



A WORLD-LEADING MULTILATERAL CLIMATE FUND
A LEARNING LABORATORY
A PIONEERING FUND

Private Sector Engagement for Resilience to Catalyze Transformational Change at the Local Level



TRANSFORMATIONAL CHANGE LEARNING
PARTNERSHIP

RESILIENCE INTEREST GROUP

March 2nd, 2021

WELCOME!

AGENDA

- | | |
|---|--------|
| I. Welcome and Overview | 10 min |
| II. Presentation. IFC's and Private Partner's Experience in Farming Communities: Examples from Nepal and Bangladesh | 40 min |
| III. Fireside chat and Q&A with participants | 35 min |
| IV. Wrap Up and Next Steps | 5 min |

I. WELCOME AND OVERVIEW

MEETING OBJECTIVES

- Present areas where the International Finance Corporation (IFC) has succeeded in working with the private sector at the local level
- Share IFC and in-country partner experiences, challenges, and lessons learned in building climate resilience by working with local actors
- Share experiences and lessons learned from participants



GROUND RULES



Allow everyone the chance to speak (keep comments concise)



Have your microphone on mute while others are speaking



Use the button in the right corner of your screen to raise your hand if you want to contribute to the conversation



Listen actively and with an ear to understanding others' views



Commit to contribute to learning and respectful discussion



Use the chat if you need to report a technical issue or directly contact Shelby Thomas/ María José Vallejo

TC WORKING DEFINITION AND FOUR (4) DIMENSIONS

Working Definition of Transformational Change

Strategic changes in targeted markets and other systems, with large-scale, sustainable impacts that shift and/or accelerate the trajectory toward low-carbon and climate-resilient development.

Four Dimensions of Transformational Change

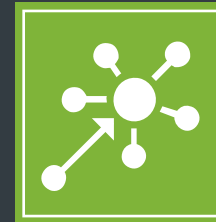
Relevance



Systemic Change



Scale



Sustainability



II. IFC'S AND PRIVATE PARTNER'S EXPERIENCE IN FARMING COMMUNITIES: EXAMPLES FROM NEPAL AND BANGLADESH

TODAY'S SPEAKERS



HARSH VIVEK

*IFC's Program Leader for the
South Asia Food and
Agribusiness of Advisory
Services*



SIDDHANT PANDEY

CEO - Business Oxygen



HITESH GOLCHHA

*Director - Golchha
Organization*

Private Sector Participation to Promote Climate Adaptation

Lessons from Pilot Program for Climate
Resilience (PPCR) in South Asia

Harsh Vivek

Program Leader, South Asia Agribusiness Advisory
International Finance Corporation
The World Bank Group

March 2, 2021



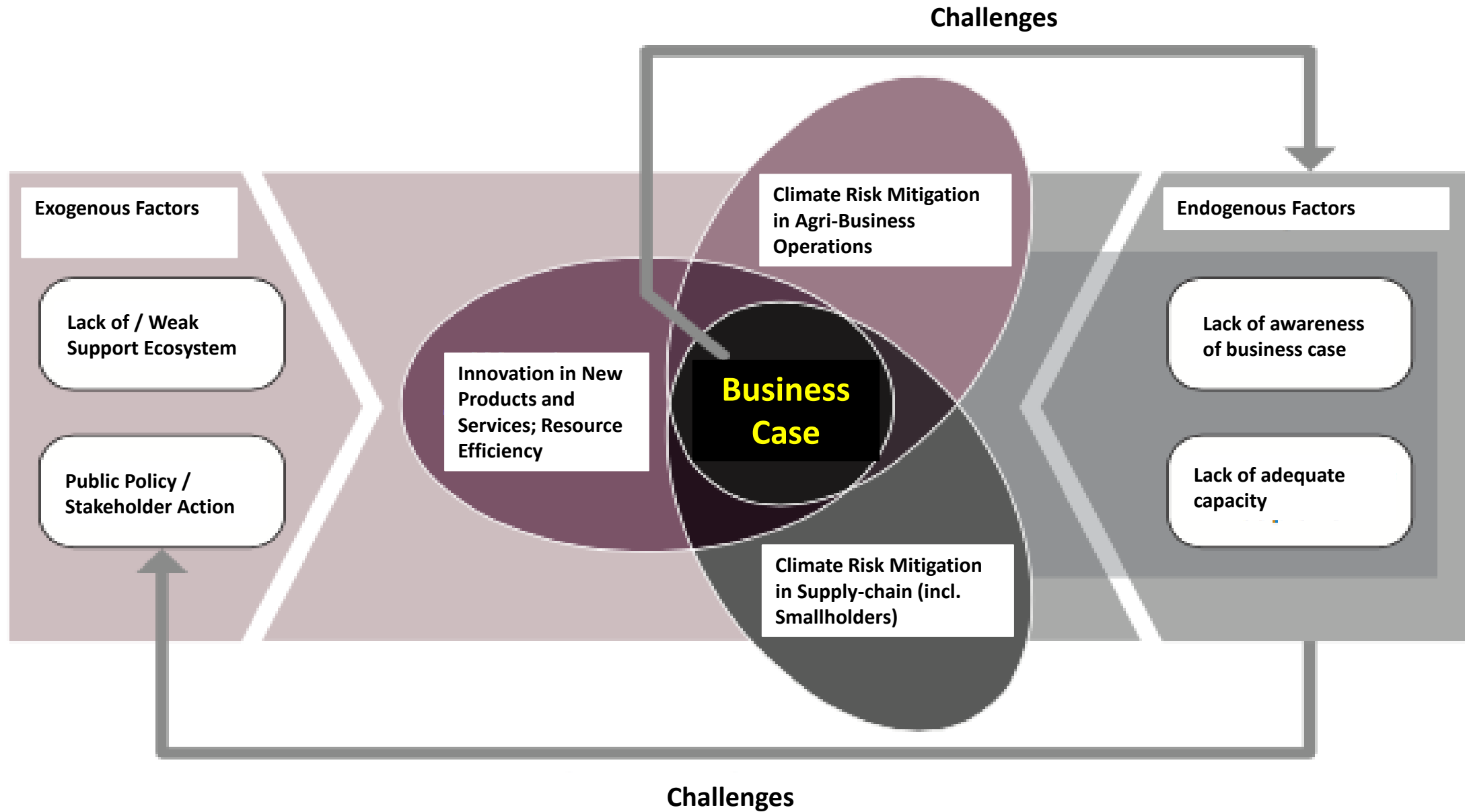
South Asia climate challenge in agriculture

