

UPSC CURRENT AFFAIRS NOTES 21-09-2023

6th Report on Central Ministries/Departments performance on CPGRAMS released by DARPG for the month of August, 2023



MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS

A total of 1,21,004 Grievances Redressed by Central Ministries/Departments in August, 2023
For the 13th month in a row, the monthly disposal crossed 1 lakh cases in the Central Secretariat
Department of Agriculture and Farmers Welfare and Ministry of Water Resources, River Development and Ganga Rejuvenation topped in Group A category in the rankings released for the month of August, 2023

Ministry of Development of North Eastern Region and NITI Aayog topped in Group B category in the rankings released for the month of August, 2023

The Department of Administrative Reforms and Public Grievances (DARPG) released the Centralized Public Grievance Redressal and Monitoring System (CPGRAMS) monthly report for August, 2023, which provides a detailed analysis of types and categories of public grievances and the nature of disposal. This is the 16th report on Central Ministries/Departments published by DARPG.

The progress for August, 2023 indicates 1,21,004 Grievances Redressed by Central Ministries/Departments. The Average Grievance Disposal Time in the Central Ministries/Departments in the year 2023, from January to August is 19 days. These reports are part of the 10-step CPGRAMS reforms process which was adopted by DARPG for improving quality of disposal and reducing the time lines.

In August, 2023, the BSNL Call Centre collected feedback from 85,386 citizens. Out of these, approximately 32,982 citizens expressed satisfaction with the resolution provided to their respective grievances. 21,317 citizens have given the Rating for their Grievance Redressal as “Excellent & Very Good” in the month of August, 2023

The following are the Key Highlights of the DARPG's monthly CPGRAMS report for August, 2023 for Central Ministries/ Departments:

PG Cases:

- In August, 2023, 118294 PG cases were received on the CPGRAMS portal, 121004 PG cases were redressed and there exists a pendency of 63461 PG cases, as of 31st August, 2023
- The pendency in the Central Secretariat has decreased from 64963 PG cases at the end of July, 2023 to 63461 PG cases at the end of August, 2023

PG Appeals:

- In August, 2023, 20272 appeals were received and 19700 appeals were disposed. The Central Secretariat has a pendency of 23030 PG Appeals at the end of August, 2023
- The pendency of appeals in the Central Secretariat has increased from 22458 appeals at the end of July, 2023 to 23030 appeals at the end of August, 2023

Grievance Redressal Assessment and Index (GRAI) – August, 2023

Department of Agriculture and Farmers Welfare and Ministry of Water Resources, River Development and Ganga Rejuvenation are the top performers in the Grievance Redressal Assessment & Index within the Group A for August, 2023

Ministry of Development of North Eastern Region and NITI Aayog are the top performers in the Grievance Redressal Assessment & Index within the Group B for August, 2023

Bureau of Indian Standards establishes 6467 Standard Clubs for students across nation

The Bureau of Indian Standards (BIS), the National Standards Body of India, has announced that it has established 6467 Standard Clubs in schools and colleges across the country. As per BIS the standard clubs are being established with an objective to sensitize young members of society about the importance of standards in improving quality of life.

“Children are the architects of a strong, vibrant, and dynamic India. The Bureau of Indian Standards (BIS) is lighting up the future of India with a visionary initiative - the creation of Standards Clubs in schools and colleges across the nation. This innovative endeavour aims to instil in young minds the paramount importance of quality, standards, and generating scientific temperament. Quality consciousness, steeped in the principles of standardization, is a key pillar of accelerated economic development. By nurturing an appreciation for quality, standards, and standardization in our students, we ignite a spark that has the power to transform our society” informed BIS through an official statement.

It was further informed by BIS that the Standards Clubs initiative started in 2021 has already made a significant impact, having been established in 6,467 schools and colleges across the country. These clubs boast a membership of over 1.7 lakh enthusiastic students from science background, guided by dedicated science teachers from their respective schools as mentors who are provided with specialized trainings by BIS. Among them, 5,562 Standards Clubs have been created in schools, while 905 clubs in different colleges, which include 384 clubs in engineering colleges.

