



CLIMATE
CHANGE
AGRICULTURE AND
FOOD SECURITY

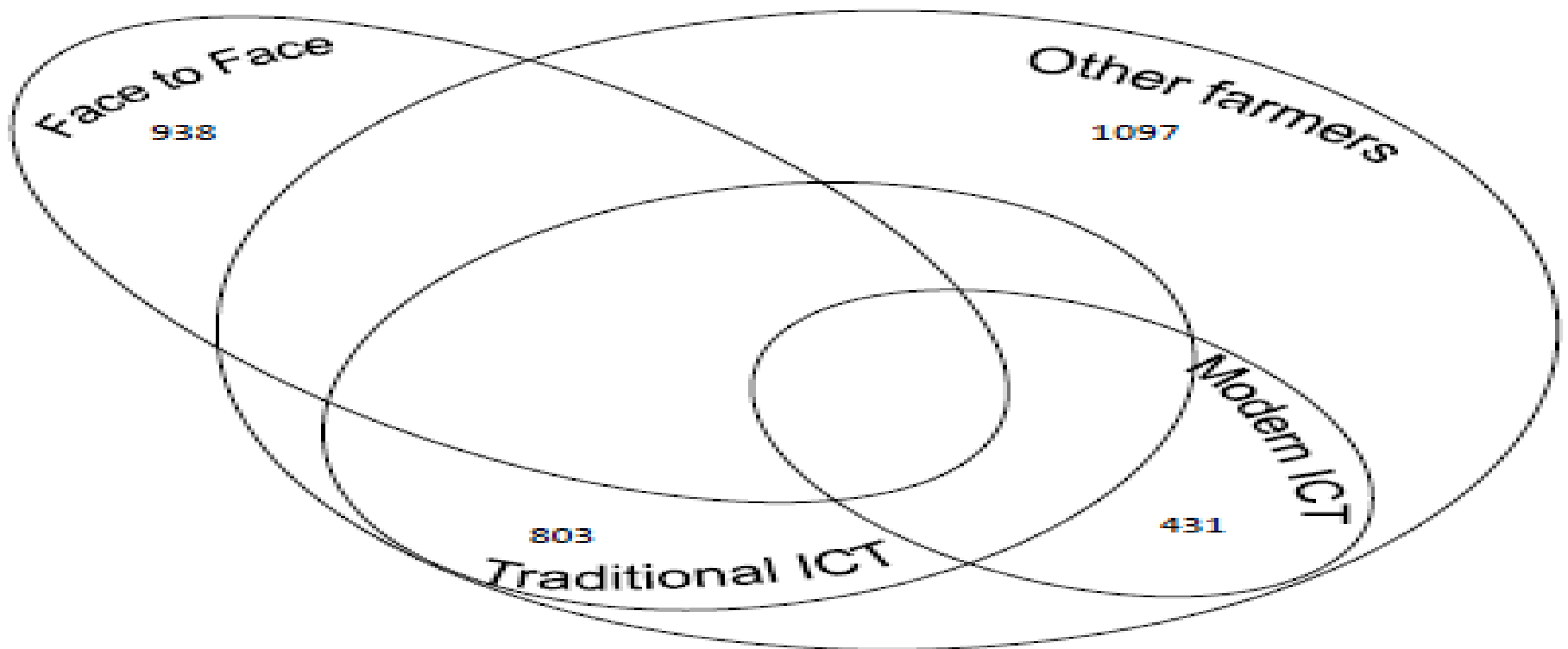
Farmers, Information Networks and Information- What else is needed?

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CIMMYT^{MR}

Framers and information networks



Traditional mode

- Television, Radio, Newspaper

Modern ICT

- Landline phone, Mobile phones, Internet / Internet Kiosks

Other farmers

- Farmers in the same village or neighbourhood

Face to Face

- KVKs, AG Univ, NGOs, Co-op, markets, Private i/p dealers etc.