One of the most vulnerable regions in the world to climate change

Climate impact in agriculture: yield loss due to recurring droughts and floods; stagnant and/or declining farm yields; increased incidence of pest attacks and diseases; loss of soil health and biodiversity; and increased risk of post-harvest loss.



What ails private sector participation in climate change adaptation in agribusiness?



Pilot Program for Climate Resilience (PPCR)

Agro Input Companies (Seed):
PPCR Bangladesh



Agro Produce Offtake Companies:
PPCR Nepal

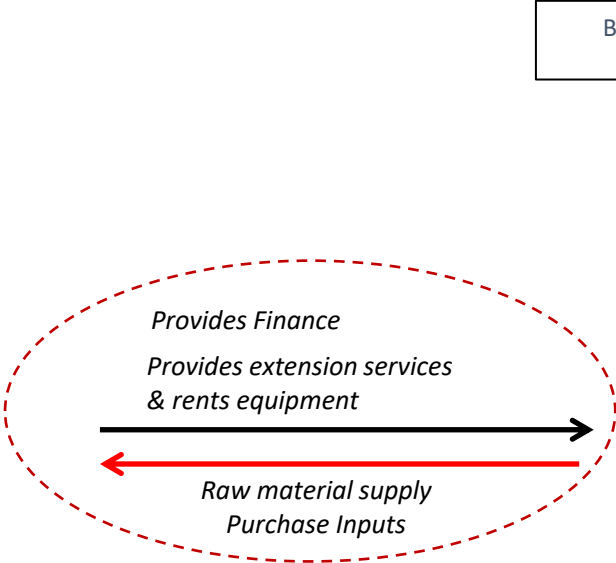


Provides Technical Assistance
Concessional Finance
Capacity Building

Lead Firms

Distribution channel

Suppliers



Sells inputs, equipment

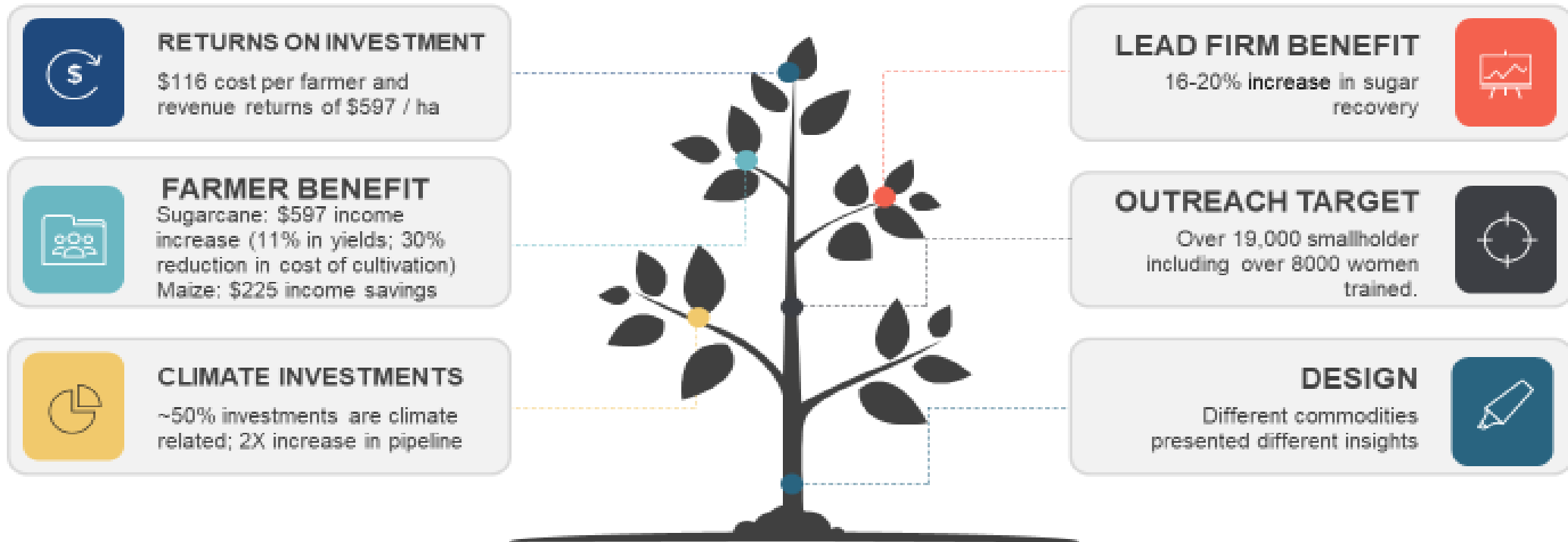
Behavior Change – Adoption of Climate Resilient Practices



