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Power

Ref: APL/APJL/EMD/EC/MoEFCC/286/05/24
Date- 24/05/2024.

To,

Additional Principal Chief Conservator of Forest (APCCF)
Ministry of Environment, Forest and Climate Change
Regional Office, East Central Region
Second Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi- 834 002, Jharkhand

Sub: Six Monthly Compliance Status of Environment Clearances of Residential Township for Godda Thermal Power Plant at Motia & Patwa Villages. Godda Tehsil, Godda District in Jharkhand.

Ref: Env. Clearance Letter no: EC/SEIAA/2017-18/2070/2017/207, dated: 31.08.2017

Dear Sir,

With reference to above subject, please find enclosed herewith Six-monthly Environment Clearances (EC) compliance status report of **Residential Township** along with Environmental monitoring results like Ambient Air Quality, Noise level, Water Quality & CSR report etc. for the period of **October'2023 to March'2024** in soft (**e-mail**).

This is for your kind information & record please.

Thanking You,
Yours faithfully,
for **Adani Power (Jharkhand) Limited**

(**Santosh Kumar Singh**)
Head - AESG
Encl: as above

cc:

Member Secretary
Central Pollution control Board
Parivesh Bhavan, East Arjun Nagar
New Delhi- 110 032.

State Level Environment Impact Assessment Authority (SLEIAA)
Dhurwa Nursery Complex,
Ranchi – 834 004, Jharkhand

Member Secretary,
Jharkhand Pollution Control Board
TA Division Building (Ground Floor), HEC,
Dhurwa, Ranchi-834 004 (JH)

The Regional Officer,
Jharkhand Pollution Control Board,
Dumka, Jharkhand

Adani Power (Jharkhand) Ltd
Adani Corporate House
Shantigram, S G Highway
Ahmedabad 382 421
Gujarat, India
CIN: U40100GJ2015PLC085448

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www.adanipower.com

SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE (EC)

FOR

Residential Township of

1600 (2x800) MW Godda Thermal Power Plant

At

Godda Taluka, District- Godda
Jharkhand

Submitted to:

Integrated Regional Office, Ranchi
Ministry of Environment, Forest and Climate Change
State Level Environment Impact Assessment Authority
Central Pollution Control Board, New Delhi &
Jharkhand State Pollution Control Board, Ranchi

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Submitted by:

Environment Management Department

Adani Power (Jharkhand) Limited

Motia, Patwa & adjacent village,
Godda Taluka, Godda District
Jharkhand

Period: October'2023 to March'2024

CONTENTS

Adani Power (Jharkhand) Limited

Introduction

Adani Power (Jharkhand) Ltd. AP(J)L, a wholly owned company of Adani Power Limited has established 1600 (2x800) MW Coal-based Ultra Supercritical Thermal Power Plant at Village Motia, Patwa and adjacent villages of Godda & Poraiyahaat Blocks of Godda District in Jharkhand. The power plant is based on Ultra-Supercritical, energy efficient & environment friendly technology.

AP(J)L has been granted Environmental Clearances & Consent (CTE/NOC) followed by Consent to Operate (CTO) to Establish by Ministry of Environment & Forest and Jharkhand state Pollution Control Board and AP(J)L has also obtained all necessary statutory / mandatory clearance respectively.

India and Bangladesh desire to enhance traditional ties of friendship, through economic cooperation. Realizing the ever-increasing demand of electricity for the socio-economic development and progress, the Government of India (GoI) and Government of Bangladesh (GoB) have signed a Memorandum of Understanding (MoU) on 11 January'2010.

As provided in the MoU, GoB and GoI shall inter-alia undertake to encourage and facilitate joint co-operation between the parties in Power generation, transmission, energy efficiency and development of various types of renewable energy business.

Accordingly, Adani Power Limited (APL) on 11.08.2015 signed a MoU with Bangladesh Power Development Board (BPDB), to develop a 2X800 MW thermal power plant on BOO basis in India and supply the entire power generated to Bangladesh Power Development Board (BPDB) through a dedicated Transmission Line.

Adani Power (Jharkhand) Ltd. has been granted Environment Clearances (EC) for Residential Complex from State Environment Impact Assessment Authority (SEIAA), Jharkhand vide letter no. EC/SEIAA/2017-18/2070/2017/207 dated 31.08.2018.

Consent to Establish (CTE): Consent to Establish (CTE/NOC) issued from Residential Complex Jharkhand State Pollution Control Board vide letter no.: JSPCB/HO/RNC/CTE-3502450/2018/1117 dated: 01.11.2018.

Consent to Operate (CTO): Consent to operate renewed by JSPCB for residential township vide letter no. JSPCB/HO/RNC/CTO-16595623/2023/1464 DATED 19.08.2023 valid till 30.09.2025.

Adani Power (Jharkhand) Limited

Compliance status of Environmental Clearance

Residential Township for Godda Thermal Power Plant

Vide letter no: **EC/SEIAA/2017-18/2070/2017/207 dated 31.08.2018.**

Sl. No.	Specific Conditions	Compliance Status
PART – A. SPECIFIC CONDITIONS		
1	This Environmental Clearance is valid subject to the following condition below- That this project has - a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.	Agreed & being complied. Applicable legal rights obtained to operate residential township.
PART B - GENERAL CONDITIONS		
1. Pre- Construction Phase		
i.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.	Complied Required hutment, drinking water, medical facilities and other infrastructure were provided within the site during construction phase. Local manpower was preferred during Construction phase & Photographs of infrastructure facilities submitted with previous compliance report.
ii.	Provision of drinking water, wastewater disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.	Complied. Required basic amenities like Drinking water facility, Sanitation facility, cleaning of construction camps, Wastewater disposal, solid wastes management and primary health facilities was already ensured during project construction phase.
iii.	Adequate safety measures shall be adopted for the construction workers.	Complied. Fire & Safety Management Plan had already been submitted with compliance report of October 2018 to March 2019.
iv.	All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.	Complied. Before deploying construction manpower at site, proper health check-up, vertigo test (for height work) and induction program on safety carried out on regular basis.
v.	Fencing of the project boundary before start of construction activities.	Complied. Boundary wall of the project (residential Township) was completed before construction.

vi.	Use of energy efficient construction materials shall be ensured to achieve the desired thermal comfort.	Complied. LED lights, Fly Ash bricks and aerated concrete blocks are used in construction of Township. Photographs already submitted with previous compliance report.
vii.	Use of fly ash-based bricks/blocks/tiles/ products shall be explored to the maximum extent possible.	Complied. We have put our best efforts and used fly Ash based bricks, AAC blocks and pavers to the extent maximum for the construction of residential township. Photographs were submitted along with last compliance report**.**
viii.	Layout of proposed buildings and roads within premises etc. shall be made in such a way that it shall cause minimum disturbance to existing flora and fauna. Appropriate green belt shall be developed to compensate the habitat loss of tree cutting (if any) from competent authority as per prevailing Act/Rules. The exotic species existing within the existing premises, if any, shall be protected. The greening programme shall include plantation of both exotic and indigenous species.	Complied. As such there was no wild species (flora and fauna) in the project however layout has been designed keeping greenbelt requirement to the maximum extent possible which includes both exotic and indigenous species. Green belt development completed, and details enclosed as **Annexure – III**.
ix.	Dedicated pedestrian paths shall be provided along the proposed Buildings. Appropriate access shall be provided for physically challenged people in the Pedestrian Paths.	Complied. Dedicated pedestrian paths provided along the buildings. Required access (elevator) provided for physically challenged peoples.
x.	The design of service roads and the entry and exit from the buildings shall conform to the norms & standards prescribed by the State Public Works Department.	Complied. Proper entry and exit from buildings are maintained.
xi.	The road system shall have the road cross sections for general traffic, exclusive ways for public mass transport (bus) system, pedestrian paths and ways, utility corridors and green strip.	Complied. Access Road constructed and parking space provided. Green strips developed. Please refer **Annexure- III** for green belt development**.**
xii.	Topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site. Balance top soil should be disposed at in planned manner for use elsewhere adequate erosion and sediment control measures to be adopted before ensuring construction activities.	Complied. Excavated topsoil has been utilized in surface levelling for internal road construction, landscaping and Horticulture activities.
xiii.	Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans including topsoil should be developed prior to beginning of demolition and construction	Complied. This is greenfield / new construction project and had no establishment present at site hence, there was no scope for any demolition.

<table>
<tr><td></td><td>activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.</td><td>Efforts were taken to reduce the quantity of the generated waste by judicious use of the resources while project construction.

Mechanical equipment had been engaged for handling and movement of materials to avoid human handling. This ensured that there were no spillages on the ground. AAC blocks (fly ash based) being used for construction which also generate meagre quantity of waste as compared to conventional red bricks.

Therefore, waste generated during construction phase was minimum and managed effectively by utilizing in surface levelling for internal road construction and Horticulture activities.</td></tr>
<tr><td>xiv.</td><td>Disposal of muck including excavated material during construction phase should not create any adverse effects in the neighbourhood and the same shall be disposed of taking the necessary precautions for general safety and health aspects.</td><td>Complied

Suitable measures were ensured to manage the muck / excavated material. Excavated materials utilized in filling & surface levelling for internal road construction and Horticulture activities.

Precautionary actions such as pest control are taken care for health and safety aspects. Time to time sanitization and vaccinations (with booster dose) also ensured to combat COVID – 19 pandemics during COVID.</td></tr>
<tr><td>xv.</td><td>The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which should in the vernacular language, informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority, Jharkhand and the same matter also be sent to Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.

The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Ranchi.</td><td>Complied.

EC advertisement had already been circulated in below mentioned Newspapers.

<table>
<tr><th>Name of Newspaper</th><th>Dated</th><th>Pg.no</th></tr>
<tr><td>Dainik Jagaran Godda, Bhagalpur</td><td>11-9-2018</td><td>04</td></tr>
<tr><td>The Times of India, Ranchi</td><td>11-9-2018</td><td>03</td></tr>
<tr><td>Hindustan Deoghar</td><td>11-9-2018</td><td>05</td></tr>
<tr><td>Prabhat Khabar Deoghar</td><td>11-9-2018</td><td>05</td></tr>
</table>
Copy of EC advertisement has already submitted along with compliance report for the period of October 2018 to March 2019.</td></tr>
</table>

xvi.	Risk assessment study along with Disaster Management Plan (DMP) shall be prepared. The mitigation measures for disaster prevention and control shall be prepared and get approval from competent authority. All other statutory clearances/licenses/permissions from concerned State Governments Departments, Boards and Corporations shall be obtained for directions issued by Central Government/State Government, Central Pollution Control Board/Jharkhand State Pollution Control Board.	Complied Necessary NOC, clearances & permissions has already been obtained. Fire & Safety Plan & Disaster Management Plan (DMP) has already been submitted along with compliance report for the period of October 2018 to March 2019.
xvii.	Baseline Environmental Condition of Project area i.e. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples should be conducted and report should be submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi prior to start of construction activities.	Complied. Baseline Environmental Monitoring Report as per NAAQS 2009, Ambient Noise Level & Analysis of Ground/surface Water Samples already submitted to SEIAA, Jharkhand. Monthly Monitoring report also being submitted regularly to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and JSPCB, Dumka. Environmental Monitoring Report is enclosed as **Annexure -I**
II. Construction Phase		
i.	It shall be ensured that the construction debris is properly stored on the site prior to disposal. Such requirements shall be made part of the contractor agreement.	Complied. Excavated material has been utilized in landscaping & surface levelling for internal road construction and Horticulture activities.
ii.	All the topsoil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site. Proper erosion control and sediment control measures shall be adopted.	Complied. Excavated topsoil were utilized suitably at site for development of horticulture/ landscape & road construction.
iii.	Earth material generated from excavation shall be reused to the maximum possible extent as filling material during site development. The construction debris and surplus excavated material shall be disposed off by mechanical transport through the Ranchi Municipal Corporation.	Complied. Excavated soil has been reused suitably within project premises in filling and surface levelling for internal road construction and Horticulture activities.
iv.	Disposal of muck, including excavated material during construction phase, shall not create any adverse effects on the neighbouring communities and shall be disposed off taking the necessary precautions for general safety and health aspects.	Complied. Suitable measures were taken to manage the muck / excavated material. Necessary precautionary actions taken to take care of health and safety aspects and no adverse effect on neighbouring community was observed during construction phase.

v.	Low Sulphur diesel generator sets should be used during construction phase. Diesel generator sets during construction phase shall have acoustic enclosures and shall conform to Environment (Protection) Rules, 1986 prescribed for noise emission standards.	Complied during construction stage.
vi.	All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.	Complied. PUC records of deployed vehicles were ensured while project construction phase.
vii.	Ambient noise levels shall confirm to the standards prescribed by MoEF&CC, Govt. of India.	Monitoring of noise level are being carried out and results are well within the stipulated norms. Environmental Monitoring report is enclosed as **Annexure -I**
viii.	The protective equipment such as nose mask, earplugs etc. shall be provided to construction personnel exposed to high noise levels.	Complied. Safety PPEs/ gadgets were provided during construction stage.
ix.	Construction spoils, including bituminous material and other hazardous materials including oil from construction equipment must not be allowed to contaminate soil/ground water. The dumpsites for such material must be secured so that they shall not leach into the ground water.	Complied. Excavated Soil and Construction debris generated from construction activities was stored within the project site. It was ensured that construction spoils, including bituminous material and other hazardous materials including oil etc. doesn't contaminate watercourses. The dumpsites for such material are secured so that it will not leaching into the ground water. The storage Diesel drums were kept on the Secondary Containments to prevent contamination of land and protect natural resources.
x.	Proper and prior planning, sequencing and scheduling of all major construction activities shall be done. Construction material shall be stored in covered sheds. Truck carrying soil, sand and other construction materials shall be duly covered to prevent spilling and dust emission. Adequate dust suppression measures shall be undertaken to control fugitive dust emission. Regular water sprinkling for dust suppression shall be ensured.	Complied. Construction materials were stored in covered shed and transportation of materials by covered vehicles ensured during construction stage. Pucca road and pavement is constructed to prevent fugitive dust emission. Water sprinkling for dust suppression was provided regularly during construction stage.
xi.	Use of Ready-Mix concrete is recommended for the project.	Complied. Ready-Mix concretes had been used for concreting during construction phase.

