पर्यावरण सद्यस्थिती अहवाल २०११-१२: पाणी पुरवठा

२२ ऑगस्ट २०१२

रूपाली घाटे, अभिषेक वाघमारे



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(पर्यावरणाच्या नीलप्रतीसाठी)

पाणी पुरवठा

पान ३० - ३.१.४ उच्च दर्जाच्या नागरी स्विधा

राष्ट्रीय मानांकन प्रतिदिनी प्रतिमाणशी	पुणे शहर सरासरी प्रतिदिनी प्रतिमाणशी			
१३५ लिटर	१९४ लिटर			

प्रथमदर्शी पुण्यामध्ये गरजेपेक्षा पाणी पुरवठा जरी जास्त आहे असे दिसत असले तरीही एकूण वॉर्डांमधील पाणी पुरवठ्यातील तफावत (असमानता), ही खूप जास्त व अन्यायकारक आहे. वरील तक्त्यातला आकडा दिशाभूल करणारा आहे.

पर्यावरण सचस्थिती अहवालामध्ये दिलेल्या राष्ट्रीय मानांकनापेक्षा शहराच्या कोणत्या भागात कमी तर कोणत्या भागांमध्ये जास्त पाणी मिळते हे देखिल नमूद केले पाहिजे. याने पाणी वाटपामधील असमानता दिसून येईल. ही माहिती वॉर्डनिहाय असणे अपेक्षित आहे, म्हणजे नगरसेवकांना वॉर्डनिहाय सोयीसुविधांसाठीच्या बजेटची मागणी करणे सोपे जाईल.

पर्यावरण सद्यस्थिती अहवालामध्ये पाण्याच्या चोरी व गळती बाबत देखिल उल्लेख नाही. जवळ जवळ ४०% पाणी हे गळती, चोरी व अनियंत्रित स्टॅंडपोस्ट मुळे वाया जाते¹.

Data variable	Unit	Score range					Remarks
		10	8	6	4	2	
Unacco- unted for water	%	<10	11-15	16-20	21-25	>25	As specified in CHPEEO

अलीकडेच केलेल्या शहराच्या पाणी पुरवठा सर्वेक्षणात एका खाजगी संस्थेने (के.एस. सोमय्या कॉलेज) पाण्याचा अपव्यय किती भयानक थराला जाऊन पोहोचलाय ते दाखवले. पुण्यात ४०% पाणी वाया जाते (गळती, चोरी). सप्टेंबर २०११ मध्ये झालेल्या महानगरपालिकेच्या सर्वसाधारण सभेत पुणे महानगरपालिकेच्या पाणी पुरवठा विभागाकडे पाण्याच्या गळती व चोरीची आकडेवारी नव्हती².

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¹ http://articles.timesofindia.indiatimes.com/2012-02-29/pune/31109975 1 water-supply-parvati-water-works-total-water-consumption/2

water-consumption/2

It has been estimated that wastages and leakages in Pune's water supply system amount to more than 40%. Answering a question in GB Meeting of the PMC in Sept 2011, the PMC Water Supply Department had agreed that it does not have the figures of water

जर या विभागाकडे पाण्याचा लेखाजोखा नसेलच तर कोणत्या आधारावर १० गुण 'Unaccounted for water' ला दिले आहेत? ४०% पाणी वाया जात असेल तर • गुण मिळाले पाहिजेत.

पान ४७-४८- पाण्याची गुणवत्ता

नळजोडणी द्वारा पाणी देण्यात आलेल्या मिळकती	९४.९१% (९,६७,९३८ घरे)
नळजोडणी नसलेल्या मिळकती (यात २.४३% अघोषित तर २.६८% घोषित झोपडपट्टी आहे)	५.८१% (५७,७९३ घरे)
नळजोडणि नसलेल्यांपैकी ज्यांना टॉकर द्वारा पाणी देण्यात येते त्या मिळकती	०.६९% (६९०० घरे)

२०१०-११ मध्ये नळजोडणी द्वारा पाणी देण्यात आलेल्या मिळकतींची संख्या (टक्केवारी) किती होती व ती २०११-१२ मध्ये किती टक्क्यांनी वाढली आहे?

जरी नळजोडणी ९४.९१% असेल तरी पाणी पुरवठा हा २४ तास नसून, शहराच्या अनेक भागांमध्ये पाण्याचा दाव कमी आहे.