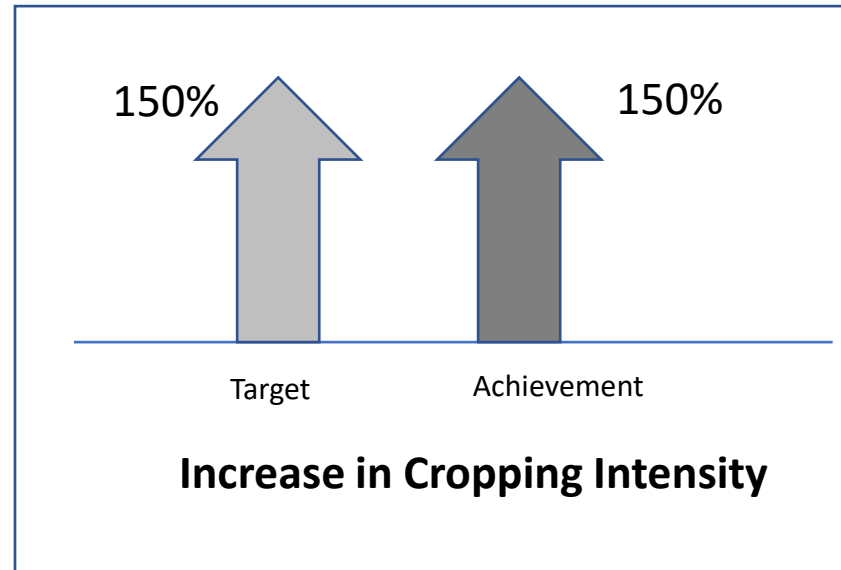
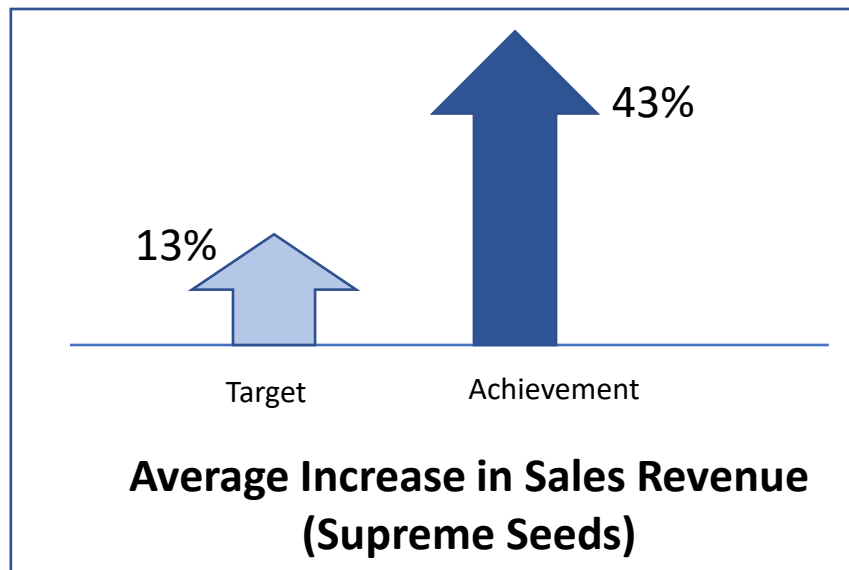
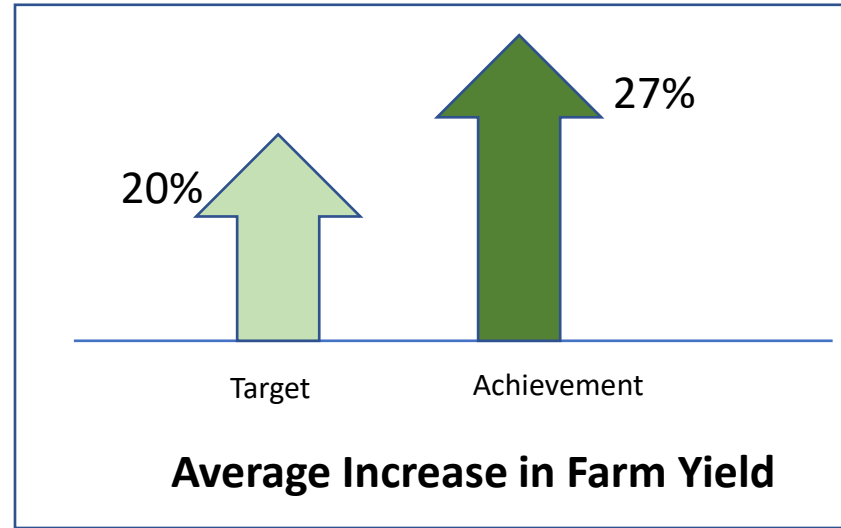
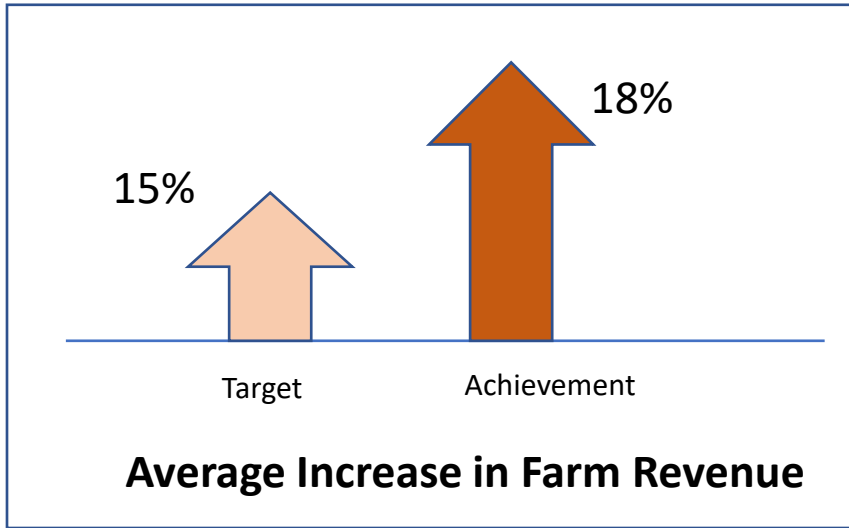
What did we achieve? Nepal PPCR

Over 19,000 smallholders, including 8,000 women smallholders supported in Nepal across three commodity value-chains: rice, maize and sugarcane

DEVELOPMENT RESULTS



What did we achieve? Bangladesh PPCR



Over 90,000 smallholders supported for capacity building on climate smart agriculture (CSA) including over 11,000 women farmers

3 private sector firms supported with capacity building of extension workers and field staff on CSA

Extensive use of digital tools for farmer extension and support including weather-crop advisory

What did we learn?

