

1. Village Profile

Village Name - Mel Pillur
Panchayat - Nellithurai
No. of households - 12
Population - 50
Community - Irular
Institutions in the village (if any): Not any

2. Water supply and demand

Average daily water demand of the village (Liters per day)

Summer - 4140 lpd (w/o washing= 2200 lpd)
Monsoon -3800 lpd (w/o washing= 1856 lpd)

Average daily water demand of the household (Liters per day)

Summer - 345 lpd (w/o washing= 185 lpd)
Monsoon - 317 lpd (w/o washing= 155 lpd)

Average daily water supply in the village (Liters per day)

Summer - 2000 lpd
Monsoon -10200 lpd

Average daily shortfall/surplus in water supply in the village (Liters per day)

Summer - Shortfall of 2,140 lpd (w/o washing=shortfall of 200 lpd)
Monsoon - Surplus of 6400 lpd (w/o washing= surplus of 8344 lpd)

3. Water Storage facilities

3(a). Water Storage facilities in a household in the village

Households harvesting rain water at home	No
Average water storage capacity in a household (in liters)	180
Maximum storage capacity in a household (in liters)	200

3(b). Water Storage facilities in the village

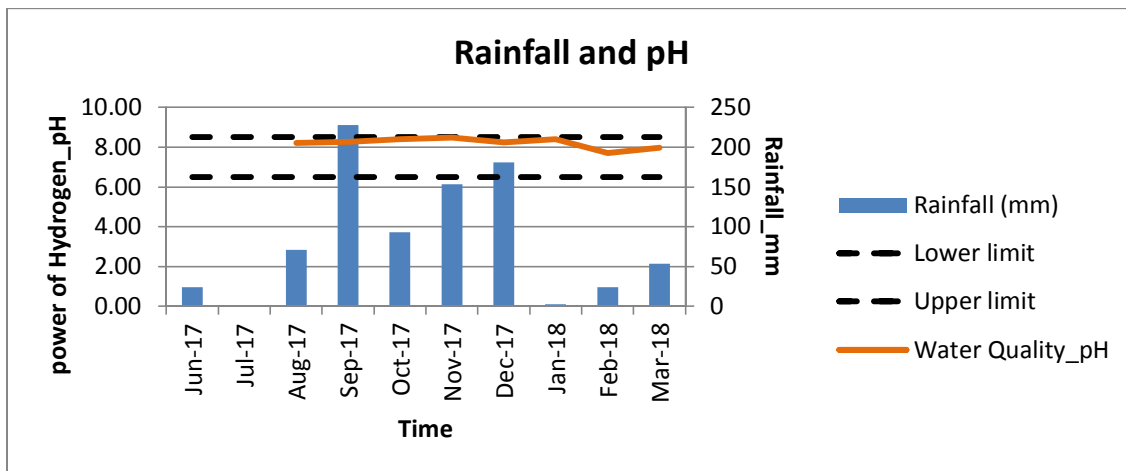
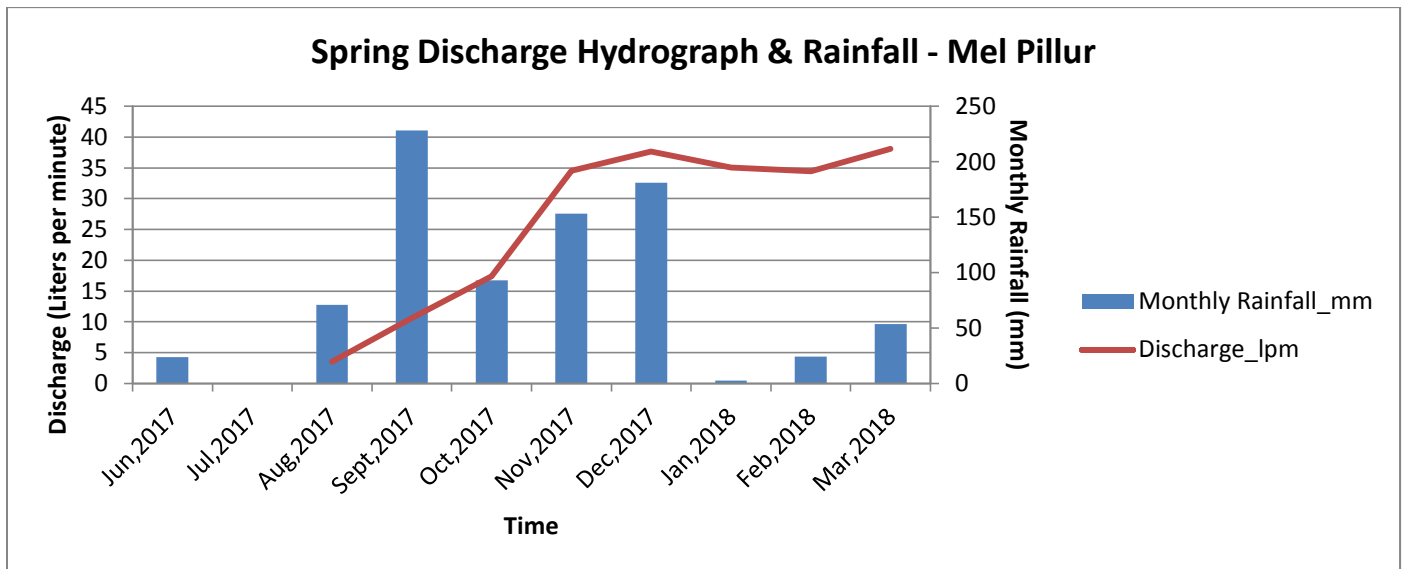
A Ground Level Reservoir with a capacity of 10,000lt in the village.