The student members of these Standards clubs engage in a variety of activities, like:

- Standards writing competitions
- Quiz competitions
- Debates, essay writing and poster making
- Exposure visits to laboratories & Industrial units and more.

“These activities are designed to provide young talents with insights into the world of quality and standardization. Under these clubs a wide range of activities have been conducted and the financial assistance to organize these activities is provided by BIS to these educational institutions. Apart from the above, training programmes for mentors of standard clubs and exposure visits to labs and industry units for student members are organized regularly by BIS” read the statement.

“Recognizing the significance of practical learning, BIS has further extended its financial support. High and higher secondary eligible Government Schools with Standards Clubs are entitled to receive a one-time Laboratory Grant to a maximum of Rs. 50,000/- in the form of state of the art lab equipment for upgrading their Science Labs” read the statement further.

“Furthermore, to ensure that the learning environment is both pleasant and engaging, BIS is providing financial assistance of upto Rs. 1,00,000/- to establish 'Manak Kaksha' in government institutions where Standards Clubs have been formed. Under this initiative one room in the school shall be renovated by providing basic amenities like smart TVs, audio video systems, proper illumination, decorating the walls etc. These spaces are to be designed to inspire curiosity and innovation, fostering the growth of future leaders” the statement added.

It was also stated that, “with its unwavering commitment to quality, BIS continues to shape the future of India by nurturing the minds of its youth. This visionary initiative not only promotes quality and standards but also empowers the young generation to become responsible and quality conscious citizens.”

WEATHER INFORMATION NETWORK DATA SYSTEM (WINDS) PORTAL

The Finance Minister has released the Weather Information Network Data Systems (WINDS) manual, which has gained attention for its ability to provide a full understanding of the WINDS portal to farmers, policymakers, and agricultural enterprises.

WINDS, which will be launched in July 2023 by the Ministry of Agriculture and Farmers' Welfare, will use advanced meteorological data analytics to deliver actionable insights for informed agricultural decisions.

The manual offers stakeholders a thorough grasp of the WINDS portal's features, data interpretation, and effective utilization, empowering farmers, policymakers, and other agricultural entities to make educated decisions.



Facts about Weather Information Network Data Systems (WINDS) portal

The Ministry of Agriculture and Farmers' Welfare launched it in July 2023 to harness advanced weather data analytics to provide stakeholders with actionable insight to make informed weather decisions on agriculture.

WINDS will provide farmers with critical weather-related information and data.

The webpage also publishes information about the ministry's parametric crop insurance scheme, as well as non-scheme parametric insurance industry programs for crop risk mitigation and catastrophe risk reduction and mitigation.

The WINDS initiative prioritizes the establishment of a robust network of meteorological stations.

The goal of this effort is to create a large network of weather stations at the block and gram panchayat levels.

This vast network of weather stations will allow for accurate weather pattern monitoring, effective planning, risk assessment, and rapid response to meteorological concerns.

The goal is to close the knowledge gap and empower decision-makers, farmers, and stakeholders at the grassroots level.

Other Initiatives of the Government of India for Agriculture

Launch of the National Mission for Edible Oils – Oil Palm (NMEO-OP)

The government announced the NMEO-OP project for self-reliance in edible oil in August 2021, which requires an investment of about Rs. 11,000 crore (over five years).

Income Support to Farmers Through PM KISAN

The Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme, which provides farmers with Rs. 6000 per year in three equal installments, was inaugurated in 2019.

PMFBY (Pradhan Mantri Fasal Bima Yojana)

PMFBY, a crop insurance plan, was introduced in 2016 to offer farmers with insurance coverage and financial assistance in the event of crop loss due to natural disasters, pests, or diseases.



Institutional Credit for the Agriculture Sector

Animal Husbandry and Fisheries farmers can now make use of concessional institutional credit through Kisan Credit Cards (KCC) at 4% interest per year to address their short-term working capital needs.

Farmers Will Receive Soil Health Cards

The Soil Health Card Scheme was implemented in 2014-15 to maximize nutrient utilization.

Regulations are issued to promote

The fertilizer control order includes nano urea.

