Building Resilient Livelihoods for Small and Marginal Farmers by Community Managed Sustainable Agriculture (CMSA)
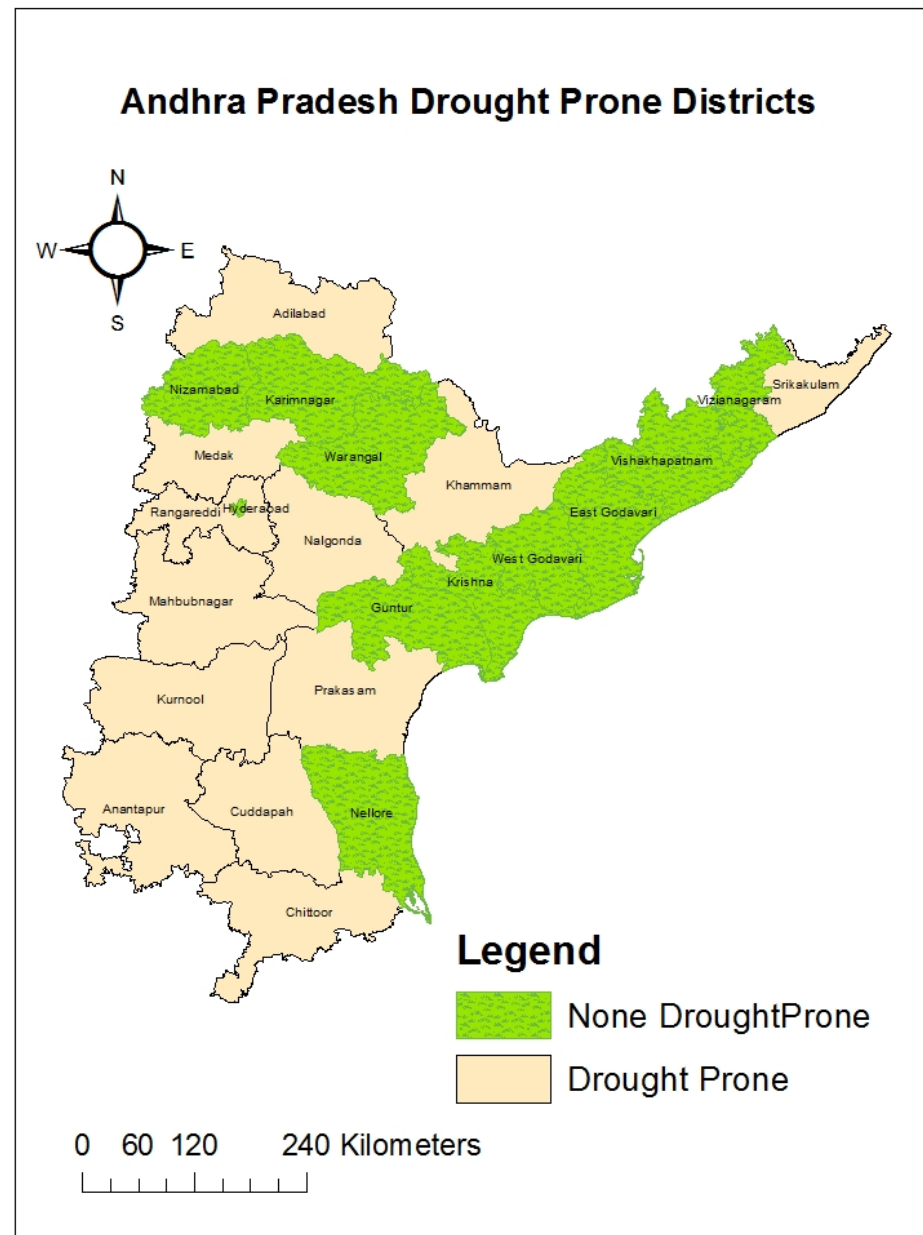

