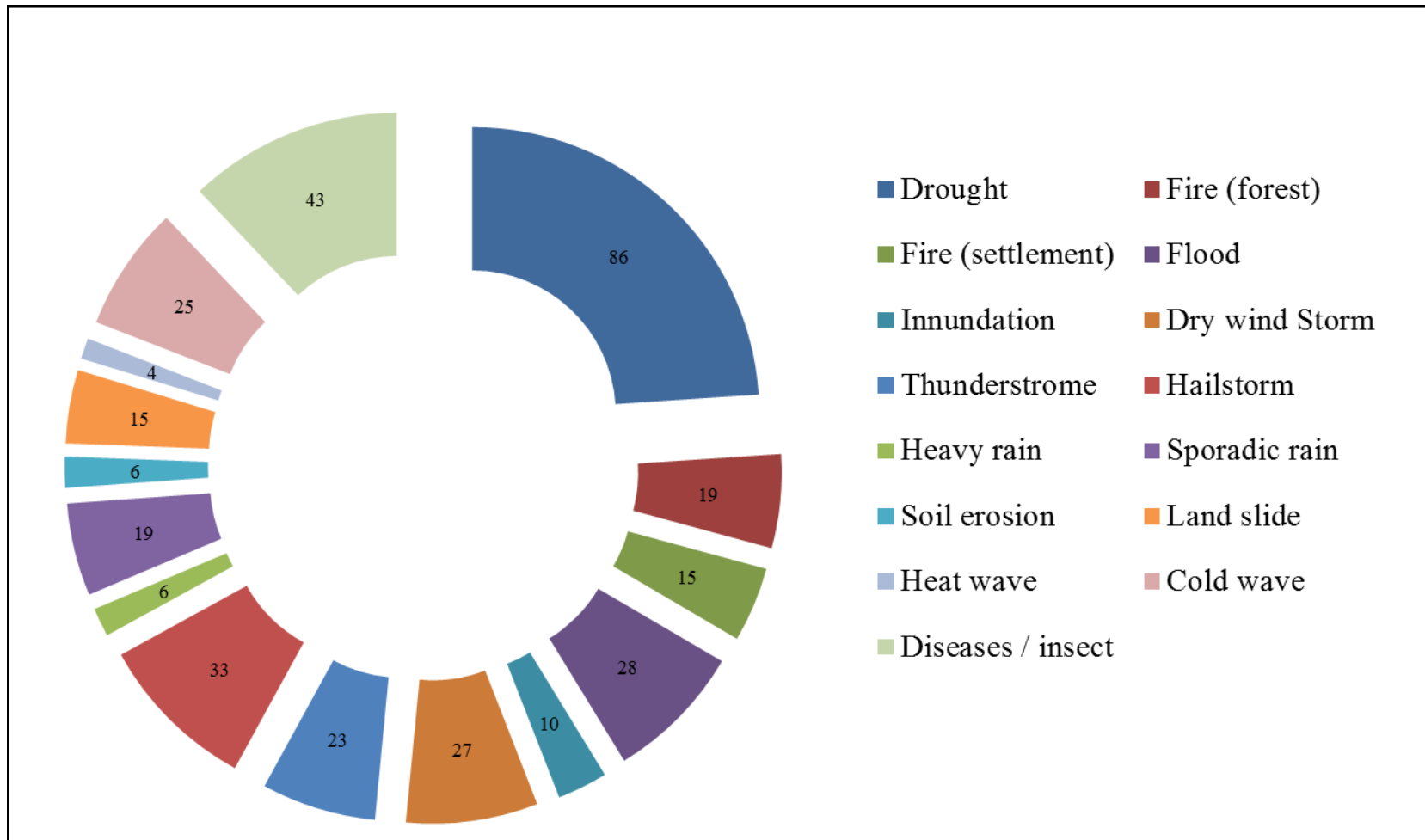


Perception on reason of climate change



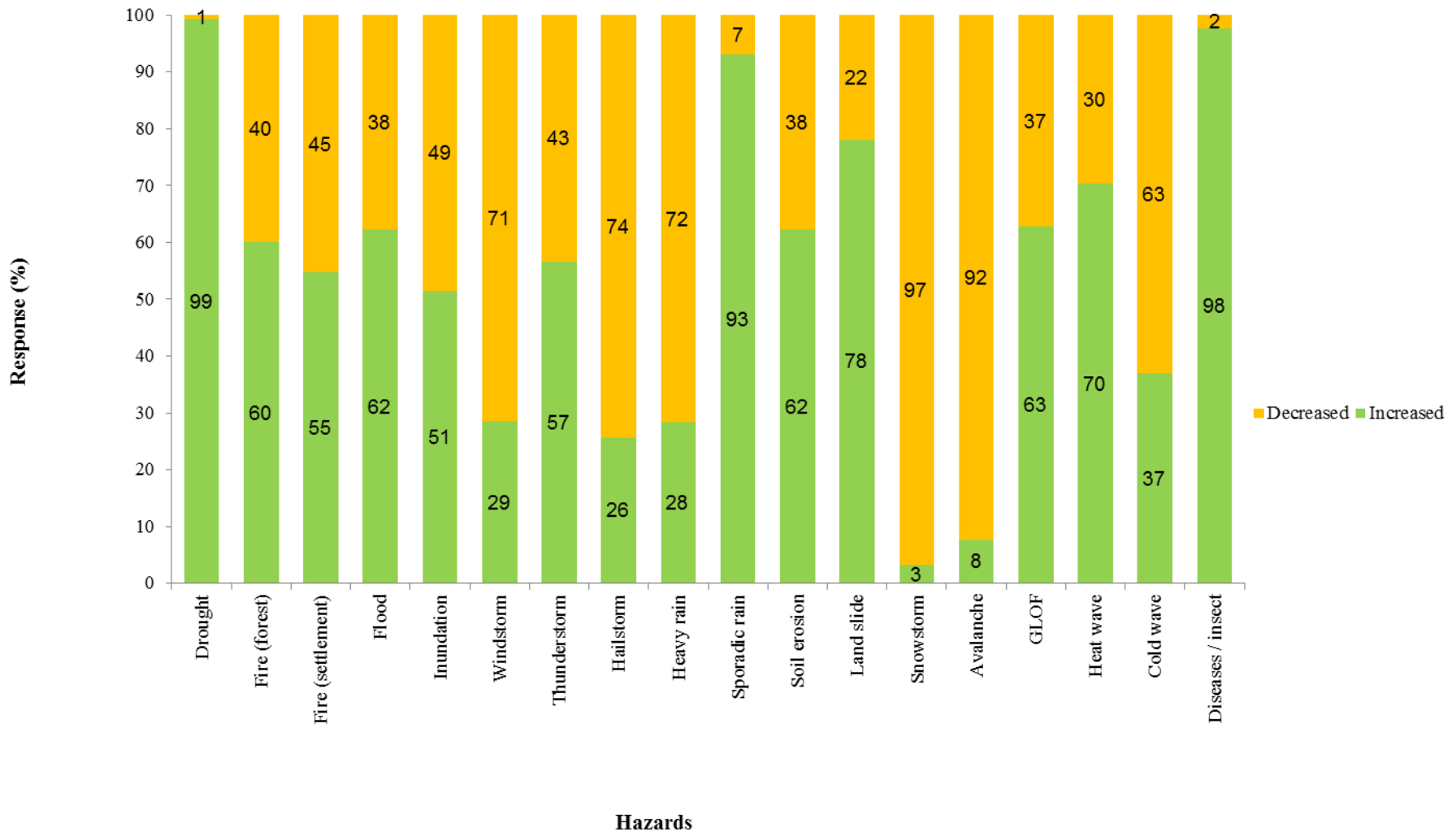
Perception of Climate Change...

