

***Climate Smart Agriculture and Cooperatives in Nepal:  
Opportunities and Challenges***

***by***

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## **Presentation Outline**

1. Background
2. Government Policy Framework on Agriculture Development
3. Climate Smart Agriculture-CSA
4. Impact of Climate Change on Agriculture
5. CSA Alignment with Important Policy Aims
6. Indicators and Practices of CSA
7. CSA in Government Policies
8. CSA and Agricultural Cooperatives in Nepal
9. Concluding Remark

## Background

- **Agriculture sector** is the **major source of livelihood** that contributes about **23 %** to Nepal's GDP
- The cooperative sector of Nepal has got constitutional recognition as a pillar of socialism oriented national economy
- The Cooperative Act 2074 has given more responsibility to agricultural cooperatives to commercialize agriculture and animal husbandry, increase production and productivity and marketing

## **Government Policy Framework on Agriculture Development**

- National Agriculture Policy- 2004
- Agribusiness Promotion Policy-2006
- Agriculture Biodiversity Policy, 2006 (revised-2014 )
- National Cooperative Policy- 2012
- Agriculture Mechanization Policy- 2014
- Agriculture Development Strategy (ADS 2015-2035)
- Prime Minister Agriculture Modernization Project (PMAMP)

# Climate Smart Agriculture-CSA

CSA (Climate Smart Agriculture)-FAO terminology (2010)

## Definition:

CSA is an integrative approach to address the interlinked challenges of food security and climate change

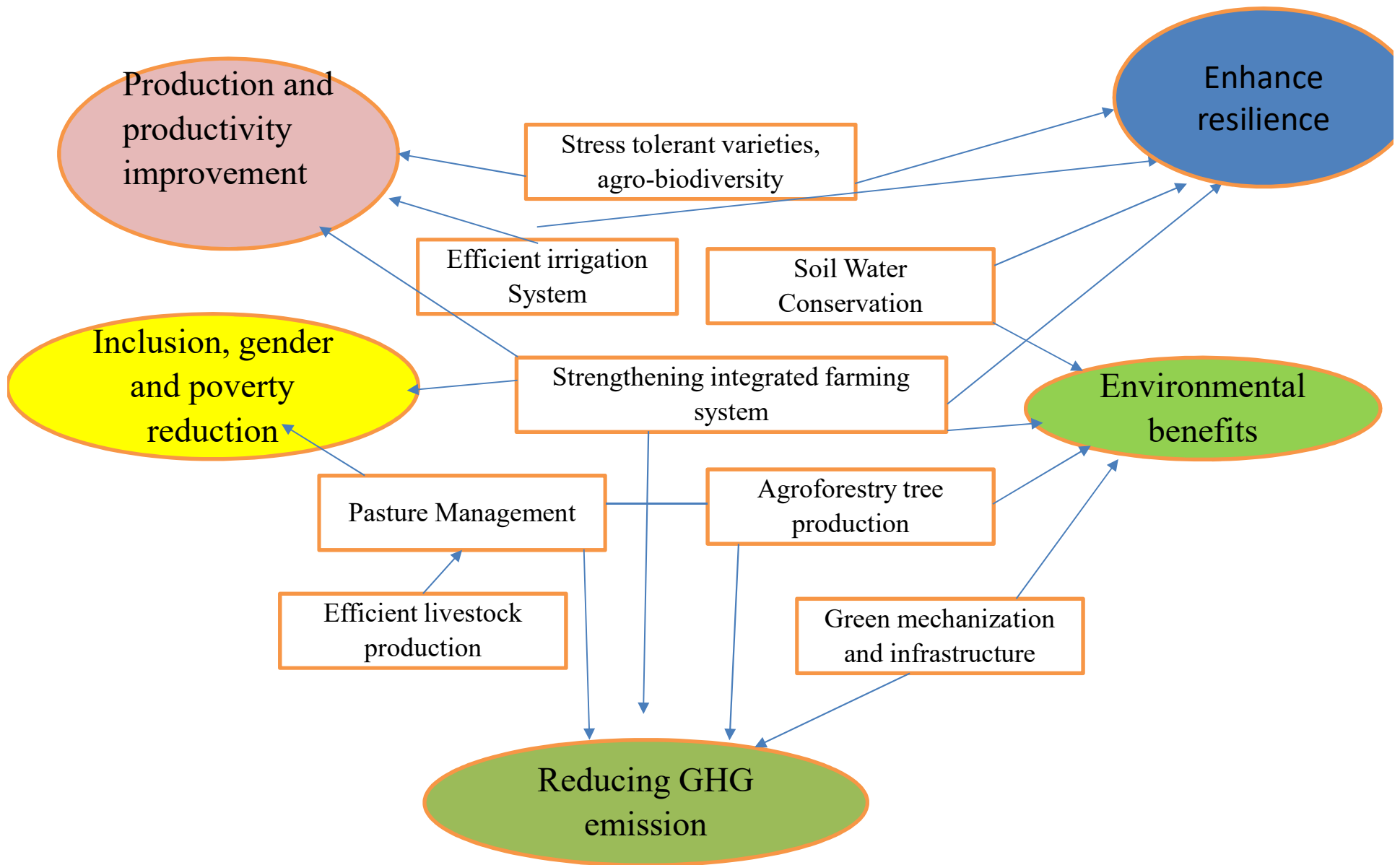
## Three pillars

- Sustainably increasing **agricultural productivity**, to support equitable increases in farm incomes, food security and development (**Productivity**).
- **Adapting and building resilience of agricultural** and food security systems to climate change (**Adaptation**)
- **Reducing greenhouse gas** emissions from agriculture (**Mitigation**)