Vivek Prasad

Dept. of Environmental Science and Public Policy
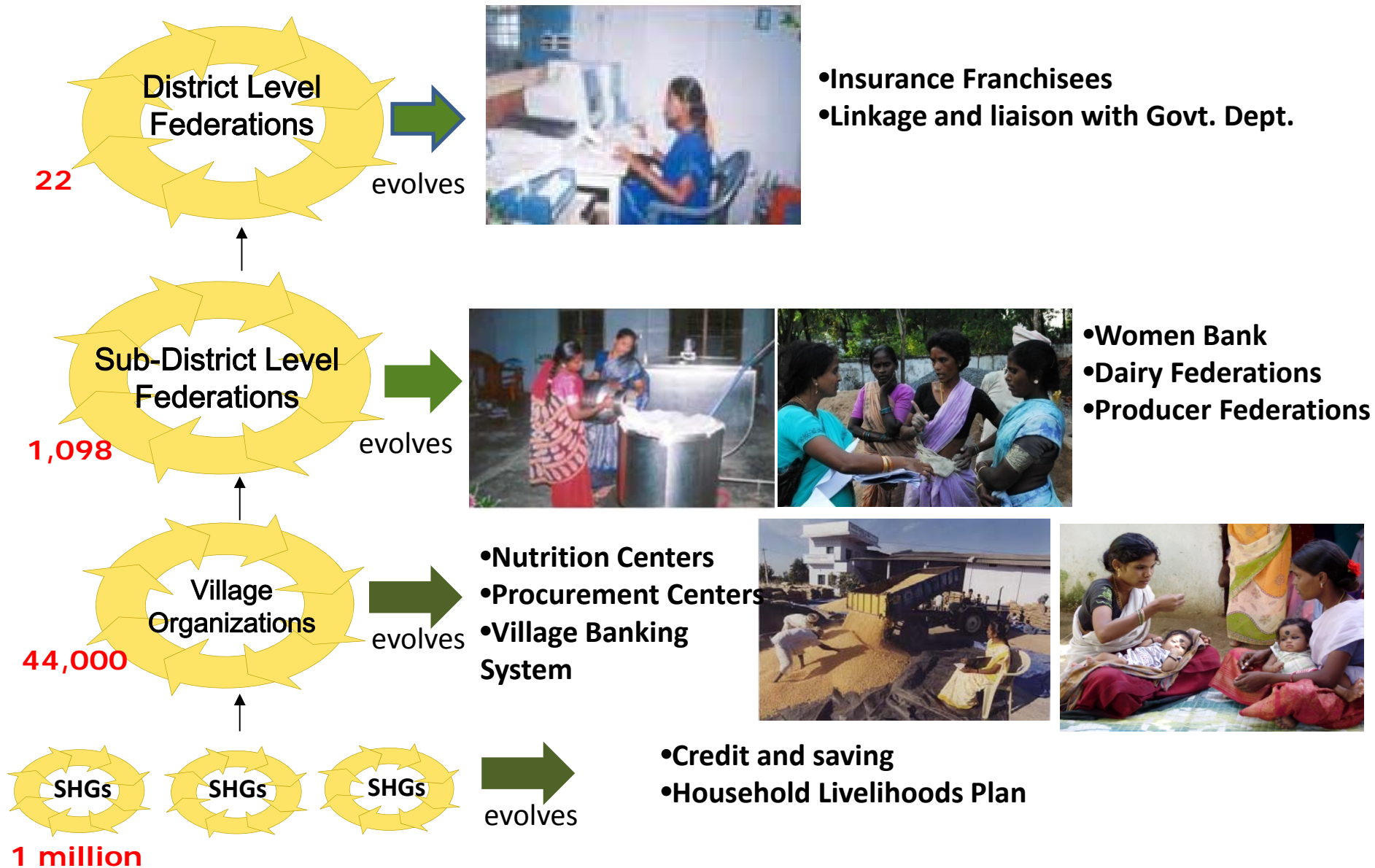