Potential results of climate change



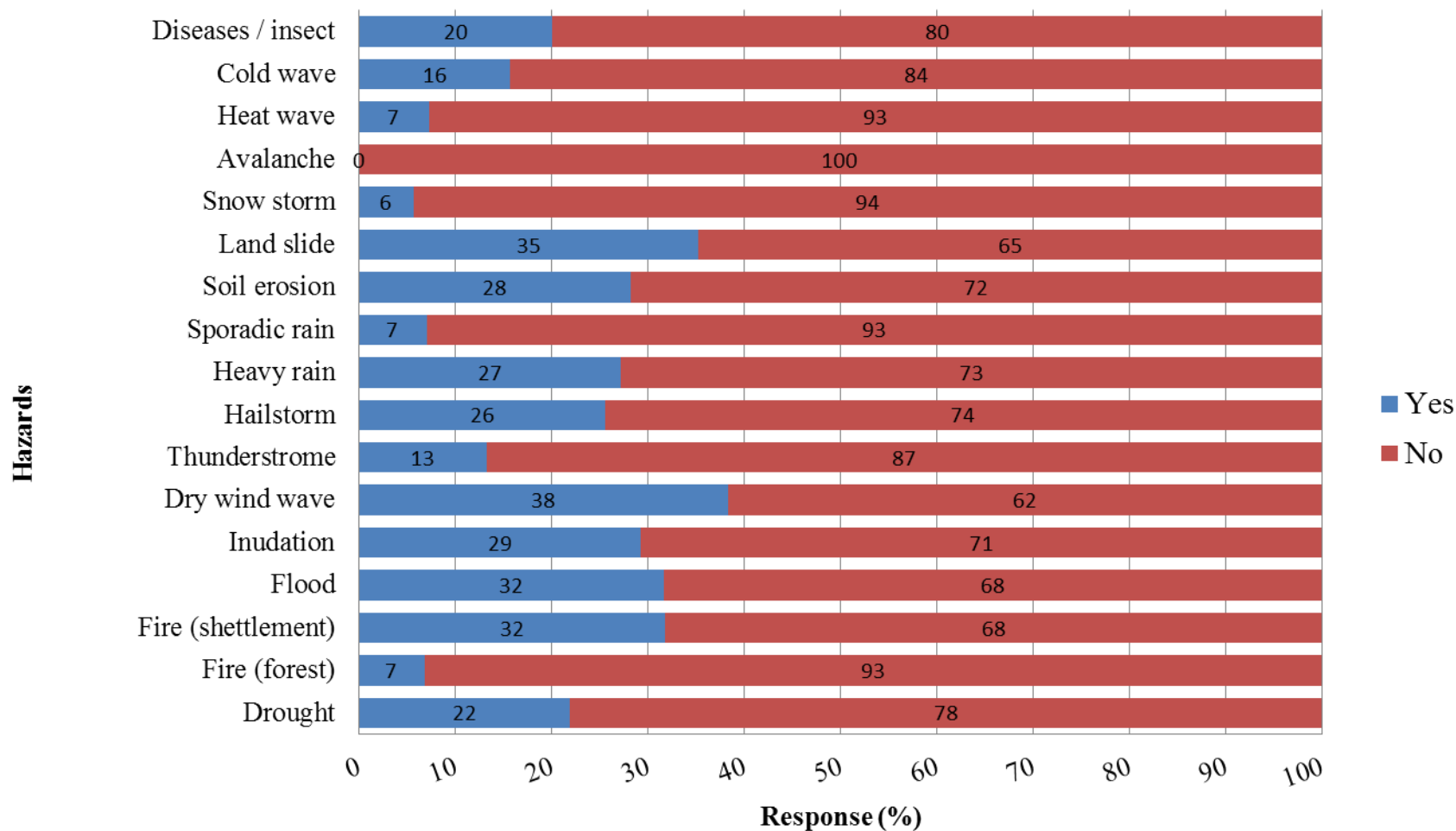
Climate Induced Disasters and Impacts

Observed change in climate induced hazards in last 25 years



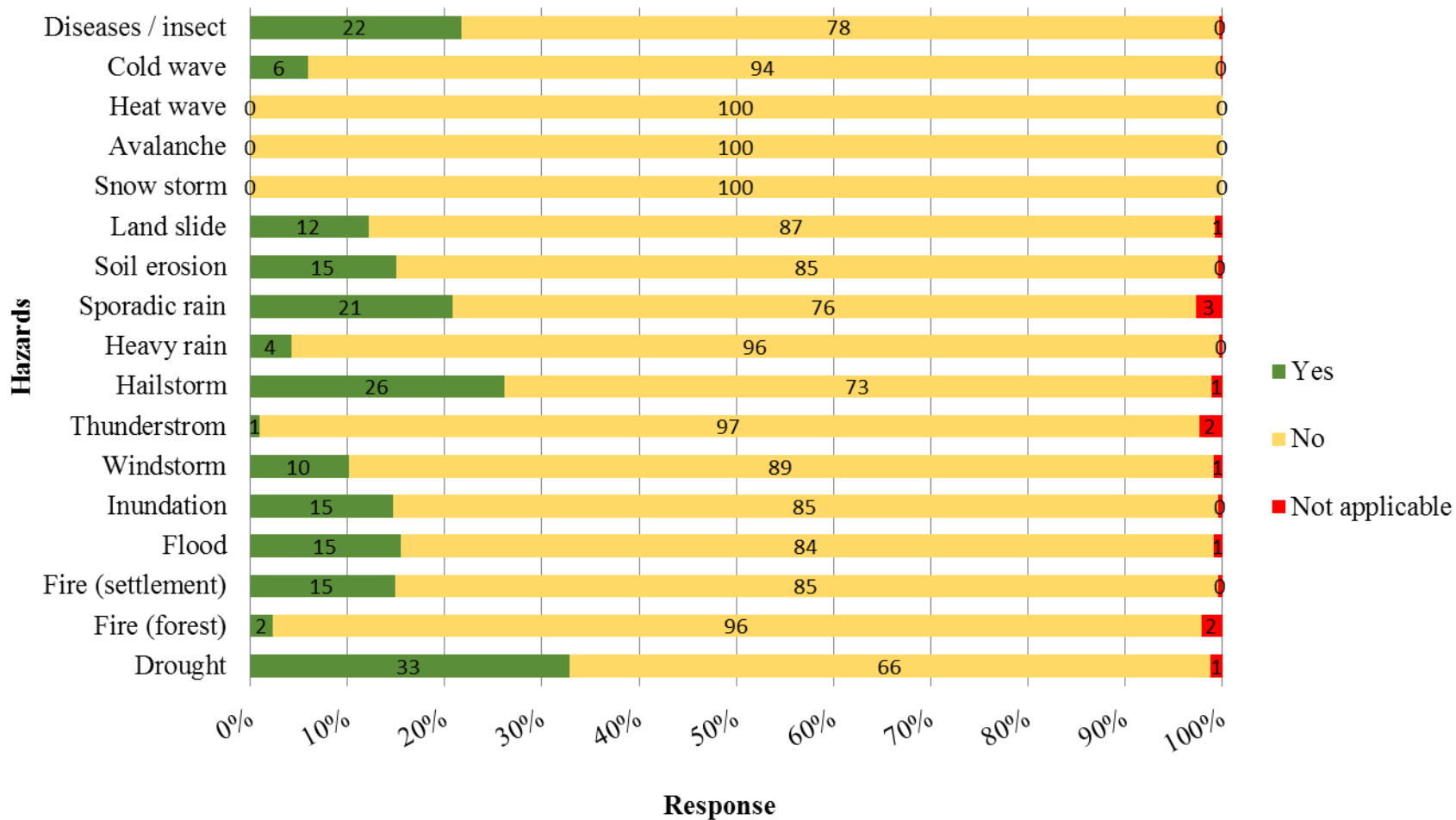
Climate Induced Disasters and Impacts...