4. Water Resources

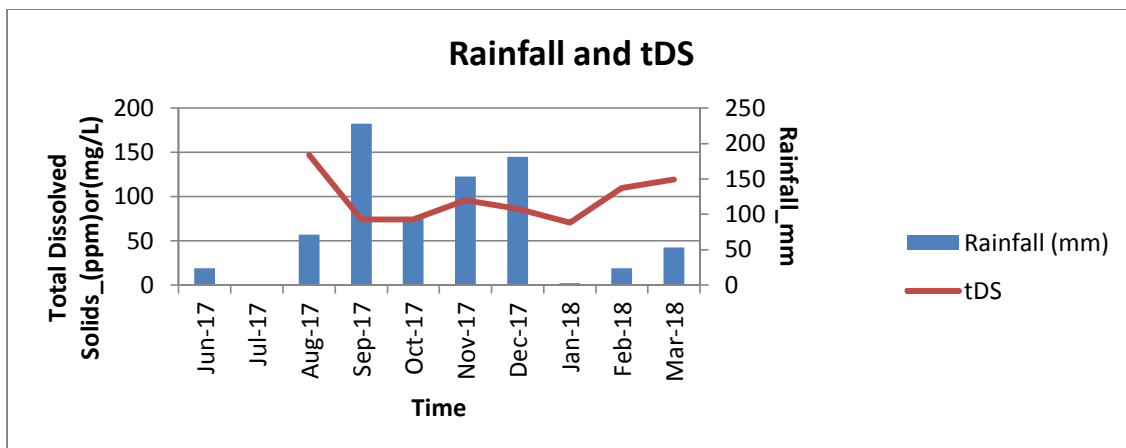
S No.	Name of the water resource	Source ID (if any)	Type of resource (Spring/Open well/wetland/Bore well/stream)	Dimensions of the water resource (Spring-length, width, depth; Well-total depth)	Seasonality	Springshed/catchment area (Acres)	Land ownership	Land-use pattern of the watershed area	Geology of the watershed area
1	Kuttaiyur	NEL006	Spring	DNA	Perennial	DNA	Forest	Forest	Springs are located inside the river

S No.	Name of the water resource	Source ID (if any)	Type of resource (Spring/Open well/wetland/Bore well/stream)	Users of the water from this resource (People/Wildlife/School/Anganwadi/PHC/resort/private estate/community toilet etc.) List all	How is the water delivered from the source? Describe	Which storage infrastructure is used? Give code from section 2.	State of sanitation near the source (toilet, waste dumps, OD, etc)	Water Quality issues (in different seasons)	Other issues (In different seasons)	Long term prospect (Will it remain perennial)
1	Kuttaiyur	NEL006	Spring	Community, Livestock, Agriculture, Wildlife	Pipeline	GLR	Nothing	Nothing	Nothing	Yes

5. Spring Hydrographs and Water Quality



Note:
 Permissible limit
 for pH is between
 6.5 and 8.5



Note:
 Permissible limit
 for tDS is below
 500ppm.