Various Modern Information models

Tele centre based

Kissan Call Centers, 2004

BSNL Help line

Internet based

Village Knowledge Centres, 1998

ITC e-chaupal, 1999

E-sagu, 2004

Mobile- Voice message based

*IFFCO Kisan Sanchar Limited
(IKSL), 2007*

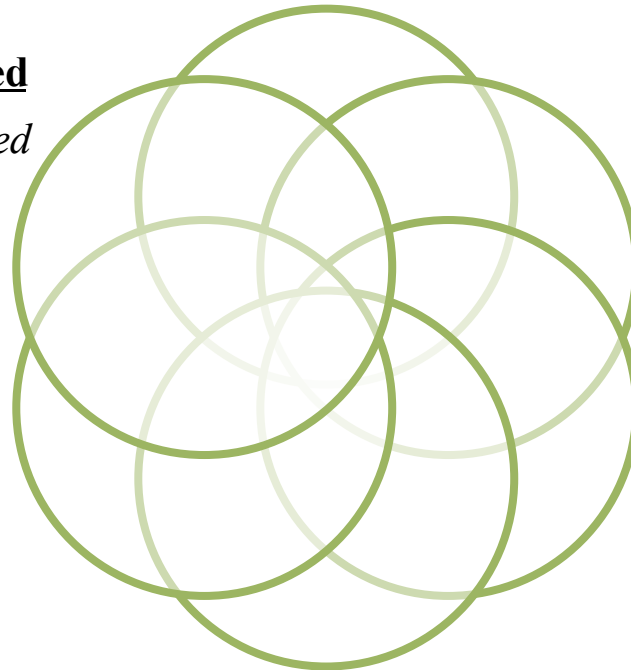
Mobile -SMS based

Reuters Market Light (RML) 2007

Warna Unwired- Microsoft, 2007

KVK's- NAIP, 2009

Kisan Sanchar, 2010



Mobile based application

Fisher Friend- MSSRF, 2008

Nokia- Life tools, 2009

Tata- M Krishi, 2009

Video based

Digital Green, 2009

Information Usability facts

Only 41% of farmers have access to modern ICT sources of information.

46% of farmers are not able to utilize the available information due to lack of extension and related facilities

19% find inputs availability as the biggest constraint in utilizing the information

Not much variability in access to information by farm size but huge variation in utilizing the benefits

Age, Education, Gender and access to complementary sources of information also play an role in using information

Is information enough?- Big Issues

Climate Information in itself enough?

- Reaching the last mile..... to create impact

Is there enough available climate information?

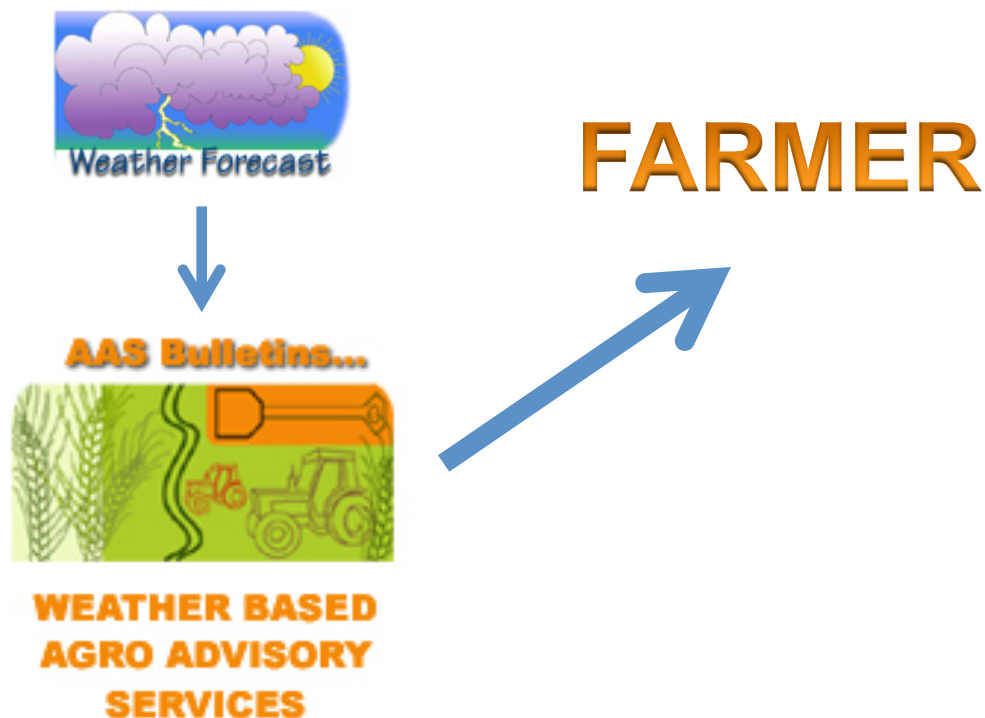
- I really don't know

Climate information services

- Mostly supply driven and there is limited understanding of its usability in action

