

Water Supply Overview

Sr. No.	Items	Description
1	Overhead Tanks	2
2	Total storage capacity	2.4 LL
3	Daily water supply	2.5 LL
4	Duration of water supply	20 hrs
5	Public Fountains	4



Existing Environmental Scenario

4. Traffic And Transportation

• Existing Road Network

- New Sonai Rd – 25ft (w) x 0.80km(L)
- Old Sonai Ghodegaon Rd – 25ft (W) x 2.25km(L)
- Ganeshwadi Rd – 10ft (w) x 0.80km (L)
- Kangoni Road - 15ft(w) x 0.30(L)
- ZP School-Ghodegaon Junction-50ft(w) x 0.75km(L)

• Important Traffic Junctions

- Ghodegaon Rd Junction – no. of roads -4
- Junction at Sugar factory – no. of roads -3
- Junction at ZP school – no. of roads -3

• Vehicle Parking_areas

- Shri Shanaishwar Devasthan Trust: 14,000 sq. m
- Near new Prasadalya building: 40-50 Vehicles
- Near MSRTC bus stop : 20-25 Vehicles



Existing Environmental Scenario

4. Traffic and transportation (cont..)

Key Environmental Issues

- Roads in the Gaothan area are very narrow in width and are in awkward shape
- Poor road surfaces quality, kutcha roads, resulting in wear and tear of vehicle tyres, slow traffic movement and dust pollution
- Formation of bottlenecks in Gaothan area
- Kutcha parking area resulting in dust pollution.
- Inadequate coverage, Large spacing between street lights



1. Major roads in Shani Shingnapur

Road	Type	Width (ft)
New Sonai Road (Excluding ZP school to Temple Circle section)	BT	25
Old Sonai Ghodegaon Road	BT	25
Ghodegaon Road	BT	25
Ganeshwadi Road	BT	10
Kangoni Road	BT	15
ZP School- Ghodegaon Junction	BT	50
Village Internal Road	BT+ Earthen	10 – 15

2. Existing Road Network

Category of Roads	Length, Km	Distribution %
Surfaced Roads		
Bitumen Topped	6.2	69.66
Un- surfaced Roads		
WBM	0.5	5.62
Earthen/ Kutcha	2.2	24.72
Total Length	8.90	100



3. Important Traffic Junctions in Shani Shingnapur

Sr.No.	Name	No. of Roads
1	Ghodegaon Road Junction	4
2	Junction at Sugar factory	3
3	Junction at ZP school	3



Ambient Air Quality in Shani Shingnapur

Location	Parameter	Unit	Min	Max	NAAQS
Near Shani Mandir	SPM	ug/M ³	189.77	193.18	200
	RSPM	ug/M ³	139.28	142.76	100
	Sulphur Dioxide	ug/M ³	36.12	38.12	80
	Oxide of Nitrogen	ug/M ³	59.77	62.13	80

Ambient Noise Levels in Shani Shingnapur

Location	Leq (day)	Leq (night)
Near Shani Temple	76	59
CPCB Standards in dB (A)	55	45



Groundwater Quality in Shani Shingnapur

Gw-1: Public Tap near Temple

GW-2: Open Well

Parameters	Unit	GW-1	GW-2	IS 10500
Essential Characteristics				
pH Value		8.2	7.8	6.5 - 8.5
Total Hardness (as CaCo ₃) Max	mg/l	184	190	300
Chlorides (as Cl) Max.	mg/l	110	120	250
Residual, free chlorine, Min	mg/l	0.05	0.4	0.2
Alkalinity	mg/l	140	160	200
Desirable Characteristics				
Total Dissolved solids, Max	mg/l	250	290	500
Calcium (as Ca), Max	mg/l	110	112	75
Magnesium as Mg	mg/l	72	76	30
Sodium as Na	mg/l	BDL	BDL	75
Sulphate (as SO ₄), Max	mg/l	93.4	98.40	200
Nitrate (as NO ₃), Max	mg/l	1.2	1.1	45
Ammonical Nitrogen	mg/l	0.8	0.1	1.0
Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BDL	BDL	0.001
Dissolved Oxygen	mg/l	6.5	6.8	NS
Bacteriological Parameters				
Total Coliforms	No./ 100 ml	≥ 1600	≥ 1600	>50
Faecal Coliforms	No./100 ml	< 2	720	10