xii.	Accumulation/stagnation of water shall be avoided ensuring vector control.	Complied. Necessary drainage is constructed to avoid accumulation / stagnation of water.
xiii.	Regular supervision of the above and other measures shall be in place all through the construction phase so as to avoid disturbance to the surroundings.	Complied. Regular supervision/monitoring already ensured to avoid any disturbance to the surroundings during construction phase.
xiv.	Water during construction phase should be preferred from Municipal supply.	Complied. Water Resource Department, Govt. of Jharkhand has granted construction water allocation/permission from Liljhi River during construction phase.
xv.	All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied.	Noted and Compliance assured.
xvi.	Unskilled construction labourers shall be recruited from the local areas.	Complied during construction phase.
xvii.	Provisions shall be made for the integration of solar water heating system.	Noted & being implemented. Provisions has been kept for solar water heating system.
xviii.	Provision of vermin-composting for the biodegradable solid wastes generated from the proposed extension buildings as well as the large amount of biomass that shall be available from the tree plantation shall be made.	Vermicomposting program enables farmers to uplift their socio-economic condition in more than 13 villages. Since F.Y 22-23, over 68 small and marginal farmers were supported with 83 units of vermi bed along with organic farming training to 350 new farmers. So far 700 small & marginal farmers were supported to install 457 Vermicompost units. Detailed CSR report is enclosed **as Annexure- III.**
xix.	Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.	Being complied. Ground water monitoring is being carried out by NABL accredited third party consultant, monitoring report is enclosed as **Annexure-I**
xx.	Permeable (porous) paving in the parking areas, and walkways should be used to control surface runoff by allowing storm water to infiltrate the soil and return to ground water.	Complied. Permeable (porous) Paving in parking areas has been implemented.
xxi.	All intersections shall be designed and developed as roundabouts.	Complied. Main intersection of township has been designed and developed as roundabout.
xxii.	All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.	Complied. Utility lines laid below ground level.

xxiii.	The road drainage shall be designed to enable quick runoff of surface water and prevent water logging.	Complied. Road drainage has been completed for quick runoff to prevent water logging.
xxiv.	Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forest Government of India shall be adopted.	Complied Adequate parking space provision has been provided in the Residential Township.
xxv.	Rest room facilities shall be provided for service population.	Complied. Adequate number of rest rooms are constructed for service population.
xxvi.	Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & Jharkhand State Pollution Control Board (J.S .P.C.B.), Ranchi.	Being Complied. Monitoring Environmental parameters of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground/surface Water Samples & DG Stack monitoring being carried out by NABL accredited third party consultant. Environmental monitoring reports being submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and JSPCB, Dumka on monthly basis as well as with six monthly Environment Clearance compliance report. Environmental Monitoring Report enclosed as **Annexure –I**
	Water Body Conservation	
i.	Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.	There is no water body within premises of residential complex.
ii.	Improvement or rehabilitation of existing nallas (if any) shall be carried out without disturbing the ecological habitat.	There is no nalla within residential complex premises.
III. Post Construction/Operation Phase		
i.	The environmental safeguards and mitigation measures contained in the application shall be implemented in letter and spirit.	Complied. • Solid waste handling facilities such as waste bins (Biodegradable and No-biodegradable) across the buildings are provided. • STP is operational to treat domestic sewage and treated wate being utilized for Green Belt Development. • Roads, Drains & Rainwater Harvesting ponds are constructed.

		• Green Belt development and being maintained. • Drip irrigation system established to save water.
ii.	All the conditions, liabilities and legal provisions contained in the Environmental Clearance shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity. Ground water shall not be abstracted without prior permission from the competent authority.	Water requirement of residential township being met from the water treatment plant of Thermal Power Plant.
iii.	The storm water management plan shall be implemented in such a manner that the storm water is discharged though an existing dedicated Storm Water Outfall only.	Complied. Adequate storm water drainage established in residential township.
iv.	The height of the stack of the DG sets should be as per norms of Central Pollution Control Board (C.P.C.B.), New Delhi.	Complied. DG set stack height maintained as per the norms. photograph evidence already submitted with previous compliance report.
v.	Medical (First-Aid) facility must be provided for visitors & employees. Para-medical staff should be attached as Medical facility provider.	Complied. Medical (First Aid) facility available for visitors and employees. Authorization of BMW (Non-bedded) issued from JSPCB vide letter no. JSPCB/RO/DMK/BMW-9456865/ 2021/8 dated 05.03.2021.
vi.	Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of available indigenous, fast growing and sturdy species of trees, shrubs and herbs. Preferential plantation of flowering trees with less timber and fruits value shall be carried out.	Complied. Plantation and green carpeting developed is about 33% area. Indigenous, fast growing species with good aesthetic look used for plantation. Apart from above, we are also doing plantation in surrounding area (outside township) in terms of Avenue Plantation and distribution of saplings to villagers, which will help to enhance green cover in the surroundings. Green Belt photographs with species details are enclosed as **Annexure – III.**
vii.	Two chambered container or two separate containers (one for recyclable wastes and other for all organic and compostable wastes) shall be placed at appropriate distance on the roadsides and inside the building. Covered dustbins/garbage collector in convenient places to collect the Municipal solid wastes shall be provided.	Complied. Separate covered dust bins for Bio-degradable and non-biodegradable waste provided in proximate to each building and being disposed-off as per MSW – Rule 2016. photograph evidence already submitted with previous compliance report.

viii.	Proper composting / vermi-composting of municipal solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).	Compliance assured. Separate covered dust bins for Bio-degradable and non-biodegradable waste provided in proximate to each building and being disposed-off as per MSW – Rule 2016.
ix.	The use of hand gloves, shoes and safety dress for all waste collectors and sorters shall be enforced	Complied. Use of mask, hand gloves, shoes and safety dress (reflecting jackets) by waste collectors are being ensured.
IV. Entire Life of the Project		
i.	The project proponent should implement Environmental Monitoring Programme as per details submitted in EMP.	Being complied. Environmental monitoring reports being submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and Dumka on monthly basis.
ii.	No expansion/modification activity should be carried out obtaining prior Environmental Clearance as per EIA Notification 2006.	Noted & Agreed Clearance & permission will be taken from respective authority before making any changes / modification/expansion in future, if required.
iii.	Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stock Emissions & Testing of emission from DG sets should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & JSPCB, Ranchi.	Being Complied. Monitoring of AAQM as per NAAQS 2009 & Monitoring of Ambient Noise Level, Analysis of Ground/surface Water Samples & DG set Stack monitoring are being carried out by third party NABL approved consultant. Environmental monitoring reports being submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and Dumka on monthly basis. Environmental Monitoring reports enclosed as **Annexure-I**
PART C- SPECIFIC CONDITIONS		
I. Pre-Construction Phase		
i.	Project Proponent should obtain prior consent to establish (NOC) under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act' 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act' 1981 from State Pollution Control Board before start of construction activities.	Complied. JSPCB has granted Consent to Establish/NOC vide letter No. JSPCB/HO/RNC/CTE-3502450/ 2018/ 1117 dated- 01.11.2018. Consent to operate renewed by JSPCB for residential township vide letter no. JSPCB/HO/RNC/CTO-16595623/2023/1464 DATED 19.08.2023 valid till 30.09.2025.

ii.	It was also advised that CSR activity of the Project Proponent should be measurable and quantifiable, and it should be visible even after the completion of the project. The Project Proponent was also directed to deposit 10% of the CSR cost (2.5% of the total project cost). The security deposit is imposed to ensure the proper performance/ implementation of the committed CSR activities.	Being complied. CSR progress & implementation Report along with CSR activities is enclosed as **Annexure – II.**
iii.	Project Proponent should obtain prior permission for ground water withdrawal from CCWA/CGWB if applicable.	Noted Water requirement of residential township being met from the water treatment plant of Thermal Power Plant. Prior permission for ground water withdrawal from CCWA/CGWB will be taken if ground water required for domestic purpose.
iv.	Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.	Buildings are designed as per seismic regulations.
v.	Use of energy efficient construction materials to achieve the desired thermal comfort shall be incorporated. The desired level of roof assembling "U" factor and insulation "R" value must be achieved. Roof assembling "U" factor for the top roof shall not exceed 0.4 watt/sq.m./degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 shall be strictly followed.	Complied. Buildings are designed as per National Building code 2005 provision for thermal comfort and roof insulation done for better energy efficiency.
vi.	Street/Corridor lighting shall be energy efficient. The High-Pressure Sodium Vapour (HPSV) Lamps & Compact Fluorescent Lamps (CFL) along Building premises shall be provided. High intensity, high mast lights to be installed at few strategic points. Solar energy may be used for outdoor lighting.	Complied. In place of HPSV & CFL, latest LED lightings are used in building premises which will reduce power load and conserve energy.
vii.	Reduction of hard paving-onsite (Open area surrounding all buildings) and/or provision of shades on hard paved surfaces to minimize heat island effect and imperviousness of the site should be undertaken.	Complied.
viii.	All proposed air/conditioned buildings should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency.	Being followed. Thermal comfort of building and energy efficient lighting and electrical system being ensured as per ECBC regulations.

ix.	Monitoring of AAQ as per NAAQs 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets should be conducted, and reports should be submitted on monthly basis to State Pollution Control Board (SPCB).	Being complied Monthly Environmental Monitoring report is being submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and JSPCB, Dumka. Monitoring reports are enclosed as **Annexure –I**
x.	Project proponent shall install Wind Augmentation and Air Purifying Unit (4 Units at one location in Godda) on Pilot basis to deal with particulate matter pollution.	At present water sprinkling and sweeping of pucca roads is being done to control dust and particulate matter at site. Options shall be explored for Wind Augmentation and Air Purifying Units on pilot basis to deal with particulate matter, if required.
II. Construction Phase		
i.	All the conditions laid down in NOC issued by SPCB should be strictly complied with during entire construction cycle of the Project.	Being Complied. Consent to operate renewed by JSPCB for residential township vide letter no. JSPCB/HO/RNC/CTO-16595623/2023/1464 DATED 19.08.2023 valid till 30.09.2025.
ii.	The water treatment plant shall be provided for treatment of water. The treatment shall include screening, sedimentation, filtration and disinfections. Appropriate arrangement shall be made for treatment and reuse of backwash water of filtration plant.	Complied Sewage treatment plant has been installed which includes screening, sedimentation, filtration and disinfection. Treated water from STP being used for Horticulture /plantation through automated irrigation system.
iii.	Project proponent shall 'provide adequate measuring arrangement at the inlet point of water uptake and at the discharge point for the measurement of water utilized in different categories and monitoring daily water consumption.	Being complied. Monitoring of daily water (domestic) consumption ensured.
iv.	Regular water sprinkling shall be done all around the site to minimize fugitive dust emission during construction activities.	Complied during construction phase. Water sprinkling was provided to all around the site to minimize fugitive dust emission during construction phase.
v.	Rainwater harvesting structures should be provided as per submitted Plan.	Complied. Rainwater harvesting (RWH) system for roof run-off and surface run-off has been designed and implemented. For roof top rainwater collection, all the water from roofs are collected through roof water drainage pipe and discharge in to storm water drain. The storm water drainage systems are connected to Rain- Water Harvesting ponds for reuse. Photograph

		evidence already submitted with previous compliance report.
III. Post Construction/Operation Phase		
i.	Project Proponent should obtain prior consent to operate under Air Act, 1981 & Water Act, 1974 from State Pollution Control Board before commissioning of the project.	Complied. Consent to operate obtained from JSPCB before commissioning of residential township vide letter no. JSPCB/HO/ RNC/CTO-8554195/2020/1597 DATED 29.09.2020. The same is renewed by JSPCB vide letter no. JSPCB/HO/RNC/CTO-16595623/2023/1464 DATED 19.08.2023 valid till 30.09.2025.
ii.	Water saving practices such as usage of water saving devices/fixtures, low flushing systems, sensor-based fixtures, auto control walls, pressure reducing devices etc. should be adopted.	Noted. As a water saving practices, we have opted for water saving fixtures and low flushing system.
iii.	Water budget should be adopted as per the plan submitted in the supplementary Form-I A & EMP.	Noted and agreed.
iv.	All the generated domestic effluent should be sent to ETP/STP for treatment & further recycling & reuse.	Being Complied. Sewage Treatment Plant established to treat domestic wastewater and treated water is being utilized for plantation/green belt development.
v.	Treated water recovered from STP would be used for flushing the toilets, gardening purpose, make up water in air conditioning systems, etc. As proposed, Fluidized Bed Reactor (FBR) type sewage treatment plant should be installed. The Sewage Treatment Plant shall be ensured before the completion of Building Complex.	Complied. FBR type STP established in township. Dual Flushing system / plumbing is provided. Treated water from STP being used in Gardening/plantation.
vi.	Rainwater from open spaces shall be collected and reused for landscaping and other purposes. Rooftop rainwater harvesting shall be adopted for the proposed Buildings. Every building of proposed extension project shall have rainwater-harvesting facilities. Before recharging the surface runoff, pre-treatment must be done to remove suspended matter and oil and grease.	RWH plan is implemented, and provision kept for collected rainwater to reuse for landscaping.
vii.	Municipal solid wastes generated in the proposed extension buildings shall be managed and handled in accordance with the compliance criteria and procedure laid down in Schedule- II of the Municipal Wastes (Management and handling) Rules, 2000 (As amended).	Being complied. Separate covered dust bins for Bio-degradable and non-biodegradable waste placed in proximate to each building and being disposed-off as per Municipal Wastes (Management and handling) Rules.
viii.	The standard for composting & treated leachates as mentioned in Schedule-IV of the Municipal Wastes (Management and handling) Rules, 2000 (As amended) shall be followed.	Noted We have tied up with private participation who is segregating and recycling all the recyclable waste such as newspaper,

		aluminium cans, glass bottles, iron scrap and plastics etc. and dispose-off through solid waste management facility developed at Godda.
ix.	All hazardous wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Hazardous Wastes (Management and Handling) Rules, 1989 (As amended).	Not applicable under Schedule – I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and as amended.
x.	Recycling of all recyclable wastes such as newspaper, aluminium cans, glass bottles, iron scrap and plastics etc. shall be encouraged through private participation. Project proponent shall take appropriate action to ensure minimum utilization of plastic carry bags and plastic small containers etc. within the proposed buildings shall be ensured.	Noted & being complied. We have tied up with private participation who is segregating and recycling all the recyclable waste such as newspaper, aluminium cans, glass bottles, iron scrap and plastics etc. and dispose off through solid waste management facility developed at Godda.
xi.	Project proponent shall operate and maintain the sewage collection/conveyance system, sewage pumping system and sewage treatment system regularly to ensure the treated water quality within the standards prescribed by Ministry of Environment and Forests, Government of India.	Noted and being followed. Treated water quality is well within the norms. Analysis report enclosed as **Annexure – I.**
xii.	Properly treated and disinfected (Ultra-Violet Treatment) sewage shall be utilized in flushing the toilets, gardening purpose, make up water in air conditioning systems etc.	Being complied Properly treated and disinfected (Hypochlorite Treatment) sewage being utilized in gardening.
xiii.	Non-mixing of faecal matter with the municipal solid wastes shall be strictly ensured.	Noted & complied.
xiv.	Non-mixing of sewage/sludge with rainwater shall be strictly ensured.	Complied Separate closed sewerage system established, and separate storm water drain is established.
xv.	Noise barriers shall be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. D.G. sets shall be provided with necessary acoustic enclosures as per Central Pollution Control Board norms.	Being Complied We ensured that noise level do not exceed the prescribed standards. Also, DG set provided only for emergency power back up purpose during blackouts and the chances of same is very remote.
xvi.	Back up supply shall be based on natural Gas/cleaner fuel subject to their availability.	Noted.
xvii.	The project proponent shall resort to solar energy at least for street lighting and water heating for Proposed Building Complex, gardens/park areas.	Complied 06 nos. of Solar Street Lights are Installed, and photographs are attached as **Annexure-IV.**

xviii.	During maintenance, energy efficient electric light fittings & lamps- low power ballasts, low consumption high power luminaries, lux level limiters & timers for street lighting shall be provided.	Complied. Energy efficient equipment's/light (LED) installed. LDR/Timer are provided in streetlights
xix.	A report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, "R" and "U" factors etc.	Buildings are designed as per National Building code 2005 provision for thermal comfort and roof insulation done with provision for better energy efficiency
xx.	Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets & Testing of Untreated & treated effluent samples of STPs should be conducted and report should be submitted on monthly basis to SPCB.	Being complied. Monitoring of AAQM as per NAAQS 2009 & Monitoring of Ambient Noise Level, Analysis of Ground/surface Water Samples are being carried out by third party NABL approved consultant. Environmental monitoring reports being submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi and JSPCB, Dumka on monthly basis. DG set is only for emergency back up and DG stack monitoring report is enclosed as **Annexure –I**
IV. Entire Life of the Project		
i.	All the conditions laid down in NOC & consent to operate issued by SPCB should be strictly complied with during entire life cycle of the project.	Noted & Compliance assured.
ii.	Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG Sets & Testing of Untreated & treated effluent samples of STPs should be conducted and reports should be submitted 'on monthly basis to SPCB.	Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, STP water analysis being carried out and report submitted to SEIAA Jharkhand and JSPCB Ranchi and Dumka on monthly basis. DG set provided only for emergency power backup purpose during blackouts and the chances are very remote. However, DG set stack emission monitoring also done, and report included under environmental monitoring reports. Environmental Monitoring reports is enclosed as **Annexure-I**
iii.	The project authorities shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPC rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.	Treated STP water is well within the stipulated norms. DG set provided only for emergency power backup purpose during blackouts and the chances are very remote. However, DG set stack emission monitoring also done, and report included under environmental monitoring reports.