Households affected by disasters in last 25 years



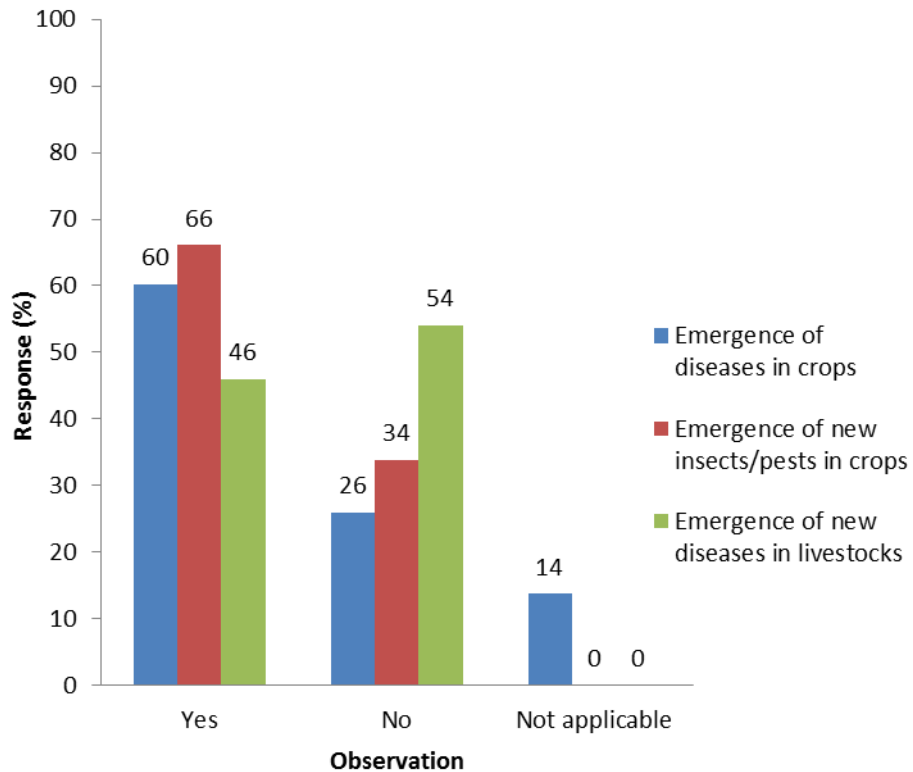
Climate Induced Disasters and Impacts...

