

Comparison of Approaches

Version 1 - Revision 2

Whom to persuade	What to convince them of	Impact of reaching them	Research and rationale	Statistical comparison	Potential difficulties
Indian Farmers	Conserving rainwater for domestic water needs	Using the conserved rainwater for domestic use will reduce the stress on groundwater resources such as wells. If implemented by 30% of farmers, would reduce the agricultural water consumption by 4%	Currently, the groundwater accounts for 80% of domestic needs and 70% irrigation needs. If 5% of total rainwater is conserved for domestic use, it will reduce the stress on the groundwater by 5%	If 50% of the farmers take this approach, it would use 70% of the total water resources which would conserve 10% of water resources which could be diverted for domestic usage.	Conserving rainwater will need a new infrastructure which will certainly demand for space and funding
	Optimizing the water usage in traditional surface irrigation method	If implemented by 30% of farmers, it would reduce the water usage upto 2%	Currently, India distributes 80% the total water for agricultural, 15% for industrial and 5% for domestic use. Even if 1% of water is optimized in agriculture, that 1% would be channelled for domestic use	If 50% of the farmers take this approach, it would use 73% of the total water resources which would conserve 7% of water resources which could be diverted for domestic usage.	Lack of motivation to optimize water usage
	Using sprinkler or drip (micro) irrigation instead of using the surface irrigation	If implemented by 30% farmers, it would reduce the agricultural water usage by 10%	Micro irrigation has proven to be efficient around the world. Currently only 10% of the farmers use micro irrigation, i.e. the methods of controlled irrigation that use approximately 50% less amount of water than that of the surface irrigation	If 50% of the farmers take this approach, it would use 65% of the total water resources which would conserve 15% of water resources which could be diverted for domestic usage.	It will take a long time to convince farmers to switch to the micro irrigation methods as it will require capital investment to build the irrigation system and time to learn the operations of that system
Village/ town Council	Implementing the methods of sustainable farming in the village/ town	Village councils could help the village population to implement the water efficient irrigation techniques	Village/ town councils are elected by the residents of that area and they are accountable for law enforcement and wellbeing of the residents. Hence they can be the agents in implementing the sustainable irrigation methods in a village/town	Implementation of sustainable irrigation practices by 50% of a village/ town will result into 5% more availability of water in that particular village	Lack of motivation, a careless attitude which formulates a reluctance to implement the new, sustainable techniques
Government of the state of Maharashtra	Developing and co-regulating the methods of water conservation with farmers	Government could enforce the farmers around the nation to implement the water efficient irrigation techniques in their farming practices	If the government co-regulates the plan for water conservation with farmers then that would motivate the farmers to pursue with those methods, as they would have an equal say in the plan	If government persuades 50% of farmers to optimize water in irrigation then that can reduce the stress on groundwater by 15% and surface water by 10%	It would be very difficult to persuade the government. Also, the problem with co-regulation is that both the stakeholders would only have a partial authority to create the plan for water management. They could possibly be pressurized to take the others' viewpoints into consideration even if they are somewhat unreasonable