Organic farming promotion in the country

In 2015-16, the Paramparagat Krishi Vikas Yojana (PKVY) was launched to encourage organic farming in the country.

Farmers in Uttar Pradesh, Uttarakhand, Bihar, and Jharkhand have taken up organic farming on either side of the Ganga as part of the Namami Gange Programme to control river water pollution and generate additional revenue.

The government also intends to encourage natural agricultural practices that are sustainable through the Bhartiya Prakratik Krishi Padhati (BPKP) scheme.

Agriculture Infrastructure Fund

Various agricultural infrastructures have been built since the creation of the Agri Infrastructure Fund (AIF), with some nearing completion.

It is a financing facility that will be opened in July 2020 to develop post-harvest management infrastructure and community farm assets, with perks such as a 3% interest subsidy and credit guarantee support.

Promotion of FPOs

In 2020, a new Central Sector Scheme for the Formation and Promotion of New 10,000 FPOs was announced, with a financial investment of Rs 6865 Crore till 2027-28.

NBHM (National Beekeeping and Honey Mission)

As part of the Atmanirbhar Bharat Abhiyan, the National Beekeeping and Honey Mission (NBHM) was launched in 2020.

NBHM seeks to promote and expand scientific beekeeping throughout the country to realize the goal of the 'Sweet Revolution,' which is being executed by the National Bee Board (NBB).

Per Drop More Crop

The Per Drop More Crop (PDMC) project was introduced in 2015-16 to increase farm water use efficiency through Micro Irrigation technologies such as drip and sprinkler irrigation systems.

Agricultural Mechanization

Agricultural mechanization is critical for modernizing agriculture and eliminating labor-intensive farming operations.

A total of Rs. 5490.82 crore has been earmarked for agricultural mechanization from 2014-15 to March 2022.

The amount of subsidized machines and equipment available to farmers has also expanded.

E-NAM Extension Platform Setup

The National Agriculture Market (eNAM) is a pan-India electronic trading system that connects current Agricultural Produce Marketing Committee (APMC) mandis to form a unified national market for agricultural commodities.

Kisan Rail is being used to improve farm produce logistics.

The Ministry of Railways has developed Kisan Rail to exclusively transport perishable agricultural and horticultural commodities.

Kisan Rail's first phase began in July 2020.

VANADIUM

Vanadium, a critical raw material for many industrial applications, has been found in sediment samples collected from Gulf of Khambhat, which opens into the Arabian Sea off Alang in Gujarat.



Scarce Resource: Vanadium is considered a critical raw material due to its essential role in strengthening steel and making batteries. Its scarcity in India has made this discovery all the more important, as it could potentially reduce India's dependence on imports for vanadium.

Vanadium in Sediments: The finding of vanadium in sediment samples from the Gulf of Khambhat is noteworthy because vanadium is rarely found in its pure form naturally. Instead, it is typically present in various minerals, making its production costly and often requiring specialized extraction techniques.

Titanomagnetite Deposits: Vanadium in this region has been found in a mineral called titanomagnetite, which forms when molten lava cools rapidly. This type of deposit can be a valuable source of vanadium.

Geological Origins: The Geological Survey of India (GSI) suggests that the vanadium deposits in the Gulf of Khambhat may have been drained from the Deccan basalts, primarily through the rivers of Narmada and Tapi. Understanding the geological origins of these deposits is essential for further exploration and exploitation.

Strategic and Industrial Importance: Vanadium is crucial for several strategic sectors such as defense and aerospace. It is used in the production of vanadium-containing alloys that find applications in jet engine components and high-speed airframes. Additionally, vanadium is utilized in energy storage systems, critical electronic components, and the manufacture of alloys known for their resistance to corrosion, wear, and high temperatures.

Energy Storage: The mention of vanadium redox flow batteries highlights its role in large-scale energy storage. These batteries have the potential to play a pivotal role in renewable energy integration and grid stabilization.

Geographical Distribution: While vanadium has been found in various regions of India, including Arunachal Pradesh, Karnataka, Odisha, and Maharashtra, the discovery in the Gulf of Khambhat adds to the diversity of potential sources within the country.

