

FLOURIDE TREATMENT PLANT IN BAHARDA SCHOOL CAMPUS AWAITING ELECTRICITY

Embracing Pain

QUITE A FEW VILLAGES IN BALASORE ARE STRUGGLING IN SILENCE BECAUSE OF FLUORIDE MENACE IN DRINKING WATER

The villagers of Chakulia in Patripal gram panchayat (GP) of Remuna Block, Balasore are suffering because of the presence of fluoride in drinking water. Researchers, experts, ministers, activists and concerned people admit that the issue is grave enough to impact people's life in the region.

The scenario is the same in the 20 odd villages across the GPs of Patripal in Remuna block and Jayrampur and Gopinathpur in Bhograi block of Balasore. The worst affected are the 12 villages - Baharda, Balipal, Chakulia, Fartipur, Ganapati Baharda, Kantabania, Kuanrpur, Mukundpur, Naigopalpur, Patripal and Tantarada villages in Patripal panchayat.

FLUORIDE MENACE

Fluorosis is a public health problem caused by excess intake of fluoride through drinking water/ food products/ industrial emissions over a long period. It results in dental fluorosis, skeletal fluorosis and non-skeletal fluorosis. Moderate exposure can lead to dental fluorosis such as staining and pitting of teeth or enamel damage as well as non-skeletal fluorosis. Chronic high-level exposure can lead to skeletal problems such as stiffness and pain in the joints; bone structure may change. Moreover, the later stages of skeletal and dental fluorosis effects are permanent and irreversible in nature.

SPREADING TENTACLES

Fluoride was first detected in Patripal GP in 2006. Subsequently, fluoride contaminated water sources were also detected in Jayrampur and Gopinathpur GPs in 2011. However, as per data available from the National Water Quality Database, there are no fluoride quality affected habitations in Balasore. The last recorded instance was in 2010 when five habitations of Patripal: Chakulia, Fartipur, Kuanrpur, Baharda, Naigopalpur were listed as habitations with fluoride contamination ranging from 2.16 mg/L to 4.50 mg/L. While this can be partly attributed to the piped water supply (PWS) system installed by District Rural Water Supply and Sanitation (RWSS) Department in the affected GPs, several reports from IMMT Bhubaneswar and Fakir Mohan University have indicated the presence of fluoride-con-

The issue is beyond the public health concerns and has found its way in other aspects of the community life. Families are getting their daughters married early so that they can escape the menace and can lead a healthy life in their in-law's family outside this village

It has become equally difficult to get the sons married because of the impending crisis that the future daughter-in-laws are sure to face.

Most of the people have severe skeletal fluorosis. Some are completely bed ridden, and many suffer from severe joint pains and stiffening of joints



TWO AFFECTED CHILDREN

taminated pockets in the district and also recorded the critical condition of patients affected by fluorosis.

SITUATION IN REMUNA

A study conducted by 'Fluoride Knowledge and Action Network' in 2016 reveals that the standard fluoride level in drinking water is 1 ppm, whereas it is as high as 15 ppm in Patripal Panchayat. Rabintra Kumar Jena, then MP, had suggested adoption of a solution-based approach and to set up systems in place to ensure there are no health hazards especially due to this problem. A comprehensive assessment of water samples for fluoride was carried out. Based on the initial results, a targeted fluorosis survey was conducted in habitations where high fluoride is detected. For this, the District Fluoride Mitigation Committee partnered with Sarva Shiksha Abhiyaan officials and provided training to teachers at a cluster level for collecting water samples and testing the same.

Patripal, Chasakhanda and Guguda have higher number of fluoride samples with a high contamination level. School children

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are the most vulnerable.

THE APPROACH

In Patripal, a surface water based supply scheme was launched after the problem was recognised to provide fluoride free drinking water. After functioning well for a couple of years, the supply scheme became dysfunctional. "Also, water pressure becomes lower due to illegal water connections. We saw people using this water for purposes other than drinking," complains Jemamani Das, ex-naib sarpanch of Patripal.

"Locally, there are no storage tanks for water. This means that water is available only when there is distribution and no backup is made for the frequent disturbances in supply. Having local water storage and getting that managed could be a way to ensure some part of the safe water needs of people," feels Pravakar Das, a teacher from Patripal panchayat.

Concerned about the prevalence of the fluorosis among school children, Indo-Swedish Rheumatology Foundation (ISRF) based in Sweden set up a fluoride treated drinking water plant to fulfill the drinking water needs of Baharda Nodal Primary school. However, the plant is not able to function because of the delay in getting electricity connection and requisite governmental support. "We struggled to set up this plant, but our effort is not sufficiently reciprocated by the local administration which can provide sustainable solution for the children and can set an example to adopt the technology in other parts of the country," says Dr Rabinarayan Dash, acclaimed rheumatologist and a native of Balasore and trustee of ISRF.