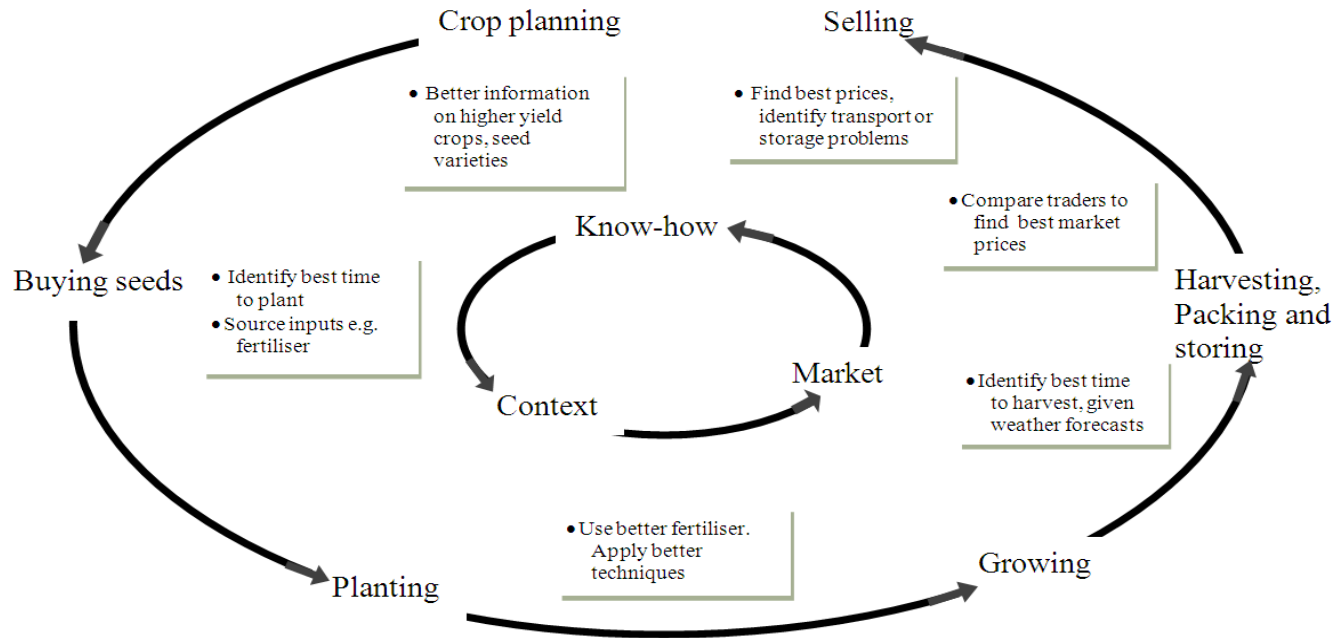
Some Examples- Good and Bad

<p>Anuman (Expected weather) Location: Satara Date: 03/12 H: 29⁰C, L: 19⁰C RH: 77% Chances of Rain: 98% Rain: 9 mm</p>
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SO WHAT?????

What Information farmer gets?



Information Farmer Receives

- Temperature
- Market Prices
- How to grow?

