



**Rainfall too low in 2012
ACT to face the drought**

**FACTS Recorded at
Varanashi Research
Foundation**

Rain Fall recorded at VRF - Adyanadka, DK dist, Karnataka in m.m.



Particulars	June	July	2 months Total	Total Rainfall for the Year Jan-Dec. (m.m)
Average of 16 yrs 1996-2011	543	568	1111	1981
2012	368	240	608	(upto July 31st) 679
Deficit %	32	58	45	Max. expected at the present rate: 891



55 ft open well normally water level 15-18 ft below ground now 27.5 ft below

03.08.2012



A small madaka normally over flowing water, now full of vegetation

03 08 2012

Seepage(Osaru) collection tank, 25% water Normally over flowing



03.08.2012



Large percolation tank less than 25% water



03.08.2012



Madaka Empty normally out flowing

03.08.2012

Koppala Tank Half full Normally over flowing





Normal case in 1st week of August

Koppala tank





Large Engu Gundi





Not a new /non published information

- Low rainfall has been reported every where.
- Drought is on its run

How to manage see in next slides



We have two months of Monsoon left
and 4 months of Returning (North East)
Monsoon Act to conserve water

Remember, Water harvesting Principles:

Make the running water to walk, walking water to crawl,
crowing water to stay and sink

“Catch the water in the hills during 4 months of monsoon,
Store the water in rivers and river lets during next 4
months, Summer 4 months will have enough water” :

Shree Padre

Applies to Coastal and Malnad regions.



Plan of Action

“Catch the water in the hills during 4 months of monsoon”

1. Dig catch pits using excavators in hilly terrains
2. Built small check dams in all road side water drains, boundry markings(Agalu)
3. Catch pits in the corner of Play grounds, Drying yards, near the wells
4. Diverting the rain water to natural pits, man made pits like laetrite quarry. Plant live fence if needed.
5. Bore well feeding Could be directly fed from nearby fresh water spring/ roof water. Or digging a pit nearby and diverting rain water. No costly Govt. design needed.



Water percolation in boundary trenches and Road drains

Blocks are built at regular intervals in the demarcation - cum - cattle barrier trench and also road drains. An easy way to collect water for percolation





Recharging the bore-well



Two bore-wells of Varanashi Farms get directly fed with clean water from the nearby irrigation tanks during rainy season. Such arrangement is also made for an open-well used for drinking purposes



Store the water in rivers and river lets during next 4 months, Summer 4 months will have enough water”

Build as many katta's (temporary mini dams following VRF sand/sand bag and plastic technology or any suitable traditional technique across river lets and rivers. Water could be stored in large river like Netravati and Kumaradhara.

VRF Sand and Plastic Dam 2012 across Seere River





Varanashi sand bag and plastic barrage first attempt

- In the beginning of 2003 summer, a temporary barrage(dam) (35 m length and 3 m height) has been constructed across the Seere river
- Due to which water got accumulated in 1.5 kilometers of the river





- The dam has been constructed using sand bags and tank lining plastic sheet in place of stones and mud respectively
- The new method avoids the use of soil (the traditional method) which is washed down while in rainy season. The barrage entered into service in the summer of 2003, also improving the banks of the river

