

NEWS ITEMS ON CAG/ AUDIT REPORTS (26.07.2023)

1. Parliamentary panel recommends setting up 'dedicated cultural heritage squad' to recover stolen antiquities ([deccanherald.com](https://www.deccanherald.com)) UPDATED: JUL 25 2023

A parliamentary panel has recommended setting up a "dedicated cultural heritage squad" for the recovery of stolen antiquities, with a team of officers who can be trained on various aspects of retrieval, as followed by various countries.

The department-related Parliamentary Standing Committee on Transport, Tourism and Culture said this in a report tabled in both Houses of Parliament on Monday.

In its "Three Hundred Forty Eighth Report on the subject 'Heritage Theft - The Illegal Trade in Indian Antiquities and the Challenges of Retrieving and Safeguarding Our Tangible Cultural Heritage'", the committee suggested that the government could set up a "multi-departmental task force" to speed up the retrieval process.

The task force should include senior officials from the Ministry of Home Affairs (police and investigation), Ministry of External Affairs (for coordination with foreign governments), Archaeological Survey of India (ASI) and senior scholars and experts.

The panel noted that besides undertaking archaeological research and conservation, the ASI is tasked with the huge responsibility of recovering stolen antiquities, according to a statement issued by the Rajya Sabha Secretariat.

Several countries, such as Italy, Canada, the Netherlands, the United States, Scotland, Spain and France, have established dedicated cultural heritage squads with "a team of experts that focus their efforts singularly on tracking and recovering stolen antiquities", it said.

"The committee recommends that establishing a dedicated cultural heritage squad for the recovery of stolen antiquities with trained officers shall prove to be highly advantageous for ASI. The team may be trained on various aspects as per requirement of set procedures of retrieval, followed by different countries," the panel said in its report.

It also "recommended to the ministry to examine the proposal for creating a central sector scheme to ensure handholding and encouragement of the state governments for creation of a master database of antiquities in the country".

"The ministry may also formulate an incentivisation scheme for the involvement of interested and relevant agencies/stakeholders for record keeping of our tangible cultural heritage," it added.

On the National Mission on Monuments and Antiquities (NMMA) front, the committee noted that in the 15 years since its inception, "only about 16.8 lakh antiquities out of a total estimated 58 lakh antiquities i.e. about 30 per cent have been documented as on date".

The committee was informed by the ASI director general in the deposition that the figure of 58 lakh is only an estimate and there may well be many more antiquities existing in India.

"If so, it makes the slow pace of documentation under NMMA all the more alarming," the statement said, quoting from the report.

The parliamentary committee further said it would like to know "the reasons behind the concerning observations made by CAG even after nine years having passed since the publication of its original Report in 2013. The Committee feels that documentation and maintenance of database of the country's antiquities is urgently needed and recommends that all-out efforts should be made to complete the documentation process on a mission mode".

The panel said it has been informed by the ASI that documentation in the 55 ASI site museums all over the country has been initiated and is likely to be completed by the year-end.

The committee felt that the documentation in the "ASI-owned sites" should have been accomplished "much before". It learned from media reports that ASI sites, such as Chandraketurgarh in West Bengal, are sources of numerous artefact that are sold worldwide in the illegal antiquities markets while the sites lie abandoned, the statement said.

The committee found it perplexing that with all the emphasis on documentation as one of the major preventive measures against the theft of antiquities, the ASI has not documented the antiquities in its own site museums. It noted that the Ministry of Culture has been in existence since 1961 and the ASI predates the ministry by a century.

The panel also noted the observation of the Public Accounts Committee in its report regarding the huge amount of public money spent over the years on preservation and conservation. Despite the antiquity of these two organisations, the years of efforts made towards conservation of Indian heritage and the funds allocated, the documentation work, which is the preliminary step in conservation, has "not shown satisfactory progress", it said.

The committee also recommended that the ministry or the ASI may "explore the possibility" of involving state governments and relevant bodies such as the Indian National Trust for Art and Cultural Heritage (INTACH), Indian Council for Cultural Relations (ICCR), Indira Gandhi National Centre for the Arts (IGNCA), National Culture Fund (NCF) and the French Institute of Pondicherry, among others, in the process of documentation of India's antiquities, the statement said.

The panel recommended that a dedicated team be formed in the ASI for better collaboration with such civil society organisations to enhance the documentation and recovery.

It noted in its report that the overall budget allocation for the Ministry of Culture is "only 0.075 per cent of the total budget, which is grossly inadequate", the statement said.

The panel observed that countries, such as China, the United Kingdom, the US, Singapore and Australia, spend "roughly 2-5 per cent of their budget on the promotion of art and culture, and a

majority of the amount spent by these countries on art and culture is sourced from non-government sources, which is not the case in India". <https://www.deccanherald.com/national/north-and-central/parliamentary-panel-recommends-setting-up-dedicated-cultural-heritage-squad-to-recover-stolen-antiquities-1240472.html>

STATES NEWS ITEMS

2. Key info missing, Noida has to file new Sports City report (timesofindia.indiatimes.com) July 26, 2023

Noida: The public accounts committee (PAC) of the UP Assembly has set a deadline of one-and-a-half months for the Noida Authority to submit a comprehensive survey report on Sports City after consulting the project developers about what facilities they have already developed and those not completed so far.

During a meeting in Lucknow on Monday, the committee, which looks into audit reports, found key information missing from the Authority's latest status report on Sports City and instructed officials to conduct a fresh survey.

The committee also asked the Authority to incorporate inputs from a third-party consultant.

The Authority has allotted land parcels of at least 300 hectares across four locations in the city for the development of the ambitious Sports City project envisioned as an integrated mini-township with modern and worldclass sports facilities.

Three C is developing two land parcels — one in sectors 78 and 79, and 101, and another in Sector 150. Logix Infra Developer and ATS Homes are developing land parcels in sectors 150 and 152, respectively.

To attract developers for the project, the Authority had permitted residential and commercial land use on Sports City land.

The project, however, has been mired in controversy, with developers reportedly diverting their focus from sports facilities and prioritising the sale of residential properties instead. That has delayed the completion of sports facilities and left the Authority with over Rs 8,200cr dues.

The same has led to registry restrictions for nearly 15,000 homebuyers who have already moved into their flats.

A 2021 CAG audit report on the Noida Authority raised several objections about how it was handling the Sports City project.

