



# Improved Agriculture and High-Value Farming through Corporate Social Responsibility: A Case of CybageAsha in Pune

Varun Miglani

# INTRODUCTION

CybageAsha aims at **uplifting rural communities using sustainable interventions- infrastructural development and income generation through modern agricultural techniques in villages.**

CybageAsha has implemented three interventions to promote sustainable agriculture practices and improve farmers' livelihoods -

**a. Paddy cultivation,**

**b. Wadi cultivation,**

**c. Vegetable farming.**

**Input Assistance** is provided in various aspects of agriculture, such as **providing seeds, saplings, fertilizers, irrigation systems, and training on new technology.**

Adopted **9 Villages in 2017** and another **10 villages in 2020** in **Bhor and Velhe Talukas of Pune district**



# OBJECTIVES

- To study the impact of CybageAsha's agricultural interventions on the livelihoods of the farmers.
- Mapping the initiatives undertaken by CybageAsha and benefits received by the beneficiaries with Sustainable Development Goals.
- Providing the Strength Weakness Opportunities and Challenges (SWOC) Analysis.
- Providing recommendations for further interventions.





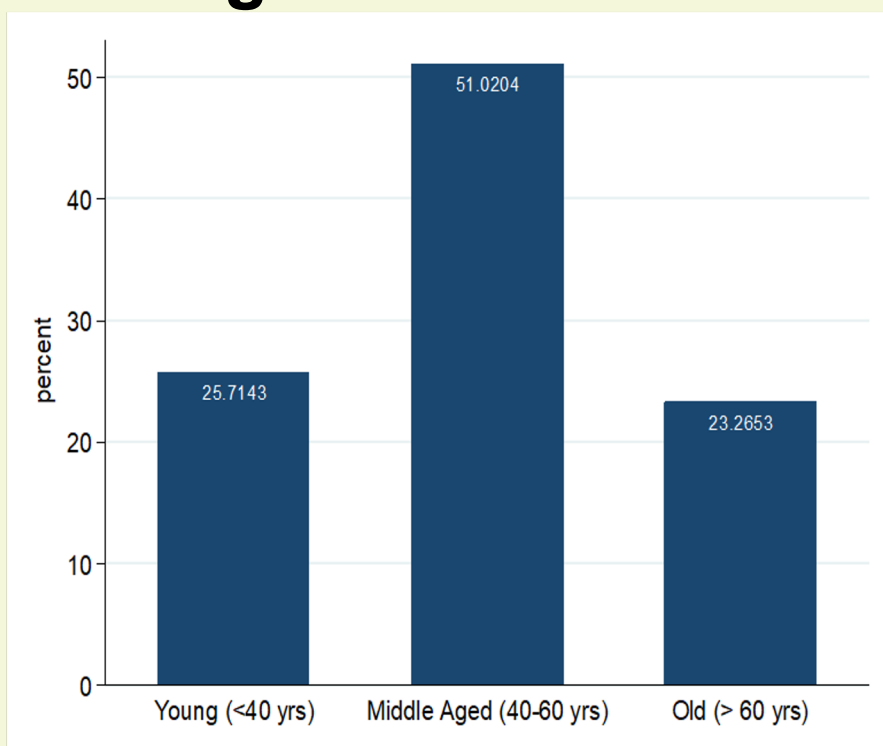


# Data and Methods

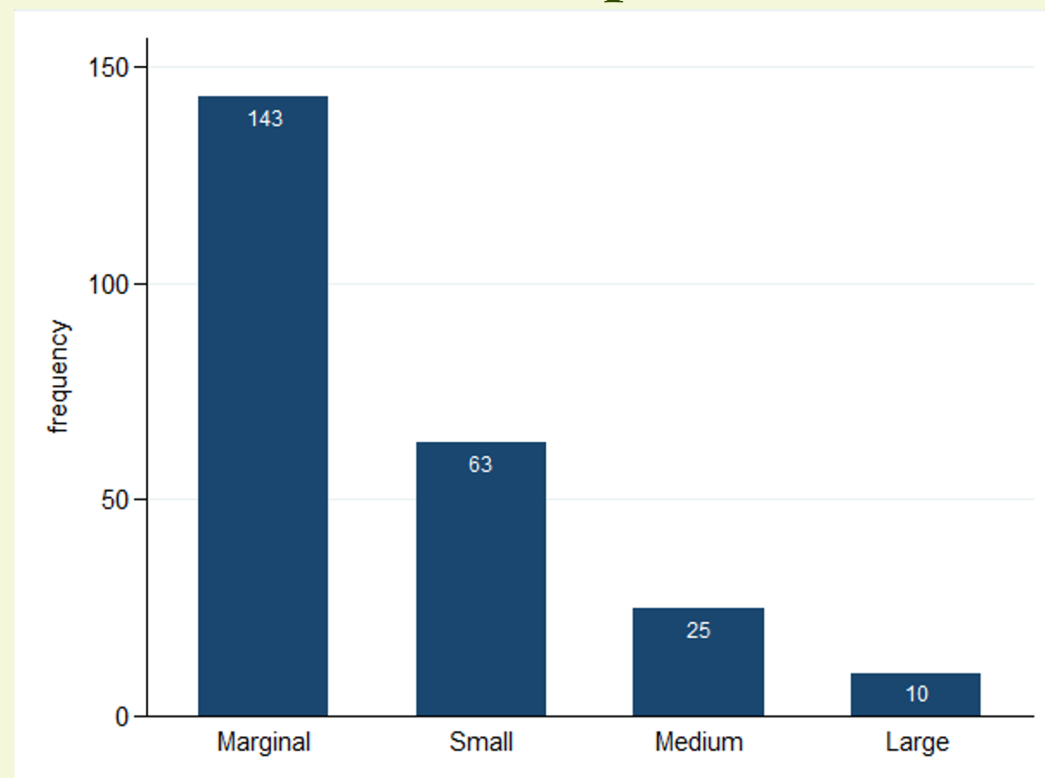
- Primary data - 250 beneficiary households [Purposive Method: Data Collection]
- Interview Schedule: primary data collection
- Analysis of data was done using tabular and graphical representations.  
**T-test and Hypothesis Testing** : Changes in incomes, yields and profits of the beneficiaries before and after the intervention and comparison with control group.
- **Theory of Change framework:** understand the short-term and long-term impacts of the interventions.