Household experiencing food insecurity due to disasters in last five years

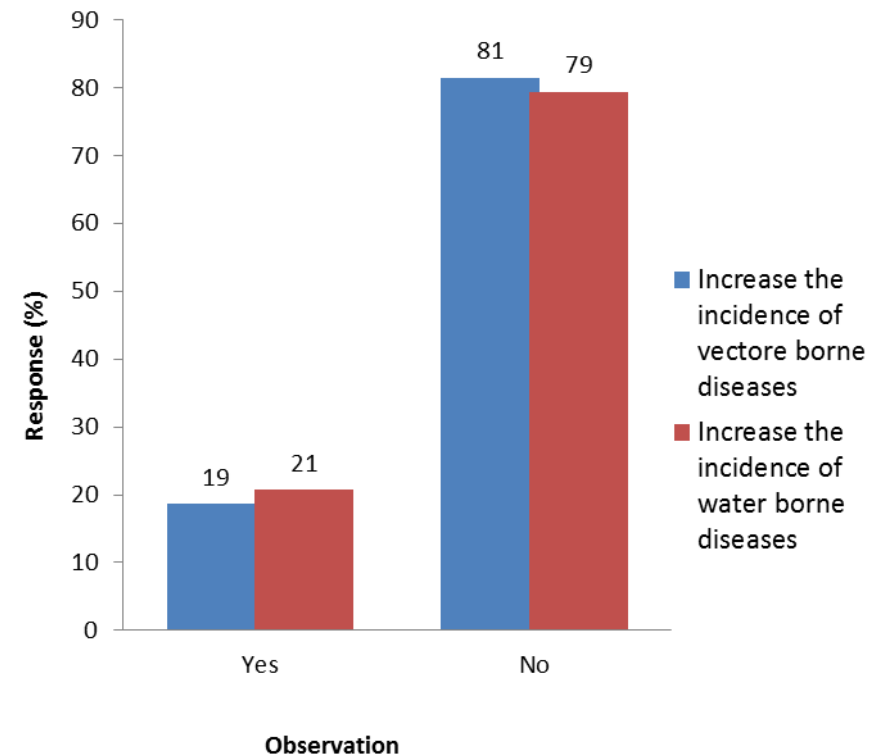


Climate Change Impacts on Human, Health, Crops, and Livestock

Climate change impact on crops and livestock in last 25 years

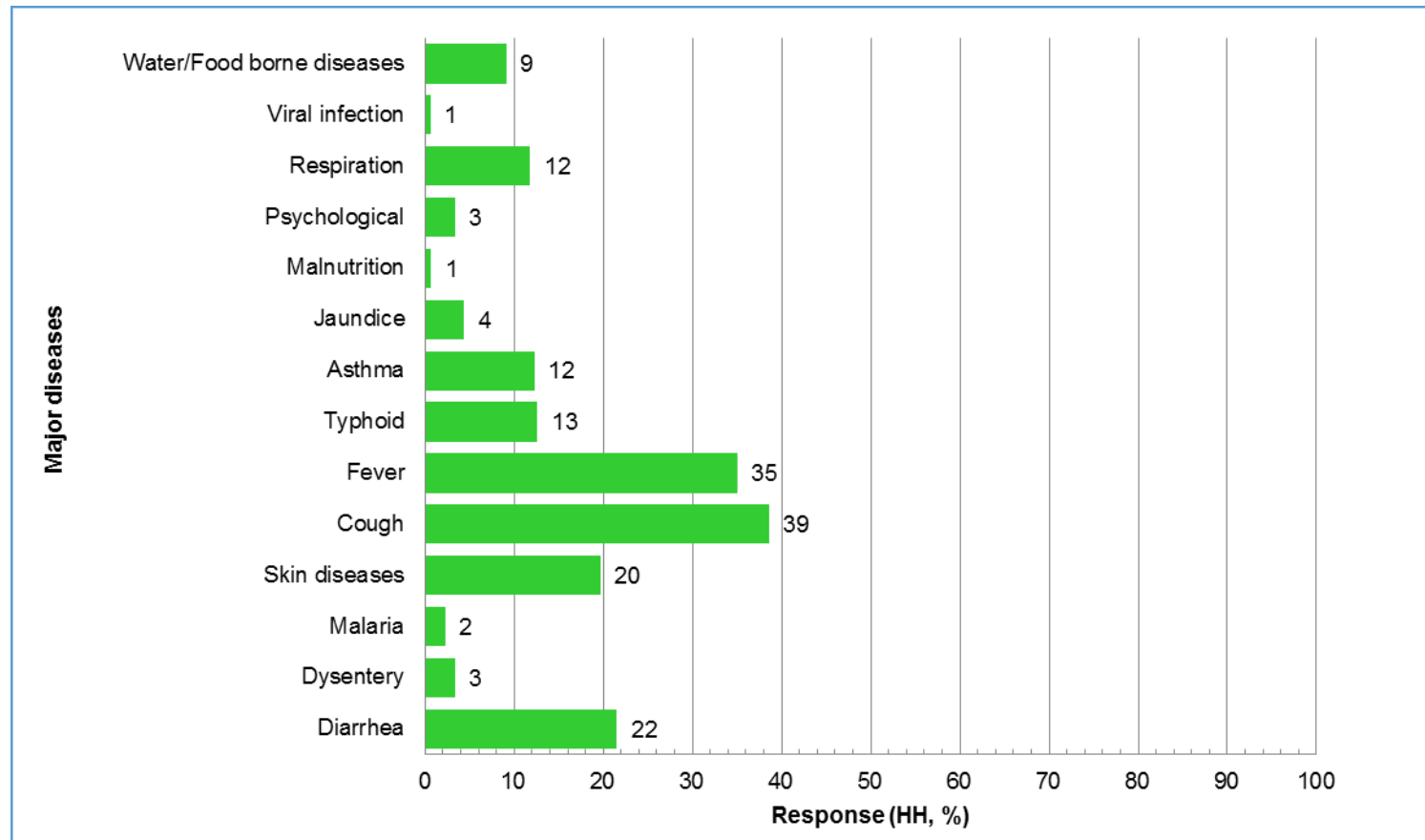


Climate change impacts on human health in last 25 years



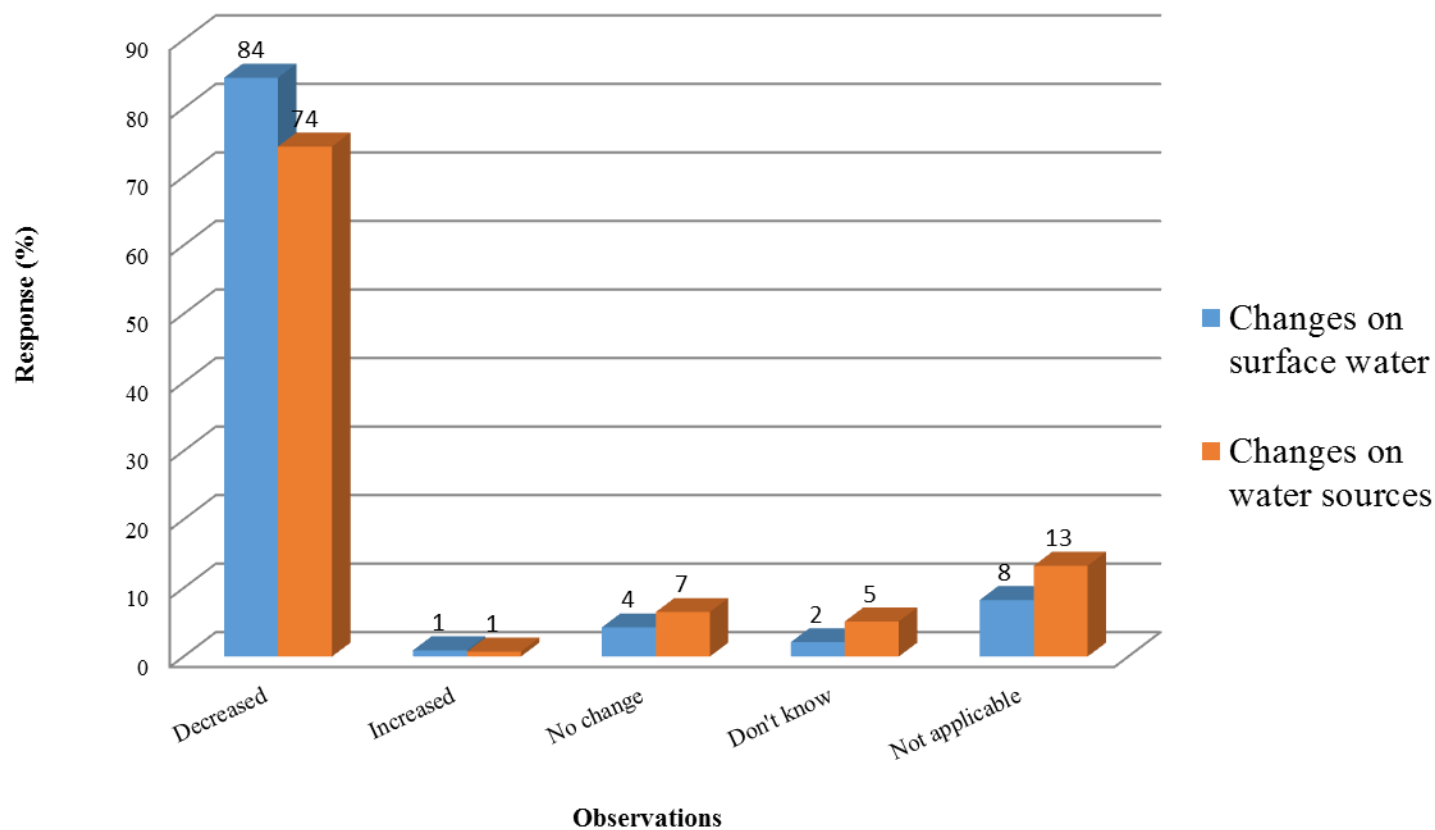
Climate Change Impacts on Human, Health, Crops, and Livestock...