Vanadium has a limited biological role and is not considered an essential element for most organisms.

However, some marine organisms, including certain species of tunicates and sea squirts, can accumulate vanadium in their blood and tissues, where it may play a role in oxygen transport and defense mechanisms.

Health Considerations

Vanadium is not classified as an essential element for humans, and there is no established Recommended Dietary Allowance (RDA) for it.

Some vanadium compounds have been investigated for potential medicinal uses, but their safety and efficacy remain subjects of ongoing research.

Industrial Uses of Vanadium

Steel Production

Vanadium is commonly used as an alloying element in steel production.

Vanadium steel, known for its strength, toughness, and resistance to corrosion, is used in various applications, including construction, aerospace, and toolmaking.

Aerospace Applications

Vanadium alloys are used in aerospace applications due to their high strength-to-weight ratio and resistance to fatigue.

Components in aircraft engines and structures often contain vanadium alloys.

Energy Storage

Vanadium is a key component in vanadium redox flow batteries (VRFBs), a type of energy storage system.

VRFBs have potential applications in grid energy storage and renewable energy integration.

Chemical Catalysts

Vanadium compounds serve as catalysts in various chemical reactions, including those in the production of sulfuric acid and maleic anhydride.

Other Industrial Uses

Vanadium compounds are used as pigments in ceramics and glass.

Vanadium oxide is employed as a catalyst in the manufacture of sulfuric acid and as a corrosion inhibitor.

Future Applications of Vanadium

Vanadium Redox Flow Batteries

Vanadium redox flow batteries are considered a promising technology for large-scale energy storage due to their scalability and long cycle life.

They can help stabilize renewable energy sources by storing excess energy for later use.

Potential in Sustainable Energy

Vanadium may play a role in the development of sustainable energy technologies, such as hydrogen production and fuel cells.

C-DOT and CSIR-National Physical laboratory sign agreement for ‘Development of NavIC based IST traceable Primary Reference Time Clock for Telecom Sector

Centre for Development of Telematics (C-DOT), the premier Telecom R&D Centre of the Department of Telecommunications (DoT) and CSIR-National Physical laboratory (NPL) signed an agreement for ‘Development of NavIC based IST traceable Primary Reference Time Clock (PRTC) for Telecom Sector’.

The agreement is signed under the Telecom Technology Development Fund (TTDF) scheme of the DoT for providing funding support to domestic companies and institutions involved in technology design, development, commercialization of telecommunication products and solutions to enable affordable broadband and mobile services in rural and remote areas.

The project focuses on the development of a device which shall provide direct Indian Standard Time (IST) traceability to all the Telecom Service Providers (TSPs) and Internet Service Providers (ISPs) within ± 20 ns. This shall benefit India in multiple ways starting from reducing the dependency on GPS, shifting to IRNSS/NavIC, digital forensic analysis of transactions, cyber secure networks, reduce call drops & further synchronise all the telecom services with one reference time source IST, developed by CSIR-NPL.

Time synchronization of the telecom networks will be foundation for a strong cyber secured nation, as every bank transaction, stock market transactions and exchange of information is through the TSPs and ISPs. Development of NavIC based IST traceable Primary Reference Time Clock (PRTC) is an initiative which aims towards achieving the objective of “One nation One time”.



Speaking at the Agreement signing ceremony, Dr. Rajkumar Upadhyay, CEO, C-DOT underscored the tremendous potential of Indian R&D in developing futuristic innovative solutions for the benefit of our nation's prosperity and improving the quality of life. He emphasized the need to collaborate in other areas of joint interest for realizing the vision of "Atmanirbhar Bharat".

The event was attended by Dr. Ashish Agarwal & Dr. K. K. Maurya, Senior Principal Scientists along with other senior scientists of NPL. Dr. Pankaj Kumar Dalela, Ms. Shikha Srivastava-Directors of C-DOT were also present during the agreement signing ceremony.

Both C-DOT and CSIR-NPL expressed their enthusiasm and reiterated their firm commitments towards taking this engagement further with a resounding success.