Information Farmer wants

- Plant protection
- Seed information
- Weather- probability of rainfall
- cultivation best practices and crop choice

The missing link

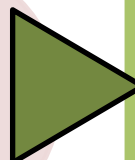
Climate information services are mostly supply driven and their is limited understanding of its usability in action

- Choice of seed varieties
- Timing of sowing and harvesting
- Use of climate smart technologies
- Best farm Practices
- Efficient resource Management
- Timely decision on application of inputs like fertilizers, pesticides, weedicides.
- Organizing storage

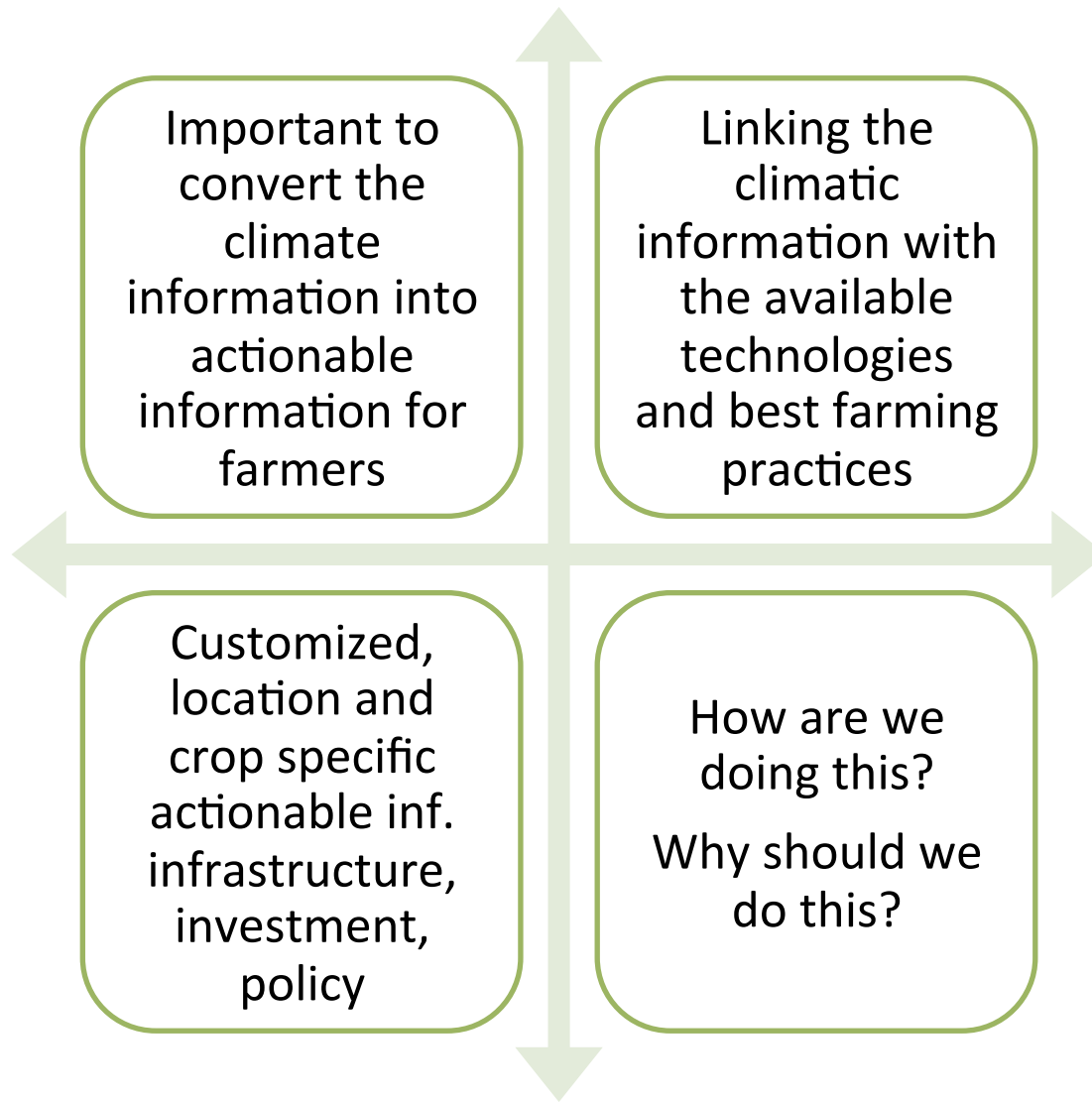
**Managing
Production Risk**

- Inputs availability
- Type of inputs- package of it
- Availability of machinery/ technology
- Market variability in prices
- Insurance
- Credit

