

# Team Agriculture

## Team Members:

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**List down top 3 ideas to solve the problem and narrow down on the best idea based on metric in the table given in the next slide**

Sr. No	Top Ideas
1.	Buried Clay Pot Irrigation
2.	Airdrop Irrigation
3.	Irrigation Programmers

Sr. No	Identified Problem	IDEA 1	IDEA 2	IDEA 3
1.	Interest & Experience (100)	80	70	75
2.	Need and Value (100)	90	80	75
3	Enough Market (50)	30	40	40
4.	Competition (50)	35	40	35
5.	Profit or Valuation (50)	35	35	30
6.	Right Time (50)	40	30	35
7.	Right Location (75)	70	60	65
8.	Resources Availability (75)	70	65	65
9.	Legal (50)			
	<b>Total (Out of 600)</b>	450	420	420

## Your Product/Service Name

- **Problem Statement:**

**To build and develop a solution to overcome the problem of irrigation in places where water is scarce.**

- **Description: ( What is the problem ? )**

- Approximately only 7.99% land of total agricultural land has the benefit of good rain, 23.36% of land has the benefit of medium rain and 68.65% of land has less than 750mm rain.
- In India 85% of underground water is used as drinking water. Underground water is an important aspect affecting the economy and life standard of our country.
- Out of total 185 rivers of Gujarat, constant flowing rivers are very less. Rivers are located only in 20% of area that supply water to the remaining 80% area. It means most of the irrigation in the state depends on underground water.



## Who has this problem ?

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Age Group	Gender	Job profile	Problems	Locate
20 and above	Both male and female(mostly male)	Farmers	Lack of water for irrigation	Places with water scarcity

## How is the problem solved today

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# Irrigation Solutions

## Harnessing micro-irrigation

By adopting micro-irrigation, farmers experience an increase in productivity – by being able to control, quite precisely, water application at the plant roots, crop yield is increased, resulting in an increase in profits.





## Reduction of water intensive crops

Crop	Water Requirement (mm)	Crop	Water Requirement (mm)
<b>Rice</b>	<b>900-2500</b>	Chillies	500
Wheat	450-650	Sunflower	350-500
Sorghum	450-650	Castor	500
Maize	500-800	Bean	300-500
<b>Sugarcane</b>	<b>1500-2500</b>	Cabbage	380-500
Groundnut	500-700	Pea	350-500
<b>Cotton</b>	<b>700-1300</b>	<b>Banana</b>	<b>1200-2200</b>
Soybean	450-700	<b>Citrus</b>	<b>900-1200</b>
Tobacco	400-600	<b>Pineapple</b>	<b>700-1000</b>
Tomato	600-800	Gingelly	350-400
Potato	500-700	Ragi	400-450
Onion	350-550	<b>Grape</b>	<b>500-1200</b>

*\*\*Highlighted in Red – Crops with very high requirement of water*

## How is the problem solved today

### Increasing water harvesting

Water harvesting, the capture and storage of rainwater for use during dry periods, is a technology proven to increase food security in drought prone areas. Erosion control and groundwater recharge are additional advantages of water harvesting techniques, which contribute to agricultural development and resource conservation.





# How is the problem solved today

## Watershed development

A watershed is an area of land and water bounded by a drainage divide, within which the surface runoff collects and flows out of the watershed through a single outlet into a larger river or lake. Watershed technology is used in rainfed areas.

Watershed management involves the effective conservation of soil and water resources for sustainable production. It involves the management of land surface and vegetation so as to conserve the soil and water for immediate and long term benefits to the farmers, community and society as a whole.



# Challenges with present solution

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## *Harnessing micro irrigation*

*1. slower adoption pace for drip method of irrigation.*

*2. Financial difficulties*

*3. Availability of power*

- *reduction of water intensive crops*

*1. water overuse can cause water shortage, often occurs in areas of irrigation agriculture*

- *Increasing water harvesting*

*1. Unpredictable Rainfall*

*2. Initial High Cost*

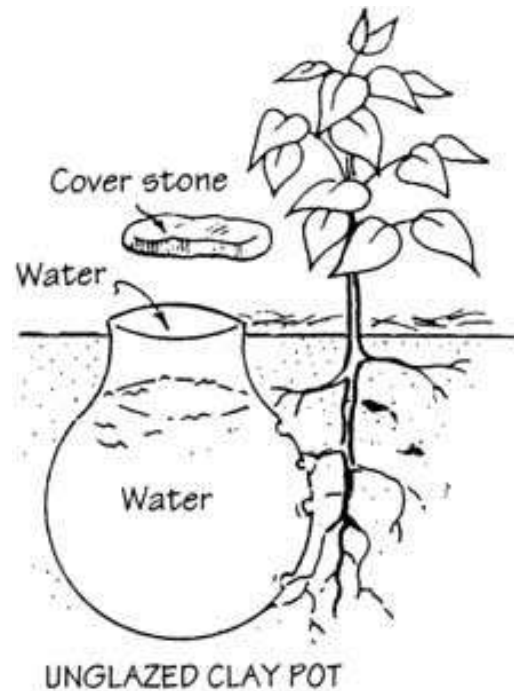
*3. Regular Maintenance*

- *watershed development*

*1. Serious socio-economic problems can be major obstacles in carrying out watershed work in the developing countries.*

## Buried Claypot Irrigation

*Unglazed claypots buried at intervals in a field can water crops and drastically cut water consumption.*

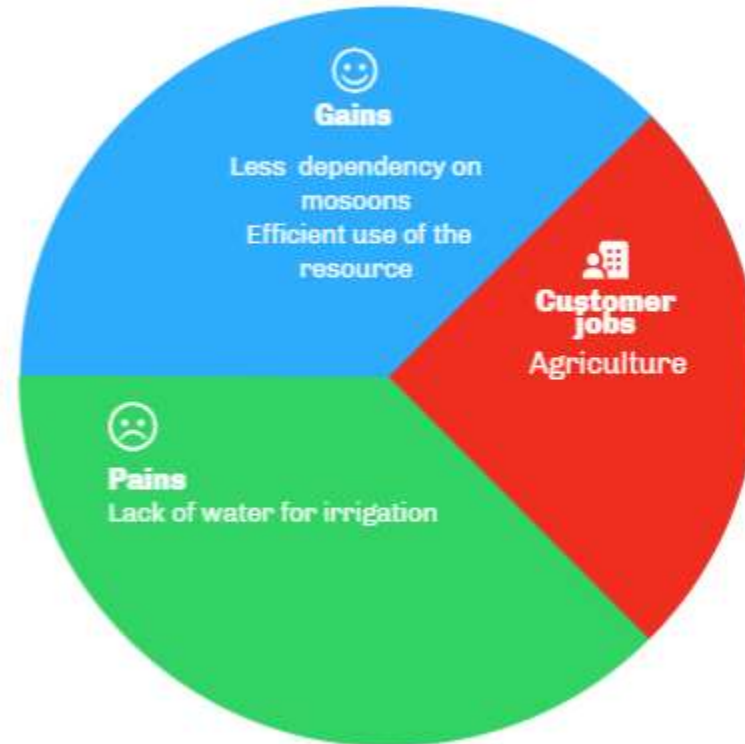


# Customer Profile

## VALUE PROPOSITION



## CUSTOMER SEGMENT



## List down the required resources

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A supply of Unglazed new or used claypots from potteries or crockeries & from weddings or functions where claypots have been used to serve food.

A NGO to acknowledge farmers about the idea and help them adopt this efficient method of irrigation.

Donations to support this NGO and any other expense.



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# Thank you