

4 what is CSA? and discuss the reason for low adoption of CSA practices among farmers

Climate-smart agriculture is the approach to help people who manage the agriculture system effectively against climate change. It fulfils triple objective of sustainably increasing production and income, adapting to climate change and reducing emissions, as defined by Food and Agriculture Organization.

### Need for Climate smart agriculture

Including houses 18% of the world population, in order to fulfil the demand the agriculture production needs to rise by 60% by 2050.

with increasing negative externalities caused by climate change, transition to climate smart agriculture holds key.

Lower adoption Given its potential benefits the practice adoption has been dull due to.

### ① Weak Organisation capacity

The market integration of climate smart products has been low and this explains to the minimal performance of extension services offered. The NICRA National Innovation for Climate resilient agriculture is a welcome step.

### ② Insufficient incentives

The climate smart techniques require additional infrastructure, research and incur higher cost. An incentive scheme such as the PM-Kusum can increase the footprint of the techniques.

③ Low follow-up : Once adopted there are chances of lesser follow up and

the effort vanishes in thin air. measures such as the Climate Smart Villages which aims to enhance farmers abilities must be implemented across all districts.

④ Information Dissemination inequalities small and marginal farmers among less than two hectares are 86% and women constitute 70% of agriculture workers, are not communicated about the weather, seed, market etc as their wealthy counterparts efforts such as the Kisan Suvidha app, Biotech Kisan aims to reduce this inequality.

climate smart agriculture can greatly contribute to food security and reduce climate change by making farmland carbon storage. The CSA holds the keys for a sustainable future.