# SOCIO ECONOMIC PROFILE OF THE BENEFICIARIES

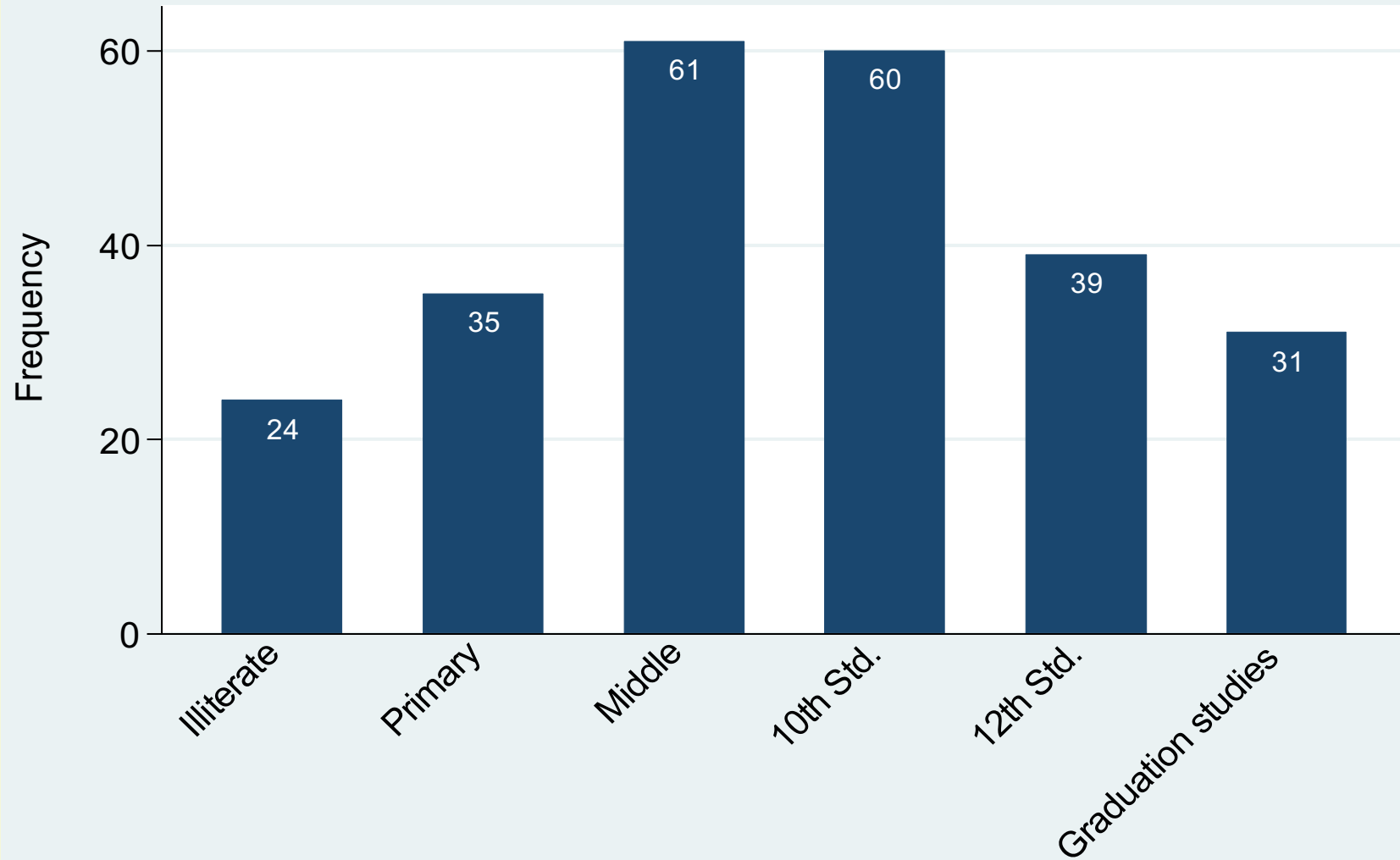
## Age Profile



## Distribution of Operational Land



## Highest Education of Household head



# Cropping Pattern

	Bhor (n=153)		Velhe (n=97)		Total (n=250)	
	Before	After	Before	After	Before	After
<b>Kharif</b>						
<b>Rice</b>	95.7	95.5	96.3	96.3	95.9	95.8
<b>Pulses</b>	0.7	1.3	2.1	3.1	1.2	2.0
<b>Oilseed</b>	0.7	3.9	1	2.1	0.8	3.2
<b>Millet</b>	7.8	9.2	1	0	5.2	5.6
<b>Rabi</b>						
<b>Vegetables</b>	8.5	19.6	24.7	40.2	14.8	27.6
<b>Oilseed</b>	4.6	9.2	5.2	9.3	4.8	9.2
<b>Pulses</b>	3.3	4.6	9.3	12.4	5.6	7.6
<b>Fruits/ Wadi</b>	1.3	14.4	23.7	57.7	10.0	31.2