THE WAY FORWARD

Convergence of efforts by the various departments like Panchayat Raj, water resources, irrigation coupled with participation of the people at risk can only show the pathway. Nilu Mohapatra, sub collector, Balasore who happens to be the nodal officer, District Fluoride Mitigation Committee, says, "We are organising mass awareness campaigns on the issues. We have also taken steps to identify unsafe tube wells and marked appropriately for the knowledge of the general public."

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AROUND TOWN

World Elephant Day



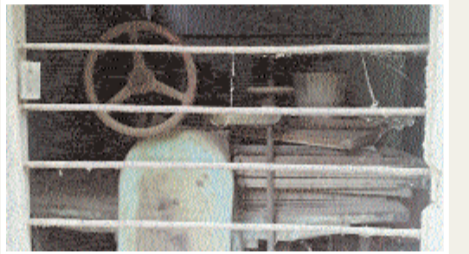
droppings" said Subrat Nayak, an environmentalist. Sukumar Das, range officer, Nilgiri appreciated the diversity of the group and shared his painstaking efforts in managing human-elephant conflict in his range. Gangadhar Majhi, an enthusiastic member of Jangal Mancha Committee, highlighted the plight of farmers and local

An informal group that is into learning and sharing the basics of biodiversity conservation since 2010, celebrated World Elephant Day recently. Its members have been actively trailing elephants and interacting with aggrieved communities in Northern Odisha for a while now. Members from industries, students from Fakir Mohan Autonomous College, Balasore and National Institute of Science Education and Research (NISER), Bhubaneswar; NGOs and representatives of the forest department were brought together to mingle with community people through different interactive activities like trekking into the forest, experience sharing and role-play. "Participants were excited to see lush green forests of Tinkosia Reserve Forest and were further thrilled to find traces of elephants through its footprints and

cal community members who deal with elephant issues on a regular basis now, yet emphasised on the importance of conservation of elephants. "I had never seen forests the way we saw today, especially walking through it and learning about different components" said Abhisha. Satyam from NISER, said, "As a student of my primary interest is celestial objects but this event has got me interested in terrestrial wonders of Nature." Being in the forests with Carbonwise Young always gives them an opportunity to learn about natural world and a break from the monotony of city life. Everyone had a different piece of take away from the event, nevertheless they all developed new perspective towards elephants and their concerns. The event concluded with a round of football between participants and local team drenched in lashing rains.

Handmade Paper Unit

The lone handmade paper unit of Mayurbhanj set up in the 80s, which has been closed for decades now, may be reopened as demanded by the locals. "This only hand made paper unit of the district situated in Dantiamuhan panchayat under Betnoti block, NH wayside in around 10 acres earlier produced papers on hand rolled basis by using locally available resources," said Chaitan Behera of the locality. Colour, craft and drawing papers, cartoon boards from fodder, grass, dry leaves, bamboos, barks available in plenty in this region. The hand made paper unit ran successfully for few years under the supervision of block industrial promotion officer of Betnoti block which was finally closed in 1994. IPO Manoranjan Patra said, "The unit was closed down due to funds. Work pressure in blocks prevented authorities from taking steps in this regard." So it remained defunct over these decades. But now, it



has been learnt from block source that a DPR has been placed before the Zilla Parishad to release necessary funds to make it operational. "But it has remained stuck so far," rued Srinath Senapati, a former Zilla Parishad candidate of nearby Chitradra. Local youths now have hope that this lone panchayat run handrolled paper unit will soon roll out work for them with the active submission of reopening demanded before the MSME Union minister Pratap Sadangi who hails from nearby area with his constituency upto Dantiamuhan.

— Compiled by Medha Nayak and Janaki Ballav Dash
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Unravelling Diabetes



A CHECK ON TIME CAN MAKE A LOT OF DIFFERENCE

PHOTO: IMAGESIZAR

A little knowledge, they say, is dangerous. At times, what we erroneously believe we know about diabetes can be more damaging than the diabetes itself. With increasing incidence of diabetes, worldwide, there is also increasing misinformation around the subject.

● **MYTH #1:** Only adults can get type 2 diabetes, and only children can get type 1.

● **FACT:** Quite the contrary, type 2 diabetes is occurring in children at an alarming rate. The rise of obesity in children makes them the newest at-risk population for type 2 diabetes. One can get type 1 diabetes at any age.

● **MYTH #2:** Diabetes medication makes you gain weight.

● **FACT:** Some do and some do not. A newer class of drugs even helps you lose weight! In some people, insulin can produce minor weight gain by enhancing fat storage and preventing the conversion of fat into energy. To remedy this, physicians recommend a slight decrease in daily calorie intake and an increase in physical activity.

● **MYTH #3:** I can't have diabetes because I experience no symptoms.

● **FACT:** Actually, you can have either type 1 or type 2 diabetes, without experiencing any symptoms at all. Right now, there are approximately six million Americans who have diabetes—both type 1 and type 2—and don't know it. The disease manifests as people age, gain weight and become sedentary.