Main diseases and frequency of increment in last 25 years



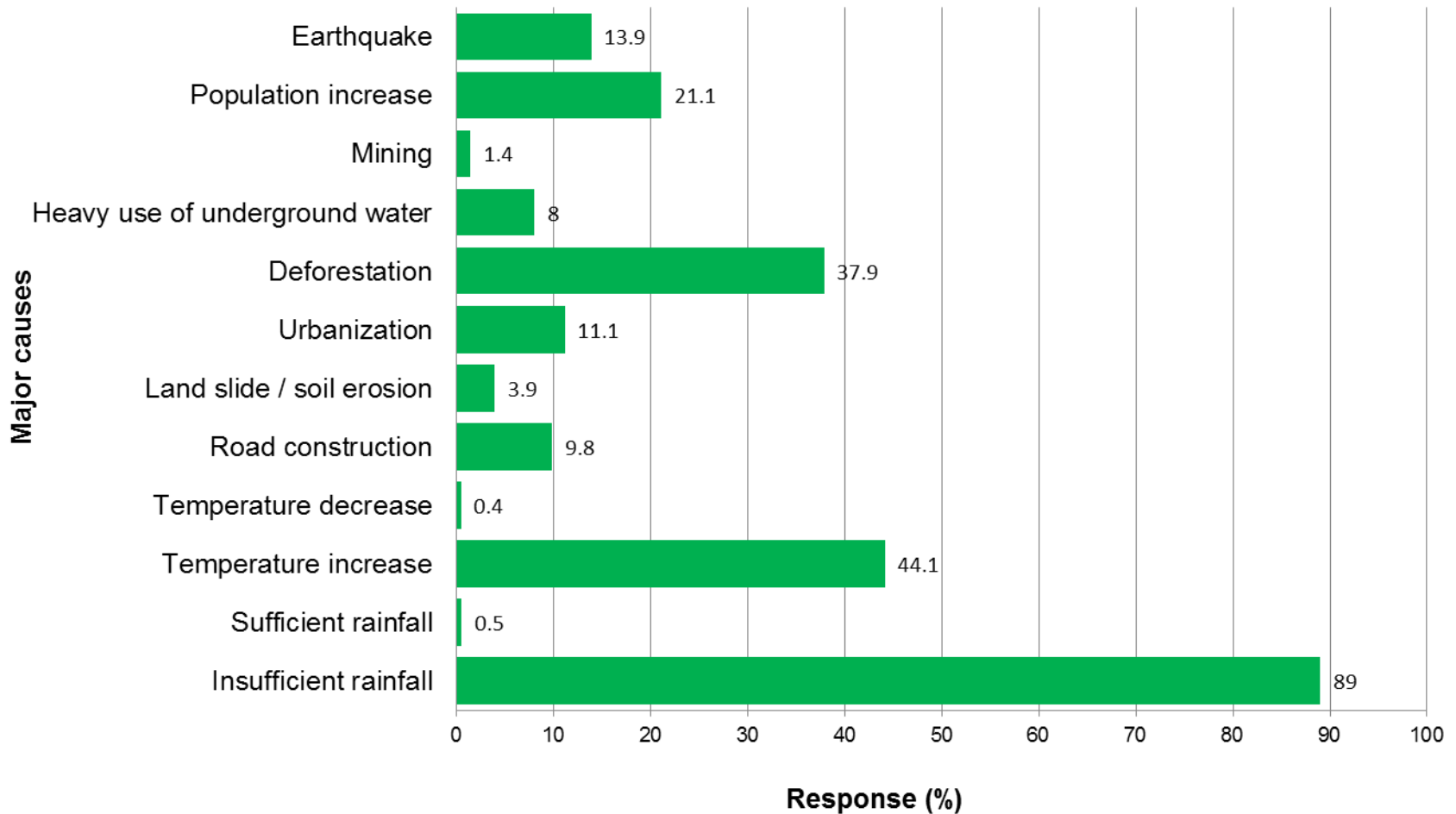
Climate Change and Natural Resources: Water and Biodiversity

Observed changes on water resources in last 25 years



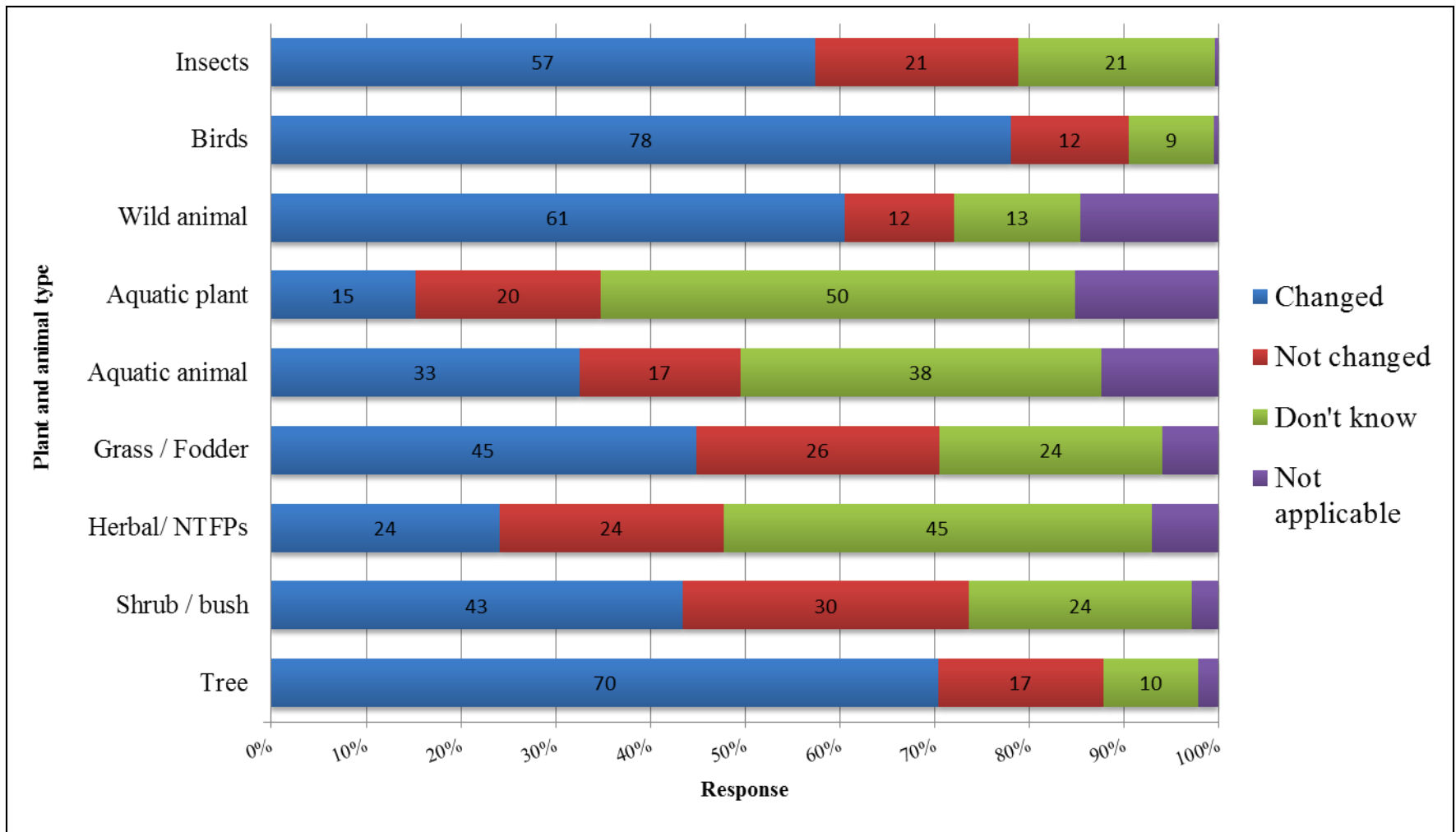
Climate Change and Natural Resources: Water and Biodiversity...