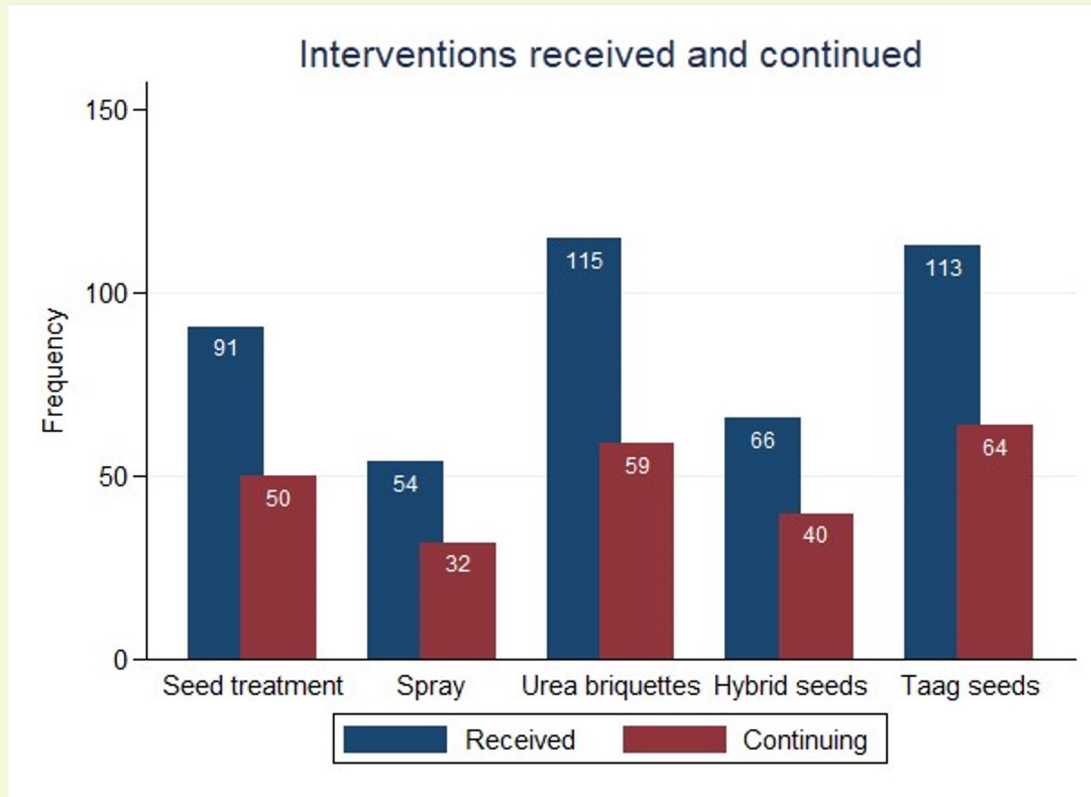
## List of Interventions Received

Intervention	number of farmer	% (n=250)
Paddy Cultivation	141	56.3
Vegetable Cultivation/Watermelon/flower	127	51.0
Wadi Development (Mango/Jamun)	97	38.9
Vermi-compost	49	19.4
Others	5	2.0