iv.	The overall noise levels in and around the project area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules 1989 viz. 75 DBA (day-time) and 70 DBA (night-time).	Being complied. Noise level being maintained well within the stipulated norms prescribed under EPA Rules 1989 viz. 75 DBA (daytime) and 70 DBA (nighttime). Monitoring reports enclosed as **Annexure – I**
v.	The project authorities shall provide requisite funds for both recurring and nonrecurring expenditure to implement the conditions stipulated by SEIAA, Jharkhand with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Noted & Compliance assured. Separate fund has been earmarked for environment management.
vi.	Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of available indigenous, fast growing and sturdy species of trees, shrubs. 15% of the total plot area shall be used for plantations.	Complied. More than 33% area covered under Green Zone. Green belt / plantation developed along with project construction & during operation and efforts are made to develop more greenery in & around the residential township with survival rate of more than 80%. Apart from above, we are also doing plantation in surrounding area in terms of Avenue Plantation and distribution of saplings to villagers, which will help to enhance green cover in the surroundings. Greenbelt details is enclosed as **Annexure -III.**
vii.	Whenever developer will hand over building to the society, the developer must mention in the agreement or sale deed that 15% green belt area of total plot area should mentioned & Environmental Conditions given by SEIAA, Jharkhand has to be complied.	Complied. Green belt developed in 33% of total plot area. Green belt details are enclosed as **Annexure -III.**
viii.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.
ix.	The funds earmarked for the environmental protection measures shall not be diverted for other purposes.	Noted & being complied.
x.	In case of any changes in the scope of the project, the project shall require a fresh appraisal by the SEAC/SEIAA.	Noted & agreed

xi.	The SEAC/SEIAA, Jharkhand will have the right to amend the above conditions and add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted & agreed
xii.	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF&CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.	Being complied. Last six-monthly compliance report for the period of April'2023 – September'2023 submitted vide. Letter no. APL/APJL/EMD /EC/MoEFCC/213/11/23 dated 23.11.2023.
xiii.	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal (NGT), if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.	Noted.

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Annexure - I

HALF YEARLY ENVIRONMENTAL MONITORING REPORT

(PERIOD- OCTOBER' 2023 TO MARCH' 2024)

Submitted TO:

ADANI POWER (JHARKHAND) LTD.

2X800 MW GODDA THERMAL POWER PLANT

VILLAGE: MOTIA, DISTRICT-GODDA, JHARKHAND

PREPARED BY:

M/s Vibrant Techno Lab Pvt. Ltd.
Add: SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road
Jaipur (Rajasthan)
(Recognized by MoEF & CC, NABL Government of India)

FOREWORD

Electric Power scenario has occupied a significant place in the development program of the country. The growing concern for environment protection and enforcement of stringent environmental legislations have increased the responsibilities of both the governing bodies as well as the industries. Hence environmental protection plays a crucial role in maintaining the local environment quality for any industry, throughout their production processes. Hence compliance of the statutory requirements becomes very important to conserve the ecological balance within and surrounding the plant area. Therefore, environmental protection is becoming a prerequisite for sustainable development.

However, the prerequisite for sustainable development is judicious planning of environmental status, likely impacts of the approach adopted on the environment including inhabitants of the locality, availability of the eco-friendly technology, emerging waste disposal and waste utilization processes, techniques of land reclamation for the restoration of aesthetic beauty and adoption of cleaner technologies for power generation.

Adani Power (Jharkhand) Ltd. is a 2x800 MW Godda Thermal Power Plant Located at Village: Motia, District-Godda, Jharkhand, India, has engaged **M/s Vibrant Techno lab Pvt. Ltd. (Raj.)** to provide Environmental Monitoring Services for ambient air quality monitoring, stack emission monitoring, noise level monitoring & Sampling and Analysis of ground water quality, surface water quality, treated effluent, sewage, waste water from ETP, and soil Quality as per prevalent guidelines notified by MoEF & CC an CPCB time to time.

This report presents a summary of the monitoring and analysis data generated for the period from Oct 2023 to Mar 2024 i.e., for 2nd half of the FY' 23-24.

During the entire monitoring work for the above task, the staff and management of Adani Power (Jharkhand) Ltd. were extremely co-operative. We are grateful to them for their invaluable support and assistance rendered to us during the course of the sampling and monitoring.

Date: 12.04.2024

Authorized Signatory

VIBRANT TECHNO LAB PRIVATE LIMITED ★ JAIPUR

INDEX

SECTION 1: LIST OF EQUIPMENTS

The list of Equipments used in the project is delineated in the table as below.

SR. No.	NAME OF EQUIPMENTS	MAKE/MODEL
1.	Respirable Dust Sampler	Enviro Instruments EI-142
2.	Fine Particulate Sampler	Enviro Instruments EI-133
3.	Gaseous Sampling Attachment	Enviro Instruments EI-061
4.	Sound Level Meter	Mextech
5.	Stack Monitoring kit	Enviro Instruments EI-106
6.	Combo Sampler	Enviro Instruments EI-205
7.	Digital Balance	Dig. Thermo Hygrometer
8.	UV Visible Spectrophotometer	Systronics.,117
9.	Hot Air Oven	Smita Scientific, Cat. No. SHAO-2S/G
10.	Bacteriological Incubator	Smita Scientific, Cat. No. SLBI-2
11.	pH Meter	Systronics.,361
12.	Dissolved Oxygen Test Kit	Lutron
13.	Autoclave Automatic	Smita Scientific, Cat. No. SAUV-2
14.	Horizontal Laminar Air Flow	Smita Scientific, Cat. No. SHLF-1 SG
15.	Muffie Furnace	**Smita Scientific, Cat. No. SMFF-3S/G**
16.	Conductivity Meter	Systronics, 304
17.	Phase Contrast Microscope	Kane International
18.	COD Digester	Smita Scientific, Cat. No. SCOD-3

SECTION 2: LIST OF PROJECT PERSONNEL

S.No.	Name	Qualification	Experience (Yrs.)	Designation
1.	Rajkumar Yadav	MSc. Agriculture	14.5	Lab Incharge QM
2.	Raja Manish	MSc. Organic Chemistry	3.0	Senior Analyst
3.	Rajiv Kumar Das	BSc. Chemistry	2.0	Senior Field Analyst
4.	Umesh Sharma	MSc. Pharmaceutical Chemistry	12.5	Technical Manager

SECTION 3: EXECUTIVE SUMMARY

Adani Power (Jharkhand) Ltd. is a 2x800 MW Godda Thermal Power Plant Located at Village: Motia, District-Godda, Jharkhand, India, has engaged M/s Vibrant Techno lab Pvt. Ltd. (Raj.) to provide Environmental Monitoring Services for ambient air quality monitoring, stack emission monitoring, noise level monitoring & Sampling and Analysis of ground water quality, surface water quality, treated effluent, sewage, waste water from ETP, and soil Quality as per prevalent guidelines notified by MoEF & CC an CPCB time to time.

As per the guidelines, 03 locations have been fixed for Ambient Air Quality Monitoring. Monitoring has been done as per NAAQS 2009 standards and reports are summarized for the period Oct 2023 to Mar 2024. The brief has been discussed in Section-7 of the report. (Analysis report attached as annexure-3A). Stack monitoring and analysis summary has also been presented for the mentioned period and reports are attached. The brief has been discussed in Section-11 of the report. (Analysis report attached as annexure - 3B).

Ground water samples at 04 locations & Surface water sample at 01 location on Quarterly basis. The brief has been discussed in Section-8 of the report (Report attached as Annexure-3C & 3D). Wastewater STP & ETP samples on monthly basis were collected and analyzed to understand the overall water quality of the project area. The brief has been discussed in Section-10 of the report. **(**Analysis report attached as annexure **-**3E**).**

Ambient Noise Monitoring has been performed at 10 locations for day & night which is also within limit. The Summary of the result is presented in Section -09 **(**Monitoring report attached as annexure **-**3E**)**.

SECTION 4: CONCEPT & METHODOLOGY

4. Methodology

In the present study the following are the standard methods used for collection, analysis & interpretation of data:

AAQM Sampling & analysis: "Indian Standards (IS 5182)" "Guidelines for the measurement of Ambient Air Pollutants, Vol-I, CPCB" & "USEPA" methods were used for Ambient Air sampling and analysis for overall air quality status of the plant as well as surrounding area.

PARAMETERS OF AAQM	STANDARDS METHODS
PM10	IS 5182 (P-24):2019
PM2.5	IS: 5182 (P-23), 2006
Nitrogen dioxide (NO_2)	IS: 5182 (P-6), 2006
Sulphur dioxide (SO_2)	IS: 5182 (P-2), 2001
Carbon Monoxide	IS: 5182 (P-10)1999
Ammonia	3rd ed., 1988 Method No.401
Lead	IS: 5182 (P-22): 2004
Benzene	IS: 5182 (P-11), 2006
Benzo-α-pyrene	IS: 5182(P-12), 2004
O_3	IS: 5182(P-9):1974
Nickel	USEPA Compendium IO -3.2, 1999
Arsenic	3rd ed.,1988 Method No.302
Mercury	VTL/STP/02

PARAMETERS OF STACK MONITORING	STANDARDS METHODS
Particulate Matter (PM)	IS: 11255 (P-1): 1985, RA 2019
Oxide of Nitrogen (as NOx)	IS- 11255 (P-7);2005, RA- 2017
Sulphur Dioxide (as SO_2)	IS: 11255(P- 2): 1985, RA 2019
Mercury (Hg)	USEPA 29::1996

Water Sampling & analysis: Similarly, "Indian Standards (IS 3025)", "USEPA" and "APHA 23rd Edition were used for water sample collection and analysis.

PARAMETERS OF WATER SAMPLE	STANDARD METHODS
pH (at 25 °C)	IS 3025 (P-11): 2022
Colour	IS 3025(P-4): 2021
Turbidity	IS 3025 (P-10): 1984, RA: 2017
Odour	IS 3025 (P-5)1983
Taste	IS 3025(P-8) 1984
Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009, RA: 2019
Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019
Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986, RA: 2019
Chloride as Cl	IS: 3025(Part 32):1988, RA:2019
Cyanide as CN	IS: 3025 (P-27)1986
Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019
Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017
Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022
Fluoride as F	APHA (23rd Edition), 4500FD:2017
Nitrate as NO_3	IS: 3025 (P-34): 1988, (Chromotropic Method) RA: 2022
Iron as Fe	APHA (23rd Edition),3113B: 2017
Aluminum as Al	IS 3025 (P-55):2003, RA: 2019
Boron	APHA (23rd Edition) 4500B: 2017
Total Silica	IS: 3025 (P-35):1888,RA: 2003
Phenolic Compounds	APHA 23rd Edition,2017, 5530 C
Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C
Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017
Copper as Cu	APHA (23rd Edition),3113B: 2017
Manganese as Mn	APHA (23rd Edition)3030D,3113B: 2017
Cadmium as Cd	APHA (23rd Edition)3030D,3113B: 2017
Lead as Pb	APHA (23rd Edition)3030D,3113B: 2017
Selenium as Se	APHA (23rd Edition)3114C,2017
Arsenic as As	APHA (23rd Edition),3114C,2017
Mercury as Hg	APHA (23rd Edition)3114C,2017
Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017
Residual Free Chlorine	IS :3025(P-26): 2021
Temperature	IS :3025(P-9):1984, RA:2017
Total Coliform	IS:15185: 2016
E. coli	IS:15185: 2016

PARAMETERS OF STP TREATED & UNTREATED WATER	STANDARD METHODS
pH (at 25 °C)	IS 3025 (P-11): 2022
Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017
Total Suspended Solids	IS 3025 (P-17): 2022
Oil &Grease	IS 3025 (P-39):2021
BOD (3days at 27 °C)	IS 3025(P-44):1984, RA:2019
COD	IS: 3025 (P-58): 2006, RA: 2017

Noise Level Monitoring: "Protocol for Ambient Level Noise Monitoring, IS 9989: RA 2001" was followed to monitor the Ambient Noise level surrounding the Power Plant.

PARAMETERS	STANDARD METHODS
Leq	IS 9989-1981 RA: 2020

A brief account of the methodologies and matrices followed in the present study is given under different headings. All the methods were structured for the identification, collection and organization of environmental impacts data. The information, thus gathered, had been analyzed and presented in the form of a number of visual formats for easy interpretation and decision making.

SECTION 5: PLAN FOR SAMPLING LOCATIONS

The scenario of the Ambient Air Quality in the study region has been assessed through a network of 03 locations of Ambient Air Quality Monitoring. The design of monitoring network in the air quality surveillance program was based on the following considerations.

- Topography / Terrain of the study area.
- Human Settlements
- Wind pattern.
- Health status
- Representation of regional Background levels.
- Accessibility of monitoring site.
- Resource availability.

A synopsis about the locations is as follows:

AAQM LOCATION

- Near Nayabad Village (Close to plant boundary)
- Near Mali Village (Close to plant boundary)
- Near Motia Village (Close to plant boundary)

STACK MONITORING LOCATION

- Unit-01
- Unit-02
- D.G Set Plant
- D.G Set Township

GROUND WATER SAMPLE'S LOCATION (Quartely)

- Mali Village
- Motiya Village
- Naya Bad Village
- Patwa Village

SURFACE WATER SAMPLE (Quarterly)

- Ganga Water

WASTE WATER SAMPLING LOCATION

- STP Outlet (Township)

SECTION-6: METEOROLOGICAL DATA

Weather monitoring would help in keeping track of different parameters like temperature, humidity, rainfall, wind direction, wind speed & barometric pressure. Real time meteorological data is used to support a number of programs including public aviation, agricultural activity, disaster management etc.

