



Team Agriculture

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List down the top three problem with respect to your assigned topic

Sr. No	Identified Problem
1.	Irrigation
2.	Manure and Fertilizers are expensive and are chemical so it is harmful for the crops.
3.	Inadequate Transport

Who has this problem ?

Sr. No	Identified Problem	Who has this problem ?
1	Irrigation	Urban & Rural Farmer
2	Manure and Fertilizers are expensive and are chemical so it is harmful for the crops.	Rural Farmer
3	Transport	Urban & Rural Farmer

Who has this problem ?

Sr. No	Identified Problem	Who has this problem ?	How this problem is solved today ?
1	Irrigation	Urban & Rural Farmer	Harnessing micro-irrigation. Reduction of water intensive crops. Increasing water harvesting. Watershed development. Improved water conservation policy in agricultural sector.
2	Manure and fertilizers are expensive and are chemical so it is harmful for the crops.	Rural Farmer	By using cow dung as manure but the farmers also use cow dung as fuel for fire to cook food so enough cow dung can't be used.
3	Inadequate Transport	Urban & Rural Farmer	By bullock carts or by hand carts, also the roads and bridges are no developed so it makes it much more difficult to transport materials and crops for agricultural use.



Irrigation problem

Chemical Manure and Fertilizer



Erosion



River Crossings



Dust



Roughness

Transportation problems

Select the most important problem and your solution to the identified problem

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

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

Select the most important problem and your solution to the identified problem

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.



Select the most important problem and your solution to the identified problem

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.



List down the required resources

- Improved water management in agriculture, requires us to nurture a stronger relationship between farmers and the precious resource of water, so that people can understand the value of each raindrop and understand that unless we are prudent, and frugal, with our use of this limited resource, there will never be enough water for all.
- Investment needs to be made in educating and empowering farmers on the various solutions to harvesting and conserving water – to ensure that the agricultural sector starts to become a key part of the solution to India's water crisis, as opposed to a key part of the problem.



Thank you