Eg. Public policy focus on polder regions in Bangladesh encouraged private sector to explore new markets in South Bangladesh

Public Policy can Create an Enabling Environment for Private Sector

Behaviour Change through Capacity Building

Economics for adoption of climate resilient practices needs to be highlighted

Business case for smallholders: increased yield, reduction in cost of cultivation etc.

Business case for private sector firms: new markets, reduced supply-chain risks, lower cost of sourcing

Business Case is Key for Private Sector Firms and Smallholders

Nature of Supply-chain Plays a Role in Effectiveness of Extension

Shorter / tighter the supply-chain, higher the efficacy of extension and capacity building (eg. Sugarcane versus rice in Nepal PPCR)

Blended finance can play a key role in incentivizing change through risk mitigation; innovation

Concessional Finance Required to Catalyze Change

Digital Tools Accelerate Outreach for Climate Resilience

Automated Weather Stations >> weather and crop advisory
Digital extension and capacity building

Can private sector participation catalyze transformational change? Experience from PPCR...

Triple bottom-line approach: economic viability, social inclusion and environmental sustainability

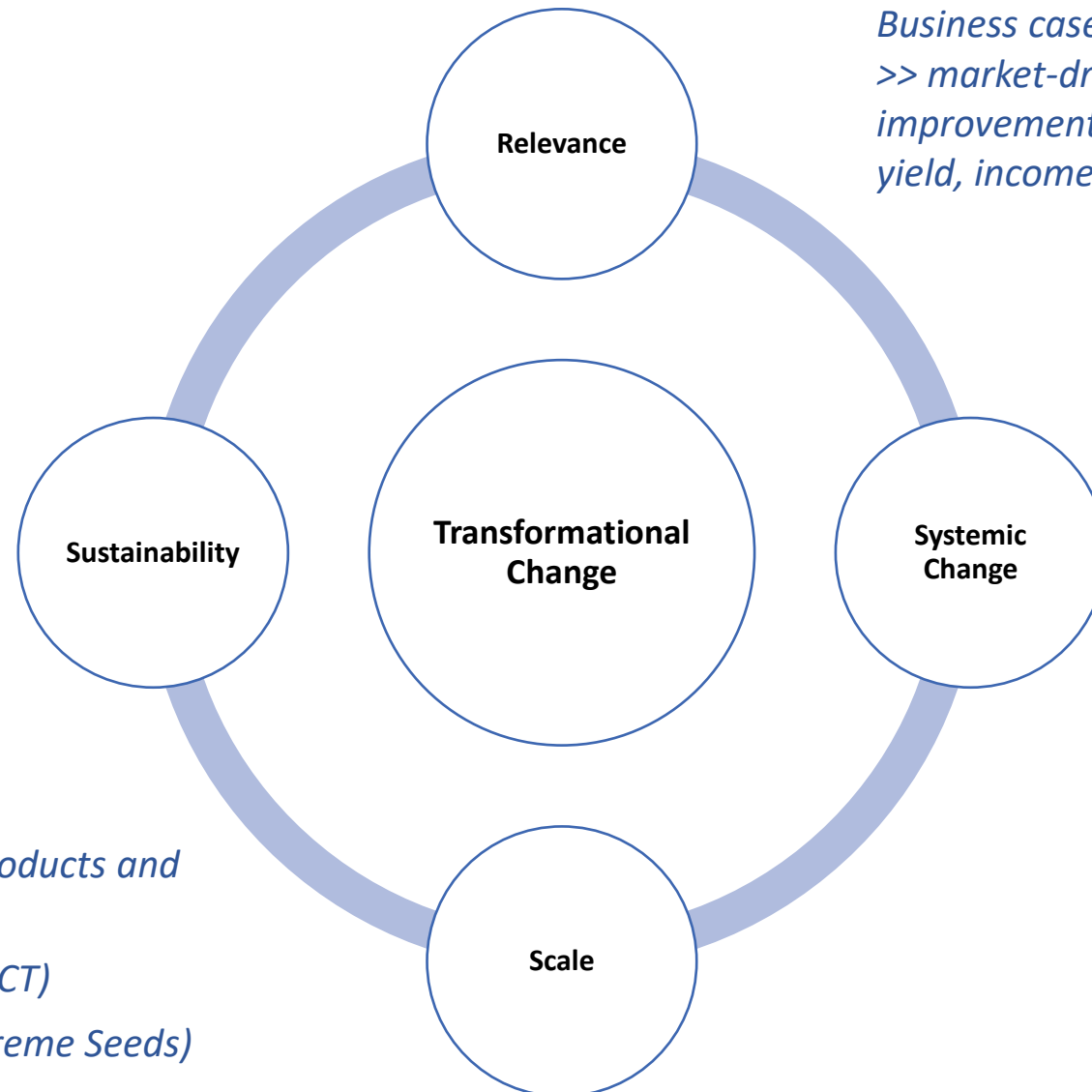
“Profit or returns orientation” in smallholder engagements for climate change adaptation

Private-sector to complement public efforts on climate adaptation through efficient resource mobilization, process efficiency and innovation

New markets for climate resilience products and services (eg. Climate resilient seeds)

New technologies and products (eg. ICT)

Improved revenue and sales (eg. Supreme Seeds)



Business case driven private sector engagement >> market-driven behaviour change: improvements in smallholder farming; better yield, incomes and sourcing volumes

*Multi-stakeholder partnerships
Evidence-based policy-making: grounds-up approach to climate-action*

Social change: gender participation

Access to information for informed decision-making: ICT

Thank You

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NEPAL CASE STUDY

4 minute video from Nepal Case Study: B02

- Available at:

<https://www.youtube.com/watch?v=bOYeYebspuc&t=5s>

TCLP Resilience/Catalyzing TC for Climate Resilience through Private Sector Engagement

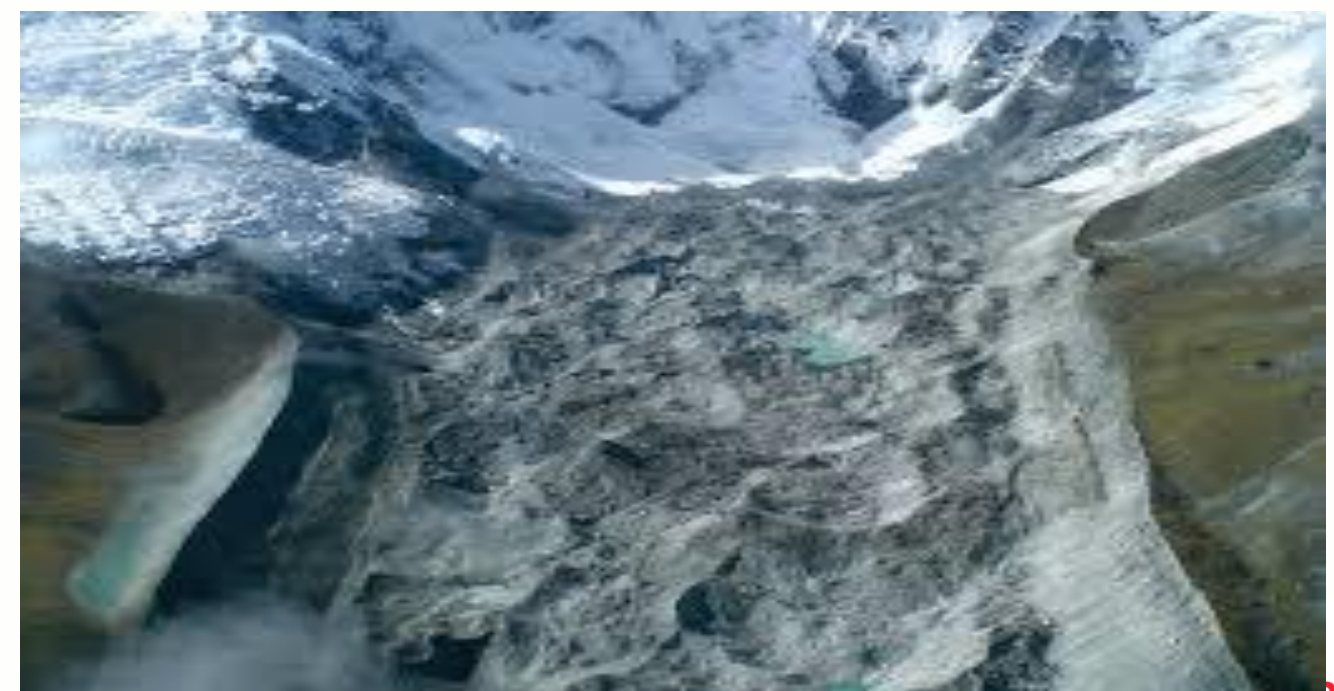
Investors



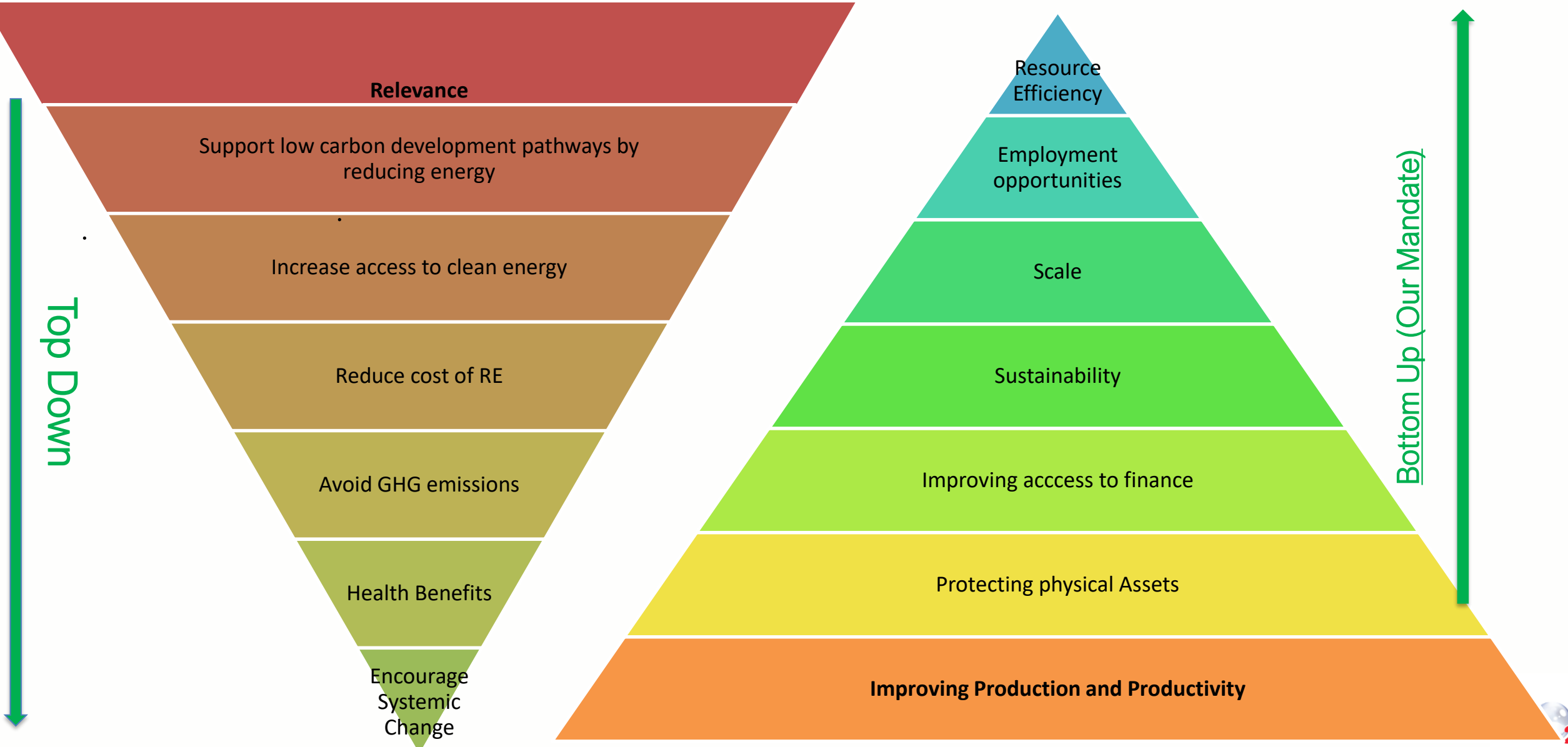
Presented by:
Siddhant Raj Pandey
Chairman/CEO
Business Oxygen