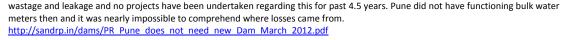
Data variable	Unit	Score range Ro					Remarks
		10	8	6	4	2	
Duration of water supply	hours	12.1-24	6.1-12	3.1-6	1.1-3	0 -1	Average water supply duration

शहराच्या बऱ्याच भागांमध्ये १२ तासाच्या वर पाणी पुरवठा होत नाही, तसेच उन्हाळ्यामध्ये तर कधीच होत नाही. असे असताना 'Duration of water supply' ला ८ गुण कोणत्या आधारे दिले गेले आहेत याचे स्पष्टीकरण करावे. लायकीपेक्षा जास्त गुण देऊन कुठला भंपक हेतू साध्य करत आहे पर्यावरण विभाग?

पान १६६-१६७: पाण्याचे मीटर बसविणे व समान पाणी वाटप करणे

पाणी वाटप समान नाही व शहराच्या बर्याच भागांध्ये पाणी पुरवठा कमी दाबान्न होतो हे प्रतिबंधक कार्यपद्धती येथे नमूद केले आहे. इथे असे देखील नमूद केले आहे की काही मिळकर्तींना (घरगुती व व्यावसायिक) पाणी पुरवठा मीटर पद्धतीने केला जतो.

शहराच्या कोणत्या भागांमध्ये पाण्याचे मीटर बसविले गेले आहेत, ते सांगावे.



ज्या भागांमध्ये मीटर बसविले गेले आहेत, त्या भागांमध्ये २४ तास पाणी दिले जाते का? नसेल तर किती तास पाणी पुरवठा केला जातो? (मीटरिंग केल्यावर २४ तास पाणी पुरवठा करणे अपेक्षित असते).

पाणी पुरवठ्याबाबत अजुन काही बाबी आहेत ज्याबाबत अहवालात काहीच नमूद नाही केलेले नाही. त्या खालील प्रमाणे -

- १. पुणे शहराचे 'Water Audit' केले जाते का?
- २. पाणी पुरवठा करायला महापालिकेला किती खर्च येतो व त्यामधून वसूली किती होते?
- ३. २०१०-११ व २०११-१२ मध्ये पाणी पट्टी वसूली किती होती?

शहराच्या बर्याच भागांमध्ये बोरवेल असूनसुद्धा भुजलाच्या सद्यस्थिती बद्दल अहवालामध्ये साधा उल्लेख देखिल नाही.

भूजल हा पाण्याचा एक नैसर्गिक आणि विश्वासार्ह स्रोत आहे – की होता? - असे आता म्हणावे लागेल. अनियंत्रित भूजल उपशामुळे जिमनीखालचे जलप्रवाह कायमस्वरूपी बंद होऊ शकतात. पावसाळ्यानंतरच्या रब्बी हंगामात सरकारी पाणी पुरवठ्यानंतर भूजलावर विसंबून राहावे लागते. तसेच, शहरातील बांधकामात लागणारे पाणी जिमनीतून उपसावे लागते. शहरातील आणि आज्बाज्च्या परीसारील भूजल उपसा व पातळीबद्दल पर्यावरण सद्यस्थिती अहवाल भाष्य करत नाही. पर्यावरण सद्यस्थिती अहवाल २०१०-११ मध्ये भूजलाबाबत हा मजकूर समाविष्ट करण्यात आला होता –

"भूजल साठ्याचा उपयोग मुख्यत्वे घरगुती बरोबरच शेतीला पाणीपुरवठा करण्यासाठी होतो. भूजल सर्वेक्षण आणि विकास कार्यालय – GSDA च्या अहवालातून असे दिसते की जिमनीमध्ये पाणी झीरपण्याचे प्रमाण कमी झाले आहे. मात्र पाणी उपसण्याचे प्रमाण वाढल्यामुळे भूजल पातळी जवळपास ०.१ – ८.७५ मीटर ने खाली गेली आहे. अवताडेवाडी मध्ये ८.७५ मीटर ने तर बिबवेवाडी मध्ये ३ मीटर ने भूजल पातळी खालावली आहे. ही सचपरिस्थिती पाणी साठ्यांच्या 'फक्त उपलब्धतेच्या' हष्टीने देखील 'धोक्याची सूचना' आहे. जलसंधारण (water conservation) हा एकमेव तोडगा आहे."

गतवर्षी सरासरी पेक्षा जास्त पाउस होवूनही ह्या उन्हाळ्यात पाण्याची टंचाई पुणेकरांनी सहन केली. या दरम्यान भूजलाचा अनियंत्रित व बेहिशेबी उपसा झाला. हजारो बंगलाधारकांनी खाजगी बोरवेल बांधल्या, व पाणी टंचाईत भूजल टंचाईची भर पाडली. या भयंकर सद्यस्थितीचा काडीमात्र उल्लेख या अहवालात नाही.