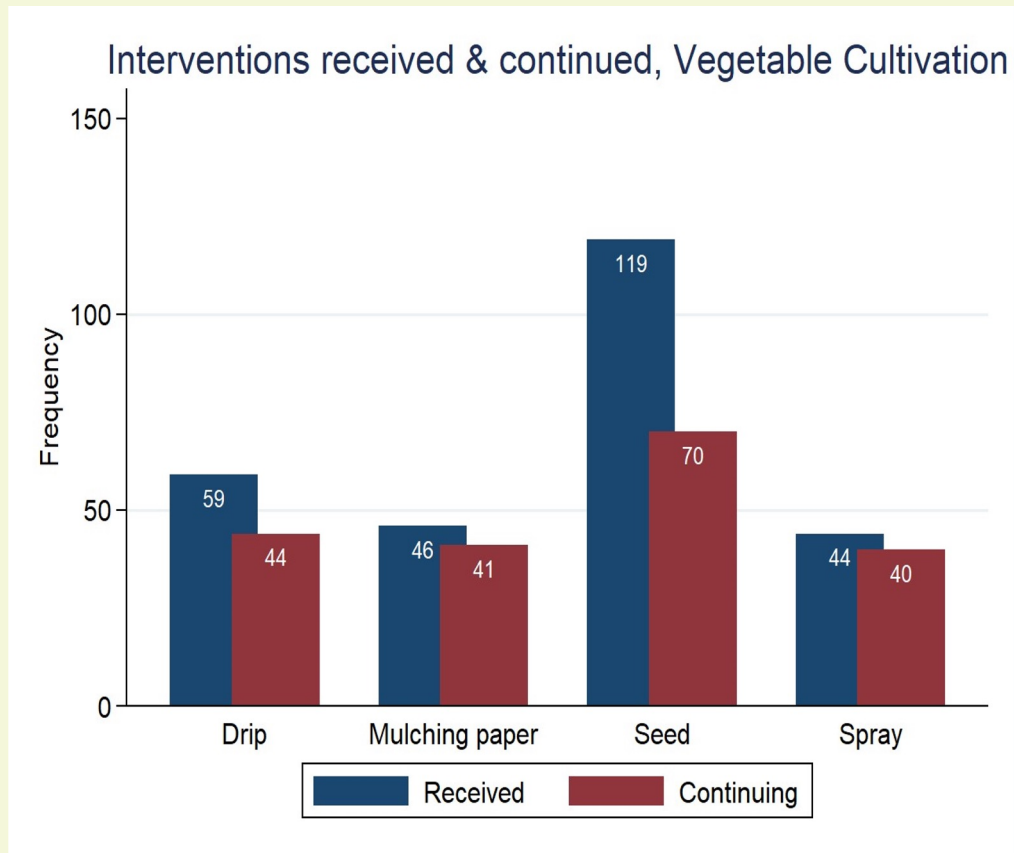
## REASONS FOR JOINING AS BENEFICIARY

CATEGORY	FREQUENCY	PERCENTAGE
Higher Profit	109	26.78%
Benefits and facilities	62	15.23%
Water related	31	7.61%
Higher Income	29	6.87%
Technology Adoption	28	6.87%
Production increase	28	6.87%
Training	19	4.66%
Farming tech and modern methods	14	3.43%
other	87	21.37%