BUSINESS OXYGEN Pvt. Ltd.
A WLC Ventures Managed SME Fund



Transformational Change



ADAPTATION /RESILIENCE



- Installing **3.4 MW Rooftop Solar system**, pioneering diversification into energy mix of Nepal under 'RESCO' model
- **Substituting import** of thermal electricity



- Converting **45,000 kgs of organic waste per day** comprising of animal manure and municipal solid waste for the generation of green fuel.
- **528,000 kg of compressed natural gas** produced per year, substituting **37,183 liquefied petroleum gas cylinders**
- Reduction of GHG emission



- **20 tons of pellets annually** converting **30 tons of forest waste per annum**. Demonstrate to mitigate the adverse impacts of climate change reducing use of coal with renewable biomass pellets
- Removal of bushes prevents/reduces fires in **Sagarnath forests in 13,500 ha area** and also other forests in the areas where biomass is harvested
- Reduction of GHG emission



- Enhancing supplementary source of income to **9,265 smallholder farmers** in the supply chain
- **4,950 tons of organic fertilizer production** from organic waste complements to boost agricultural production

Climate Portfolio



Alternative Energy



Alternative Energy



Restaurant - Food Processing

DESCRIPTION

Bio-gas and fertilizer company
Converts 45,000 kg of organic waste to 1600kg of bio CNG and organic fertilizer

Distributed rooftop systems and off grid community solar panels.

Building Central Kitchen and outlets to create efficiency

RESULTS

- Average farmer income increased (Systemic Change)
- Reduction of waste and Co2 emission by replacing LPG with Bio-CNG gas produced out of natural anaerobic digestion. (Relevance)
- Building food security through production of 4,950 tons of organic fertilizer. (Scale)

- Potential to displace thermal energy imports if scaled. (\$200 MM imported) (Relevance)
- Enabling solar pumps to irrigate rural communities(Systemic Change)
- Create employment and entrepreneurship due to access to electricity in rural communities. (Scale)

- Efficient mgmt of energy/reduction of food wastage (Relevance)
- Employment for marginalized women (Systemic Change)
- Food supply sourced to local farmers as chain expands impacting livelihood. (Scale)

Climate Portfolio



Alternative
Energy



Agri -business



Manufacturing

DESCRIPTION

Manufactures Biomass pellets

**Manufacturers of Hardened Yak
Cheese for Export**

**Manufacturing of beaten rice and
puffed rice.**

RESULTS

- Develop green fuel which can displace the use of coal. 20 tons of pellets annually using locally available resources by converting 30 tons of forest waste per annum. (Relevance)
- Reduce forest fire risk in Sagarnath forest area which is highly climate vulnerable. (Systemic Change)

- Created alternative source of income for 1600 farmers living in remote parts of Nepal who are female. (Scale)
- Trained dairies for efficient production processes. (Relevance)

- Company purchase paddy from 5,250 small holder farmers directly. (Scale)
- Company has climate resilient storage capacity of 10,500 tons of paddy protecting it from rain and moisture.(Relevance)
- Greater shelf life and demand of these products is experienced during difficult times like pandemic or post disaster.

Moving Forward

- ❖ Find a mid approach between business development and Environment Practices (Knowledge building)
- ❖ Create awareness from small acts to propogate that Greening does have the potential to improve SME business performance
- ❖ Replicate and scale it all over the country

How CIF can add value:

- ❖ Supplementary advisory support for fund managers like Bo2 to build and scale up climate smart business capital to further grow bottom up approach
- ❖ Enabling Access to Finance through Blended Finance approach..

Let's Breathe !





Eastern Sugar Mills Limited and IFC Collaboration on Climate Smart Agriculture in Nepal under PPCR

Hitesh Golchha

Managing Director, Golchha Group

March 2021



Challenges and Response

- Climate shocks hampering farm yield and incomes:
 - Response: Make the farm and in turn the farmer resilient to climate change
 - Capacity building of **field extension workers** on climate resilient sugarcane farming
 - Demonstration of new and improved sugarcane cultivation practices and technologies
- Acceptability of new ideas amongst farmers
 - Response: IFC Train the Trainer(s) approach
 - Technical and business (farm economics) training to farmers, especially lead farmers
- Exposure to weather conditions
 - Response: Automated Weather Station integrated with software to trigger warning and prompting messages to farmers for timely action on the field
- Lack of human resources – farm workers
 - Response: Introduction to mechanization for smallholders