Proposed Projects

1. Construction of U/G Sewerage Network & STP

•Phase-I (2005-2011) : Pilgrim Zone - Approx 2 sq. km- Rs. 261.35 Lakh

Population covered – Approx. 4000 residents + 7000 floating

- 1) New sewerage collection system with lift and pump Stations (Rs. 125 Lakh)
- 2) STP along with additional collection facility during the festivals (Rs. 105 Lakh)
- 3) Reuse of the treated sewage effluent for Agriculture.

•Phase-II (2011-2031) : Shani-Shingnapur Town - Rs. 80.25 Lakh

Population covered – 10500 resident (2031) + 10000 floating

- 1) An underground sewerage covering the Shani-Shingnapur village (Rs. 50 Lakh)
- 2) Construction of an STP of 1 MLD capacity (Rs. 25 Lakh)



1. CONSTRUCTION OF U/G SEWERAGE NETWORK & STP

•Stakeholders involved

- 1) Construction of sewerage network by SGP and Temple Trust
- 2) Construction, Operation & maintenance of STP by private operator
- 3) Technical assistance by M J P

•Cost recovery and Management options

- 1) Aid from State and Central Govt.
- 2) Tax from residents, commercial establishments, dharm shalas, hotels & restaurants
- 3) Construction and operation of STP by private sector

•Project outcome and Environmental Benefits

- 1) Improved sewerage and drainage system
- 2) Less surface and ground water pollution
- 3) Improved hygienic conditions, reduction in water borne diseases
- 4) Overall clean environment
- 5) Improvement in public health & reduction in medical treatment costs
- 6) Pleasing aesthetics
- 7) Water reuse for greenbelt development



2. MUNICIPAL SOLID WASTE MANAGEMENT

- Project Cost Rs. 48.00 Lakh

- 1) Waste segregation & collection system for entire town
- 2) Development of the Compost/Vermi compost Plant
- 3) Community awareness programme, Information, education & Communication campaigns by NGOs on waste segregation
- 4) Improvement of waste collection by providing manpower, vehicles etc.
- 5) Development of sanitary land fill site for non-degradable waste

- Stakeholders involved

- 1) Collection & transportation by SGP & Temple Trust
- 2) Development & Operation of disposal facility by private operator
- 3) Financial/equipment sponsorship of private sector for collection of waste, operation & maintenance of the Compost plant.
- 4) NGOs', Deosthan, SGP & Social groups' participation in awareness programme
- 5) Participation from local religious, education institutes in maintaining cleanliness of Temple area



2. MUNICIPAL SOLID WASTE MANAGEMENT

- Cost recovery And management options

- 1) Aid from State and Central government agencies
- 2) Partial recovery through sale of compost
- 3) Contribution from residents, commercial establishments, dharm shalas, hotels & restaurants towards door to door collection

- Project outcome and Environmental Benefits

- 1) Improved hygienic conditions
- 2) Improvement in public health
- 3) Better hygienic conditions at the eateries and food joints



3. WATER SUPPLY

- Project Cost 56.00Lakhs and of MJP scheme Rs. 456.40Lakhs

- 1) MJP has proposed a water supply scheme involving construction of 1.5 MLD WTP and 5 lakh litre capacity ESR. The work for the same is in progress.
- 2) Remodelling of of proposed/existing distribution network (Rs. 50 Lakh)

- Stakeholders involved

- 1) Construction of intake and distribution network by MJP & SGP
- 2) Construction by private sector
- 3) Operation & maintenance of WTP by SGP and Sansthan
- 4) Technical assistance by Maharashtra Jeevan Pradhikaran