Varanashi sand bag and plastic barrage

-Improvement over traditional Katta



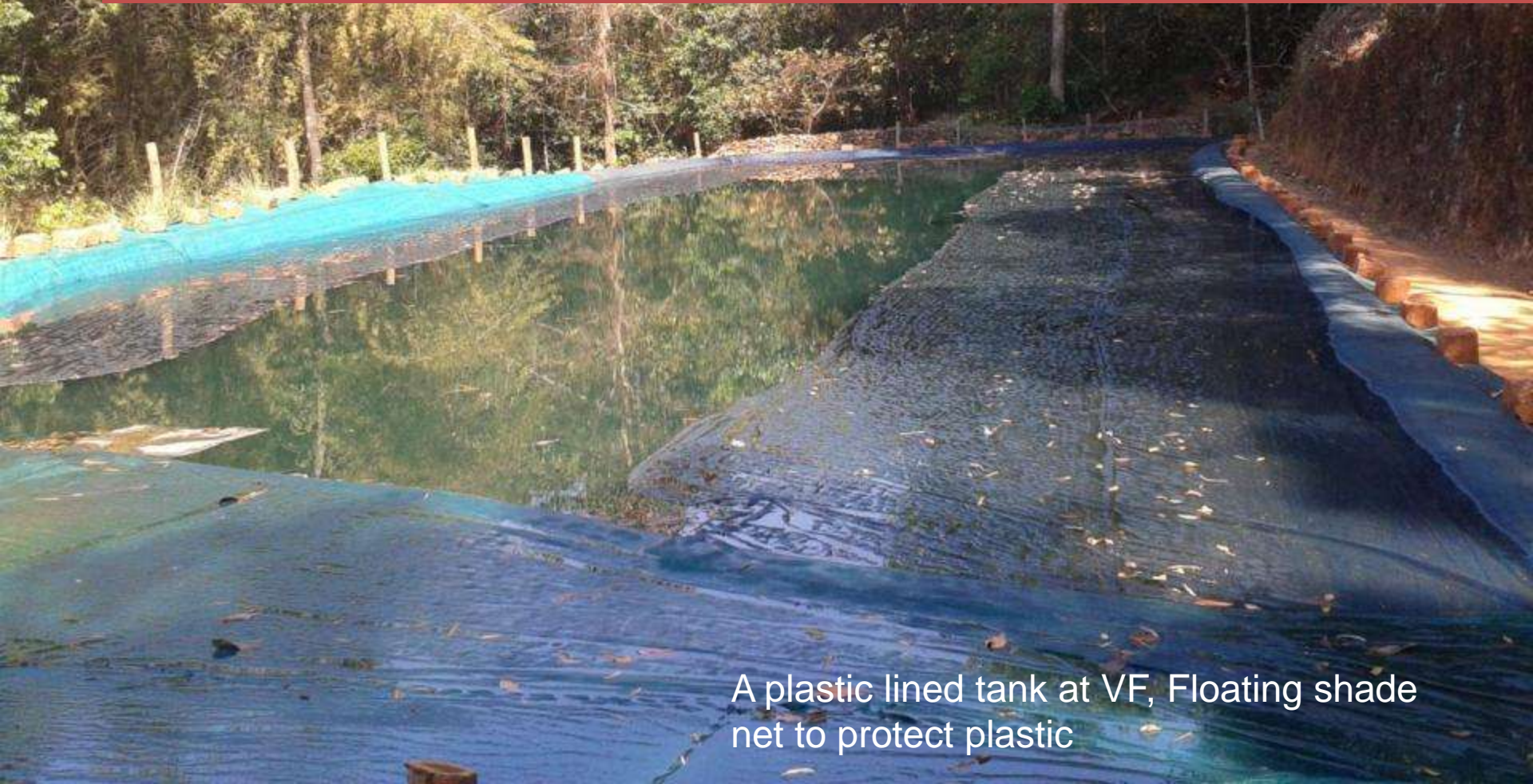
- The success of this method has prompted farmers around to adopt it. Ten such barrages have been constructed in 2005 summer





Construct water reserves using plastic lining

Laterite mines /Natural pits could be lined with a little effort. Fill them with good water from nearby source when flow is still on.



A plastic lined tank at VF, Floating shade net to protect plastic



Laterite mines(Kalpane) an excellent water harvesting structure during rainy days. Spend some money, lining it with Thick tank lining plastic sheet will make it an excellent low cost storage during summer. We do not need costly RCC tanks in villages. Change the mind set



Store the water.....

- Repair and use all the public water tanks to store the water (eg: one in Adyanadka)
- Encourage Roof water harvesting. Water from odd summer rains could be properly collected and utilised



Roof water harvesting



During rainy season, rainwater from the roof of Varanashi industrial shed is collected in a tank and used. Water from occasional summer rains is similarly used



Educate on conserving and usage

- Recycle all waste water
- Plan the irrigation and use.
- And so on.....



Use of waste water

- Near the cattle shed, there is a gobar gas unit receiving the cow dung, the cowshed washings also flow into the unit
- The spent slurry is collected in a 5000 litre tank. The household washing is also diverted into the tank
- After dilution, the slurry is pumped and allowed to flow through pipes for irrigating crops
- Similarly, washing from the industrial unit is also used for irrigation without any wastage



Use of septic tank water



- Standardized the use of toilet waste
- From toilet the fecal matter flows into a two chambered septic tank. After digestion, the wastewater flows into a third tank
- The treated water with dissolved nutrients flow into plant basin through a distribution pipeline
- Thus, nutrient-rich water is properly utilised
- There are three such units working now



Managing Farming and Food shortage



- High time to go for short term food and vegetable farming in coastal and Malnad region where in water is assured up to Feb.
- If the labour is shortage use machine also bring in students and city people(WWOOFing).
- And many more ways

**Kindly circulate this power point
to the people who can act**



You will be also benefited

Dr.Varanashi Krishna Moorthy
Varanashi Research Foundation
Adyanadka 574 260
DK, Karnataka, INDIA
Tel: +91 8255 270254
e.mail: info@varanashi.com
Web: www.varanashi.com



THANK YOU

You are welcome to visit us

**Varanashi Farms – aerial
view**