To address the issues plaguing the Sports City project, the Authority hired an agency earlier this year to assist it with planning, identifying gaps, and suggesting remedies to complete the proposed sports facilities. The agency is still involved in that process. Of the 11 proposed sports facilities, only a few have come up.

During the Monday meeting, the PAC instructed the Noida Authority to revisit the project site, consult the builders involved, and analyse the current state of development of the residential and sports facilities.

The Authority will compare the revised plans provided by the builders with the ground reality and take inputs from a third-party consultant in their final assessment of the project status.

The committee has directed the Noida Authority to incorporate the replies given by builders in its final report. <https://timesofindia.indiatimes.com/city/noida/key-info-missing-noida-has-to-file-new-sports-city-report/articleshow/102121216.cms>

3. Loans spiral, DJB asked for expenditure details (timesofindia.indiatimes.com) July 26, 2023

NEW DELHI: The finance department of Delhi government has asked Delhi Jal Board to submit a detailed account of expenditure incurred in the last five years as its loan liabilities have exceeded Rs 70,000 crore in the 2022-23 financial year.

Sources said the DJB's liabilities increased by 170 per cent in the last five years. As per the audit report of the Comptroller and Auditor General, the Jal Board's total outstanding as on March 31, 2018, was recorded at Rs 26,268.89 crore, which has now crossed Rs 70,000.

A senior Delhi government official said a cursory look at the accounts of the Jal Board has revealed that not only the agency's borrowings have massively increased, a large amount of funds meant for the capital projects was diverted to other heads. "We have noticed that there is no flow of information from the Delhi Jal Board on its utilisation of funds received under various heads. We have asked the agency to provide us the details of assets created in the last five years," a Delhi government official said, requesting anonymity.

"We have started getting some information from the agency. But the flow is slow," the official said.

No immediate reaction was available from the AAP government.

According to officials, increasing expenses and stagnant revenue has left DJB with a higher deficit. While the number of consumers and demand for water has constantly risen, the agency's revenue from water tariff has fallen in the last six years.

As per the Economic Survey of Delhi, the DJB earned Rs 1,615.83 crore from water tariff in 2016-17, which increased to Rs 1,819.6 crore in 2018-19 but started decreasing after that. In 2021-22, the Jal Board could collect only Rs 1,530.6 crore.

"As per section 55 (2) of the DJB Act, the organisation is required to meet the operation and maintenance cost and should be able to make the payment of debt expenses by recovering water and sewerage charges. But the DJB has been taking Rs 900 crore from the government every year

to meet the expenses towards salaries, wages and operation," said an official, adding that the charges should be revised to match the expenses but has not been done since 2015.

"The Delhi government has given Rs 12,712 crore to the Jal Board for capital projects in the past five years. But the information about asset creation is missing. The bulk of the funds has been used for small-scale works such as upgrading water pipes and rejuvenation of sewer lines. Many big projects related to water and sewage treatment plants have been lagging behind schedule," an official, requesting anonymity, said. "About Rs 2,000 crore meant for the capital projects have been diverted and there is no information on how the amount was utilised," the official said.

Sources said the DJB was given Rs 1,557 crore in May 2023 for executing projects in the current finance year, including the Yamuna cleaning works but the agency has diverted Rs 750 crore towards pending liabilities without government's permission. <https://timesofindia.indiatimes.com/city/delhi/loans-spiral-djb-asked-for-expenditure-details/articleshow/102124843.cms>

SELECTED NEWS ITEMS/ARTICLES FOR READING

4. Rs 3.33 trillion GST evasion detected during FY19-FY23 ([financialexpress.com](https://www.financialexpress.com)) July 26, 2023

Rs 1.08 trillion in taxes recovered from fraudsters

The Goods and Service Tax (GST) authorities have detected Rs 3.33 trillion in tax evasion during the last five years, of which Rs 1.08 trillion has been recovered, the finance ministry told Rajya Sabha on Tuesday.

During FY19 and FY23, 25,449 fake GST registrations have been detected, 2,154 fake GST registrations have been suspended, and 17,105 fake GST registrations have been cancelled, minister of State for Finance Pankaj Chaudhary told BJP MP Sushil Modi.

The highest number of fake GST registration detected in the last five years was in Delhi (5,810), followed by Tamil Nadu (2,654), Gujarat (2,364), Punjab (2,214), and then Maharashtra (2,163).

The highest number of fake GST registration suspended in the last five years was in Delhi (1,236), followed by Gujarat (378), Maharashtra (178), Tamil Nadu (107), and Kerala (77).

The highest number of fake GST registrations cancelled in the last five years was in Delhi (5,769), Gujarat (2,289), Punjab (2,002), Maharashtra (1,971) and Uttar Pradesh (906).

The highest sum of GST evasion in terms of value was detected in Maharashtra (Rs 62,053 crore), Karnataka (Rs 40,762 crore), West Bengal (Rs 31,142 crore), Gujarat (Rs 27,822 crore) and Delhi (Rs 24,343 crore).

The highest sum of recovery in the last five years was in Maharashtra (Rs 27,182 crore), Karnataka (Rs 9,682 crore), Rajasthan (Rs 9,317 crore), Gujarat (8,448 crore), and Delhi (Rs 7,082 crore).

During a special drive from May 16 to July 9, 2023, 25,060 suspected fake registrations have been identified. Of this, 9,369 fake registrations have been found and 5,775 fake registrations have been suspended, and 3,308 fake registrations have been cancelled. During the special drive, tax evasion of Rs 10,902 crore was detected and Rs 45 crore has been realised. The Input Tax Credit (ITC) amounting to Rs 470 crores has been blocked during this period. <https://www.financialexpress.com/economy/rs-3-33-trillion-gst-evasion-detected-during-fy19-fy23/3186826/>

5. IMF projects Indian economy to grow at 6.1 per cent in 2023 ([financialexpress.com](https://www.financialexpress.com)) July 25, 2023

This is reflective of the “momentum” from stronger-than-expected growth in the fourth quarter of 2022 as a result of stronger domestic investment, the International Monetary Fund (IMF) said.

The IMF on Tuesday projected a growth rate of 6.1 per cent for India in 2023, which is a 0.2 percentage point upward revision compared with the April projection. This is reflective of the “momentum” from stronger-than-expected growth in the fourth quarter of 2022 as a result of stronger domestic investment, the International Monetary Fund (IMF) said. “Growth in India is projected at 6.1 per cent in 2023, a 0.2 percentage point upward revision compared with the April projection,” it said in its latest update of the World Economic Outlook.