6. Discussions and Interventions

These following interventions were discussed at common village meetings facilitated by Community Resource Person from Keystone Foundation who regularly monitors the water resources for its discharge and water quality from June, 2017 till March, 2018. These interventions were agreed by the village, some of which have already been implemented under Village Water Security Plan by community and Keystone.

Name of the water resource	Source ID	Interventions	Expenditures (Rs)	Status
Mel Pillur/ Kuttaiyur	NEL006	1. To de-silt and repair GLR	Repair of GLR = Rs 7,150	Done. Material cost borne by Keystone. Labour by Community
		2. Replace and lay new pipeline from source to village GLR	Pipeline cost =Rs 1,09,200	On-going. Material cost borne by Keystone. Labour by Community
		3. Protection of the spring source by planting shola saplings in spring-shed region	Nursery expenses =Rs 400	Planned. Once after pipelines are laid, planting to be done in monsoon.

Discussion 1	: Oct, 2017
Source	: Mel Pillur/ Kuttaiyur (NEL006)
Intervention	: To work on Kuttaiyur GLR and ensure better water storage and distribution to the village.
Total expenditure	: Rs. 7,500 approx.

Interventions	Reason (benefits)	Expenditure (Rs)
1. To de-silt and repair the GLR in the village.	The village is dependent only on a spring source where water comes throughout the day. Instead of a running tap, storing and systematic distribution ensures regular supply of water. In case of wildlife disturbing the existing water supply system, it allows for an uninterrupted supply of water for at least two-three days till the damage is fixed.	Cement (Rs350/sack*5sacks) = Rs 1750 Transport charges = Rs 2000 Mason (Rs1400/day*2masons) = Rs 2800 Sand contribution (Rs100/load*6people) =Rs 600 TOTAL COST = Rs 7,150
2. Protection of the spring source by planting shola saplings in spring-shed region	Planting of shola saplings in the spring-shed region to improve long-term prospect from the source. To be planted in monsoon.	Nursery expenses Rs 20/sapling*20 =Rs 400

Discussion 2	: Feb, 2017
Source	: Mel Pillur/ Kuttaiyur (NEL006)
Intervention	: To work on existing pipeline and ensure efficient supply of water to the village to meet domestic and irrigation purposes.
Total expenditure	: Rs. 10,10,000 approx.

Interventions	Reason (benefits)	Expenditure (Rs)
1. Maintenance of pipeline	<p>The existing pipeline has leakages at various places due to frequent damages caused by wildlife. Replacement of existing pipeline with new one, and burying underground ensures less leakage.</p> <p><i>During monsoon, people from the village stay in their agriculture fields where they pipe water directly from stream. Only two families stay full time in the village who dependent on water from GLR. Need for maintenance of pipeline comes only in summer. In February, the village approached Forest Dept. for new pipeline who had agreed to provide with support from existing or new funds. With the available funds, Keystone has covered the material cost of pipelines as part of Water Security Plan.</i></p>	<p>Pipeline cost Rs 78/m*1000m of 1.5" H.D pipes =Rs 78,000</p> <p>Rs 39/m*800m of 1" H.D pipes =Rs 31,200</p> <p>TOTAL COST =Rs 1,09,200</p>

7. Maintenance and Intervention

Operations to ensure regular equitable water supply to every household in respective villages

- Storing spring water in the village GLR and accessing water from the GLR than tapping it directly from the source.
- Opening the water outlet from the GLR in the morning and/or evening, so that all families can fetch water from a common point
- In case of shortage of water, deciding on quota of water each family can take with a given timings

Maintenance to ensure

- Removal of leaves/blocks from the pipeline coming from the spring box
- Cleaning of GLR tank once in two months
- Checking pipelines for leakage and repairing it as and when need arises
- Monitoring of discharge from the spring and water quality by a person from the respective village

8. Other agencies and village institutions

- None

9. Finances

- There is no saving group in the village.
- There are no pump-operators appointed for the villages, and people from the village turn pipe valves and attend to any problems in the pipeline, and other water infrastructures.

Annexure

A1. Maps

- Habitation
- Surrounding area
- GPS location of water resources, GLR
- Catchment area

A2. Photos from the field