**Managing Market
Risk**

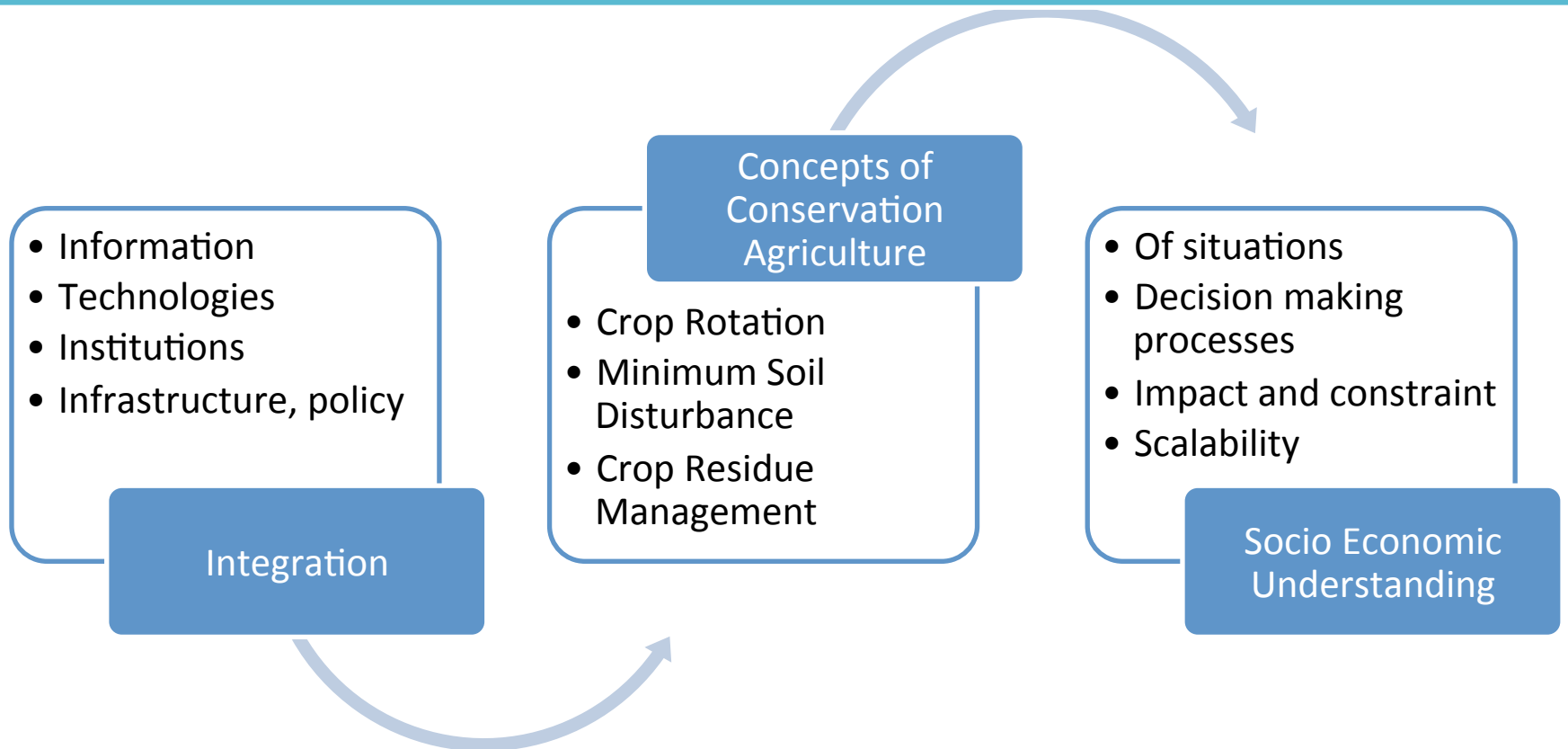


Framework of Climate Services +



HOW can it be done???