According to the report, global growth is projected to fall from an estimated 3.5 per cent in 2022 to 3 per cent in both 2023 and 2024. While the forecast for 2023 is modestly higher than predicted in the April 2023 World Economic Outlook (WEO), it remains weak by historical standards. The rise in central bank policy rates to fight inflation continues to weigh on economic activity. Global headline inflation is expected to fall from 8.7 per cent in 2022 to 6.8 per cent in 2023 and 5.2 per cent in 2024, it said. Underlying (core) inflation is projected to decline more gradually, and forecasts for inflation in 2024 have been revised upward, it said.

The IMF said the recent resolution of the US debt ceiling standoff and, earlier this year, strong action by authorities to contain turbulence in the US and Swiss banking, reduced the immediate risks of financial sector turmoil. This moderated adverse risks to the outlook, it said. However, the balance of risks to global growth remains tilted to the downside. Inflation could remain high and even rise if further shocks occur, including those from an intensification of the war in Ukraine and extreme weather-related events, triggering more restrictive monetary policy, the report said.

Financial sector turbulence could resume as markets adjust to further policy tightening by central banks. China’s recovery could slow, in part as a result of unresolved real estate problems, with negative cross-border spillovers, it said. “Sovereign debt distress could spread to a wider group of economies. On the upside, inflation could fall faster than expected, reducing the need for tight monetary policy, and domestic demand could again prove more resilient,” said the WEO report.

The IMF said central banks in economies with elevated and persistent core inflation should continue to clearly signal their commitment to reducing inflation. A restrictive stance — with real rates above neutral — is needed until there are clear signs that underlying inflation is cooling.

“With fiscal deficits and government debt above pre-pandemic levels, credible medium-term fiscal consolidation is in many cases needed to restore budgetary room for manoeuvre and ensure debt sustainability,” the IMF said. <https://www.financialexpress.com/economy/imf-projects-indian-economy-to-grow-at-6-1-per-cent-in-2023/3186789/>

6. Banks Wrote off Bad Loans worth over Rs 2 TN in FY23: RBI ([businessworld.in](https://www.businessworld.in)) 25 July 2023

Rising bad loans cleared off, but recoveries show little improvement, sparking calls for accountability

Banks in India wrote off bad loans amounting to over Rs 2.09 lakh crore (approximately USD 25.50 billion) during the fiscal year ending in March 2023, as revealed in a Right to Information (RTI) reply by the Reserve Bank of India (RBI) to a media house. This brings the total loan write-offs by the banking sector to a significant Rs 10.57 lakh crore (around USD 129 billion) over the past five years. The write-offs have been instrumental in reducing gross non-performing assets (GNPA) or loans defaulted by borrowers to a 10-year low of 3.9 per cent of advances as of March 2023.

The banking sector witnessed a decline in gross NPAs from Rs 10.21 lakh crore in FY2018 to Rs 5.55 lakh crore by March 2023, primarily due to loan write-offs by banks. According to RBI data, since FY2012-13, banks have written off Rs 15,31,453 crore (USD 187 billion) in total.

However, it is essential to note that the loans written off by banks will remain in their books as unrecovered loans. The RBI's RTI reply indicated that banks managed to recover only Rs 109,186 crore from Rs 586,891 crore of loans written off in the last three years, translating to only 18.60 per cent of the write-offs during the three-year period.

Considering both write-offs and loans recovered from write-offs in the last three years, the total defaulted loans amount to Rs 10.32 lakh crore. This figure, citing a back-of-the-envelope calculation, suggests that the total NPA ratio, including write-offs, would have been 7.47 per cent of advances, much higher than the 3.9 per cent reported by the banks.

During the fiscal year ending March 2023, loan write-offs by banks amounted to Rs 209,144 crore, compared to Rs 174,966 crore in March 2022, and Rs 202,781 crore in March 2021.

Despite banks writing off loans to reduce NPAs in their books, they reported abysmal recoveries from these written-off loans. According to the newspaper report, they could only recover Rs 30,104 crore in FY21, Rs 33,534 crore in FY22, and Rs 45,548 crore in FY23.

Banks are supposed to continue their efforts to recover the loan using various options even after writing off the loans. Additionally, they have to make provisioning and the tax liability is reduced as the written-off amount is deducted from the profit.

A loan is classified as a non-performing asset (NPA) when the repayment of the principal amount or the interest remains outstanding for a period of 90 days. However, the identity of these defaulting borrowers remains undisclosed by banks or the RBI.

Among individual banks, some significant reductions in NPAs due to write-offs were seen in the case of State Bank of India, Punjab National Bank, Union Bank, Central Bank of India, and Bank of Baroda.

The RBI clarified that a substantial portion of these write-offs is technical in nature, primarily intended at cleansing the balance sheet and achieving taxation efficiency. The loans are written off from the books at the Head Office without foregoing the right to recovery. Once recovered, the provisions made for those loans flow back into the profit and loss account of banks.

The loan recovery process can take years, especially as most of the loans involved in write-offs belong to wilful defaulters and promoters who generally do not pay back to the banks. Some experts have raised concerns about the non-transparent nature of these write-offs, calling for greater accountability and transparency in the process. <https://www.businessworld.in/article/Banks-Wrote-Off-Bad-Loans-Worth-Over-Rs-2-Tn-In-FY23-RBI/25-07-2023-485442/>

7. GDP to IIP—Indian statistical systems have bigger problems than ‘underestimating’ population (*theprint.in*) 26 July 2023

Over the last few weeks, there has been a debate on whether the standard household surveys in India are representative of the reality in the country. While the issue is about the sampling strategy used by these surveys, the debates raise other important questions about the quality and availability of data and the process of drawing conclusions from it. These should be the subject of scrutiny.

The problem with the statistical system

The Census data is the sampling frame for most household surveys. One of the arguments being made today is that the projections from the 2011 Census underestimate the urban population of India. But the issue isn't whether a particular survey under or overestimates a certain population. The question is: Why, even in 2023, do we have to rely on projections from the 2011 Census? The simple answer is that India has postponed the 2021 Census. We do not exactly know why it has been postponed and till when.

There have been other concerns about the official statistics system of India — from problems in the calculation of Gross Domestic Product (GDP) and Index of Industrial Production (IIP) to delaying the release of National Crime Records Bureau (NCRB) data to altogether withholding the 2017-2018 Consumer Expenditure Survey results. These do not bode well for the credibility of India's statistical system.