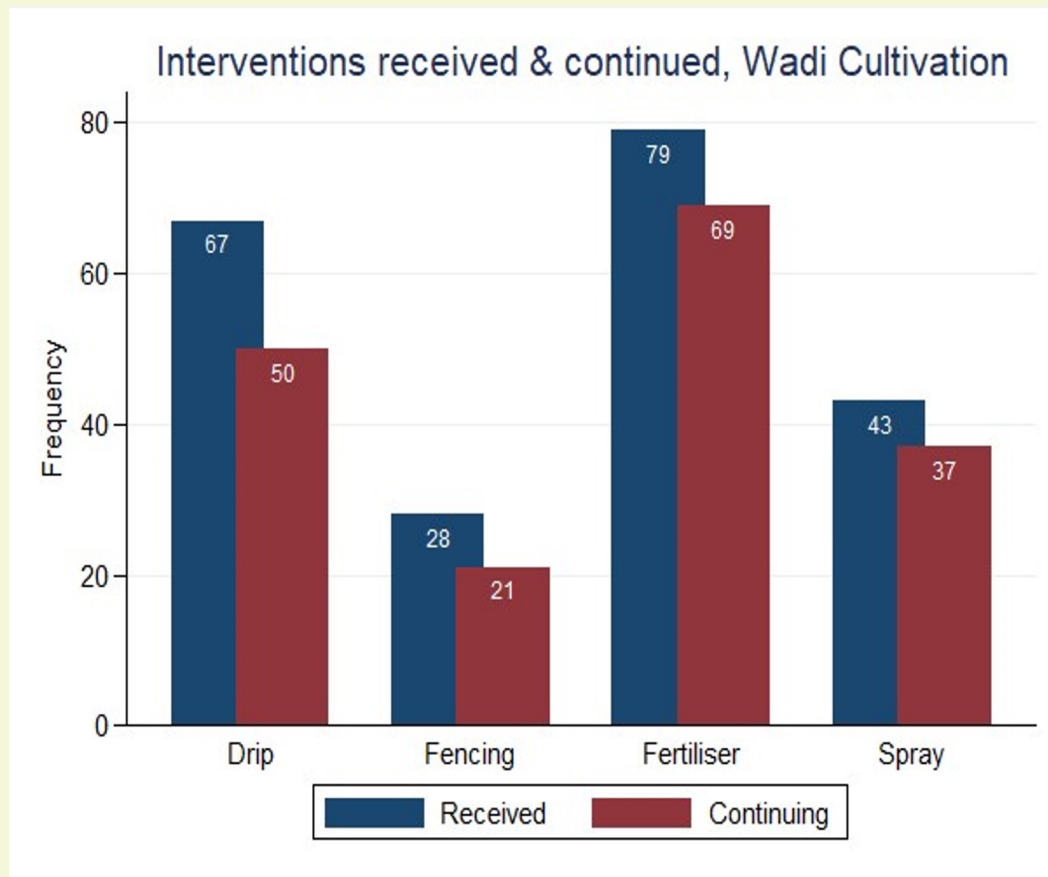
# Paddy Farmers



# Vegetable Cultivation



# Wadi Cultivation