George Mason University, USA
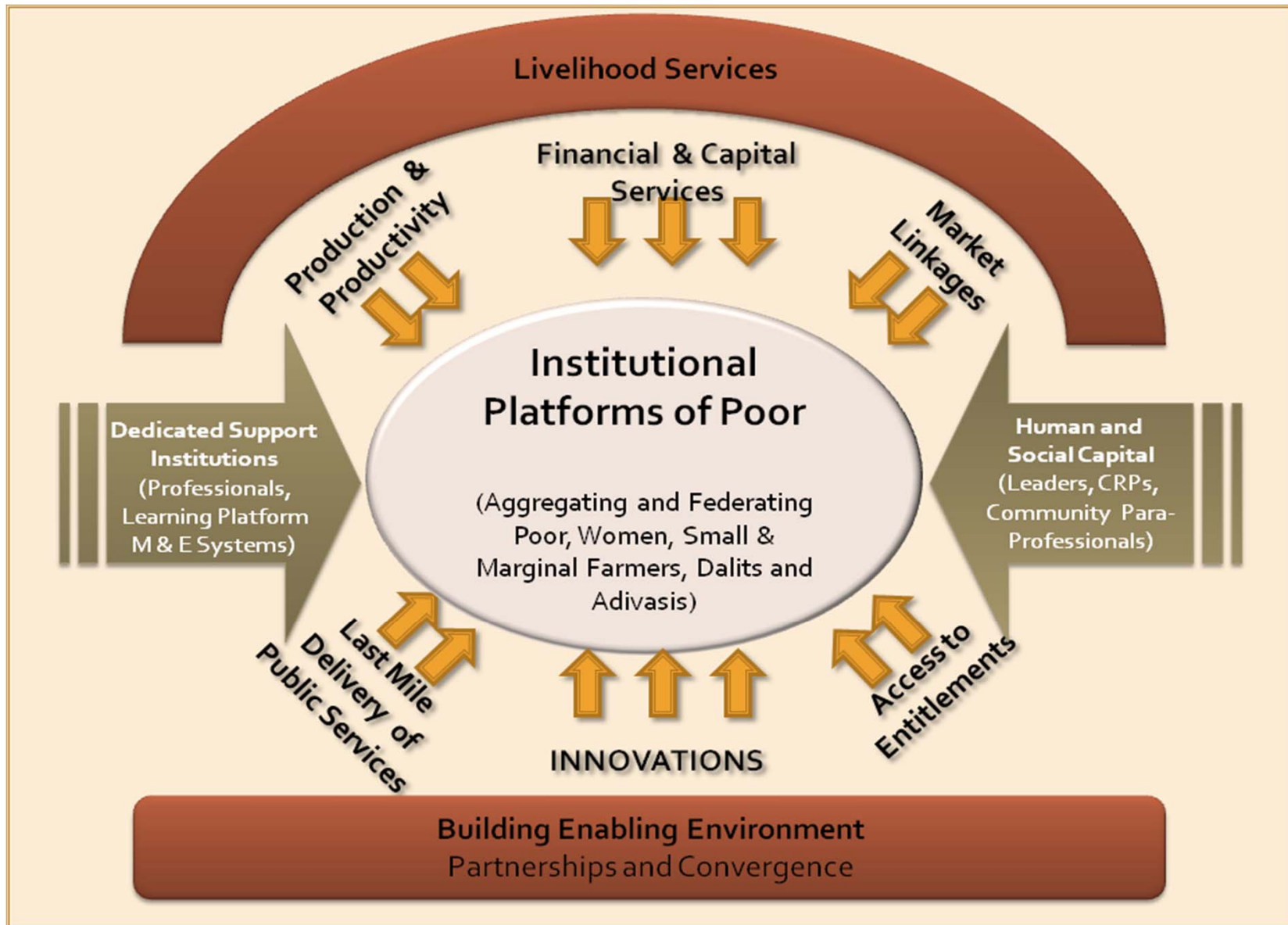
Global context