Causes of changes in water resources in last 25 years



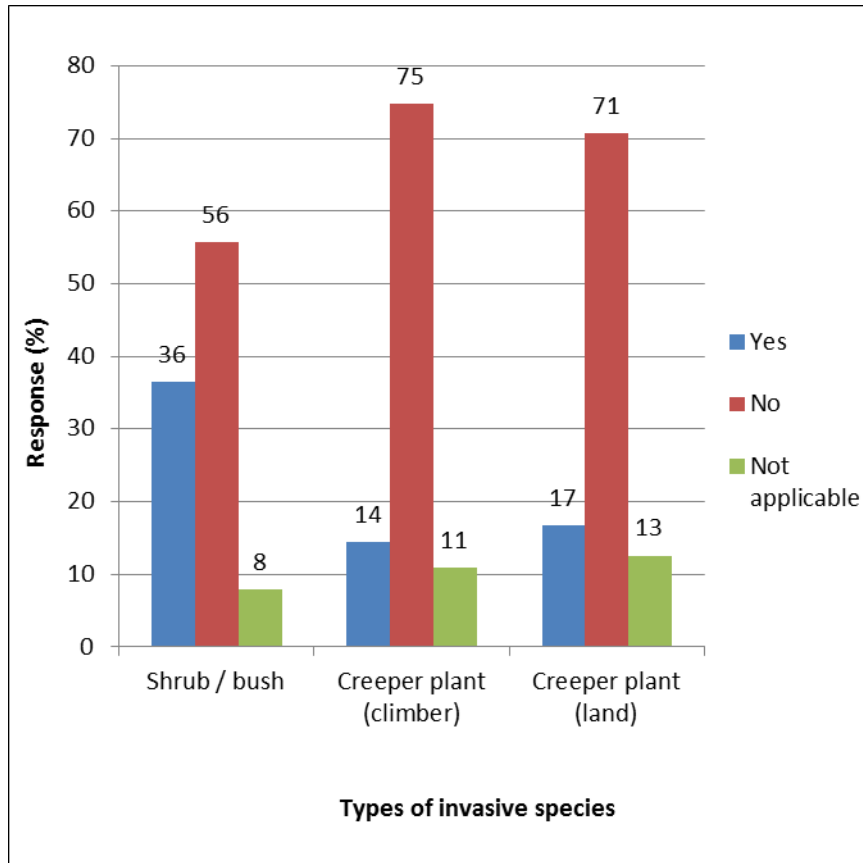
Climate Change and Natural Resources: Water and Biodiversity...

Changes in the status of animal and plant species in last 25 years

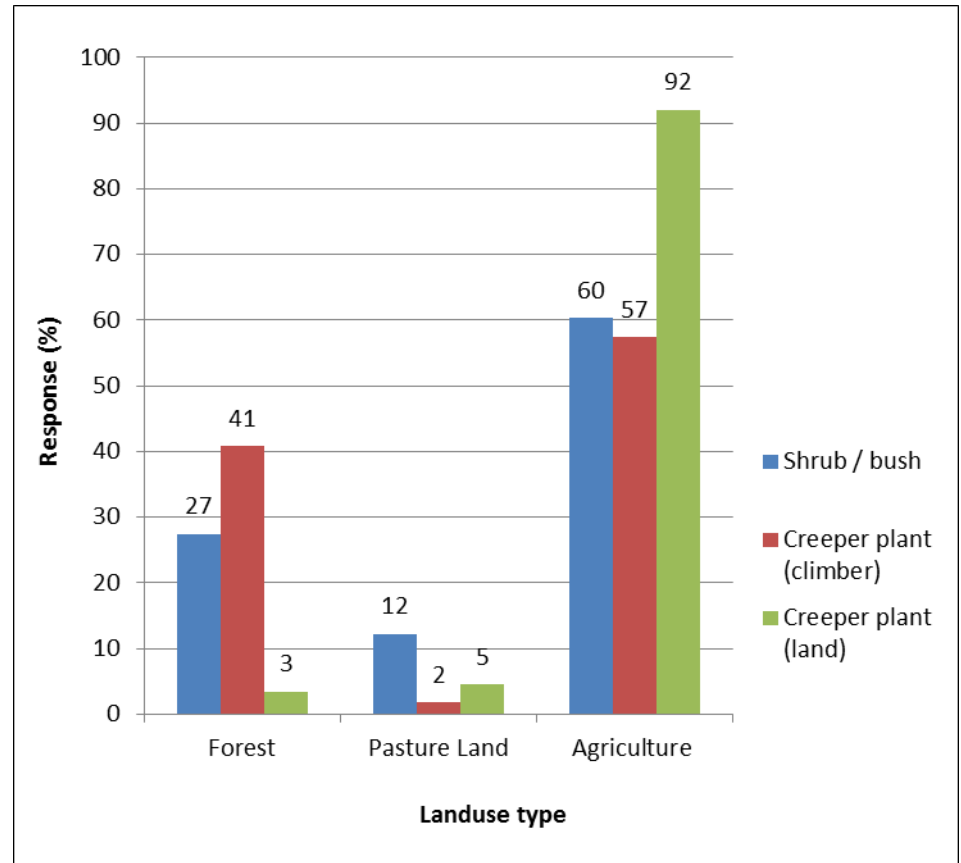


Climate Change and Natural Resources: Water and Biodiversity...