The importance of household surveys

There are several indicators of the health of an economy. We hear about GDP, exports, or India's trade deficit that are based on 'macro' data. But if we want to know how households in India are faring, then we need to find ways of measuring outcomes at the household level. It is neither

possible nor advisable to go ask every household in the country what they consume, whether they work, what assets they own, how their health is, or how optimistic they feel about their economic and social circumstances. Hence, countries across the world rely on surveying a sample of households.

For a meaningful analysis, the sample of households has to be representative of the population. The survey strategy depends on what it is that one wants to measure. For example, if a survey is about how many complaints consumers have against their banks in a particular state, then the sampling will have to be done based on the prevalence of banking products in various districts of the state, and among various groups such as gender, age, occupation, etc. How many households one surveys is less important than whether the households adequately represent the groups for which analysis has to be conducted.

A sampling frame is required before conducting a survey — one that tells us the total number of households with specific characteristics in a region from which a sample can be drawn to ask more specific questions. Each household surveyed represents a certain section of the population. The aggregate estimate is a sum of all survey estimates weighted by how many other such households one estimate captures. The final estimate should always be seen as an average with a potential range and never as absolute.

Collecting household data is extremely challenging, given the difficulty of observing the field staff. This requires tremendous management capacity to train staff, monitor implementation on the field, and cross-check the results with a second round of a subset of the sample, preferably by a different team. Some of these processes may need to be upgraded in the existing government survey machinery.

Reading the survey results

The very nature of sampling precludes the possibility of obtaining an absolute point estimate. This has lessons for policy conclusions that we draw from survey data. For example, the manner in which a question is asked matters disproportionately against what one can learn from the answer. You may ask someone if the “person is working on the day?” vs if the “person has a job on the day”. The answer to the first can be yes, and the second can be a no, depending on how the respondent interprets the meaning of the word “job”.

Research shows that women often respond to employment questions in the negative. But if one were to probe further, one might find that they are helping with the family enterprise which can constitute as “work outside the usual housework”. Results from two surveys that either use different samples or ask different questions to similar samples can thus be different. This is not to say that survey results are meaningless but to emphasise that one must be careful about exactly what a specific survey is measuring.

It is always a good idea to see if survey results are consistent with other indicators of the economy. The problems of measurement make it difficult to do this in India. These larger problems that India’s statistical system faces should be the subject of more scrutiny. <https://theprint.in/opinion/gdp-to-iip-indian-statistical-systems-have-bigger-problems-than-underestimating-population/1686202/>

8. Watered down: Almost half of India's rivers still remain polluted; here is why (downtoearth.org.in) 25 July 2023

India has been cleaning up its polluted rivers for many decades now. In the past three years alone, the country has spent over Rs 4,000 crore on two flagship programmes, Namami Gange and the National River Conservation Plan, suggests government data. Still, 46 per cent of the 603 Indian rivers remain polluted, shows a report released by the Central Pollution Control Board in December 2022.

India's river cleanup drives have failed because the country has focused on major rivers alone, says Venkatesh Dutta, professor, School of Earth and Environmental Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow. They were bound to fail because small rivers eventually merge with major rivers and pollute them, he adds.

Starting 2019, the focus has widened to include small rivers and tributaries in revival programmes. Besides the two flagship schemes, several other Central programmes such as Swachh Bharat Mission, Smart Cities Mission have components to arrest river pollution, says D P Mathuria, executive director, Technical, National Mission for Clean Ganga (NMCG).

"Today, every state is also working for the revival of small rivers," says Nidhi Dwivedi, programme officer, NMCG. Experts like Dutta, though, maintain that the ground realities remain the same. Down To Earth (DTE) tracked the restoration drives of small rivers in four states to gauge the progress and the challenges.

Uttar Pradesh

In July 2022, the state government claimed 60 rivers had been revived in the previous five years. The reality, though, is quite different. One of the 60 rivers is Gomti, which, as per the 2022 CPCB report, is the fifth most polluted river in the country.

As per the Uttar Pradesh commissioner's office of rural development, river cleaning projects have been undertaken in eight rivers — four in Jhansi, two in Jalaun and one each in Deoria and Kushi Nagar.

Even the cleaned rivers remain vulnerable. Aami, which flows through four districts in the state, was cleaned up early this year after protests and intervention by the National Green Tribunal.

"The authorities are yet to set up the common effluent treatment plant and sewage treatment plant, which are a part of Aami's revival plan," says Vishwavijay Singh, who formed the Aami Bachao Manch in 2007.

Dutta says that small rivers have been neglected for such a long time that even locating their routes is a challenge. "In May 2023, I was researching Sarayan river in Lakhimpur Kheri district and found that the government records classify this Gomti tributary as a nullah. There is no record of the source of the river. We finally used satellite images and found that it used to be 249 km long. The revenue records show it to be 190 km long," says Dutta.

Bihar

Documentation on the state's small rivers is sketchy, and the few rivers that have been revived are facing opposition from local communities.

In 2020, East Champaran district cleaned up an 80-km stretch of Dhanauti river, a tributary of Burhi Gandak, after spending over Rs 3 crore to desilt the riverbed and initiate plantation drives.

“Residents are now forbidden from fishing, which is a livelihood source for many,” says Ruchi Shree, who teaches political science at Tilka Majhi Bhagalpur University.

Gourisankar Ghosh, chairperson of Waterlife, a company that works on water conservation and sustainability, says rejuvenation projects across India are “colonial in the sense that they do not include the people in the decision-making process”.

Ranjeet Giri with non-profit Yuva Sangathan claims that the revival claims exist only on paper. “In most stretches, the water remains so polluted that it stinks,” says Giri.

Madhya Pradesh

The state has identified 12 districts for restoration works under the Namami Gange. “But, till date, not even one river rejuvenation project has been picked up,” says Rahul Banerjee, river rights activist in Indore. The bigger problem, he says, is that the state has failed to set up mandatory common effluent treatment plants in industrial areas.

Kerala

The state has a good track record of rejuvenating small rivers through its Haritha Keralam Mission, which uses Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) funds for the works.

“We have revived several small streams that cumulatively cover more than 40,000 km,” says Abraham Koshy, assistant coordinator of the Mission. While experts acknowledge the state's work, they say the rejuvenation process can become more effective if government departments work in tandem.