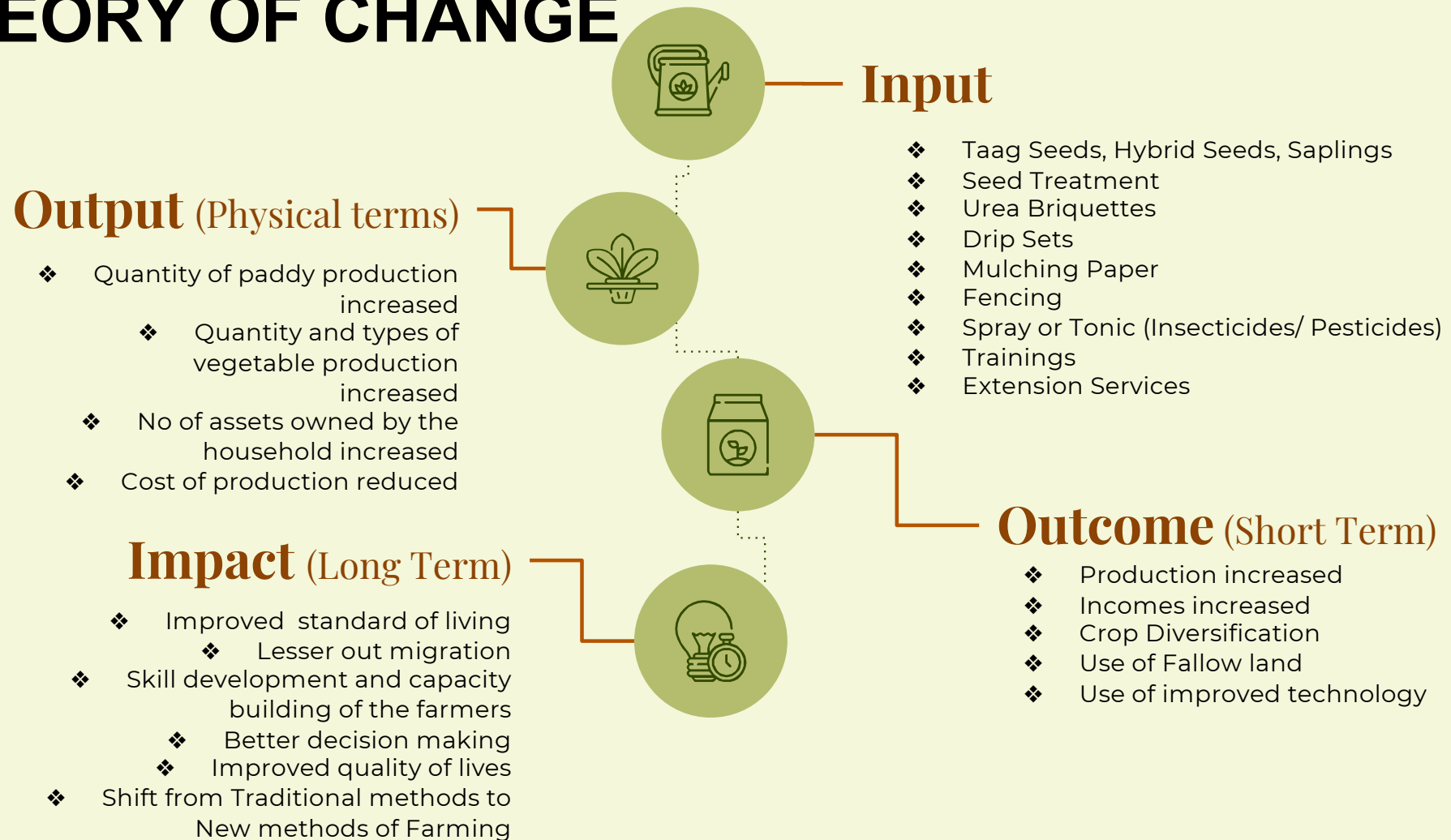
**Table Average Costs and Profit Analysis of Crop cultivation (units per acre)**

