



# Success stories

in **Watershed Management**

**District Mahendragarh**  
(Haryana)


**Success Story  
of  
Nanagwas + Deroli Jat  
Watershed**

**( Hariyali IV Batch)  
[2006-07 to 2010-11]**



Residents of village Nanagwas had been consuming ground water which was highly brackish and full of salts and not at all fit for drinking or domestic use. The villagers were compelled to drink this kind of water as there was no alternate drinking water source. The Government had provided drinking water supply for this village through water pipes via village Kothal Kalan. But most of the water supplied was being consumed in the way by the residents of Kothal Kalan and this supply could not meet the demand.

In the year 2006, Hariyali-IV scheme was launched and watersheds were selected. This village Nanagwas was chosen because of scarcity of drinking water and poor quality of this water. The main objective of the village watershed committee was to improve the quality of water of tubewell to make it fit for drinking. A percolation pond was dug up adjoining the tubewell whose water was being consumed for drinking/domestic purpose. This pond was connected to the canal and it was being regularly filled.



# Characteristics of ground water before implementation of Watershed Programme in the projected area



	Depth	E.C.	CO <sub>3</sub>	HCO <sub>3</sub>	Cl	Ca+Mg	R.S.C	Cat.
As per report of 2007	152'	2080	Nil	24.0	8.0	3.4	20.6	n

Construction of percolation pond resulted in percolation of water and this percolated canal water drastically improved the quality and quantity of underground water of the tubewell. The results could be visualized within one month of the construction of percolation pond. Results were so amazing that the farmers were thrilled to see the change in quality of water the thing they had been long wishing for. Quality of other nearby tubewells belonging to the farmers also improved a lot. Ground water table also came up by 5-10 feet.

## Activity-wise Expenditure

Name of activity	Financial Ach (Rs. in lacs)
Demonstration	2.00
Horticulture	0.73
Percolation/Stock Pond with drainage, ramp, Khura, pipeline from canal to pond etc.	22.53
Pasture Development	1.80
Channel	2.00


Improvement in the quality of water was also confirmed by getting water samples of tubewell, after the construction of percolation ponds. The table below depicts the result of water sample testing.

	Depth	E.C.	CO <sub>3</sub>	HCO <sub>3</sub>	Cl	Ca+Mg	R.S.C	Cat.
As per report of 2009	130'	475	~	7.0	2.5	5.0	2.0	V



Great decrease in the electrical conductivity and residual sodium contents after this project clearly indicates decrease in salt concentration and improvement in quality of water for drinking.

The health status of the villagers also improved significantly. Earlier, digestive disorders and cholera used to be very common but after the availability of good quality drinking water such problems have become rare.





**नानगवास**

One more benefit that could be gained was that the percolation ponds were used for livestock also. Buffaloes could now get rid of heat stress by bathing in this pond in summers. Decrease in heat stress has increased the productivity of buffaloes.

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Villagers were encouraged and motivated by the outcome of this watershed

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## Activity-wise Expenditure

Name of activity	Financial Ach (Rs. in lacs)
Land shaping	3.06
Horticulture	0.11
Percolation Pond with inlet / khura	5.36
Gully Plugging	7.55
Percolation Embankment	8.60
Check Dams	3.56

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**Thank You**