- Approximately 2.6 billion people depend on agriculture for livelihood,
- 500 million are small farmers (less than 2 ha),
- By 2050, there will be more than 9 billion people in the world,
- Agricultural production must increase by 70 percent in order to feed the growing population,
- Already stressed land and natural resources, limitations and externalities of conventional agriculture, and impact of **contemporary climate change** make the task challenging.

Andhra Pradesh Drought Prone Districts

Adilabad

Nizamabad
Karimnagar
Srikakulam
Vizianagaram

Medak
Warangal
Vishakhapatnam

Rangareddi Hyderabad
Khammam
East Godavari

Nalgonda
West Godavari

Mahbubnagar
Krishna

Guntur

Kurnool
Prakasam

Anantapur
Cuddapah
Nellore

Chittoor

Hyderabad

Legend

None DroughtProne

Drought Prone

0   60   120   240 Kilometers

Institutional Platform: hierarchal and multi-sectoral functions

District Level Federations

22

evolves

- Insurance Franchisees
- Linkage and liaison with Govt. Dept.

Sub-District Level Federations

1,098

evolves

- Women Bank
- Dairy Federations
- Producer Federations

Village Organizations

44,000

evolves

- Nutrition Centers
- Procurement Centers
- Village Banking System

SHGs   **SHGs**   **SHGs**

evolves

- Credit and saving
- Household Livelihoods Plan

1 million

Community institutional platform

Building blocks of CMSA
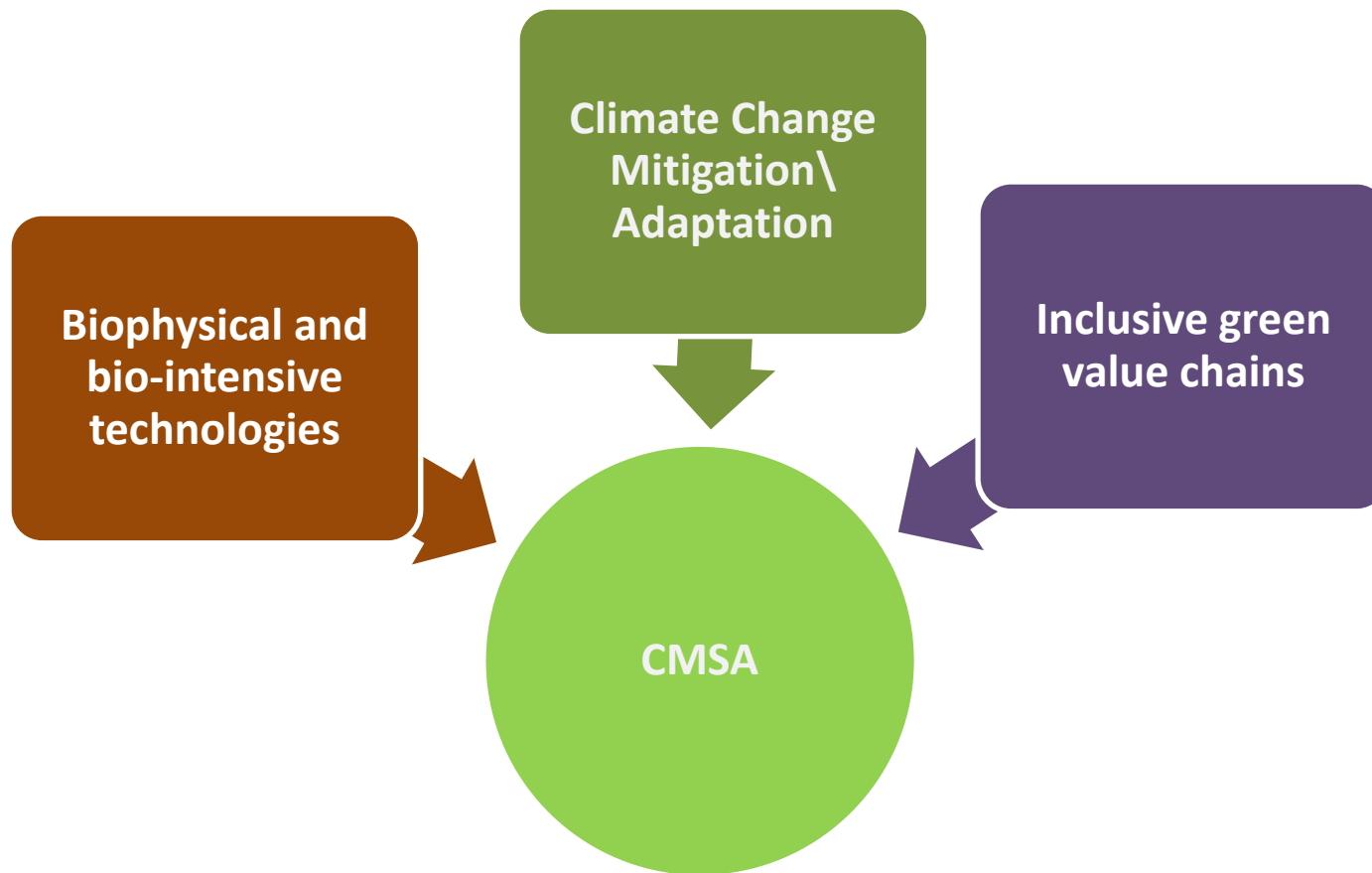
Biophysical and bio-intensive technologies