“For instance, the forest department, responsible for plantation drives along the rivers, is not a part of the mission,” says S P Ravi of non-profit All Kerala River Protection Council.

He adds that the government's claims should be taken with a pinch of salt. “One of the flagship projects under the Haritha Kerala Mission is the linking of Pamba and Manimala rivers with an artificial channel. It remains clogged most of the year.”

He says that the river rejuvenation projects have a very limited outlook. “Cleaning midland stretches, streams, joining rivers is required. But this alone does not mean the river is rejuvenated. Authorities have to start from the source and ensure rejuvenation up to the point it drains into the sea or backwaters,” he adds. <https://www.downtoearth.org.in/news/water/watered-down-almost-half-of-india-s-rivers-still-remain-polluted-here-is-why-90690>

9. Over 5 crore MGNREGA job cards deleted in 2022-23: Centre ([newindianexpress.com](https://www.newindianexpress.com)) 25th July 2023

More than five crore job cards under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) were cancelled in 2022-23, 247 per cent more than the number of deletions in 2021-22, the Lok Sabha was informed on Tuesday.

In a written reply, Rural Development Minister Giriraj Singh said that in 2021-22, MGNREGA job cards of 1,49,51,247 workers were deleted while in 2022-23 the number was 5,18,91,168.

West Bengal, Andhra Pradesh and Telangana were among the states which saw the highest number of deletions.

In 2021-22, as many as 1,57,309 job cards were deleted in West Bengal, while in the following fiscal, the number shot up by over 5,000 per cent to 83,36,115.

In Andhra Pradesh, 6,25,514 job cards were deleted in 2021-22, which increased by 1,147 per cent in 2022-23, when 78,05,569 job cards were cancelled.

Similarly, in Telangana, 61,278 job cards were deleted in 2021-22, while 17,32,936 cards were deleted in 2022-23, an increase of 2,727 per cent.

Gujarat deleted 1,43,202 workers' job cards in 2021-22 and 4,30,404 in 2022-23, a jump of over 200 per cent.

In his reply, Singh said the deletions were made due to reasons such as "fake" job cards, duplicate job cards, people not willing to work anymore, family shifted from Gram Panchayat permanently, or deaths.

In reply to another question, Singh said 2.95 crore people in the age group of 18-30 years were registered under the scheme up to the 2020-21 financial year which was increased to 3.06 crore up to financial year 2022-23.

In 2022-23, 57.43 per cent of MGNREGA workers were women.

The Mahatma Gandhi National Rural Employment Guarantee Scheme is aimed at enhancing livelihood security by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. <https://www.newindianexpress.com/nation/2023/jul/25/over-5-crore-mgnrega-job-cards-deleted-in-2022-23-centre-2598486.html>

10. TRAI's call for AI regulatory body is flawed ([thehindubusinessline.com](https://www.thehindubusinessline.com)) Updated - July 25, 2023

The Telecom Regulatory Authority of India's (TRAI's) recent call to regulate Artificial Intelligence (AI) comes at a time when policymakers must address rapidly evolving technological

innovations. Rather than attempting strict regulations, governments should focus on establishing guardrails to navigate the AI landscape responsibly. AI is a highly dynamic and constantly evolving field, making it nearly impossible to create rigid rules that cover every scenario.

Moreover, TRAI's credibility to discuss regulation, especially around technology, is questionable considering its own failures in implementing basic regulations like the Do-Not-Disturb (DND) guidelines. Rather than proposing a new bureaucratic entity like the Artificial Intelligence and Data Authority of India, the government should focus on fostering collaboration between stakeholders to develop ethical AI practices. AI's rapid development will outpace regulatory processes, rendering any fixed regulatory ideas obsolete before its implementation. Government bureaucracies might struggle to keep up with the agility required to regulate AI effectively.

AI's unpredictable trajectory creates a knowledge vacuum, leading to various fears and concerns, from job displacement to deep-fakes and cyberattacks. In such a dynamic landscape, it is impractical to enforce stringent regulations that cover every potential AI application.

Complex technology

AI is a highly complex and diverse technology, encompassing various systems, algorithms, and applications across different industries. Attempting to create a single, all-encompassing regulatory framework for such a diverse field would be exceedingly complicated and challenging to implement effectively. AI is a phenomenon that transcends national borders, with research, development, and deployment happening on an international scale. Implementing regulations within a single country could lead to disparities and hinder international collaboration and progress.

Government should adopt a guardrail approach, providing guiding principles and ethical frameworks to ensure responsible AI development. This approach allows for flexibility, adaptability, and self-correction within the AI community, encouraging innovation while maintaining ethical standards. Instead of relying solely on regulations, a more balanced approach could involve fostering responsible AI development through industry-led ethical guidelines, transparency, and public-private partnerships. Collaborative efforts can strike a balance between encouraging innovation and ensuring ethical use, thereby harnessing the full potential of AI for the benefit of society without imposing undue restrictions.

The ethical dimension of AI regulations is also challenging. Determining universally accepted ethical guidelines for AI is a complex task, as perspectives on ethics can vary significantly across cultures and societies. Implementing regulations without a clear consensus on ethics could lead to controversies and conflicts.

The compliance costs and legal complexities associated with heavy regulations might discourage entities from entering the AI market, leading to a concentration of power among established tech giants. Furthermore, excessive regulations might stifle research and experimentation, which are crucial for driving AI advancements. <https://www.thehindubusinessline.com/opinion/trais-call-for-ai-regulatory-body-is-flawed/article67120722.ece>

11. How India can empower subnational governments to navigate climate risks (economictimes.indiatimes.com) Jul 25, 2023

This article looks at ways through which subnational governments can use available finance to implement climate action.

Recently, heavy rainfall due to cyclone Biparjoy created a flood-like situation in three districts of Rajasthan – Barmer, Jalore, and Sirohi. The impacts of climate change have become more evident than ever before. Within just the first six months of 2023, India witnessed four cyclones. Meanwhile, the adjoining states are reeling under the scorching heat waves. Delhi recorded the highest temperature of 2023 at 42.9 Degree Celsius in June. The heat waves in Uttar Pradesh and Bihar have led to the loss of over 96 lives in the past few days.

The frequency of such extreme weather events will only increase with rising temperatures. This has been corroborated by the Intergovernmental Panel on Climate Change's (IPCC) sixth assessment report, released in March 2023. The report also states that climate change has resulted in reduced food security, changing rainfall patterns and extreme weather events. Furthermore, the report indicates that such events increase climate migration, perpetuate substantial damage to infrastructure and increase the risk of diseases.