Challenges and Response

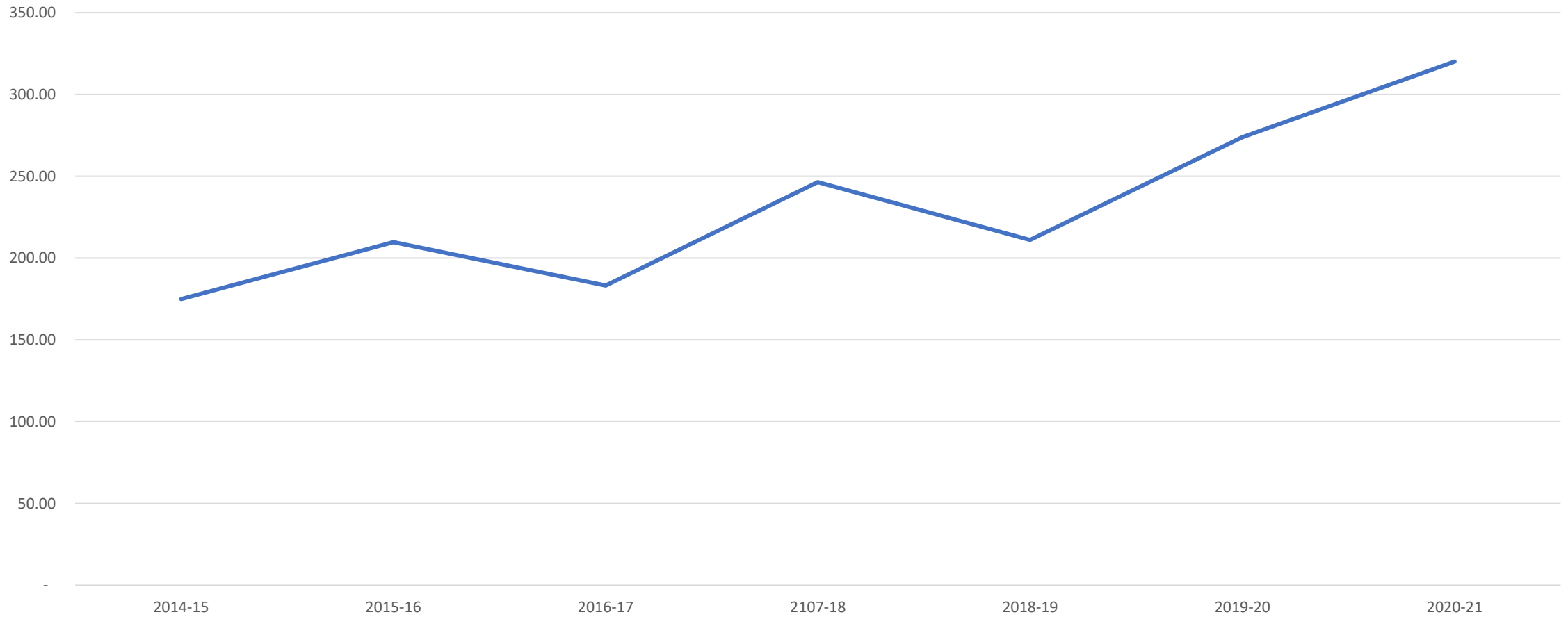
- Lack of resources or timely availability of farm inputs
 - Response: Tie up with suppliers
- Smallholder nature of farming which makes mechanization unviable
 - Response: Launch of affordable tools and machine rental program by the mill.
 - Micro Entrepreneurs who have launched machine rental program
 - Contract farming where farmers are pooling their land together to do Sugarcane farming
- Exposure to risks related to pest attacks and weather
 - Response: Crop insurance
- Access to funds to be able to apply farm inputs on time
 - Response: Tie up with banks for conditional micro finance to the farmers