भूजलासारख्या बहुमोल संसाधानाचे महत्त्व लक्ष्यात न घेता त्याकडे दुर्लक्ष करण्यात आले आहे यावरून खुद पर्यावरण विभागाची पर्यावरणाबाबतची तळमळ किती कुचकामी आहे हे दिसते. गेल्यावर्षी भूजल संवर्धनासाठी उपाय सुचवला होता पण या वर्षी भूजलाबदल एक चकार शब्द नाही. भूजल टंचाई विभागातील लोकांचा जीव हैराण करेल; कदाचित पाण्याच्या दुष्काळात शहर सोडायची वेळ नागरिकांवर येईल, परंतु महापालिकेला त्याचे गम्य नाही.

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संदर्भ सूची

?. PMC's tunnel vision blocks water supply plans

Times of India Feb 29, 2012

Almost 40% of Pune's drinking water is lost due to leakages, pilferage and wastages through uncontrolled stand posts, a study on the city's sustainable drinking water supply has found. The recent study, conducted by researchers at Mumbai-based S K Somaiya College suggested that there should be a proper drinking water supply management system to resolve the issue of unequal distribution of water in the city, given the wastage of water. "The old water supply lines are rusted and require repairs. The PMC lacks a system to control water supply. The meters are faulty and absence of supply data makes it difficult to calculate water usage," observes the city's Environment Status Report which says that the PMC has no maps of the old pipeline network. "The total wastage in supply system is 20%, of which 12% is due to problems in the distribution system and 8% is wasted during treatment," the ESR said.

Water theft

Pipeline leakage losses apart, the PMC has another problem on its hands. The civic body has no clue how to track, sever or bring down thousands of illegal water connections in the city through which millions of litres of water is pilfered for domestic and commercial purpose without a dime being paid to the civic body. Citizens from Warje say illegal connections have been taken from the main water pipeline that runs to the Warje treatment plant and despite complaints; the administration was turning a blind eye. "It is difficult to curb water theft as we don't have a permanent mechanism for it," admitted one of the water department officials.

Sewage treatment

Since 1997, the PMC has been receiving 11.50 TMC water from the state irrigation department on the condition that it will treat 6.50 TMC water annually for agricultural use. Since the PMC did not take any steps, the state government on March 18, 2009 asked it to pay Rs 6 crore as compensation and PMC promised to treat water by 2011. "By 2011 the PMC has developed capacity to treat 527 MLD (70.80 %) of the total sewage generation of 750 MLD. In the next few days a treatment plat at Kharadi with 40 MLD capacity will be operation and then the PMC would be treating 567 MLD (76.20%) sewage. The PMC will make available this treated sewage water for agriculture purpose to farmers in district," said civic chief Mahesh Pathak.

No additional quota

The PMC's plan to draw water from the Bhama-Askhed dam was first announced by then municipal commissioner Pravinsinh Pardeshi while presenting the draft budget for 2008-09. The estimated cost of the project was Rs 260 crore. According to PMC officials, it would be an additional source of water supply for the growing city. The Bhama-Askhed

dam is across the Bhama river, a tributary of Bhima. The PMC planned a 40-km pipeline for the purpose. However, the irrigation department said the civic body was already getting more water than its stipulated quota, and should minimise distribution losses.

Every year, the water quota in the reservoirs is reserved till July 15. The PMC asked the state to reserve the yearly water quota till August 31. However, the state irrigation department in its contract of water supply to Pune city has said, "The Maharashtra Krishna Valley Development Corporation will provide 11.5 TMC water to Pune every year." Irrigation officials said that the irrigation department cannot afford to increase water to Pune city as the farmers from the region have already complained about excessive use by city residents.

Rainwater harvesting

Rainwater harvesting initiative alone can meet as much as 21 per cent of the total water demand in the Pune Municipal Corporation's limits as per the PMC's estimates. There are monetary benefits too. The civic body offers a 10 % rebate in property tax to citizens who implement it. Yet, only over thousand of the total 6.44 lakh properties in Pune have taken to rainwater harvesting. The PMC was among the first to take up implementation of the eco-housing programme under technical assistance provided by the <u>United States</u> Agency for I n t e r n at i o n a I Development (USAID). However, despite the initiatives and incentives, there are not many takers for the water management system in the city. The reluctance can be attributed to the fact that unlike cities like Chennai there is no shortage of water here. Most houses in the southern city have voluntarily opted for the step as citizens went through years of hardships when the rains failed year after year.

http://articles.timesofindia.indiatimes.com/2012-02-29/pune/31109975 1 water-supply-parvatiwater-works-total-water-consumption/2

?. Civic body grapples with water loss due to leakage

Pune, Tue Apr 10 2012

While the Pune Municipal Corporation (PMC) has been struggling to get additional water supply of one TMC, it is estimated that as much as four TMC is wasted in the city annually by way of leakages due to old and faulty distribution system.