The impact on the people and the economy cannot be undermined either. Fluvial flooding in India is expected to cause substantial economic losses in the future. By 2050, the annual damage is estimated to be €376.4 billion under a low-emissions scenario and €585.6 billion under a high-emissions scenario. This is expected to reach €825.3 billion under a low emissions scenario and €2,409.1 billion under a high emissions scenario by 2100. McKinsey & Company estimate that rising heat and humidity could put up to 4.5% of India's GDP or approximately \$150-250 billion at risk by 2030 due to labour losses.

The window of opportunity to stop climate change and reverse it is shrinking fast. The role of subnational governments in mitigating climate risks is crucial because the implementation of mitigation activities and adaptation measures needs to happen at the state and city-level. In fact, several Indian states are revising their State Action Plans on Climate Change (SAPCC) to integrate climate change concerns into the planning process. Many Indian cities are also initiating assessments to support local-level climate planning.

Finance is, and always will be, a crucial ingredient to ensure the implementation of inclusive climate actions at the subnational levels. While several international climate funding agencies have been set up, the process of acquiring funds from these international agencies can be extremely cumbersome for states and cities. Commercial banks and lending agencies are not always a suitable option to fund adaptation projects, since these tend to be highly distributed, with beneficiaries having limited ability to pay.

Here are four ways through which subnational governments can use available finance to implement climate action:

1. **Climate Budget Tagging:** A climate budget embeds climate concerns into the normal annual budgeting process. By mainstreaming climate action in each department's schemes, climate budgets can make use of available resources and push green considerations into other investments, such as procurement contracts. Odisha is the first Indian state to adopt climate budget tagging since 2020-21. Bihar has also initiated the green budget exercise (similar to the gender budget) since 2020. Kerala, in its recent budget of 2023-24, announced plans to tag climate change-related spending in key sectors.

2. **Issuance of Green Bonds:** Subnational governments can also develop innovative ways to access finance by issuing green bonds from fixed-income investors to support lending for eligible projects. So far, 19 emerging countries have issued green, social and sustainability bonds to fund climate action, promote a just transition from fossil fuels, and deliver on their Sustainable Development Goals (SDGs). In early 2023, Government of India launched its first green bond to raise approximately \$2 billion for projects that help mitigate climate change impacts and achieve net-zero objectives.

3. **Develop Projects to Access Carbon Markets:** Another way to access finance is through international carbon markets. The voluntary carbon market is expected to reach a valuation of \$17.11 billion by 2027, making it an opportune time for subnational governments to develop projects that require high upfront costs and get them financed through international carbon markets. India has already notified activities that will be eligible for trading carbon credits in the new carbon market under the Paris Regime. Indore Municipal Corporation generated ₹5 million in revenue by selling carbon credits generated through three bundled projects. Similarly, Greater Chennai Corporation has also identified projects and is set to earn carbon credits from international carbon markets.

4. **Pooled Finance:** In addition, subnational governments can develop project proposals based on their updated SAPCCs and approach multilateral development banks and International Financial Institutions for pooled finance. For example, the World Bank signed a \$115 million program in early 2022 with the governments of Karnataka and Odisha to strengthen watershed management.

Given India's climate risks, it is prudent for subnational governments to proactively incorporate climate actions into the development agenda. By exploring innovative financing mechanisms, engaging with international climate funds, and fostering collaborations, subnational governments can effectively secure the necessary finance to implement climate projects. In doing so, they can contribute towards India's overall climate goals and foster a more sustainable future. <https://energy.economictimes.indiatimes.com/news/renewable/how-india-can-empower-subnational-governments-to-navigate-climate-risks/102112490>

12. Army and Air Force seal the deal for acquisition of indigenous drones ([newindianexpress.com](https://www.newindianexpress.com)) 26 July 2023

In a push towards induction of indigenous systems and equipment, the Indian Army on Monday concluded a contract to induct indigenously developed Remotely Piloted Aerial vehicles (RPAV).

This is in continuation with the recent induction of an artificial intelligence-based accident prevention device by the Army and a highly advanced radar system specifically designed for marine navigation.

Sources said the Indian Army and Z Motions Pvt Ltd have concluded a contract for acquiring eight indigenously developed RPAVs through the Innovations for Defence Excellence (iDEX) channel functioning under the defence ministry. The contract, worth Rs 5 crore, will see delivery of RPAVs by this year and would receive all of them in a year's time.

Sources in the defence establishment said that the Indian Army is procuring these RPAVs for itself and the Indian Air Force also. They will get an equal number of drones for field exploitation. "After experiments, it has been planned to procure the RPAVs in bulk," sources said.

The Indian Army said in a tweet: "... The state-of-the-art airborne platform would enhance the surveillance, targeting and tracking capability and carry out precision targeting of the enemy positions."

Being developed as loitering munitions that will prove to be a game-changer during operations, these RPAVs will provide integral surveillance, targeting and tracking capability to light infantry, small teams of units and special operations units to carry out precision targeting at standoff ranges.

In another move towards raising indigenous equipment under the iDEX initiative, the Navy in May signed with Siliconia Technologies.

Siliconia got the contract as its prototype Challenge, which envisaged the development of a prototype that is a lightweight ASIC (Application-Specific Integrated Circuit) based communication system, which could be used for Low Earth Orbit, Medium Earth Orbit and geostationary satellite communication. <https://www.newindianexpress.com/nation/2023/jul/26/army-and-air-force-seal-the-deal-for-acquisition-of-indigenous-drones-2598633.html>

13. NRF can help fast-track India's transformation to a knowledge economy ([livemint.com](https://www.livemint.com)) 26 Jul 2023

The much-awaited National Research Foundation (NRF) is in place, with a budget of ₹50,000 crore for five years and the goal of providing superior strategic direction for scientific research in India.

Many previous "ahead-of-their-time" research funding bodies such as the Technology Development Board (TDB), Science & Engineering Research Board (SERB), Global Innovation & Technology Alliance (GITA), and Biotechnology Industry Research Assistance Council (BIRAC) have fulfilled their purposes quite well. However, none of them had the mandate for a broader vision to transform the research and innovation landscape and take India towards a knowledge economy. With NRF, this now looks possible.