Appearance of invasive species in last 25 years

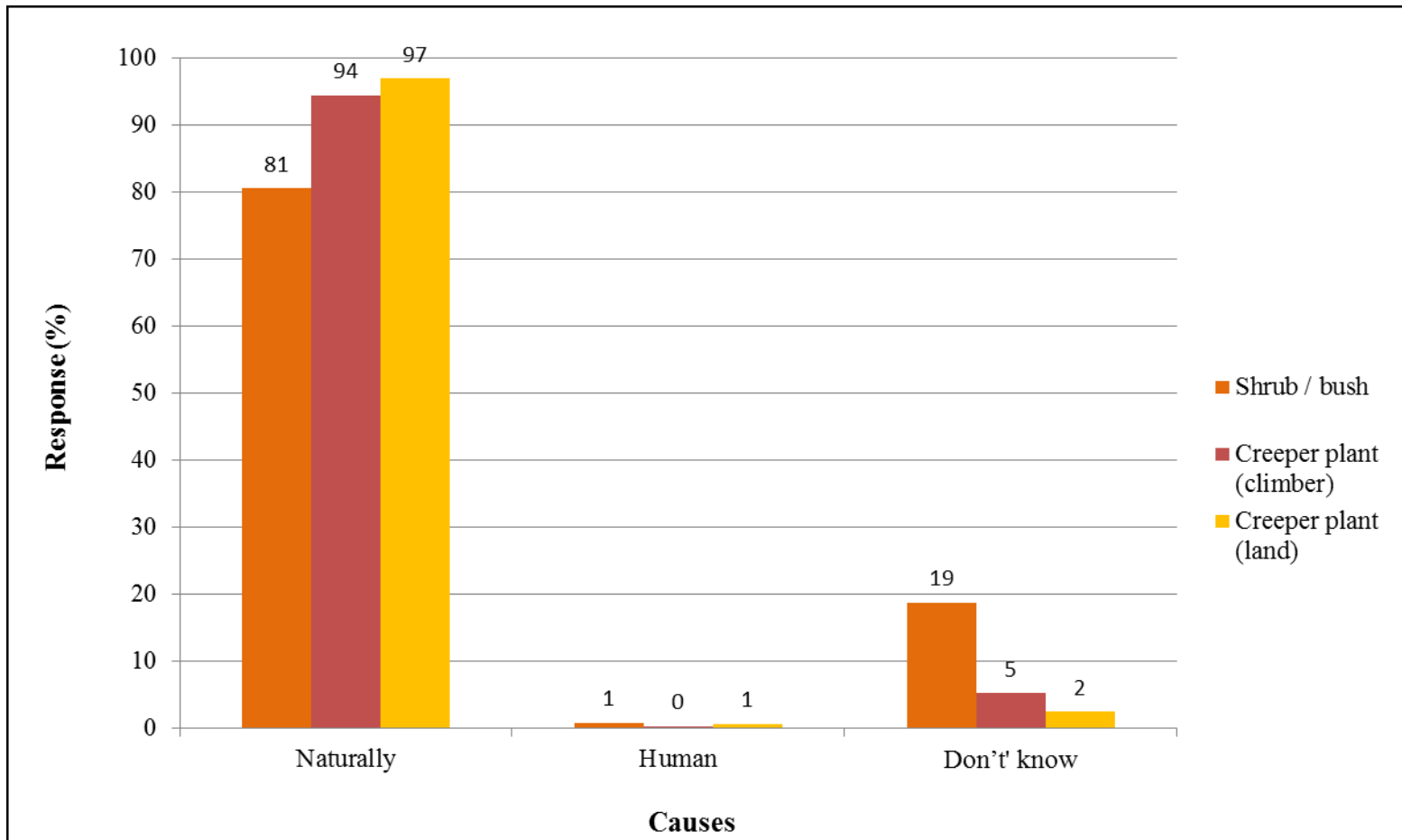


Appearance of invasive species based on land use in last 25 years



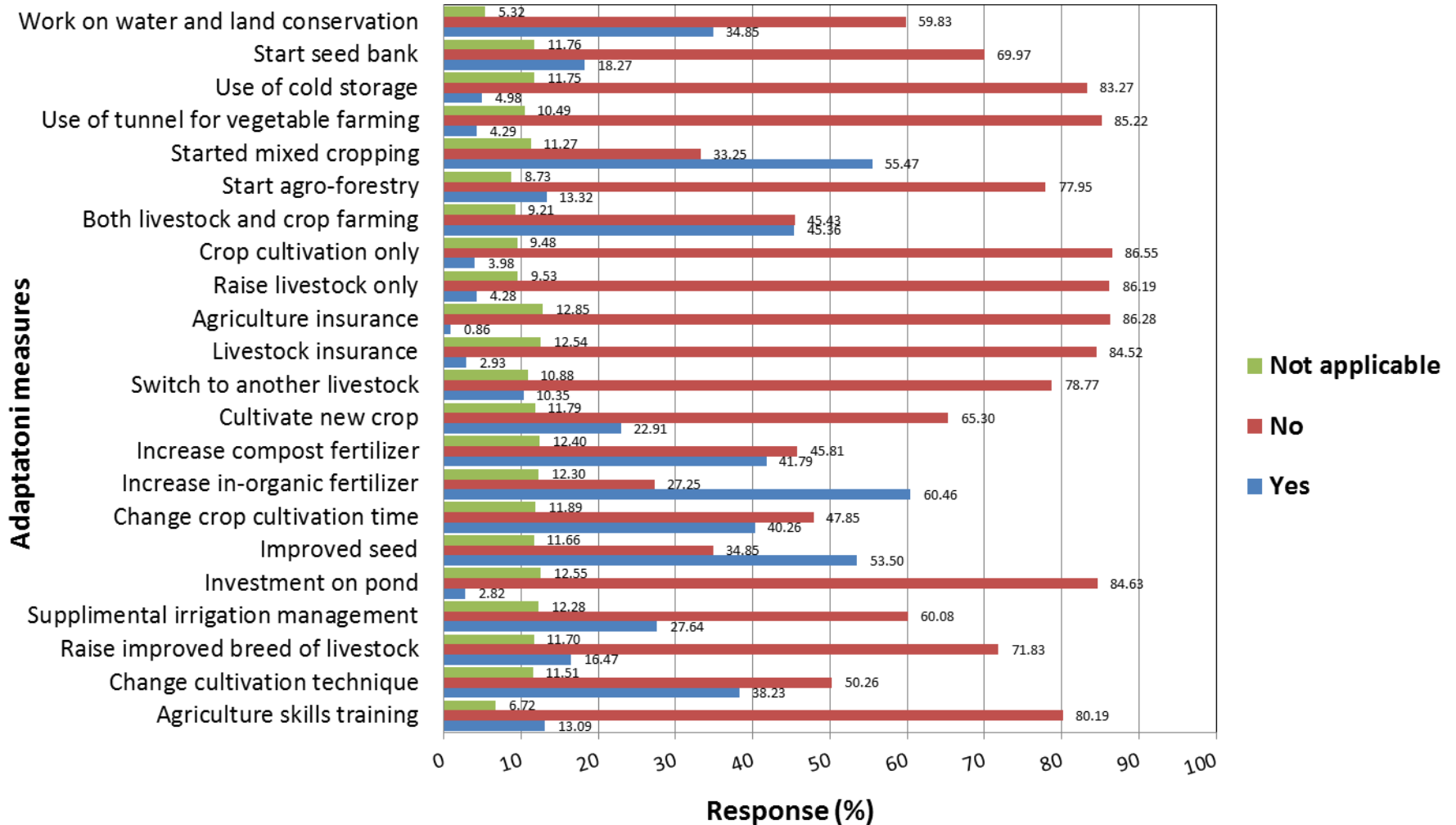
Climate Change and Natural Resources: Water and Biodiversity...