Variable	Pre (Before)	Post (After)	Difference
<b>Paddy</b>			
Crop acreage (acres)	2.0	2.1	4.5
Productivity (kg)	839.7	1102.2	31.3**
Total Costs (Rs.)	13,598.5	14,140.6	4.0
Net Profits (Rs.)	9,395.7	16,498.7	75.6**
<b>Vegetable/Watermelon/flower</b>			
Crop acreage (acres)	0.6	0.9	50.3
Total Costs (Rs.)	34,865.9	34,271.6	-1.7
Net Profits (Rs.)	27,510.9	36,326.1	32.0**

**\*\* Significant at 5% level**



# THEORY OF CHANGE



# Strength Weakness Opportunity Challenges

## Strength

- ❖ Active participation from the farmers
- ❖ Eagerness to learn new agricultural techniques
- ❖ Forthcoming and approachable Supervisors
- ❖ Regular trainings and supervision by the authorities

## Weakness

- ❖ Lesser women participation
- ❖ SHGs not very active



## Opportunity

- ❖ Crop diversification
- ❖ Bamboo cultivation
- ❖ More women engagement
- ❖ Capacity building of women through SHGs
- ❖ Close proximity to Pune city- for livelihoods and market access
- ❖ Spillover effect by sharing videos of Best Practices

## Challenges

- ❖ Storage
- ❖ Transportation for selling the produce
- ❖ Enhancing market access for the increased produce (Institutional Infrastructure)
- ❖ Water issues in remote villages of Bhor Taluka
- ❖ Use of barren and fallow land on the hills
- ❖ Access to public transport facilities, especially in Velhe Taluka

## SDG MAPPING

### GOAL-1 No Poverty

**Income of the beneficiaries have increased after joining the programme of CybageAsha.**

**Motivation and awareness related to using improved and more sustainable means of agriculture.**

**They are now diversifying into vegetable cultivation and horticulture (mangoes and jamun) on land which was not used earlier. Adding to alternative sources of income- apart from income paddy cultivation.**

### GOAL-2 Zero Hunger

Farmers were trained and provided support in growing vegetables in the non-paddy season on the same land which was not used earlier- this led to alternative sources of income for those who wanted to sell the produce but mainly led to subsistence farming.

**GOAL -3  
Good Health and Well  
Being**

**Increased awareness about  
healthcare facilities**

**Goal - 4  
Quality Education**

**Aware of the importance of education after  
joining the programme.  
Drop out was also low among the  
beneficiaries.**

**GOAL - 6  
Clean Water and  
Sanitation**

**All the beneficiaries surveyed had access to safe  
drinking water, although the sources varied from  
one village to the other village like tap water,  
filter water, water ATMs.**

**All had access to proper toilets,  
CybageAsha made a significant contribution by  
providing means for toilet construction in rural  
areas.**

## CONCLUSION

- a) **Paddy and Vegetable Cultivation** benefited a significant number of individuals by promoting and supporting the cultivation through enhanced agricultural practices resulting in ***increased productivity, improved food security and livelihoods of the beneficiaries.***
- b) Continuance of inputs such as Taag seeds, and urea briquettes to enhance paddy and vegetable production has potential to increase.
- c) **Wadi Development Project**, Faced challenges due to discontinuation of support by households. So, the program needs to ensure long-term benefits by identifying and addressing the reasons.
- d) **Vermi-compost project** contributed to waste management and sustainable farming practices, potentially providing income-generating opportunities for the beneficiaries.

The agricultural initiatives had succeeded in lowering the cost of cultivation and resulted in higher profits.