Weather monitoring station is installed at APJL, Godda and six months data has been compiled from the online platform of the weather monitoring station installed inside the power plant with the help of Environment Department and average data on monthly basis for ambient temperature, relative humidity, windspeed, barometric pressure, rainfall etc. are presented below.

Meteorological Data (Oct-2023 to Mar-2024)

Month	Wind Speed (m/s)		Temperature (°C)			Humidity (%)			Barometric Pressure (mmHg)	Rainfall (mm)
	Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
Oct'23	11.0	1.4	34.8	19.2	26.5	98.4	42.2	78.6	749.8	94.8
Nov'23	7.6	1.3	31.9	15.8	23.5	95.8	31.8	72.3	752.9	0.4
Dec'23	13.1	1.4	29.6	11.7	19.3	97.1	32.1	71.7	753.9	13.4
Jan'24	8.2	1.3	24.8	6.4	14.8	97.7	36.4	80.2	754.6	1.4
Feb'24	14.3	1.7	29.6	10.4	19.6	100.0	23.0	65.9	753.6	14.4
Mar'24	15.20	1.85	38.16	14.85	24.55	94.96	21.28	57.85	750.86	31.40

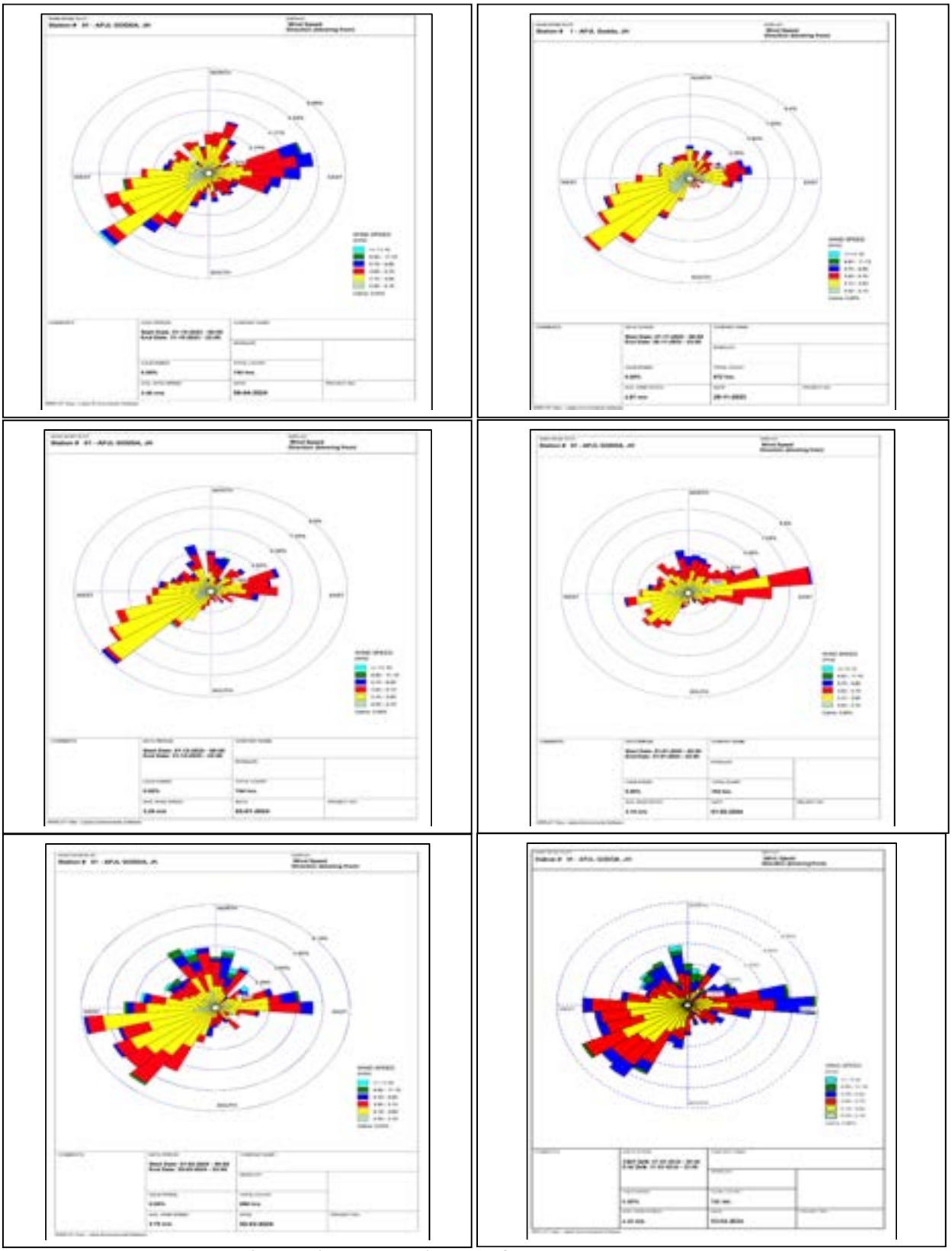


Fig 1: Wind Rose Diagram from Oct 2023 to Mar 2024

SECTION 8: AMBIENT AIR MONITORING REPORT

7.1 Concept & Scope

Ambient Air Quality monitoring encompasses the results and statistical evaluation of the data monitored at 03 different locations.

Different parameters like PM_{10}, $PM_{2.5}$, Oxides of Sulphur, Oxides of Nitrogen and Mercury are monitored for representing the ambient air quality within the study area.

7.2 Frequency of Sampling

The frequency of the sampling for AAQM was as follows:

PARAMETERS	FREQUENCY OF EACH LOCATIONS
PM_{10}, $PM_{2.5}$, Sulphur dioxide, Nitrogen dioxides	Twice in a week
12 parameters as per NAAQS in addition to Mercury	Quarterly
Mercury	Once in a month

7.3 SAMPLING DURATION AS PER NAAQS 2009

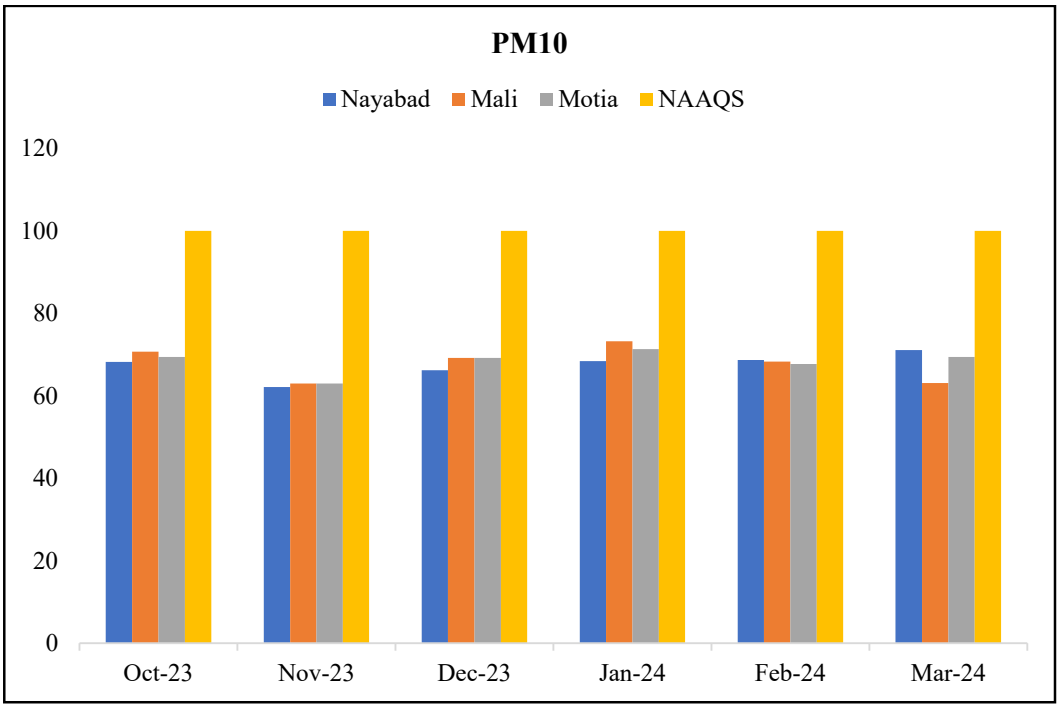
S. No.	Parameters	Sampling Duration (Hr.)
1.	Particulate Matter (PM_{10})	24
2.	Particulate Matter ($PM_{2.5}$)	24
3.	Sulphur dioxide (SO_2)	24
4.	Nitrogen dioxide (NO_2)	24
5.	Mercury	24

7.4 Ambient Air Quality Monitoring METHODOLOGY

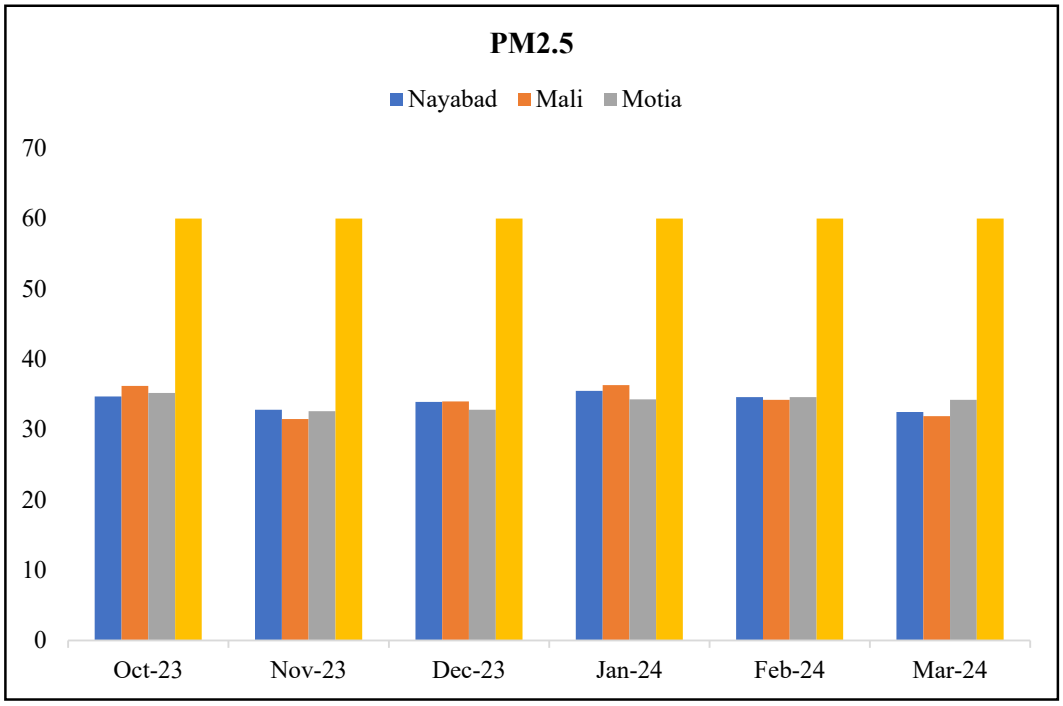
PARAMETERS	METHODOLOGY/PRINCIPLE
Particulate Matter (PM_{10})	Air is drawn through a size-selective inlet and through a 20.3 X 25.4 cm (8 X 10 in) filter at a flow rate, which is typically 1132 L/min. Particles with aerodynamic diameter less than the cut-point of the inlet are collected, by the filter. The mass of these particles is determined by the difference in filter weights prior to and after sampling. The Concentration of PM_{10} in the designated

	size range is calculated by dividing the weight gain of the filter by the volume of air sampled.
Particulate Matter ($PM_{2.5}$)	An electrically powered air sampler draws ambient air at a constant volumetric flow rate (16.7 lpm) maintained by a mass flow volumetric flow controller coupled to a microprocessor into specially designed inertial particle-size separator (i.e., cyclones or impactors) where the suspended particulate matter in the $PM_{2.5}$ size ranges is separated for collection on a 47 mm polytetrafluoroethylene (PTFE) filter over a specified sampling period. Each filter is weighed before and after sample collection to determine the net gain due to the particulate matter. The mass concentration in the ambient air is Computed as the total mass of collected particles in the $PM_{2.5}$ Size ranges divided by the actual volume of air sampled and is expressed in ug/m^3. The microprocessor reads averages and stores five-minute averages of ambient temperature, ambient pressure, filter temperature and volumetric flow rate.
Sulphur Dioxide (SO_2)	Sulphur dioxide from air is absorbed in a solution of potassium tetrachloromercurate (TCM). The impingers setup for the absorbance of Sulphur Dioxide from air is shown in Figure 15. A dichlorosulphitomercurate complex, which resists oxidation by the Oxygen in the air, is formed. Once formed, this complex is stable to strong Oxidants such as ozone and oxides of nitrogen and therefore, the absorber solution may be stored for some time prior to analysis. The complex is made to react with para-rosaniline and formaldehyde to form the intensely colored pararosaniline methyl sulphonic acid. The absorbance of the solution is measured by means of a suitable spectrophotometer.
Nitrogen Dioxide (NO_2)	Ambient nitrogen dioxide (NO_2) is collected by bubbling air through a solution of sodium hydroxide and sodium Arsenite. The concentration of nitrite ion (NO) produced during sampling is determined calorimetrically by reacting the nitrite ion with phosphoric acid, sulfanilamide, and N-(1-naphthyl)-ethylenediamine dihydrochloride (NEDA) and measuring the absorbance of the highly colored azo dye at 540 nm.