Cause for appearance of new invasive species in last 25 years



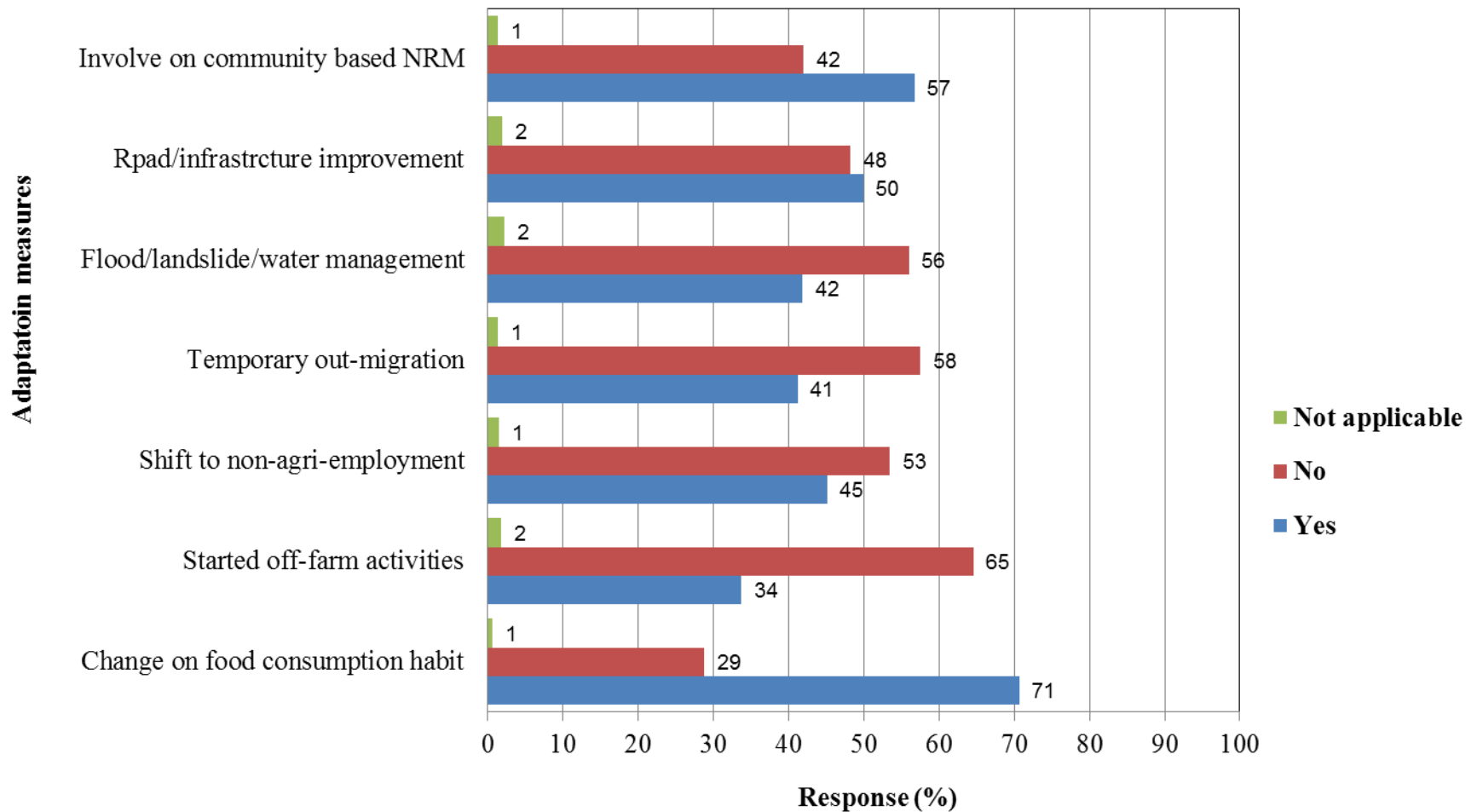
Adaptation Measures

Adaptation measures (farm based) adopted in last 25 years



Adaptation Measures...

Adaptation Measures (off-farm) Adopted in last 25 years



Outcomes

1. Contributes to integrate climate change measures into policies, strategies and planning
2. Contributes on projects related to strengthening resilience and adaptive capacity to climate-related disasters
3. Serves as a reference tool on improving education, awareness raising, and human and institutional capacity on climate change adaptation and impact reduction
4. Contributes on overall climate change related planning and management focusing on women, local and marginalized

Other activities of environment statistics

- CBS continued attempts to bring out the environment related statistics by compiling and publishing its publication ***“Environment Statistics of Nepal”*** in the United Nations statistical guideline FDES
- Compendium of Environment Statistics Nepal it is the analytical report contributed by the sector expert on the FDES guidelines

COMPENDIUM OF **ENVIRONMENT STATISTICS**

NEPAL 2015



Government of Nepal
National Planning Commission Secretariat
Central Bureau of Statistics



CBS Publication

ENVIRONMENT STATISTICS OF NEPAL 2019



Government of Nepal
National Planning Commission

Central Bureau of Statistics
Thapathali, Kathmandu, Nepal

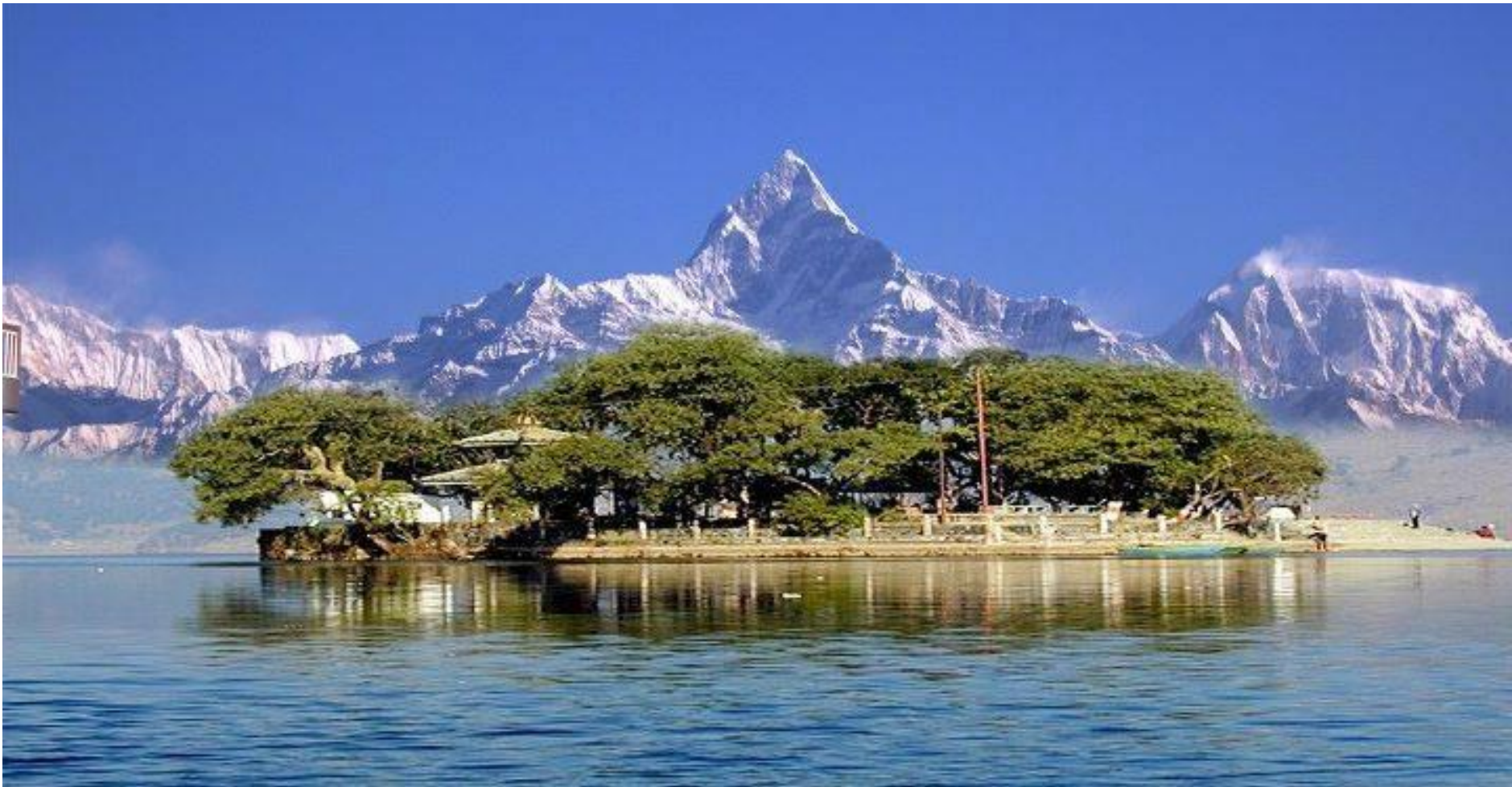
Compilation from different sources

- Censuses and surveys conducted by CBS and other stakeholders
- Administrative records of government, semi government & non governmental organizations
- Monitoring Stations
- Scientific research & special projects

Major highlights

- 9th series
- Following the FDES 2013
- Seven Chapters
- Annexes
- National, Province & District level
- According to climatic zone, eco region etc.

- Regular collection of waste management related data from all the Municipalities of Nepal
- Process to implement System of Environment Economic Account(SEEA) in Nepal
- As a pilot work compiling land and forest account



Thank you !!!
Your comments and queries are highly appreciated !!!