Outcomes: Average Yield per Bigha

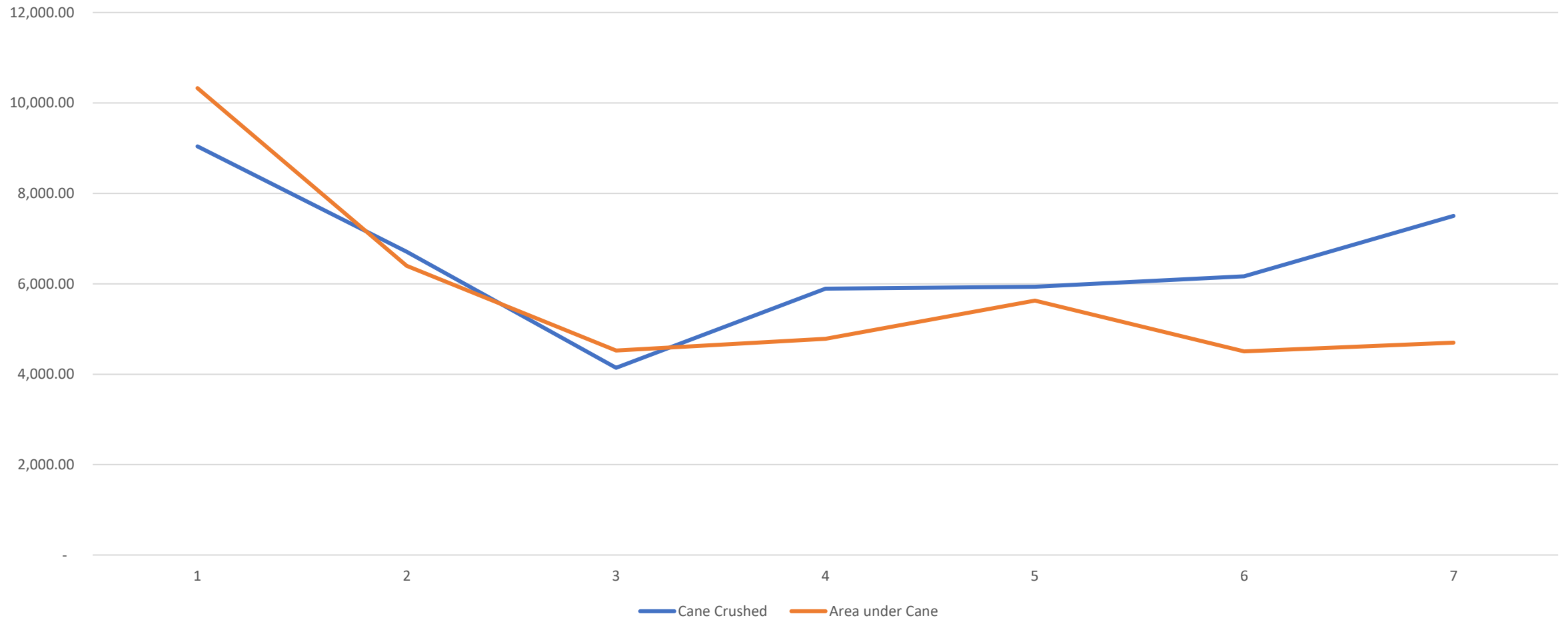
Avg Yield Per Bigha





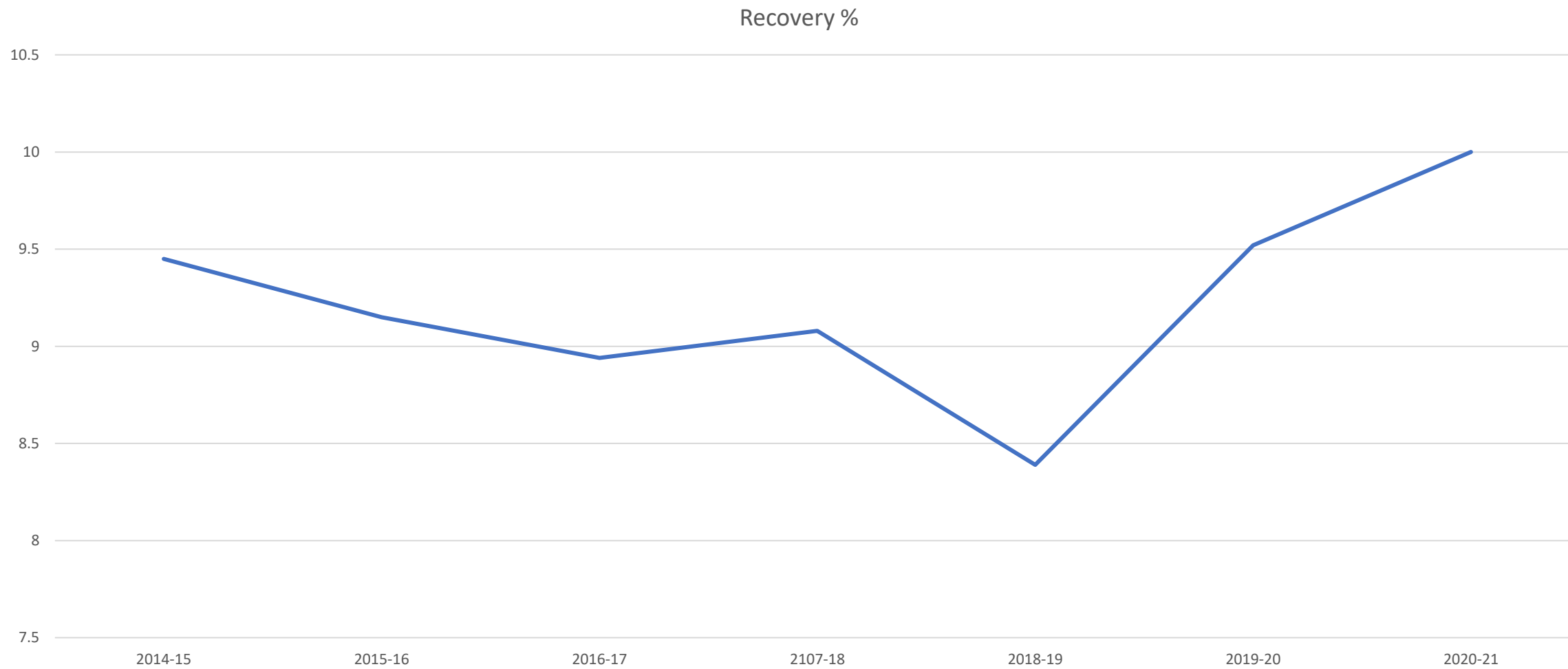
Outcomes: Increase in Cane and Reduction in total Land under cane cultivation

Cane Crushed and Land under Cane





Outcomes: Increase in Sugar Recovery





Current Issues

- Irrigation
- Drip Irrigation
- Green houses
- Tissue Culture for better seeds

- Extremely high capex and thus difficult to execute due to small holding issues.





Thank You

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KEY MESSAGE I

- There is **a role for private sector** (be it agribusiness companies, SMEs, impact investors) **in promoting resilience** wherein it can complement and support the role that governments predominantly play in promoting resilience.
- However, **there needs to be a business case orientation in involving the private sector.**



KEY MESSAGE II

- Similarly, there **needs to be demonstrable economic returns for farmers and SMEs** alike to adopt climate-resilient practices.
- These stakeholders intuitively understand climate risks and resilience but **the adoption of climate-resilient practices is largely motivated by evidence of practical benefits** in terms of revenue and yield improvements or losses avoided during the event of a climate shock.



KEY MESSAGE III

- Informed by evidence and impact on the ground, **public policy plays an important role in incentivizing and enabling private sector engagement** in building climate resilience.
- **It is important that public policies are based on bottom-up insights**



VI. WRAP UP AND NEXT STEPS

WRAP UP AND NEXT STEPS

- The FT will draft and share a report on private sector engagement with insights from this and other TCLP meetings. **The report will be shared in March 2021**
- Next steps for the Resilience/ Landscapes IG in 2021

Information for 2021 TCLP-Wide and Resilience/Landscapes IG Webinars coming soon!



THANK YOU!