- Cost recovery And management options

- 1) Aid from State and Central Govt.
- 2) Water Tax
- 3) Revision of water charges (domestic& commercial)

- Project outcome and Environmental Benefits

- 1) Reduction in water borne diseases
- 2) Improved public health



4. ROAD AND TRAFFIC IMPROVEMENTS

•Phase 1 - 2005-2011 Project

Cost 249.20 Lakh

- 1) Improvement of Village Roads (Rs. 162 Lakh)
- 2) Parking Facilities (Rs. 0.40 Lakh)
- 3) Pedestrian Facilities along Sonai Road (Rs. 43.20 Lakh)
- 4) Street Lighting (Rs. 22.50 Lakh)
- 5) Road Safety Improvements (Rs. 0.50 Lakh)

•Phase 2 - 2011-2031

Cost 257.00 Lakh

- 1) Road Improvement Ganeshwadi Link Rd (Rs. 157 Lakh)
- 2) Improvement of Ghodegaon Jn. and Mula Sugar Factory Junction (Rs. 30 Lakh)
- 3) Development of pedestrian facilities on other roads and parking facilities as required (Rs. 48.80 Lakh)

•Stakeholders involved

- 1) Construction of roads by PWD / SGP
- 2) Junction improvement works by Temple Trust, private sector
- 3) Construction of Parking area by Temple Trust, private sector
- 4) Maintenance of Parking areas by private operator
- 5) Development & maintenance of green belt along roads by Forest Dept, NGOs
- 6) Private sector participation mainly through funding of project by local traders and industries.



4. ROAD AND TRAFFIC IMPROVEMENTS

- Cost recovery And management options

- 1) One time entry fee charged to the pilgrims and tourists entering the Pilgrim Zone
- 2) Betterment charges from Temple Trust
- 3) Toll Tax for using Sonai Road and proposed Ganeshwadi Link Road

- Project outcome and Environmental Benefits

- 1) Improved roads & traffic conditions
- 2) Less traffic congestion
- 3) No conflict of slow moving and fast moving vehicles
- 4) Improved air quality
- 5) Less noise pollution
- 6) Hazard free movement of pilgrims and tourists
- 7) Improved pedestrian safety



5. TOURISM (ECO PILGRIMAGE) DEVELOPMENT PROJECTS

•Project Cost 10.00lakhs

- 1) Preparation of a tourist map & information Brochure of Shani Shingnapur (Rs. 1.50 Lakh)
- 2) Compiling information related to disaster management such as availability of health facilities, risk prone areas of the town, emergency services and agencies etc. (Rs. 0.50 Lakh)
- 3) Training of stake holders (Rs. 4.00 Lakh)
- 4) Preparing an environment & social code of conduct for pilgrims (Rs. 1.00 Lakh)
- 5) Preparation of Village Guest House (Rs. 0.50 Lakh)

•Stakeholders involved

- 1) Preparation of signage, training of stakeholders, development of environmental and social code of conduct by NGOs, educational institutes, temple trust
- 2) Preparation of maps, brochures, identification of heritage structures, development of tourism circuit of neighbouring religious places by Maharashtra Tourism Development Corporation (MTDC)



5. TOURISM (ECO PILGRIMAGE) DEVELOPMENT PROJECTS

- Cost recovery And management options

- 1) Sponsorship of by private sector, temple trust
- 2) Aid from MTDC

- Project outcome and Environmental Benefits

- 1) Clean surrounding
- 2) Conservation of natural resources
- 3) Conservation of heritage structures