● **MYTH #4:** If I'm sick, I shouldn't take my diabetes medicine.

● **FACT:** Illness, infection and injury all create stress on the body. Stress hormones stimulate the liver to send extra glucose into the bloodstream to create extra energy to fight off the stresses. This might result in elevated blood sugar levels. So, even if, you are barely

eating due to fatigue, or are suffering from nausea, you will likely need your usual dose of medicine, or possibly even more.

● **MYTH #5:** People who have diabetes need to wear special shoes.

● **FACT:** Any shoe can be worn, provided they fit you properly and do not put undue stress on your feet.

● **MYTH #6:** If I lose weight and stop requiring medication, I'll no longer have diabetes!

● **FACT:** The symptoms might go away, but the condition will not. If you have type 1 diabetes, then no matter how much weight you lose, you will always require insulin, even though you might start requiring less of it. Once you have diabetes, most physicians consider that you will always have diabetes, i.e. until the day a cure for diabetes is discovered.

● **MYTH #7:** If my diabetes is under control, there's no need to continue seeing a doctor.

● **FACT:** You might not take notice of symptoms indicative of the beginning of many diabetic complications. Thus, seeing your doctor regularly is important, both to prevent complications and to detect them early.

● **MYTH #8:** My doctor manages my diabetes, so I don't have to concern myself.

● **FACT:** Although your doctor is responsible for your overall care, the daily management of your diabetes, including going for follow-up consultations and regular laboratory testing is up to you.

● **MYTH #9:** Most people who have diabetes eventually lose their feet.

● **FACT:** The chances of losing a foot are infinitesimal if one takes good care of their feet, and keeps their diabetes in check.

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In 1978, the most envied irrigation project of Northern Odisha—Subarnarekha irrigation project—was launched to help the people of West Bengal, Odisha and Jharkhand. It was to be completed by 1995. Although it has been a few decades now, the project is yet to be operational. Funds have flowed but in vain. There has been an expansion due to the changing dynamics of this multi crore World Bank aided project.

"Subarnarekha project is a milking cow for leaders of Jharkhand, Odisha and West. It is a never-to-be-completed affair because once it is ready, it would not give milk (funds)," said Salkhan Murmu, Jharkhand party leader and former MP, rather sarcastically. "Issues relating to ousting people dwelling there out of the project area has been the most

Back on track

challenging part," shared Ashok Kumar Naik, former rehabilitation & resettlement officer. Rehabilitation and resettlement issues involving payment of compensation has taken a long time. "Some are even pending in the court," added Naik.

Despite odds, the multi-crore Subarnarekha irrigation project initially fetched funds from World Bank and ADB. But they withdrew from the scene citing various irregularities, corruption in the administration of this project. "During late 90s, the project witnessed the highest amount of corruption in all its eight divisions. Executives and engineers



SLUICE GATES OF SUBARNAREKHA PROJECT AT DEVENDRAPUR

PHOTOS: JANAKI BALLAV DASH

SEVERAL IRREGULARITIES MAY HAVE DELAYED SUBARNAREKHA IRRIGATION PROJECT BY DECADES, BUT IT IS ON ITS WAY TO COMPLETION IN NEAR FUTURE

were suspended for their involvement in multi-crore scams," stated Biram Murmu, a former MLA of this region. Due to its intensity and expansive nature, it was able to garner funds from national and international agencies but mismanagement led to its doom. "Since 2000 the project has been

aided with funds from the state and the Centre and one after other section is nearing completion now," pointed Ramakanta Mohapatra, its Betnoti division canal chief. Out there, work is under progression at 23 points.

"We are trying our best to make it fully operational by next year," added Mohapatra. Out of 26 Blocks in Mayurbhanj, around 10 blocks would get irrigation facilities in 94,655 hectares of cultivable lands. "The project aims to irrigate around 1.9 lakh hectares in Northern Odisha," he opined.

Yet the ongoing work in Asanjoda, Palasbani and a few other areas has got affected due to low quality materials. "The interests of certain contractors are in collusion with few leaders and they are milking villagers in Haldia, Deuli areas. It is a fact," asserted Srinath

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The truth is that it is ultimately going to emerge as a lifeline for millions in the northern region of the state

Senapati, a tribal student outfit leader. He pointed out how Subarnarekha project has become a cause of major irregularities over the years—right from purchasing a flyleaf at ₹ 115 to misusing vehicles, funds and other establishments at Laxmiposi, its main office and in Deuli, Haldia, Morada, Betnoti and Baisingha division.

"Whatever be the reason for the irregularities, truth is that it is ultimately going to emerge as a lifeline for millions in the northern region of Odisha," maintained Shamal Singh, a tribal cultivator of Haldia dam region.

> Janaki Ballav Dash
Share your views on this at Irene.Saha@timesgroup.com

PROJECT HEAD OFFICE AT LAXMIPOSI