A robust “education-research-innovation” or knowledge-economy ecosystem of a nation can increase the intensity, speed and efficiency of economic and social development and touch every citizen. Many countries in the West and a few in Asia have proved this by prioritising knowledge-economy ecosystems with strategic planning and plenty of resources, and benefitting immensely.

India, which has exceptional education and research institutions, robust infrastructure and thriving industries remains unable to fully harness these strengths for development and technological leadership. While the country has done exceedingly well in space research and a few other areas, For India to become one of the world’s top five knowledge economies, it needs a tectonic shift in strategy, policy, implementation and, most importantly, private-sector participation.

It's time to adopt a new approach to strategic planning, starting with the goals we wish to achieve. From there, we can define the necessary outputs to achieve these goals and identify the inputs needed for delivering those outputs. Let’s go into the details of this reverse planning process.

For any nation to strengthen its knowledge economy, it must have some time-bound and measurable socio-economic goals front and centre. What key socio-economic goals do we wish to achieve from a strong knowledge economy? For example, we could aspire to increase India's value-added manufacturing from 13-15% of GDP to 25% or more, or increase India's high-tech exports from 10% to 25% or more of total manufactured exports.

We should aim to double the foreign investment in R&D infrastructure and co-development of technologies in India. There must be a concerted effort to transform Indian champion industries into global champions. The key goal we should aim for is a significant increase in high-value employment in India.

These goals should also be viewed against the backdrop of how we are performing vis-à-vis other competing economies. We can thus set our target to move India’s rank up to the top 5 nations in relevant global indices or rankings such as the Global Innovation Index, Global Competitiveness Index, and Global Startup Ecosystem Index. Once these goals are set, progress on them should be measured periodically.

Next, we need to define the outputs of the knowledge economy that will help achieve the goals we have set. In education outputs, we could aim for a substantial increase in the gross enrollment ratio (GER) in higher education from 27% to 50%. We aspire to see India’s 50 STEM institutions in the QS World University Rankings. There must be a substantial increase in the number of quality PhDs in STEM and an improvement on the Citation Index.

We would also like to see a significant increase in R&D professionals – say 50 R&D personnel per thousand people employed in India. Another major output on R&D & innovation could be co-developing critical platform technologies in sectors that are a national priority. This will lead to a significant increase in intellectual property filings by Indian residents from 30,000 to 75,000 patents a year and from 20,000 to 50,000 industrial designs a year. We should also aim for an increase in deep-tech startups every year.

Once the impacts and outputs are defined, NRF needs to determine what inputs are needed and what fundamentals should be in place to ensure them. This could be broken into three subsets – institutional reforms, investments, and (most importantly) political will and restructuring.

Institutional reforms could include bringing all publicly funded R&D institutions and educational institutions under one umbrella, with performance-based funding. This should be followed by creating a consortium of R&D and academic institutions of similar subjects for infra and manpower sharing, and to avoid duplication of research.

Key investments in the knowledge economy are crucial, such as raising government R&D investment from 0.7% to 1.5% of GDP – 0.5% for basic research and 1% for applied/industrial R&D – matched by industry investment. The industrial R&D programme should be led by industry, and the line ministries and state governments should also invest. Thus, gross expenditure on R&D will be 2.5% of GDP, comparable to that of some knowledge economies.

There must also be a significant increase in government investment in higher education. Education sector reforms that attract private players and foreign entities are vital. To encourage more technology-driven MSMEs, the government may provide credit guarantees to financial institutions to extend credit to MSMEs with patents/designs as collateral. The government may develop a model to co-invest with venture capital firms in deep-tech startups on a 50:50 share. Reforms in the public procurement policy will also encourage innovation by startups.

Finally, political will and restructuring will be key to the whole exercise – and it could take longer. The government may need to form a Ministry of Knowledge Economy (Education, Research & Innovation), and position it as one of the most coveted portfolios in the cabinet, led by a senior minister.

The participation of line ministries and state governments will also be vital, so they must invest in technology development programme in related areas as key stakeholders or users. A comprehensive knowledge economy policy needs to be framed to run this structure.

The big question is whether the NRF will be empowered to steer India's journey towards a knowledge economy or whether this will remain a government funding agency like many others in the past. India has a big opportunity to unleash its prowess as one of the top knowledge-driven economies and NRF can play a big role in realising this dream. We can't afford to keep missing the bus! <https://www.livemint.com/opinion/first-person/nrf-can-help-fast-track-indias-transformation-to-a-knowledge-economy-11690344586711.html>

14. India Needs Administrative Reforms, Not Freebie Culture ([news18.com](https://www.news18.com)) JULY 26, 2023

At the time when the Indian Space Research Organisation (ISRO) successfully launched Chandrayaan-3, parts of the national capital were submerged. While ISRO's journey is the stuff inspirational stories are made of, the same cannot be said about governance in India. The Delhi floods are just a recent example of that. It is true that even developed nations suffer from floods, but parts of Delhi were deluged primarily because of the pettiness of the powers that be. Even as

the people affected were suffering, the state government and the Central authorities were busy fighting each other and scoring brownie points.

Waterlogging and traffic jams occasioned by rains have become routine in the national capital region (NCR). The recent flooding because of Yamuna's overflow took place in the areas not far from the Prime Minister's Office, Parliament, etc. Other big cities — be it Mumbai, Chennai, Kolkata, Bangalore, or Hyderabad — do little better. The increasingly dire events in metropolitan cities in the wake of rains are symptomatic of not just the incompetence and corruption in local bodies but something more fundamental — urban decay. One wonders whatever happened to the smart cities project.

Over four centuries ago, the famous British philosopher Francis Bacon said that knowledge is power. Today, information is power. And we have both, knowledge and information, about the monsoon season. We know fairly well about the timing of the arrival of the monsoon and its movement, the amount of rainfall that it brings, and so on. And yet, the monsoon season wreaks havoc every year. This year was no different, with areas of the national capital near the Yamuna suffering the most.

In other words, monsoon season in India is not a black swan event, something which is absolutely unpredictable, if not unprecedented. It is instead a grey rhino, a totally predictable but neglected threat.

The release of huge amounts of water from the Hathnikund Barrage in Haryana was reportedly one of the factors responsible for the deluge in Delhi. The barrage is on the border between Haryana's Yamuna Nagar district and Uttar Pradesh's Saharanpur district. The fact that the barrage is managed by the Haryana government gave the Arvind Kejriwal government an opportunity to find a scapegoat. That Haryana is ruled by the Bharatiya Janata Party (BJP) made scapegoating even easier.