09

RECOMMENDATIONS



# Recommendations - Agricultural and Allied Interventions

- **Continuous support, motivation and encouragement** to farmers - long-term impact
- **Wadi intervention program** -
  - focus on extending support to households that have not received any assistance yet.
  - lack of documents act as a constraint
  - Government interventions required for access to irrigation facilities in a few areas.
- Measures to prevent the **loss of fruit tree saplings** due to pests, and weather changes.
- Emphasize on optimum usage of pesticides and insecticides on the farms, especially for flower and fruit cultivation.
- Majority of those who discontinued, found the inputs to be unaffordable. Therefore, appropriate subsidy provisions should be made to promote long-term benefits of these interventions.
- **Videos** should be made and circulated amongst villagers in the local language to ensure the **spillover effects** of the interventions taken.
- **Organic farming** can be an intervention to be explored and promoted as means for further enhancing farmers income.
- During the off-harvest seasons, **dairy farming was remunerative**. Support from CybageAsha in this could be beneficial.

## Recommendations- Storage, Sales and Marketing

- Assistance in **marketing**.
- Farmer Producer Company should be made active for marketing the produce and creating a marketplace.
- **Trainings** - converting farm produce into processed goods that could be sold as intermediate or final consumption goods.
- **Storage facilities** could be provided to enable the villagers to store their produce scientifically. This intervention can be scaled up at the taluka level and help address the shortcomings with respect to bridging the distance between farm and market place.
- **Digital tools and applications** can be used to connect the farmers to the market. With widespread proliferation of mobile phones, such e-commerce options should be explored. CybageAsha could impart the necessary training and awareness to the farmers who are educated and are tech-savvy.

## Recommendations - Infrastructure Facilities

- All the villages from Bhore taluka are dependent on rain for agriculture. With limited access to irrigation facilities, many farms failed to reach their full production potential and suffered from low yields.
- In villages like Karnawadi and Mhalawadi, low production levels forced the farmers to allocate all their produce for self consumption. There is an urgent need for **provision of adequate irrigation facilities**, in the form of installing pipelines and sublines, building river lifts, assistance in digging and maintaining wells, farm ponds and other irrigation facilities and provision of water filters.
- **Transporting produce to the market** was an issue, resulting in delays and reduction in the quality of the produce. Improving village connectivity by constructing proper roads will facilitate movement of people and goods.

- Farmers who own cattle are unable to reach the cities to sell the milk produce in a timely manner due to lack of transportation. There can be a tie up for setting up a milk collection center with any dairy cooperative.
- The respondents shared that milling facilities of rice were far away and the villagers incurred high transportation costs to reach them. In the absence of proper transportation facilities and with no public transport system available, it is recommended to set up a milling facility in collaboration with an agricultural industrial partner within close proximity to the village to reduce costs to a considerable extent.

## Recommendations - Women Empowerment

- Educating women about the Cottage sector and Bamboo cultivation and its by-products.
- In the case of Vadgaon, Self-Help Groups were seeking help from CybageAsha for enhancing their petty businesses. CybageAsha should **coordinate with local banks** for activating Self-Help Groups in other villages, to help the women gain access to credit. This would also provide an opportunity to the household to increase household assets, enhance their opportunities for education and health.



## Recommendations -Standard of Living

- Short movies and videos can be prepared in the local language, to enhance awareness- education, health, sanitation and diet.
- Village youth should be trained to initiate start ups for storage facilities; transport facilities; irrigation facilities and marketing facilities for the villagers who are looking for support.
- Adult education programmes should be undertaken by CybageAsha employees, providing training for use of smartpone, computers, digital technology, accessing e-mails, online and digital banking etc.





**Interventions recommended can be taken up either by CybageAsha independently, or in collaboration with various stakeholders -**

- Promotion of start ups
- People participation in development agenda in collaboration with villagers (otherwise they will not value anything)
- In collaboration with GOM - District collector - local MP - MLA - Taluka Head
- Preparing a blueprint of budget for the Taluka
- SHGs in collaboration with the Lead Bank in the region



## Reference

Nayak A.K., Mohanty Sangita, Chatterjee Dibyendu, Guru P.K., Lal B., Shahid M, Tripathi Rahul, Gautam Priyanka, Kumar Anjani, Bhattacharyya Pratap, Panda B. B. and Kumar Upendra (2017). *Placement of Urea Briquettes in Lowland Rice: An Environment-friendly Technology for Enhancing Yield and Nitrogen Use Efficiency*. NRRI Research Bulletin No.12, ICAR-National Rice Research Institute, Cuttack.

# THANK YOU