6. IMPROVEMENT OF PANAS NALA

- Project Cost 8.00 lakhs

- 1) Diverting all the sewage and sullage streams in the village through the proposed sewerage network and discharging the treated sewage into the nala downstream of Shani Shinganapur. (Included in Sewerage Scheme)
- 2) Clearing and cleaning the entire stretch of the nala and manual dredging, where necessary. (Rs. 0.50 Lakh)
- 3) Formation of a defined width of the nala by cutting and filling where necessary, except for the already covered 300m stretch. (Rs. 3.00 Lakh)
- 4) Stone pitching of both the banks, except for the already covered 300m stretch. (Rs. 3.00 Lakh)
- 5) Development of 5 m wide Green Corridor along the nala by plantation of shadowy tall trees along both the banks. (Rs.1.00 Lakh)
- 6) Sitting arrangements and sheds for the pilgrims to take brief rest (Rs. 0.50 Lakh)

- Stakeholders involved

- 1) Social Forestry Department, MJP
- 2) Temple Trust
- 3) SGP



6. IMPROVEMENT OF PANAS NALA

- Cost recovery And management options

- 1) Aid from State and Central Govt.
- 2) User Charges from Pilgrims

- Project outcome and Environmental Benefits

- 1) Reduction in ground water pollution due to diversion of untreated sewage from the nala.
- 2) Reduction in air and noise pollution due to development of green belt.
- 3) An alternative resting and recreation facility for the pilgrims.
- 4) Will act as a barrier for any unwarranted change in landuse / commercialization of the area adjacent to the temple.
- 5) Improved hygienic conditions due to clearing and cleaning of the nala.
- 6) Improvement in overall aesthetics of the village.
- 7) Overall improvement in the environment.



7.RENEWABLE ENERGY PROJECTS

- Project Cost 48.71 lakhs

- 1) Solar street lights in the Temple area, parking lot and road adjacent to the temple (Rs. 25.50 Lakh)
- 2) Solar water heaters for the Bhakta Niwas and Public toilets in Parking (Rs. 22.50 Lakh)

- Stakeholders involved

- 1) Funding from international donor agencies
- 2) Government of Maharashtra, MNES, MEDA

- Cost recovery And management options

- 1) User Charges from Bhakta Niwas & public toilets

- Project outcome and Environmental Benefits

- 1) Reduction in fuel wood consumption
- 2) Air quality improvement
- 3) Conservation of energy .



8. OTHER PROJECTS

- Project Cost 0.60 lakhs

- 1) Road side plantation (5 km on both sides) (Rs. 0.10 Lakh)
- 2) Green Belt along Panas Nala (Rs. 0.30 Lakh)
- 3) Developing garden and recreation area (Rs. 0.20 Lakh)

- Likely Beneficiaries

- 1) Residents of Shani Shingnapur due to reduction in air and noise pollution, improvement in hygienic conditions and better aesthetics.
- 2) Pilgrims due to better air quality, better hygienic conditions and aesthetics.

- Stakeholders involved

- 1) Forest Dept., GoM
- 2) Temple Trust
- 3) Shingnapur Gram Panchayat

- Cost recovery And management options

- 1) User Charges from gardens, public toilets etc



8. OTHER PROJECTS

- Project outcome and Environmental Benefits

- 1) Air quality improvement Improvement in air quality, reduction in dust pollution due to greenbelt development
- 2) Reduction in noise pollution reduction in dust pollution due to greenbelt development
- 3) Better aesthetics
- 4) Tourist comfort & recreation
- 5) Improvement in hygienic conditions due to provision of public toilets in slums and mobile toilets for pilgrims



Summery

Sl. No.	Name of the Project	Phase I Cost in Rs. Lakhs	Phase II Cost in Rs. Lakhs	Cost In Rs. Lakhs
1	Sewerage network	261.35	80.25	341.60
2	Solid waste mgt.system	48.00	-	48.00
3	Roads & traffic improvement	249.20	257.0	506.20
4	Water supply	56.00	-	56.00
5	Improvement of Panas Nala	8.00	-	8.00
6	Eco pilgrimage development	10.00	-	10.00
7	Renewable Energy Projects	48.71	-	48.71
8	Other projects	0.60	-	0.60
	Total	681.86	337.25	1019.11





Thank you