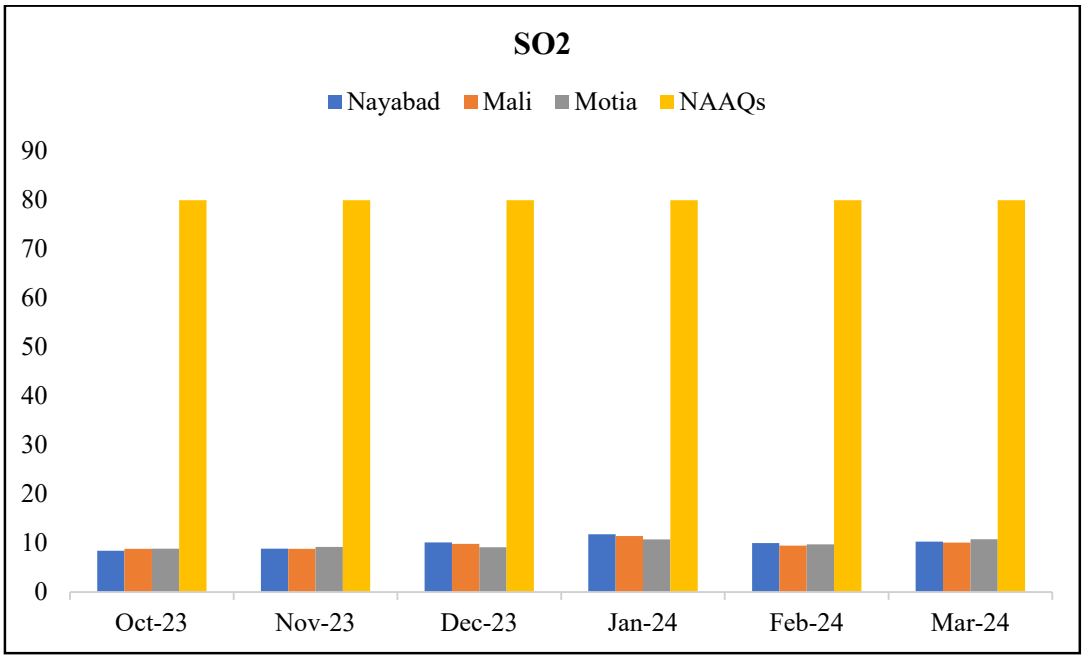
7.5 Graphical Representation



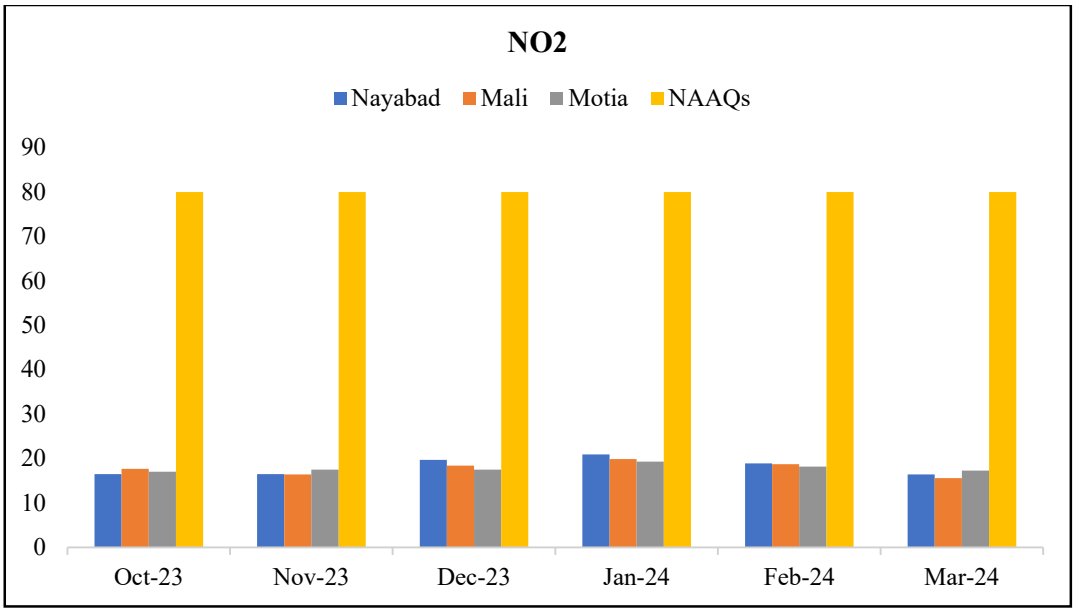
Graph 1: Particulate Matter (PM_{10})



Graph 2: Particulate Matter ($PM_{2.5}$)



Graph 3: Particulate Matter (SO_2)



Graph 4: Particulate Matter (NO_2)

7.6 Summary

From all the above graphical representation it is clearly interpreted that all the values of PM_{10}, $PM_{2.5}$,

SO_2 and NOx were lower than the prescribed limits for all the stated locations.

SECTION 8: GROUND WATER & SURFACE WATER ANALYSIS

Ground water Sample was collected for Four Location & One Surface water Sample Location.

Analysis results of ground water reveal the following:

- pH- 7.32 to 7.47
- TDS- 322 to 425 mg/l
- Fluoride (F) - 0.26 to 0.62 mg/l
- Total Hardness as CaCO3 – 173 to 245 mg/l
- Chlorides- 25.3 to 38.8 mg/l
- Nitrates – 19.5 to 34.5 mg/l
- Iron – 0.19 to 0.28 mg/l

Analysis results of Surface Water reveal the following:

- pH 7.29 to 7.37
- Total Hardness 128 to 148 mg/L.
- Total Dissolved Solids 245 to 328 mg/L.
- Chlorides 35.1 to 39.4 mg/L
- Fluoride 0.30 to 0.33 mg /L
- Nitrate 5.58 to 6.68 mg L
- Iron 0.19 to 0.24 mg/L
    - Ground & surface water sample were found to be slightly Neutral to basic in nature at all location.
    - In study area, water quality has been observed to vary considerably between the sampling locations. Mostly the parameters fall within the permissible limits of drinking water standards (IS 10500:2012).

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TEST REPORT

Name & Address of the Party	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 02**
		Party Reference No.:	**NIL**
Analysis Protocol:	**IS-5182 & CPCB Guidelines**	**Period of Analysis:**	**Oct. 2023 To March 2024**
Parameter Required:	**As per work order**		
Sample Description :	**Ambient Air Quality Monitoring**		

Month	PM2.5 µg/m3 IS 5182 (P-24):2019	PM10 µg/m3 IS: 5182 (P-23), 2006	NO2 µg/m3 IS: 5182(P-6),2006	SO2 µg/m3 IS: 5182(P-2),2001
Near Nayabad Village (Close to Plant Boundary)				
02-03 / 10/2023	20.1	44.8	10.8	5.12
05-06 / 10/2023	22.4	46.2	12.3	6.53
09-10 / 10/2023	34.7	68.2	16.5	8.45
12-13 / 10/2023	32.9	65.4	14.3	7.08
16-17 / 10/2023	29.7	58.9	13.8	6.90
19-20/ 10/2023	30.0	60.5	15.0	7.11
23-24 10/2023	28.7	59.6	14.2	7.00
26-27 / 10/2023	32.1	64.2	14.0	6.58
30-31 / 10/2023	33.2	65.7	16.0	8.00
01-02/11/2023	26.4	52.8	14.7	7.18
03-04/11/2023	28.1	54.8	15.8	7.85
06-07/11/2023	25.2	50.4	13.6	6.11
09-10/11/2023	30.5	59.9	15.0	8.86
13-14/11/2023	26.6	53.2	13.9	6.43
16-17/11/2023	28.3	55.8	14.2	7.10
20-21/11/2023	26.7	51.1	12.1	6.24
23-24/11/2023	29.4	58.8	14.2	7.89
27-28/11/2023	31.2	60.3	15.7	7.99
29-30/11/2023	32.8	62.1	16.5	8.20
01-02/12/2023	27.4	53.8	15.1	7.58
04-05/12/2023	29.1	67.2	17.5	9.21
07-08/12/2023	26.3	51.9	14.8	7.64
11-12/12/2023	31.5	66.2	16.2	9.18
14-15/12/2023	27.3	55.3	15.5	7.78
18-19/12/2023	29.7	58.1	16.3	8.75
21-22/12/2023	27.1	52.9	17.4	9.10
25-26/12/2023	31.4	61.4	18.9	9.58
28-29/12/2023	33.9	64.5	19.7	10.12
01-02/01/2024	28.8	54.7	16.3	8.76
04-05/01/2024	31.2	68.4	18.8	10.29
08-09/01/2024	27.8	53.1	16.1	8.84
11-12/01/2024	32.8	68.1	18.1	11.18
15-16/01/2024	28.5	57.2	17.3	9.21
18-19/01/2024	30.9	59.8	18.1	10.55
22-23/01/2024	28.8	54.1	19.2	11.30
25-26/01/2024	32.9	63.1	20.2	10.78
29-30/01/2024	35.5	66.2	20.9	11.82
01-02/02/2024	26.2	52.8	14.9	7.86
05-06/02/2024	28.4	65.3	16.2	8.73
08-09/02/2024	27.5	53.4	15.1	8.12

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12-13/02/2024	33.8	68.7	18.9	10.00
15-16/02/2024	28.1	57.4	14.2	7.45
19-20/02/2024	31.4	60.1	17.8	9.24
22-23/02/2024	21.6	41.3	12.3	6.29
26-27/02/2024	32.0	63.5	16.8	8.68
28-29/02/2024	34.6	67.0	18.2	9.10
01-02/03/2024	25.4	50.2	12.8	8.1
04-05/03/2024	27.6	54.7	13.9	8.8
07-08/03/2024	26.3	52.0	13.3	8.3
11-12/03/2024	29.1	57.6	14.7	9.2
14-15/03/2024	28.6	56.5	14.4	9.1
18-19/03/2024	32.5	71.1	16.4	10.3
21-22/03/2024	31.5	62.3	15.9	10.0
28-29/03/2024	26.7	53.0	13.5	8.5
Min.	20.1	41.3	10.8	5.12
Max.	35.5	71.1	20.9	11.82
Avg.	29.28	58.44	15.71	8.45

Month	PM2.5 µg/m3	PM10 µg/m3	NO2 µg/m3	SO2 µg/m3
	IS 5182 (P-24):201	IS: 5182 (P-23), 2006	IS: 5182(P-6),2006	IS: 5182(P-2),2001
Near Near Mali Village (Close to plant boundary)				
02/03 10/2023	18.9	36.9	9.7	5.04
05-06/ 10/2023	21.3	43.5	10.8	5.85
09-10/ 10/2023	34.4	67.9	16.4	8.02
12-13/ 10/2023	33.6	65.2	15.2	7.07
16-17/ 10/2023	36.2	70.7	16.9	8.85
19-20/ 10/2023	35.1	68.4	15.4	7.09
23-24/ 10/2023	34.9	66.2	14.6	7.11
26-27/ 10/2023	35.2	68.6	17.7	8.74
30-31/ 10/2023	33.1	66.0	16.0	8.00
01-02/11/2023	27.8	53.3	14.1	7.18
03-04/11/2023	28.7	55.9	15.2	8.85
06-07/11/2023	26.3	52.6	14.1	7.11
09-10/11/2023	31.4	60.9	16.4	8.82
13-14/11/2023	25.7	52.7	12.8	6.12
16-17/11/2023	27.3	58.1	13.5	7.65
20-21/11/2023	31.4	62.0	16.2	8.10
23-24/11/2023	27.1	56.1	14.5	7.48
27-28/11/2023	30.2	61.8	15.0	7.75
29-30/11/2023	31.5	63.0	16.2	8.81
01-02/12/2023	28.3	55.1	14.5	7.85
04-05/12/2023	30.0	59.6	16.1	8.12
07-08/12/2023	27.5	53.4	13.9	6.98
11-12/12/2023	32.0	71.0	15.2	8.69
14-15/12/2023	28.1	56.3	13.8	7.10
18-19/12/2023	30.0	59.8	15.0	8.23
21-22/12/2023	26.7	52.2	13.5	7.15
25-26/12/2023	32.6	62.5	16.7	8.78

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28-29/12/2023	34.0	65.0	18.4	9.86
01-02/01/2024	29.9	57.1	16.2	9.25
04-05/01/2024	32.1	61.2	18.1	9.82
08-09/01/2024	28.8	55.1	15.2	10.98
11-12/01/2024	33.9	73.2	16.7	9.89
15-16/01/2024	29.4	57.9	15.2	8.90
18-19/01/2024	32.1	60.8	16.8	9.83
22-23/01/2024	28.2	70.5	14.7	8.95
25-26/01/2024	34.2	64.1	18.2	9.98
29-30/01/2024	36.3	67.2	19.9	11.46
01-02/02/2024	26.1	50.4	13.5	7.11
05-06/02/2024	28.6	56.9	15.3	8.68
08-09/02/2024	26.4	51.7	12.9	6.95
12-13/02/2024	34.2	68.3	18.7	9.48
15-16/02/2024	26.9	53.4	12.9	7.19
19-20/02/2024	31.6	60.0	16.3	8.11
22-23/02/2024	22.9	45.3	13.7	7.10
26-27/02/2024	29.4	59.2	14.1	7.20
28-29/02/2024	32.6	66.3	17.8	8.75
01-02/03/2024	24.7	48.9	12.5	7.8
04-05/03/2024	27.0	53.4	13.6	8.6
07-08/03/2024	25.6	50.7	12.9	8.1
11-12/03/2024	28.4	56.3	14.4	9.0
14-15/03/2024	27.9	55.2	14.1	8.9
18-19/03/2024	31.9	63.1	16.1	10.1
21-22/03/2024	30.8	61.0	15.6	9.8
28-29/03/2024	26.1	51.7	13.2	8.3
Min.	18.9	36.9	9.7	5.04
Max.	36.3	73.2	19.9	11.46
Avg.	29.73	59.27	15.12	8.27

Month	PM2.5 µg/m3 IS 5182 (P-24):201	PM10 µg/m3 IS: 5182 (P-23), 2006	NO2 µg/m3 IS: 5182(P-6),2006	SO2 µg/m3 IS: 5182(P-2),2001
Near Motia village (Close to plant boundary)				
02-03/ 10/2023	17.8	38.6	10.0	5.25
05-06/ 10/2023	19.2	40.3	11.9	6.10
09-10/ 10/2023	33.1	66.4	16.2	8.50
12-13/ 10/2023	31.7	62.8	15.5	7.86
16-17/ 10/2023	35.2	68.5	16.0	8.04
19-20/ 10/2023	33.4	66.2	16.0	7.01
23-24/ 10/2023	32.1	64.5	15.1	8.20
26-27/ 10/2023	35.0	69.4	17.0	8.87
30-31/ 10/2023	32.9	65.2	16.2	8.12
01-02/11/2023	26.3	55.2	13.5	6.98
03-04/11/2023	29.6	58.1	14.2	7.37
06-07/11/2023	25.7	51.9	12.8	6.42
09-10/11/2023	30.1	61.2	15.4	7.85
13-14/11/2023	27.5	55.0	13.3	7.12
16-17/11/2023	30.0	59.7	15.0	7.38

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20-21/11/2023	32.6	63.0	17.1	8.95
23-24/11/2023	26.1	53.2	13.4	7.18
27-28/11/2023	30.5	59.4	16.2	8.73
29-30/11/2023	32.2	62.1	17.5	9.25
01-02/12/2023	26.3	51.9	14.2	7.18
04-05/12/2023	28.2	55.6	16.0	8.58
07-08/12/2023	25.5	50.2	13.8	6.87
11-12/12/2023	29.4	69.2	15.1	8.56
14-15/12/2023	26.7	53.6	14.5	7.59
18-19/12/2023	28.4	57.7	13.2	7.10
21-22/12/2023	26.1	51.2	12.8	6.48
25-26/12/2023	30.2	60.9	15.0	8.78
28-29/12/2023	32.8	62.7	17.5	9.16
01-02/01/2024	27.9	53.5	15.7	8.98
04-05/01/2024	29.9	57.3	17.3	9.88
08-09/01/2024	27.1	52.2	15.4	8.27
11-12/01/2024	30.8	71.3	16.9	9.86
15-16/01/2024	28.1	55.2	15.7	8.79
18-19/01/2024	29.8	59.1	14.9	9.10
22-23/01/2024	27.6	52.8	14.3	7.88
25-26/01/2024	32.4	61.9	16.8	10.28
29-30/01/2024	34.3	64.1	19.3	10.76
01-02/02/2024	28.7	55.6	15.1	8.12
05-06/02/2024	29.1	58.9	13.9	7.23
08-09/02/2024	26.5	52.3	14.5	7.89
12-13/02/2024	34.6	67.7	18.2	9.58
15-16/02/2024	27.8	54.1	13.5	7.62
19-20/02/2024	30.0	59.4	14.7	8.11
22-23/02/2024	21.3	44.1	12.0	6.41
26-27/02/2024	32.1	62.7	16.8	8.88
28-29/02/2024	33.9	65.3	18.0	9.75
01-02/03/2024	27.0	53.4	13.6	8.6
04-05/03/2024	29.2	57.9	14.8	9.3
07-08/03/2024	27.9	55.2	14.1	8.9
11-12/03/2024	30.7	60.8	15.5	9.8
14-15/03/2024	30.2	59.7	15.2	9.6
18-19/03/2024	34.2	69.4	17.3	10.8
21-22/03/2024	33.1	65.5	16.7	10.5
28-29/03/2024	28.4	56.2	14.3	9.0
Min.	17.8	38.6	10.0	5.25
Max.	35.2	71.3	19.3	10.8
Avg.	29.39	58.51	15.16	8.32