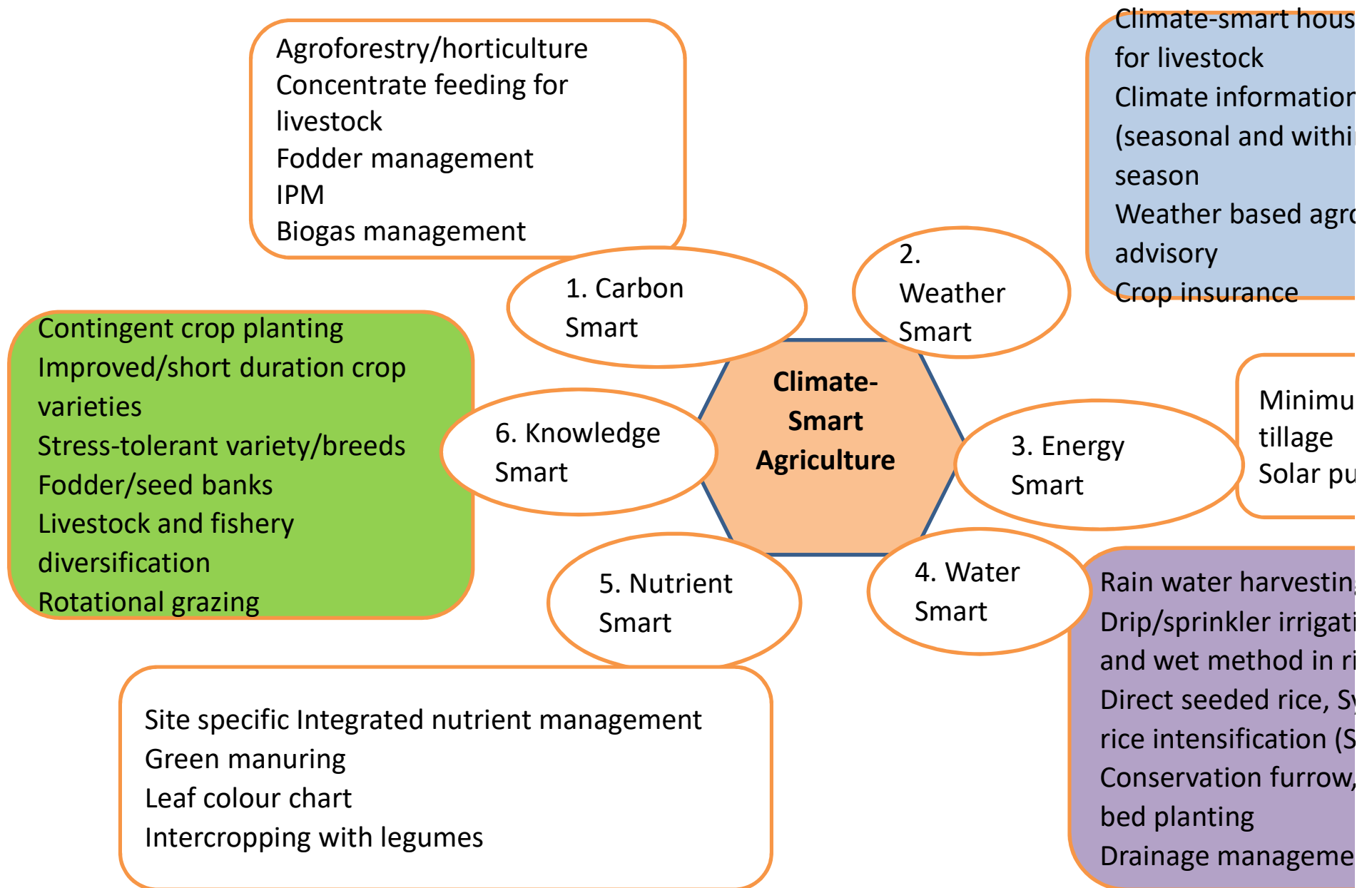
# Impact of Climate Change on Agriculture

- Adverse impact on productivity and quality of produce
- Increase in use of water and inputs—fertilizers, herbicide and pesticides
- Change in environmental factors—increase soil erosion, fertilizer leaching and biodiversity
- Adaptation in organism—increase competition between crops and weeds/pests
- Reduce livelihood opportunities in agriculture.

# CSA Alignment with Important Policy Aims



# Indicators and Practices of CSA





## **CSA in Government Policies**

### **Agriculture Development Strategy (ADS)**

- Second strategic component: Higher productivity through resilience

### **Nationally Determined Contributions (NDC) 2020**

- Zero Net emissions 2050, soil carbon, land use, biogas

### **Adaptation Actions, building resilience, in relation to National Adaptation Plan (NAP)**

### **Gender equality and social inclusion (GESI)**

### **Climate Change Policy 2019**

- second objective (build resilience of ecosystems)

### **Fifteenth Five-year plan (2019/20-2023/24)**

- Agriculture strategy 7: Climate change adaptation and resilience technology

### **Sustainable Development Goals 1 & 2**

- Reduced poverty and food security, malnutrition

### **Approved CSA investment Plan (2021)**

## Agricultural Cooperatives in Nepal

- Almost 1.2 million member households have benefited from the 1139 Small Farmers' Agricultural Cooperatives and other agricultural cooperatives that have been established in 77 districts across the nation.
- Agricultural cooperatives have tremendous roles on climate smart agriculture as well as increasing agricultural productivity, equitable farm incomes, food and nutrition security

## Concluding Remark

Agricultural cooperative has been very important to maintain balance between conservation and utilization of natural resources through adopting climate smart agriculture and socialism oriented economy.

THANK YOU