

## Shirpur Pattern: Water Conservation and Sustainability

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### Introduction :

The present paper is based on the basic research for water conservation at Arunavati River and at the southern footage in Shirpur thesil Dhule District. The present project is the vision of Hon. M.L.A Mr. Amrishbhai Patel (Ex. Youth and Sport Ministry, Maharashtra state) and Dr. Suresh Khanapurkar. The vision of Amrishbhai Patel is come into concert form by the hardwork Dr. Khanapurkar so this pattern is also known as Amrishbhai Patel Pattern all over the Maharashtra. The project officer

**Concept of Shirpur Pattern:**The basic concept of Shirpur Pattern is divided into two section

1. Shirpur Pattern is the construction of check dams on every stream whether it may be small or big and should be with gate and west weir to augment huge storage. We have to follow the water following principal of Ridge to Valley. It also focused on deepening the stream up to 15 to 20 mt. and widening up to 30 mt.
2. the project stresses on artificial recharge of water through the dry dug wells in alluvial area of shirpur thesil and cascade type of cement bunds.

### Line of Action of Shirpur Pattern:

The greatest visionary Hon. Amrishbhai Patel appointed to Dr. Suresh Khanapurkar as a Project Officer for Shirpur Pattern this project started in Oct. 2004 by PGSSL Provided all necessary equipments with two carore rupees through out the year. The actual project was decided to done with according land structure and technology. For this Mr. Khanapurkar experimented with the soil, its conservity and its structure geologically this project is run in 100 sq km area around the catchment of river Arunavati and Tapi. As per texture and structure of soil he manage to remove upper layer of soil that is known as 'Alluvial'. But the problem with next layer, i.e yellow silt, it cant help to peculate water. So it also removed vertically up to 15 to 20 mt. as per the geological structure of soil.

This process enables the rock for 100% conservation and also enables for instant natural recharge of water. This process need two important factor deepening the soil up to water Crusty Rocks in case we don't find it we must deepen it up to that level by this

Dr. Khanapurkar is renowned Ex. Geologist of Govt. of Maharashtra.

The Shirpur thesil situated in 837.39 sq. km area among which 78.7 % is cultivated land and remaining 12.94 is covered with forest area. Out of cultivated total area 84.61% area is under irrigation. The distribution of rainfall in Shirpur thesil is highly erratic, so this area comes in drought prone area of the state and due to this situation made as to work on Shirpur Pattern.

process the level of under water is get increased. In the word of Khanapurkar – “In the hurt attack surgeon operant the tumor through Angioplasty. That's why this process is known as Angioplasty in the water conservation.”

The surplus water of dam was injected into 59 dry dug wells having the depth of 50 mts direct ally with proper filtration. This process helps both in alluvium and basalt area to increase those grater level even dry bore wells of 150 mts. Attar nary water level at depth of 6 mts bellow ground level and alluvial area at the depth of 20 mts.

### Feature of shirpur Pattern:

- Shirpur Pattern is based on actual Geological experiment in Soil.
- The Technology is purely easy and Indian made without Engineers and with few equipment as pock lands and dumpers.
- This project is highly economical as camper to its benefit.
- The project is meant for sustainable irrigation for the drought prone area.
- Shirpur Pattern enables farmer for cropping thrice in year.
- Pattern also provides 24 X 7 water for Industries, Farming and for Human Being is rural, urban and hilly area of Saatpuda.

Shirpur Pattern Project working in Arthe, Shigave, Dhahivad, Bablaj, Nageshwar, Sule, Aambe etc. villages. The project is unique self finance funded by

PGSSGL provided 15 crore rupees from its profit for this project up to till date.

**Result of Shirpur Pattern.**

1. The Problem of drinking water is solved forever.
2. Energy consumption is decreased.
3. The water level in basalt area which has depleted up to 150 mts. has increased by 140 mts.
4. Water level in alluvial area which has depleted up to 150 mts. has increased by 110 mts. now the water level is about 40 mts. now the the water in the stream up to march and farmer are three crops in years. And average per capita income increased by 1 lack per hectare.

**Conclusion :**

The shirpur pattern which was implemented in near about 200 sq km area, 35 villages, 59 dug wells and 36 km small streams with the cost of 15 crore rupees. Can be reimplemented through the hole the state with 22 crore rupees and 22 pock lends and seven dumpers for every district of Maharashtra will be Sujlam Suflam during the next 10 years. The way of vision of Hon. Amrishbhai Patel and Dr. Suresh Khanapurkar helps to attained to height of finix to shirpur thesil.

**Reference:**

Khanapurkar S B., (2010), Sustainable Development of Groundwater Resources in Shirpur Taluka of Dhule District, pp 73-85.

Khanapurkar S B., (2009), Shirpur Pattern, Water Shed Project. Dainik Agro One.

Khanapurkar S B., (2007), Aadarsh Sinchan Prakalp yashogatha. Dainik Agro One.

Khanapurkar S B., (2012), Bhartiya Marathi Vidnyan Parishadh. Dainik Loksatta.