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Ground Water**		
Sampling & Analysis Protocol:	**IS-10500-2012**		

Test Results

S. No.	Parameter	Test Method	Mali Village Oct. -23	Motiya Village Oct. -23	Naya Bad Village Oct. -23	Patwa Village. Oct. -23	Unit	IS: 10500-2012	
								Acceptable Limit	Permissible Limit
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.36	7.32	7.38	7.33	--	6.5 to 8.5	No Relaxation
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen	5	15
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	NTU	1	5
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	211.0	187.0	220.0	173.0	mg/l	200	600
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	57.0	48.0	62.4	51.0	mg/l	75	200
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	171.0	152.0	182.0	159.0	mg/l	200	600
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	29.8	25.3	32.1	28.7	mg/l	250	1000
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	16.71	16.34	15.63	11.12	mg/l	30	100
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	347.0	328.0	375.0	322.0	mg/l	500	2000
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	62.1	53.9	66.5	56.2	mg/l	200	400
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.29	0.26	0.31	0.28	mg/l	1.0	1.5
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988.(Chromotropic Method) RA: 2022	23.7	19.5	25.9	20.4	mg/l	45	No Relaxation
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.29	0.25	0.28	0.24	mg/l	0.3	No Relaxation

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17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l	0.03	0.2
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l	0.5	1.0
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	3.11	2.85	3.89	3.11	mg/l	--	--
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	0.002
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.2	1.0
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.31	0.25	0.35	0.29	mg/l	5.0	15.0
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	1.5
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l	0.1	0.3
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l	0.003	No Relaxation
26.	Lead as Pb	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	0.05
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	No Relaxation
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l		
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l		
32.	Temperature	IS :3025(P-9):1984,RA:2017	25.4	25.3	25.3	25.4	°C	--	--
33.	Total Coliform	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	
34.	E.Coli	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Ground Water**		
Sampling & Analysis Protocol:	**IS-10500-2012**		

Test Results

S. No.	Parameter	Test Method	Mali Village Jan -24	Motiya Village Jan -24	Naya Bad Village Jan -24	Patwa Village. Jan -24	Unit	IS: 10500-2012	
								Acceptable Limit	Permissible Limit
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.41	7.39	7.39	7.47	--	6.5 to 8.5	No Relaxation
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen	5	15
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	NTU	1	5
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	242.0	201.0	245.0	203.0	mg/l	200	600
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	68.0	59.0	73.5	68.0	mg/l	75	200
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	196.0	188.0	198.0	174.0	mg/l	200	600
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	34.7	29.8	38.8	36.8	mg/l	250	1000
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	17.57	13.05	15.27	8.10	mg/l	30	100
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	382.0	392.0	425.0	351.0	mg/l	500	2000
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	48.1	39.6	46.20	33.4	mg/l	200	400
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.62	0.49	0.46	0.38	mg/l	1.0	1.5
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988,(Chromotropic Method) RA: 2022	34.5	26.7	31.5	24.2	mg/l	45	No Relaxation
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.19	0.21	0.25	0.23	mg/l	0.3	No Relaxation

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17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l	0.03	0.2
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l	0.5	1.0
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	4.36	4.16	4.20	3.92	mg/l	--	--
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	0.002
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.2	1.0
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.39	0.35	0.41	0.33	mg/l	5.0	15.0
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	1.5
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l	0.1	0.3
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l	0.003	No Relaxation
26.	Lead as Pb	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	0.05
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	No Relaxation
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l		
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l		
32.	Temperature	IS :3025(P-9):1984,RA:2017	24.8	25.9	25.8	26.1	°C	--	--
33.	Total Coliform	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	
34.	E.Coli	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Sruface Water**		
Sampling & Analysis Protocol:	**IS-3025**		

S. No.	Parameter	Test Method	Ganga River Oct. 2023	Ganga River Jan. 2024	Unit
1.	pH (at 25 ^{0}C)	IS 3025 (P-11): 2022	7.29	7.37	°C
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	2.1	2.6	NTU
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	--
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	--
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	128.0	148.0	mg/l
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	38.0	46.0	mg/l
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	142.0	157.0	mg/l
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	35.1	39.4	mg/l
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	8.06	8.07	mg/l
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	245.0	328.0	mg/l
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	29.4	32.3	mg/l
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.30	0.33	mg/l
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988,(Chromotropic Method) RA: 2022	5.58	6.68	mg/l
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.19	0.24	mg/l
17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	4.95	6.12	mg/l
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.21	0.29	mg/l
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
26.	Lead as Pb	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l

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27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l
32.	Temperature	IS :3025(P-9):1984,RA:2017	25.2	25.7	°C
33.	Total Coliform	IS:15185: 2016	Present	Present	Per 100 ml
34.	E.Coli	IS:15185: 2016	Present	Present	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Ground Water**		
Sampling & Analysis Protocol:	**IS-10500-2012**		

Test Results

S. No.	Parameter	Test Method	Mali Village Oct. -23	Motiya Village Oct. -23	Naya Bad Village Oct. -23	Patwa Village. Oct. -23	Unit	IS: 10500-2012	
								Acceptable Limit	Permissible Limit
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.36	7.32	7.38	7.33	--	6.5 to 8.5	No Relaxation
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen	5	15
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	NTU	1	5
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	211.0	187.0	220.0	173.0	mg/l	200	600
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	57.0	48.0	62.4	51.0	mg/l	75	200
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	171.0	152.0	182.0	159.0	mg/l	200	600
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	29.8	25.3	32.1	28.7	mg/l	250	1000
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	16.71	16.34	15.63	11.12	mg/l	30	100
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	347.0	328.0	375.0	322.0	mg/l	500	2000
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	62.1	53.9	66.5	56.2	mg/l	200	400
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.29	0.26	0.31	0.28	mg/l	1.0	1.5
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988.(Chromotropic Method) RA: 2022	23.7	19.5	25.9	20.4	mg/l	45	No Relaxation
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.29	0.25	0.28	0.24	mg/l	0.3	No Relaxation

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17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l	0.03	0.2
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l	0.5	1.0
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	3.11	2.85	3.89	3.11	mg/l	--	--
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	0.002
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.2	1.0
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.31	0.25	0.35	0.29	mg/l	5.0	15.0
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	1.5
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l	0.1	0.3
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l	0.003	No Relaxation
26.	Lead as Pb	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	0.05
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	No Relaxation
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l		
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l		
32.	Temperature	IS :3025(P-9):1984,RA:2017	25.4	25.3	25.3	25.4	°C	--	--
33.	Total Coliform	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	
34.	E.Coli	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Ground Water**		
Sampling & Analysis Protocol:	**IS-10500-2012**		

Test Results

S. No.	Parameter	Test Method	Mali Village Jan -24	Motiya Village Jan -24	Naya Bad Village Jan -24	Patwa Village. Jan -24	Unit	IS: 10500-2012	
								Acceptable Limit	Permissible Limit
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.41	7.39	7.39	7.47	--	6.5 to 8.5	No Relaxation
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen	5	15
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	*BDL(**LOQ-1.0)	NTU	1	5
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	Agreeable	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	242.0	201.0	245.0	203.0	mg/l	200	600
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	68.0	59.0	73.5	68.0	mg/l	75	200
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	196.0	188.0	198.0	174.0	mg/l	200	600
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	34.7	29.8	38.8	36.8	mg/l	250	1000
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	17.57	13.05	15.27	8.10	mg/l	30	100
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	382.0	392.0	425.0	351.0	mg/l	500	2000
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	48.1	39.6	46.20	33.4	mg/l	200	400
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.62	0.49	0.46	0.38	mg/l	1.0	1.5
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988,(Chromotropic Method) RA: 2022	34.5	26.7	31.5	24.2	mg/l	45	No Relaxation
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.19	0.21	0.25	0.23	mg/l	0.3	No Relaxation

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17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l	0.03	0.2
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l	0.5	1.0
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	4.36	4.16	4.20	3.92	mg/l	--	--
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	0.002
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.2	1.0
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.39	0.35	0.41	0.33	mg/l	5.0	15.0
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l	0.05	1.5
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l	0.1	0.3
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l	0.003	No Relaxation
26.	Lead as Pb	APHA (23rd Edition)3030D,3113 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	No Relaxation
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l	0.01	0.05
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l	0.001	No Relaxation
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l		
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l		
32.	Temperature	IS :3025(P-9):1984,RA:2017	24.8	25.9	25.8	26.1	°C	--	--
33.	Total Coliform	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	
34.	E.Coli	IS:15185: 2016	Absent	Absent	Absent	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of Party:	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 01**
		Party Reference No.:	**Na**
		Report Date:	**05.04.2024**
		Period of Analysis:	**Oct.2023 To March 2024**
Sample Description::	**Sruface Water**		
Sampling & Analysis Protocol:	**IS-3025**		

S. No.	Parameter	Test Method	Ganga River Oct. 2023	Ganga River Jan. 2024	Unit
1.	pH (at 25 ^{0}C)	IS 3025 (P-11): 2022	7.29	7.37	°C
2.	Colour	IS 3025(P-4): 2021	*BLQ(**LOQ-5.0)	*BLQ(**LOQ-5.0)	Hazen
3.	Turbidity	IS 3025 (P-10): 1984,RA: 2017	2.1	2.6	NTU
4.	Odour	IS 3025 (P-5)1983	Agreeable	Agreeable	--
5.	Taste	IS 3025(P-8) 1984	Agreeable	Agreeable	--
6.	Total Hardness as $CaCO_3$	IS: 3025 (P-21): 2009,RA: 2019	128.0	148.0	mg/l
7.	Calcium as Ca	IS: 3025 (P-40): 1991, RA: 2019	38.0	46.0	mg/l
8.	Alkalinity as $CaCO_3$	IS: 3025 (P-23): 1986,RA: 2019	142.0	157.0	mg/l
9.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	35.1	39.4	mg/l
10.	Cyanide as CN	IS: 3025 (P-27)1986	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
11.	Magnesium as Mg	IS: 3025 (P-46): 1994, RA: 2019	8.06	8.07	mg/l
12.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	245.0	328.0	mg/l
13.	Sulphate as SO_4	IS: 3025 (P-24): 1986 Sec.1 RA: 2022	29.4	32.3	mg/l
14.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.30	0.33	mg/l
15.	Nitrate as NO_3	IS: 3025 (P-34): 1988,(Chromotropic Method) RA: 2022	5.58	6.68	mg/l
16.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.19	0.24	mg/l
17.	Aluminium as Al	IS 3025 (P-55):2003,RA: 2019	*BLQ(**LOQ-0.03)	*BLQ(**LOQ-0.03)	mg/l
18.	Boron	APHA (23rd Edition) 4500B: 2017	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l
19.	Total Silica	IS : 3025 (P-35):1888,RA: 2003	4.95	6.12	mg/l
20.	Phenolic Compounds	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
21.	Anionic Detergents as MBAS	APHA 23rd Edition,2017, 5530 C	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
22.	Zinc as Zn	APHA (23rd Edition), 3030D,3113B: 2017	0.21	0.29	mg/l
23.	Copper as Cu	APHA (23rd Edition),3113B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
24.	Manganese as Mn	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
25.	Cadmium as Cd	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
26.	Lead as Pb	APHA (23rd Edition)3030D,3113B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l

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27.	Selenium as Se	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
28.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
29.	Mercury as Hg	APHA (23rd Edition)3114C,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
30.	Hexa Valent Chromium	APHA (23rd Edition)3500 Cr B:2017	*BLQ(**LOQ-0.01)	*BLQ(**LOQ-0.01)	mg/l
31.	Residual Free Chloren	IS :3025(P-26): 2021	*BLQ(**LOQ-0.2)	*BLQ(**LOQ-0.2)	mg/l
32.	Temperature	IS :3025(P-9):1984,RA:2017	25.2	25.7	°C
33.	Total Coliform	IS:15185: 2016	Present	Present	Per 100 ml
34.	E.Coli	IS:15185: 2016	Present	Present	

Note: - *BLQ-Below Limit Quantification, *LOQ- Limit of Quantification

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TEST REPORT

Name & Address of the Party	**M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand**	**Format No.:**	**7.8 F 04**
		Party Reference No.:	**NIL**
Analysis Protocol:	**IS-9989 & CPCB Guidelines**	**Period of Analysis:**	**Oct. 2023 To March 2024**
Parameter Required:	**As per work order**	**Report Date :**	**05.04.2024**
Sample Description :	**Ambient Noise Level Monitoring**		

Summary Reports

S.NO.	Location	Oct- 2023 Leq (dB)		Nov – 2023 Leq (dB)		Dec – 2023 Leq (dB)		Jan – 2024 Leq (dB)		Feb-2024 Leq (dB)		March-2024 Leq (dB)	
		Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
1.	Near BTG Area	64.3	50.6	68.8	56.2	71.5	61.2	72.8	64.1	70.8	62.3	72.5	64.1
2.	Near CT	56.2	46.7	54.2	45.6	67.7	55.2	69.4	57.4	65.3	52.7	63.8	50.5
3.	Near RW Reservoir	51.7	44.1	50.5	43.1	49.3	41.5	51.5	43.3	50.2	42.1	49.6	40.3
4.	Near Adani Office	54.5	46.8	53.1	45.8	51.2	40.6	53.3	42.5	52.6	41.2	50.3	39.4
5.	Near Temple (In Township)	55.5	44.1	54.8	45.2	53.8	44.2	56.1	44.5	54.1	43.5	52.9	41.1
6.	Near STP (Township	52.5	41.3	51.7	42.9	49.0	41.2	51.2	42.9	48.9	40.2	47.5	39.6
7.	At Motia Village	51.2	40.3	52.2	41.1	50.2	40.8	52.7	43.1	49.3	41.1	48.7	38.2
8.	At Mali Village	49.1	41.1	50.1	40.5	48.7	39.5	51.7	42.7	47.8	38.7	49.4	39.9
9.	At Nayabad Village	54.6	39.2	52.3	41.8	51.3	40.8	53.1	43.1	50.5	39.9	51.1	42.3
10.	At Patwa Village	52.1	42.3	49.8	39.7	48.2	37.6	49.8	38.4	47.9	38.2	48.3	39.4

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TEST REPORT

Sample Number:	VTL/WW/01	**Report No.:**	VTL/WW/2310180003
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	**Format No.:**	7.8 F 01
		Party Reference No.:	NA
		Report Date:	23/10/2023
		Period of Analysis:	18-23/10/2023
Sample Description:	Waste Water	**Receipt Date:**	18/10/2023
Sample Collected by	VTL Team	**Sampling Date:**	14/10/2023
Preservation:	Refrigerated	**Sampling Type:**	Grab
Method of Sampling:	APHA 23RD Edition	**Sample Quantity:**	2.0 Ltr.