It is not that the BJP has provided many shining examples of administration. The photographs of flooded Delhi roads and homes were all over the media and social media, making a mockery of the tall emerging superpower claims.

While Kejriwal's Aam Aadmi Party (AAP) and the BJP traded charges, the real issues got obscured in the dust and dirt generated by political debates. An unnamed senior official at the Central Water Commission (CWC), quoted by PTI, made an important point: "We noticed that the water released from the Hathnikund Barrage took less time to reach Delhi compared to previous years. The main reason could be encroachment and siltation. Earlier, the water would have had more space to flow. Now, it passes through a constricted cross-section."

One need not be a hydrologist to know that encroachment is a big problem. It is the monster that is devouring urban spaces all over the country. It's a colossal grey rhino: all of us, including politicians, know about it, and yet no one wants to talk about it. The monster has many parents — politicians, officials, cops, and pinkish civil society organisations whose misplaced philanthropy perpetuates the abominations of slums, unauthorised colonies, etc. After all, a lot of encroachers are poor people.

The need of the hour is reforms — in all spheres of life and at various levels. Administrative and police reforms should accompany economic reforms. Unfortunately, our political masters have no time or concern for improvement in administration. When was the last time that you heard political parties fighting elections, or even discussing, the ways and means of improving administration? You can't remember, because it never happened in the recent past. So, unsurprisingly, few remember the Second Administrative Reforms Commission, headed by Congress leader M. Veerappa Moily, who prepared 15 reports, the last of which came out in April 2009. Newspersons reported about these reports; editorialists wrote edits and articles on the subject; and that was the end of it.

Even today, as Himalayan cities sink and cities get flooded, politicians try to deflect blame towards their rivals rather than do something meaningful to make the lives of people safer. The weapons they use with impunity are whataboutery and ad hominem attacks.

And then there is the last, and often the first, resort of Indian politicians: welfarism. All of them claim to be committed to the welfare state. What they forget is the fact that the welfare state is still a state; administration, law and order, etc., are essential parts of any state. It is time our political class focused on improving the rickety administrative apparatus at all levels instead of introducing more freebies. Only this can make our cities, and villages, safe. <https://www.news18.com/opinion/opinion-india-needs-administrative-reforms-not-freebie-culture-8428525.html>

15. **AI and the Quest for Clean and Reliable Data** ([analyticsinsight.net](https://www.analyticsinsight.net)) July 26, 2023

AI's pursuit of clean & reliable data is empowering unwavering results in every sector worldwide

In the ever-evolving landscape of technology, Artificial Intelligence (AI) stands at the forefront of a remarkable revolution, transforming industries and reshaping our world. At the heart of this paradigm shift lies the crucial need for clean and reliable data, fueling the potential of AI to deliver unwavering results across every sector, spanning from healthcare and finance to education and beyond. In this article, we embark on a captivating journey to explore the power of harnessing pristine data in the AI era, unlocking opportunities for growth and innovation. Delving into cutting-edge tech insights and trends, we pave the way for a future where success knows no bounds.

The Role of Data in AI

At the core of every AI system lies data. AI algorithms learn from this data to make decisions, recognize patterns, and improve performance over time. The quality of data directly impacts the accuracy and reliability of AI models. Clean and reliable data is the foundation for cutting-edge AI technologies.

The Challenges of Unclean Data

1. Inaccurate Data

One of the primary challenges in AI is dealing with inaccurate data. Inaccuracies can stem from various sources, including human error during data entry or outdated information. AI models trained on inaccurate data can produce flawed outputs, leading to potential issues and misinformation.

2. Incomplete Data

Incomplete data poses another obstacle to AI systems. Gaps in the data can lead to biased models, hindering the AI's ability to make well-informed decisions. AI trained on incomplete data might only consider some relevant factors, resulting in suboptimal results.

3. Biased Data

Bias in data is a critical concern for AI applications. Biased data reflects historical inequalities and prejudices, which can perpetuate through AI systems. For instance, biased data in hiring algorithms can lead to discriminatory hiring practices.

The Importance of Data Cleaning

Data cleaning, also known as data cleansing, identifies and corrects errors, inconsistencies, and inaccuracies in datasets. This step is crucial in preparing data for AI training.

1. Ensuring Accuracy

Data cleaning ensures that the data used to train AI models is accurate and reliable. The AI system can learn from trustworthy information by removing errors and inconsistencies, leading to more precise outcomes.

2. Reducing Bias

Data cleaning helps reduce bias in AI systems by identifying and rectifying biased data points. It involves carefully examining the data for potential prejudices and making necessary adjustments to create a fairer, more inclusive AI model.

3. Enhancing Performance

Clean data enhances the overall performance of AI algorithms. By providing high-quality data, AI models can achieve better accuracy, faster processing, and improved decision-making capabilities.

The Role of AI in Data Cleaning

Interestingly, AI itself can play a vital role in data cleaning. AI-powered tools and algorithms can automate the data-cleaning process, making it more efficient and effective.

1. Automated Data Validation

AI can automatically validate and cross-reference data against trusted sources, helping identify inaccuracies and inconsistencies humans might overlook.

2. Identifying Anomalies

AI algorithms can detect anomalies and outliers in datasets, indicating errors or data corruption. By flagging these anomalies, data cleaning becomes more targeted and precise.

3. Predictive Data Imputation

AI can also predict missing values in datasets, replacing incomplete data with estimated values. This imputation process helps fill gaps in the data, contributing to more comprehensive AI training.

The Role of Humans in Data Cleaning

While AI brings remarkable advancements to data cleaning, human expertise remains invaluable.

1. Contextual Understanding

Humans can provide crucial contextual understanding, especially when dealing with ambiguous data. They can discern patterns and relationships that AI might miss, ensuring a more holistic approach to data cleaning.

2. Ethical Considerations

Data cleaning often involves ethical decisions, such as handling sensitive information or dealing with potential biases. Humans are essential in making these ethical judgments and ensuring the data remains unbiased and secure.

3. Continuous Improvement

Human oversight helps in continuously refining AI-powered data-cleaning tools. By monitoring and validating the outputs of AI algorithms, humans can identify areas for improvement, leading to better data-cleaning processes. <https://www.analyticsinsight.net/ai-and-the-quest-for-clean-and-reliable-data/>