The loss takes place by way of leakages through the old and rusted pipelines both above and below the ground, loose valves and unauthorised water connections.

The issue was discussed at the meeting convened by Deputy Chief Minister Ajit Pawar with officials of the PMC, irrigation department and local representatives. While some corporators claimed that the loss through leakages was as high as 40 per cent, PMC officials maintained that it was not more than 25 per cent. This forced Pawar to direct the officials to make installation of water meters mandatory.



Although the PMC does not have official figures on leakage, it has been estimated that of the total water PMC receives from the dams, five per cent is lost during filtration process while 25 per cent is lost due to leakages in tanks and pipelines. Civic activists and opposition parties have been raising the issue for long the but the PMC has failed to plug these leakages.

According to officials, though the department repairs surface pipelines, it is difficult to for them to detect underground leakage. The PMC has no maps of the old pipeline network which makes it difficult to carry out repair works.

"It has been estimated that loss of water due to wastage and leakages in Pune's water supply system is over 40 per cent. The PMC has agreed that it does not have the figures on water wastage and leakage and no projects have been undertaken regarding this for past the four-and-a-half years. Pune did not have functioning bulk water meters then and it was nearly impossible to comprehend where the losses came from. Pune urgently needs to adopt metering system, making it easier to monitor water supply and leakage and ensure supply efficiency and auditing water use," said Parineeta Dandekar, South Asia Network on Dams, River and People (SANDRP), Pune.

According to V G Kulkarni, superintending engineer, water works, while the repair work is being undertaken at several places, unavailability of sufficient staff often makes it difficult to plug leakages. According to him, getting an additional staff of 11 junior engineers from Maharashtra Jeevan Pradhikaran (MJP) for three months as promised by the Deputy CM would be of great help.

"At present, we have 48 junior engineers to look after 72 wards, each with a population of 35-40 thousand. Getting additional technical staff from MJP will help us reducing leakages," said Kulkarni.

Kulkarni said the exact amount of and reasons for water losses would be known after the water audit. He said while primary and secondary water audit will be over in the next six months, for tertiary audit (from tanks to homes), water meters must be installed at every household.

 $\frac{\text{http://www.indianexpress.com/news/civic-body-grapples-with-water-loss-due-to-leakage/934796/0}{\text{leakage/934796/0}}$

3. Finally, Pune's peths get clean water

Aug 26, 2012 (DNA)

The week-long struggle of Guruwar Peth and Ghorpade Peth residents' with the supply of contaminated water finally ended on Saturday after Pune Municipal Corporation (PMC) authorities plugged the leaking drainage pipeline in Khadakmal Aali area from where the sewage water was mixing with the drinking water.



DNA had published a report on August 25 (Peth areas getting sewage water in times of scarcity) that residents of Guruwar Peth and Ghorpade Peth area are being supplied contaminated water through the drinking water pipeline. Few residents even had to face health problems after consuming the contaminated water.

After DNA's report, PMC's water department swung into action and from early morning on Saturday, staff was deployed to locate the leakage spot in Guruwar Peth and Shukrawar Peth. They finally managed to locate the leakage near Khadakmal Aali Ganesh temple and the repair work was carried out throughout the day.

Avinash Kamthe, junior engineer of PMC's water department, said, "In the morning, we had deployed our staff for the repair work. The drainage department staff was also deployed for clearing the blockage of drainage chambers in Guruwar Peth and Ghorpade Peth. Our staff finally managed to locate the leakage in one of the chambers opposite the Khadakmal Aali Ganpati temple."

Kamthe added, "The sewage water was getting mixed with the drinking water pipeline due to which the residents were getting contaminated water. Now, we have repaired the leakage and there is no water contamination in the area."

Rushikesh Balgude, one of the residents of Khadakmal Aali, said, "We are not getting contaminated water from Saturday afternoon but we are still sceptical about using the water for drinking."

http://www.dnaindia.com/pune/report_finally-pune-s-peths-get-clean-water_1733051

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