Extension services incorporating modern ICT tools to disseminate information



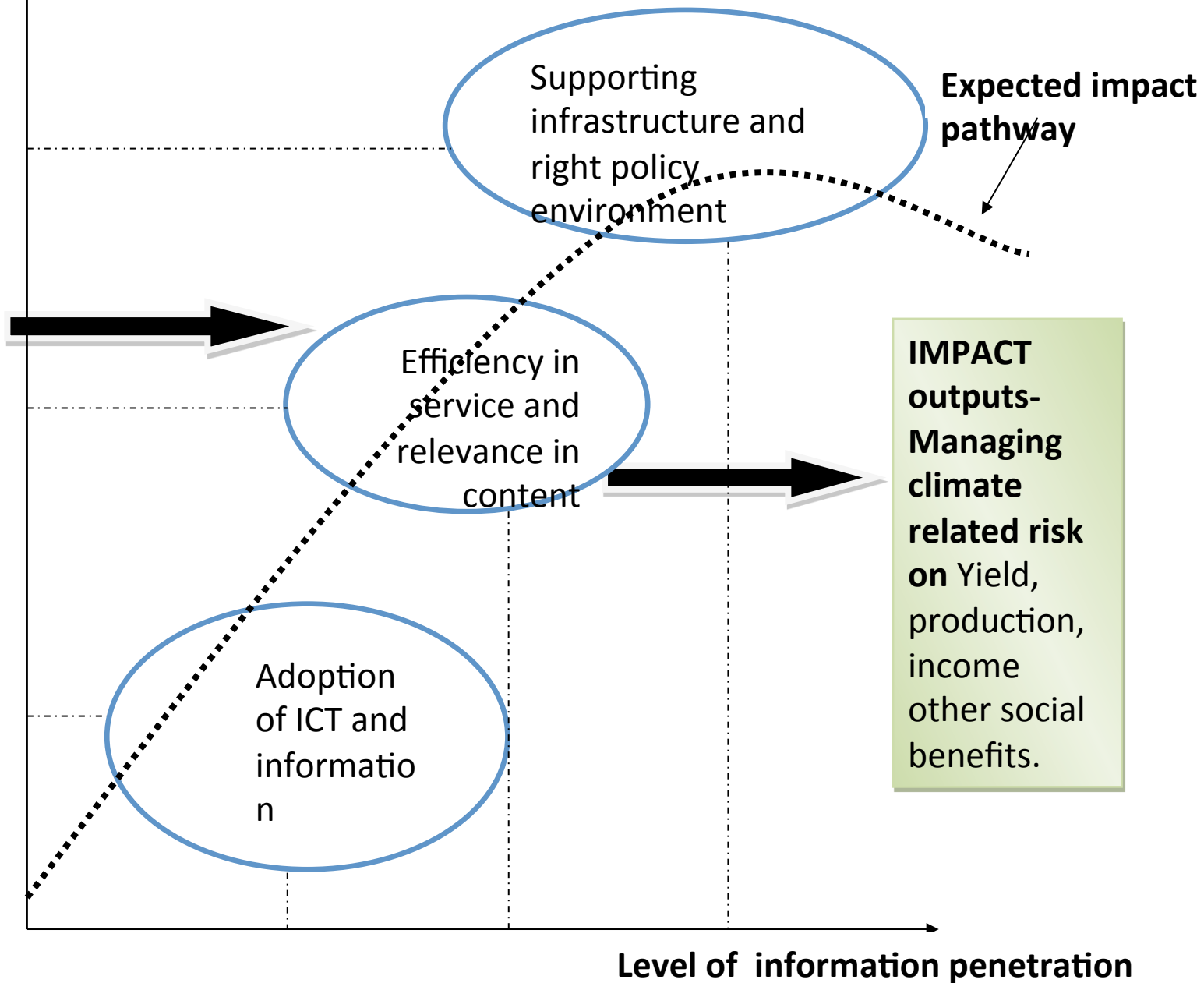
Climate Smart Villages

Why? -To have Impact

Socio-Economic Impact

IMPACT inputs

Collective information on weather, farm management advisory, markets, input and output prices.



Supporting infrastructure and right policy environment

Expected impact pathway

Efficiency in service and relevance in content

Adoption of ICT and information

IMPACT outputs-
Managing climate related risk on Yield, production, income other social benefits.

Level of information penetration

Thank You

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