Test Results

S. No.	Parameter	Test Method	STP Outlet (Township)	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.36	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	762.4	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	28.0	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	5.8	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	25.3	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	95.2	mg/l	250

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TEST REPORT

Sample Number:	VTL/WW/01	Report No.:	VTL/WW/2311180002
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	Format No.:	7.8 F 01
		Party Reference No.:	NA
		Report Date:	23/11/2023
		Period of Analysis:	18-23/11/2023
Sample Description:	Waste Water	Receipt Date:	18/11/2023
Sample Collected by	VTL Team	Sampling Date:	14/11/2023
Preservation:	Refrigerated	Sampling Type:	Grab
Method of Sampling:	APHA 23RD Edition	Sample Quantity:	2.0 Ltr.

Test Results

S. No.	Parameter	Test Method	STP Outlet (Township)	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.39	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	785.2	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	29.8	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	5.8	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	24.5	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	98.1	mg/l	250

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TEST REPORT

Sample Number:	VTL/WW/01	**Report No.:**	VTL/WW/2312140002
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	**Format No.:**	7.8 F 01
		Party Reference No.:	NA
		Report Date:	20/12/2023
		Period of Analysis:	14-20/12/2023
Sample Description:	Waste Water	**Receipt Date:**	14/12/2023
Sample Collected by	VTL Team	**Sampling Date:**	11/12/2023
Preservation:	Refrigerated	**Sampling Type:**	Grab
Method of Sampling:	APHA 23RD Edition	**Sample Quantity:**	2.0 Ltr.

Test Results

S. No.	Parameter	Test Method	STP Outlet (Township)	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.36	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	820.0	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	30.0	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	6.3	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	25.0	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	110.0	mg/l	250

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VIBRANT
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TEST REPORT

Sample Number: VTL/WW/01

Name & Address of Party: M/s Adani Power Jharkhand Ltd.
2 × 800 MW Thermal Power Plant,
Village: Motia, Dist: Godda, Jharkhand

Sample Description: Waste Water
Sample Collected by: VTL Team
Preservation: Refrigerated
Method of Sampling: APHA 23RD Edition

Report No.: VTL/WW/2401150001
Format No.: 7.8 F 01
Party Reference No.: NA
Report Date: 21/01/2024
Period of Analysis: 15-21/01/2024
Receipt Date: 15/01/2024
Sampling Date: 12/01/2024
Sampling Type: Grab
Sample Quantity: 2.0 Ltr.

Test Results

S. No.	Parameter	Test Method	STP Outlet (Township)	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.41	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	852.0	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	34.0	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	4.6	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	23.0	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	92.0	mg/l	250

Checked By

VIBRANT TECHNO LAB PRIVATE LIMITED ★ JAIPUR

RK Yadav
Lab Incharge
Authorized Signatory

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TEST REPORT

Sample Number:	VTL/WW/01	Report No.:	VTL/WW/2402140002
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	Format No.:	7.8 F 01
		Party Reference No.:	NA
		Report Date:	19/02/2024
		Period of Analysis:	14-19/02/2024
Sample Description:	Waste Water	Receipt Date:	14/02/2024
Sample Collected by	VTL Team	Sampling Date:	12/02/2024
Preservation:	Refrigerated	Sampling Type:	Grab
Method of Sampling:	APHA 23RD Edition	Sample Quantity:	2.0 Ltr.

Test Results

S. No.	Parameter	Test Method	STP Outlet (Township)	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.39	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	845.0	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	32.0	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	6.8	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	26.0	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	125.0	mg/l	250

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TEST REPORT

Sample Number:	VTL/WW/02	Report No.:	VTL/WW/2403160002
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	Format No.:	7.8 F 01
		Party Reference No.:	NA
		Report Date:	22/03/2024
		Period of Analysis:	16-22/03/2024
Sample Description:	Waste Water	Receipt Date:	16/03/2024
Sample Collected by	VTL Team	Sampling Date:	13/03/2024
Preservation:	Refrigerated	Sampling Type:	Grab
Method of Sampling:	APHA 23RD Edition	Sample Quantity:	2.0 Ltr.
Sample Location:	STP Outlet (Township)		

Test Results

S. No.	Parameter	Test Method	Results	Unit	Limits
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.37	--	5.5 to 9.0
2.	Total Dissolved Solids	IS 3025 (P-16): 1984RA: 2017	821.0	mg/l	2100
3.	Total Suspended Solids	IS 3025 (P-17): 2022	30.0	mg/l	100
4.	Oil &Grease	IS 3025 (P-39):2021	6.3	mg/l	10
5.	BOD (3days at 27 °c)	IS 3025(P-44):1984,RA:2019	24.0	mg/l	30
6.	COD	IS: 3025 (P-58): 2006,RA: 2017	120.0	mg/l	250

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TEST REPORT

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Sample Number:	VTL/S/01	Report No.:	VTL/S/2403190001
Name & Address of Party:	M/s Adani Power Jharkhand Ltd. 2 × 800 MW Thermal Power Plant, Village: Motia, Dist: Godda, Jharkhand	Format No.:	7.8 F-03
		Party Reference No.:	NIL
		Report Date:	23/03/2024
Receipt Date:	19/03/2024	Period of Analysis:	19-23/03/2024

Sample Description :

Sample Collected	:	VTL Team
Date of Sampling	:	15/03/2024
Time of Sampling	:	09:00 to 09:49 Hrs.
Location	:	DG Set Township
Load	:	500 KVA
Sampling duration (Minutes)	:	49 Min.
Meteorological Condition	:	Clear Sky
Make Of Stack	:	MS
Stack Diameter	:	5"
Stack Height	:	8.8 Meter
Instrument calibration status	:	Calibrated
Ambient Temperature – Ta (°C)	:	29
Temperature of Stack Gases - Ts (°C)	:	132
Velocity of Stack Gases (m/sec.)	:	14.62
Flow rate of PM (LPM)	:	20
Sampling condition	:	Isokinetic
Method of Sampling	:	IS-11255 & EPA
Other Details	:	--

RESULTS

S. No.	Parameter	Protocol	Units	Results	Limits
1.	Particulate Matter (PM)	IS: 11255 (P-1) : 1985,RA 2019	gm/kw-hr	0.012	0.02
2.	Oxide of Nitrogen (as NOX)	IS- 11255 (P-7);2005, RA- 2017	gm/kw-hr	0.19	0.40
3.	Sulphur Dioxide (as SO2)	IS: 11255(P- 2): 1985, RA 2019	gm/kw-hr	0.45	--
4.	Total Hydrocarbon (HC)	USEPA 18:1996	gm/kw-hr	0.10	0.19
5.	Carbon Monoxide (CO)	USEPA 10:1996	gm/kw-hr	0.29	3.5

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ANNUAL REPORT 2023-24

(APRIL 2023- MARCH 2024)

INTRODUCTION

The Adani Foundation, the CSR arm of Adani Group of Companies, executes Corporate Social Responsibility projects for Thermal Power Plant, Motia in four main core areas– Education, Community Health, Sustainable Livelihood Development and Community Infrastructure Development. With a people centric approach, the Foundation responds towards the emerging needs at the grass roots level aligning its activities with the 'Sustainable Development Goals (SDGs)' with a vision to end poverty, protect and preserve planet and bring solidarity and peace among all individuals and society. Adani Foundation aims to walk with the communities, empower people to look ahead by making the right choices and securing a bright and beautiful future, together. The population of Godda district is 13.13 lakhs, out of which population of our intervention villages is 90000 approximately. We have been able to benefit 3 lakh people directly and 7.65 lakh people indirectly across the stretch of 91 Kms ranged from Godda district to Sahebganj district passing through more than hundreds of projects affected villages by organizing various community development activities in Education, Community Health, Sustainable Livelihood and Rural Infrastructure Development verticals.

Gyanodaya, a digital learning program swiftly met the needs of spreading the light of education which has transformed lives of over 90,000 students of 338 Govt. Schools of Godda district to continue building their career in a new normal. The Godda district stood at **13th rank** in **2023** as compared to 21st rank (2018) in **Class 10th** attaining **94.98%** passing percentage in **2023** as compared to 2018 (50%). Adani Foundation has also added another feather in CSR cap with a significant improvement in the passing percentage of girls' students from lower 46.65 % (2018) to **99.14% (2023)** in standard 10th studying in 9 KGBVs in Godda district. Defeating all the odds and hurdles, the Foundation had identified **51 Dropout children** of TPP Core area and linked them with Aadhar card and their enrollment in school for completion of Primary education.

In health vertical, on **12th July 2023** at Ranchi district, Adani Power (Jharkhand) Limited, Godda was felicitated by **Ministry of Health and Ministry of Labour and Employment** for contributing towards **Eradication of TB** in Godda district in association with District administration. Similarly, on dated **12th September 2023**, the Adani CSR was graced with **"Jharkhand Samajik Utkrishtta Award 2023"** for

contributing to upliftment and development of the society in Godda district of Jharkhand.

Under Sustainable Livelihood Programme, Adani Foundation will be implementing a major project called - **Vruksh Se Vikas / Vruksh Se Samrudhi / Vruksh for Vikas (V4V)** to contribute towards a global commitment to plant '100 million trees' by end of **2030** there by contributing to 'one trillion tree campaign'. Total target of plantation in Godda is **22 Lakh plants** by year **2030**. In this year 2023-24, a total of **25,000 plantations** as per target have been done of horticulture fruit plants, medicinal and timber plants at household, panchayat, and other institutional level. Similarly, the community was supported with basic village infrastructure facilities such as drinking water facilities, sanitation facilities, and other need-based community development structures to make their living a better place at par with urban households.

The robust team of Adani Foundation at Jharkhand comprises of dedicated professionals including Unit CSR Head, Senior Project Officer, Project Officers, and a Medical team comprises of a doctor and four Para medicos.

The progress of CSR projects/interventions from **April 2023 to March 2024** is described in detail as under: -

DETAILED DESCRIPTION OF CSR ACTIVITIES

EDUCATION & RURAL SPORTS

Gyan Jyoti Tuition Programme (Providing Quality Education in Society)

1. **Adani Gyan Jyoti Yojana (Group 30): -** Education plays a vital role in development of society economically, socially, and financially, it also helps them to strengthen, so 'Adani Gyan Jyoti Yojana- Super 30 Program' was initiated in 2018-19 in Motia Village in which 30 students each of 8^{th}, 9^{th} & 10^{th} standard studies at the coaching centre for their concept building. They can prepare for their upcoming examination through concept building and remedial classes provided in Gyan Jyoti Kendra. During Previous year 2022-23, **56 children** were enrolled from class 9^{th}- 10^{th} standard (30- Class 9^{th} and 26- Class 10^{th}) in Super 30 coaching program in Motia village.

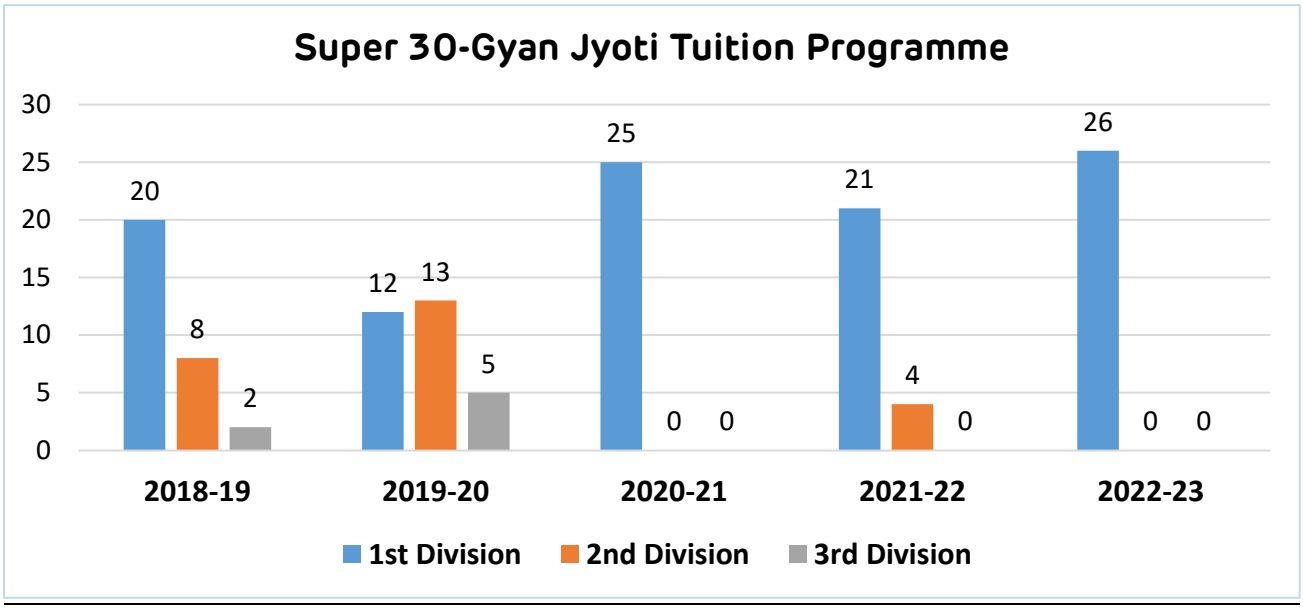
Programme Outcome

a. **Enrollment in Super 30- Class 10th:** During the last year **2022-23**, a total of 50 students were screened after doing assessment of their performance based on their abilities and awareness after taking examination. Out of which, **26** meritorious students of **Class 10th** were selected and enrolled in Gyan Jyoti Tuition Programme- Super 30, Motia Center.

b. **Academic Performance (Session 2022-23):** The students learning under Super 30 program in Gyan Jyoti Kendra, Motia have performed extremely well and passed with high grades of Academic Session 2022-23. The students succeeded with improved marks and passed with flying colours in their 10th board examination. All **26 students** have passed the exam **(100% passing percent)** with **1st division marks**. **4 students** have passed with **distinction marks above 75%.**

Super 30- Class 10th Results- Gyan Jyoti Tuition Programme

Academic Session	Gyan Jyoti Kendra	Students			Students			Overall Passing %
		Enrolled	Appeared	Passed	1st Division	2nd Division	3rd Division	
2018-19	Motia	30	30	30	20	8	2	100
2019-20	Motia	30	30	30	12	13	5	100
2020-21	Motia	25	25	25	25	0	0	100
2021-22	Motia	25	25	25	21	4	0	100
2022-23	Motia	26	26	26	26	0	0	100



- **Success Story: Aakash Shivam**, a student of Super 30- Gyan Jyoti Tuition Programme from High School, Motia has performed phenomenal and succeeded in Class 10th board examination with flying colours. The champ has secured **90.40% with first division marks** with the support provided by Adani Foundation with regular coaching classes, support of teaching learning materials and proper guidance.

- **Enrollment in Year 2023-24:** In this session, **55 students (30 students- 9th class and 25 students- 10th class)** are enrolled in Super 30 Coaching centre, Motia for preparation of Jharkhand 10th board examination to secure higher grades in exams in district and state level advancing them to a better future.