Knowledge intensive agriculture / cost-effective

Vermicompost / improved soil health

Mixed Agriculture / increased productivity

Border crop/ increased productivity

Bund plantation/ increased production

Bio-pest management/good health

Inclusive value chains

Organic farmers' market

Agri-product processing
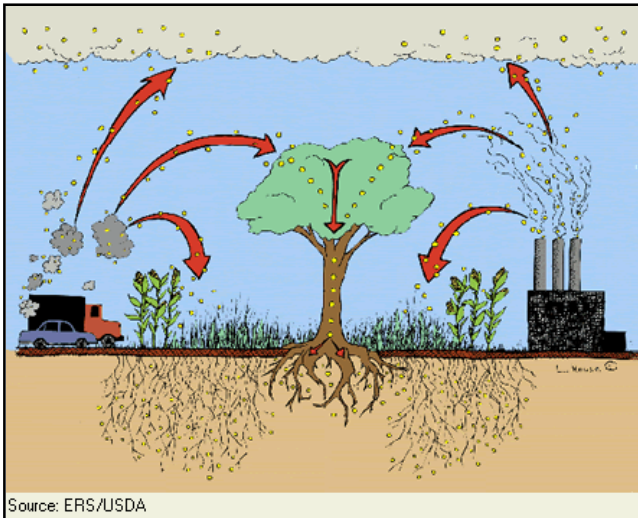

Community managed procurement

Climate smart and environmental friendly practices

Carbon sequestration

Moisture retention and water conservation

Soil moisture management

What is community managed?

Community-managed extensions

Micro-planning for agriculture

Village level seed bank

Community based marketing and procurement

Digital Libraries for the Poor: *Video-based Learning Platform*

It uses participatory video as a medium to create star farmers and facilitates a rural library of digital videos providing decentralized and localized agriculture solutions to farmers, using the thrill of appearing "on video" to amplify the organization's reach within their social networks.

Video production by farmers on best farming practices

Local level, just in time, customized extension of best farming techniques and practices

Outcome:

- **2800 video** **produced by farmers on best farming practices;**
- **Digital Libraries available online and offline** also **available on Youtube.**

digital green andhra pradesh

Digital Green @ SERP Video Production Bootcamp

by **digitalgreenorg** · 3 years ago · 1,997 views

Digital Green's video production training program conducted with community resource
persons working with the Society for the ...

Varilo Aggi Tegulu Nivararana (Rice Blast control in Paddy-Viziayanagaram)

by **digitalgreenorg** · 6 months ago · 210 views

Basil leaves and Wood Plant leaves (Bael) extract is used to contain rice blast diseases
in paddy cultivation. This video is ...

Farmer Field School _English

by **digitalgreenorg** · 2 months ago · 82 views

Farmer Field School(FFS) is an innovative initiative by Society for Elimination of Rural
Poverty(SERP) - Community Managed ...

