

TECHNICAL REPORT

NAME OF SCHEME

Improvement and Augmentation of water supply scheme
Thaplal

NATURE OF SCHEME

Gravity

AUTHORITY

J&K Government (P.H.E. Department Jammu)

PRESENT LEVEL OF WATER

0 to 10 LPCD

PROPOSED LEVEL OF WATER

40 LPCD

ESTIMATED COST

The estimated cost for improvement and augmentation of water Supply scheme Thaplal under national rural drinking water programme is worked out to Rs.333.71 Lacs.

LOCATION AND BRIEF DESCRIPTION

Village Thaplal is located within the administrative jurisdiction of tehsil and constituency Ramnagar District Udhampur towards north of tehsil head quarter Ramnagar. The village is approachable by road having a length of 7 kms. Then most of the habitations are approachable through bridal paths. The area is hilly and population scattered. As the village is near to Ramnagar Town and also Degree college exists in this village along with many new colonies that have come up recently and scarcity of water has been prevailing in the area for the last many years as such augmentation/ Extension of water supply scheme Thaplal is most needed. Even in dry spell of summer season and winter season when the demand of drinking water supply increases and the water supply presently available is quite inadequate which has necessitated to frame a new water supply scheme from the perennial water sources viz nallahs coming from Ladana and Sounfary nallah and Jhallu nallah

MAIN HABITATION

The main habitation of village Thaplal was brought under the ambit of piped water supply under minimum need programme but various

mohallas/Hamlets adjoining to these villages has not been provided piped water supply. The present population worked out is 4407 souls and at present the existing distribution system laid is capable to cater the requirement for population 1200 souls. So for the balance 2033 souls separate distribution lines have been designed to be laid. Also the existing distribution lines damaged at place requires extensive repair and partly damaged unserviceable pipes are to be replaced. At present the covered habitation is getting water supply from Ramnagar Town. After implementation of the project the water is being lifted from Ramnagar town at present shall be spared and the total water shall be taken from new source i.e Satyan Nallah. The people of this area approached to higher authorities for various times for meeting up the grievances which they are facing for want of drinking water facility. The area for framing of the project by incorporating the demands of villages and mohras. The new water supply scheme of Thaplal will envisages supply and water to the tail end areas of water supply scheme also.

Keeping in view the above facts, it is very necessary to upgrade the water supply scheme Thaplal.

POPULATION BENEFITED AND WATER REQUIREMENTS

Scope	Name of Village	PC NO	Census Code	Pop as per census of 2001
1	Thaplal	630	00427600	1419 Souls
	Harshnagar	629		

Present population upto 2011 = $1419 \times 1.3751617 = 1951$ Souls

Present population upto 2013 = $1951 \times 1.0421551 = 2033$ Souls

Floatin population = 500 Souls

Degree college and other Govt Insitution = 700 Souls

Total population upto 2013 = $2033 + 1200 = 3233$ Souls

Designed population for next 15 years upto 2028 = $3233 \times 1.3629904 = 4407$ Souls

Discharge of source at Satyan nallah = 2,40,000 GPD

Requirement of water as per designed population = 39663 GPD

Existing storage capacity = 7500 GPD

Storage capacity required as per designed population = 39663 GPD

Short fall in storage capacity = 32163 GPD

Water storage proposed = 30,000 Gpd.

Capacity of service Reservoir :-

1 Existing Storage capacity = 10,000 gallons service reservoir at village Thaplal

2 Proposed service reservoir = 30,000 gallons service reservoir at village Thaplal

PROPOSAL

In order to mitigate the difficulties of public a detailed investigation has been concluded which reveals that there is only single sources of water having sufficient discharge to cater the demand of public and it is proposed to take water from Satyan nallah.

It is proposed to lay 17500 metre. Long gravity main from satyan nallah having compound dia of 100 mm and 80 mm upto proposed 5,000 G.P.H. Slow Sand Filtration Plant from where water shall be collected in the proposed 30,000 gallons Ground service reservoir. A chokidar quarter and chain link fencing and protection work is also proposed at the ground service reservoir site. The existing GSR is also proposed to be improved. After the storage the water shall be supplied to the public through a well designed distribution network.

For revitalization of existing scheme it is proposed to replace the existing damaged/rotten pipes with new pipe and embedding the all over ground pipes properly. It is also proposed to embed the pipes more than 0.50 mt depth source because the area is heavy monsoon for three months.

- Construction of 01 No. Inlet Tanks at source
- Construction of 01 No. Cut of wall near source
- Construction of 01 No. Sedimentation Tanks at source
- Cost for the construction of 5,000 Gallons Slow Sand Filtration Plant = 01 No
- Cost for the construction of 01 no.Chokidar cum operator quater
- Cost for construction of 30,000 Gallons Service Reservoir 01 No at village Thaplal.
- Cost for construction of Tapping source V- Screen pipe 02 Nos at Source.
- Cost for construction of Steel rope crossing 06 Nos at different places
- Construction of Valve Pit 02 Nos.

Construction of public stand posts 88 Nos

➤ Construction of Chain Link Fencing around the service reservoir 02 nos

Provision of Survey and Investigation Work for 50 Km

➤ Cost for Improvement of existing system of various dia G.I. Pipes

Cost for laying and fitting of G.I. Pipes i.e. Gravity Main and Distribution System 50700 mtrs (Estimate Enclosed)

➤ Cost for construction of dry wall for strenthning the gravity main

➤ Provision for forest land compensation during execution of work under forest land

➤ Provision for Land Compensation for new structures 04 Kanal

Time of Completion

The scheme shall be completed with in Two years subject availability of funds and key material well in time.

RECOMMENDATION

Though low financial return are expected being a rural area but in the interest of public health it is recommended that the exception shall be done so as to provide basic amenity of portable drinking water supply to backward community living in hilly area of Tehsil and District Ramban of Jammu and Kashmir State.

[Handwritten signatures and initials]