Farmers Field School
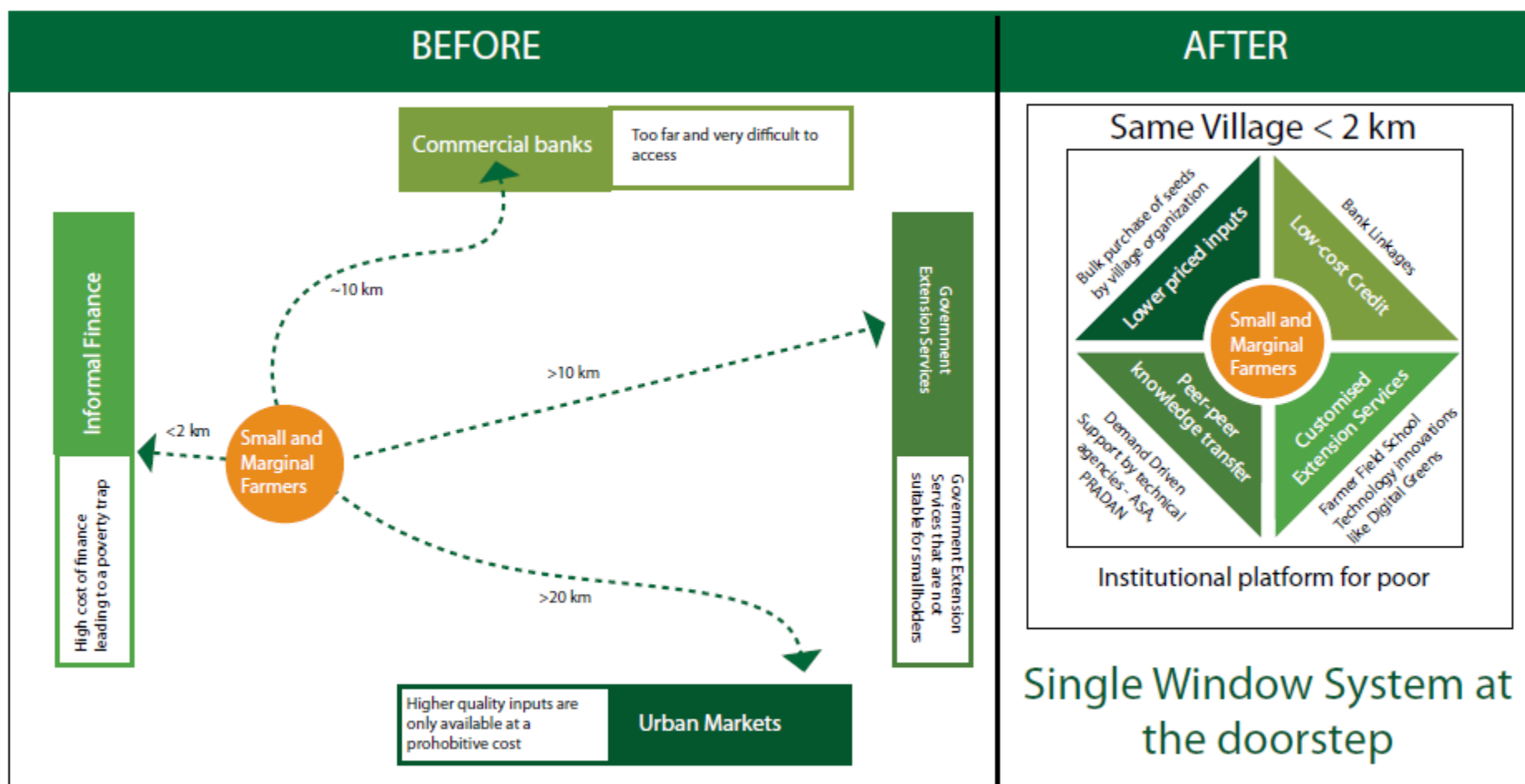

Learning in field

Learning and observation in field

Use of ICT in Community Managed Sustainable Agriculture

Timely and customized climate adaptation and crop advisory;
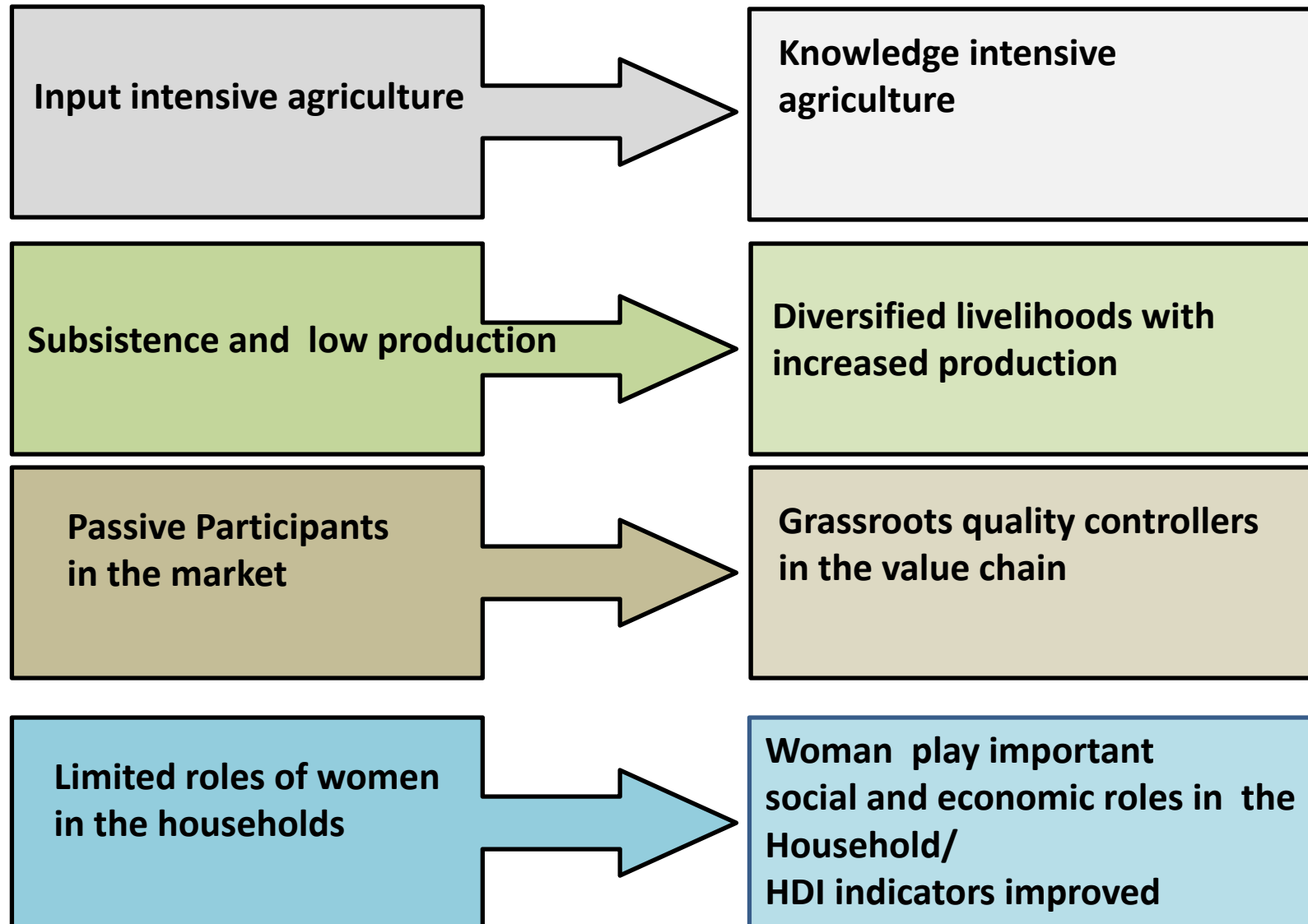

Crop-cutting experiment data

Crop disease observation data

SMS / GPRS / BT Network

Server

Web Repor

Timely and customized advisory through SMS

Data analytics

Creation of a "Single Window System at the Doorstep"

Key Transformations

Input intensive agriculture	→	Knowledge intensive agriculture
Subsistence and low production	→	Diversified livelihoods with increased production
Passive Participants in the market	→	Grassroots quality controllers in the value chain
Limited roles of women in the households	→	Woman play important social and economic roles in the Household/ HDI indicators improved

What made it possible? What lessons we learned?

- Find the entry points and keep the interventions simple,
- Farmers can manage initial piloting and experimentation but scale-up through community institutions,
- Smallholders can't create the demand-side stimulus if they do not act collectively and aggregate their voice,
- Localizing service delivery and prompting social learnings.