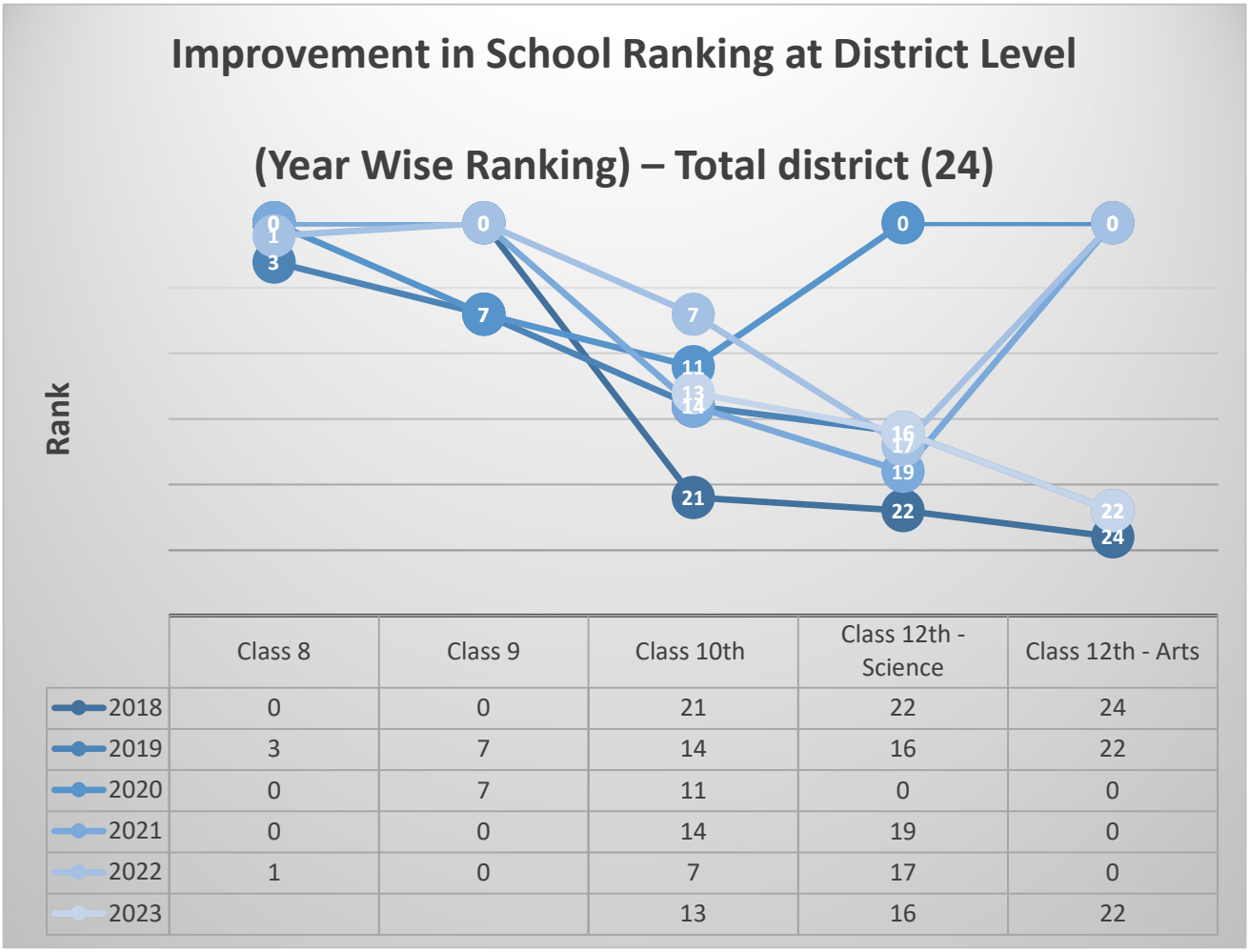
2. **Gyanodaya Project: GYANODAYA,** a step towards enlightening the human lives', was launched by Adani Foundation in partnership with District Administration in August 2018 to promote e-learning through Smart Classes in Middle and Higher Secondary Government Schools for students of 6th-12th standard of Godda district. Gyanodaya project has abled to create its learning space and improved the diverse spectrum of education through digital learning in **338 Govt. Schools** with its outreach in more than **236 remote and untapped villages** of **9 blocks** of Godda district of Jharkhand. In the tenure of less than 5 years, the program has leveraged its services facilitated by over **1872 skilled teachers** and benefiting more than **90,000 students directly**. Transformation in their lives has been observed through multiple benefits of digital learning such as - digital skills, decision making capabilities, visual learning, cultural awareness, improved academic performance and creativity. Gyanodaya model is filling the gap of teachers' shortage by enabling students to access smart classes with a simple touch of TV remote.

Outreach of Gyanodaya: Gyanodaya program has created its impact in **186** Middle Schools**, 111** High Schools, **10** Plus 2 Schools, **18** KGBVs, **7** Welfare Association Schools, and **6** JEE/NEET Centres, respectively.

Block	Middle schools	High Schools	Plus2 Schools	KGBVs	Welfares	JEE/NEET Centres	Aggregate
Godda	57	27	3	2	0	3	**92**
Sunderpahari	3	5	0	2	3	NA	**13**
Podaiyahat	31	17	3	2	0	NA	**53**
Pathargama	36	7	1	2	0	1	**47**
Basantrai	16	5	0	2	0	NA	**23**
Mahagama	15	17	2	2	0	1	**37**
Boarijore	7	10	0	2	4	1	**24**
Mehrama	11	12	0	2	0	NA	**25**
Thakurgangti	10	11	1	2	0	NA	**24**
Total	**186**	**111**	**10**	**18**	**7**	**6**	**338**

Programme Outcome

1. **Improvement in School Ranking at District Level:** The magnificent attempt of Gyanodaya program has improved the education system of Godda district and created an ecosystem of education by tapping up the government schools and strengthening the institutions as model school through operation of Digital learning program. Similarly, the intervention has enhanced the learning outcomes in the district significantly as compared to the baseline statistics of education since year 2018. Gyanodaya- E- Learning program has left remarkable footprint with significant increase in the school rankings at district level in the **year 2023** as compared to preceding five consecutive years' performance.



	Class 8	Class 9	Class 10th	Class 12th - Science	Class 12th - Arts
2018	0	0	21	22	24
2019	3	7	14	16	22
2020	0	7	11	0	0
2021	0	0	14	19	0
2022	1	0	7	17	0
2023			13	16	22

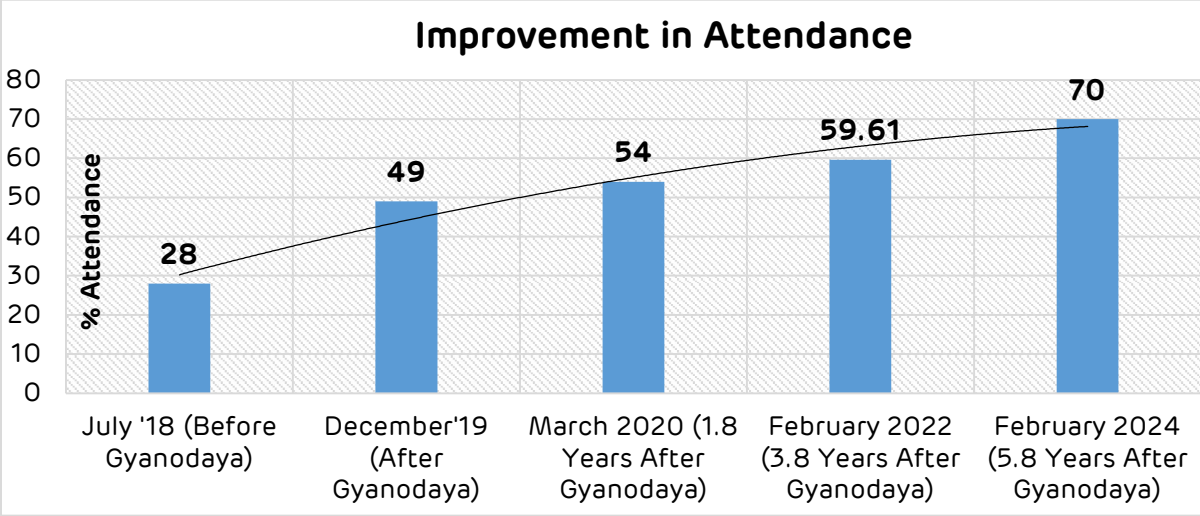
Source- *Education department, Godda.*
**No Examination held of Class 8th and Class 9th in 2018*
**No Examination held of Class 8th due to COVID 19 in 2020 & 2021*

- **Class 8th** stands at **1st rank (2022)** as compared to **3rd** rank (2019) among 24 districts of Jharkhand state.
- **Class 9th** standard upholds **7th** rank position in the year 2019 & **2020** as compared to **21st position** in the year 2018-19.
- The ranking position of **Class 10th** has improved from 21st rank (2018) to 14th rank (2019) to **11th** rank (2020) to **14th** rank (2021) to a significant achievement by securing **7th rank position in the year 2022** and **13th rank** in **2023**.
- 22nd rank (2018) to 16th rank **(2019)** to 19th rank (2021) to 17th rank in 2022 to **16th** rank in **2023** in **class 12th (Science)** and
- 24th rank (2018) to **22nd** rank **(2023)** in **class 12th (Arts)**

2. **Increase in Attendance Rate of Students:** The visually appealing, easy-to-grasp and retainable concepts covered in the study materials has led to **increase** in the class-wise attendance comparing the figures of past years **(July 18)** from **20% low attendance rate** to a rise in **54%** in March 2020 to **59.61%** in February 2022 to an exemplary growth to **70% in February 2024.**

   A significant reduction in dependency on tuition classes has been observed across the blocks which will thereby increase the faith of students and parents likewise on government schools. The growth in the class-wise attendance has been a result of making learning engaged and interactive using conceptualized and animated concept videos being taught under the Gyanodaya model.

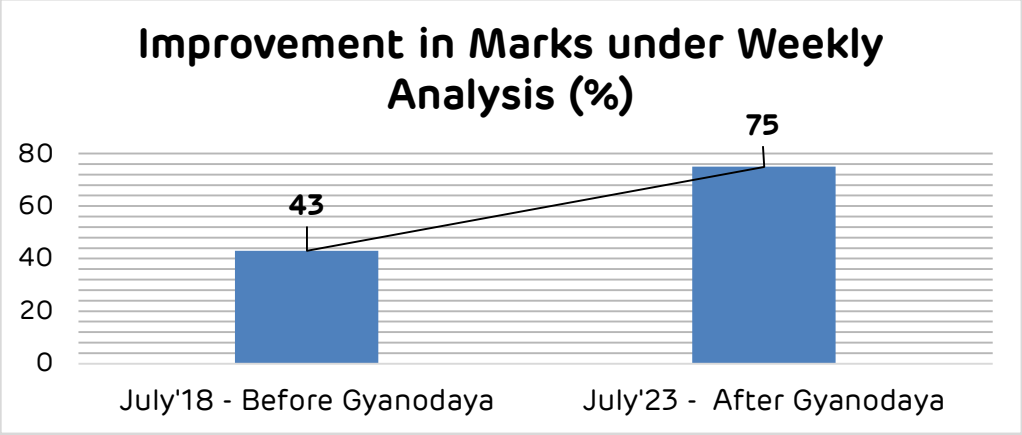
Improvement in Attendance after implementation of Gyanodaya			
July-18 (Before Gyanodaya)	**March 2020 (1.8 Years After Gyanodaya)**	**February 2022 (3.8 Years After Gyanodaya)**	**February 2024 (After 5.8 Years after Gyanodaya)**
20-30%	54%	59.61%	**70%**



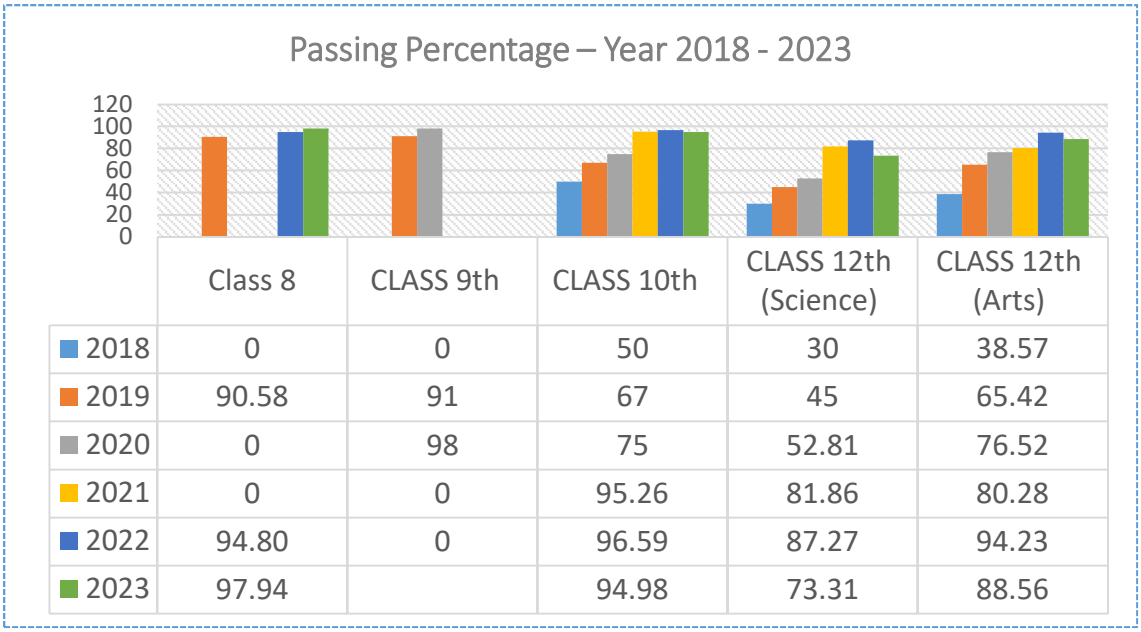
3. **Improvement in Marks of Students:** Prior to educational initiative of Gyanodaya, the students used to fall under 30-40% marks bracket which has now shifted to **70-75%** marks bracket on an average due to better understanding and retention of basic concepts and a daily quiz after every video.

Impact of Gyanodaya project on Results is as given below:

July-18 (Before Gyanodaya)	July-23 (After Gyanodaya)
Improvement in Marks under Weekly Analysis	
30% - 40%	70-75 %



4. **Increase in Passing Percentages:** With the advent of Gyanodaya, the passing percentage of students of Class 8th, Class 10th and Class 12th has increased progressively in the year 2023 as compared to previous five consecutive years 2022, 2021, 2020, 2019 and 2018.



	Class 8	CLASS 9th	CLASS 10th	CLASS 12th (Science)	CLASS 12th (Arts)
2018	0	0	50	30	38.57
2019	90.58	91	67	45	65.42
2020	0	98	75	52.81	76.52
2021	0	0	95.26	81.86	80.28
2022	94.80	0	96.59	87.27	94.23
2023	97.94		94.98	73.31	88.56

**Year Wise Passing %*

- **Class 10th:** The passing percentage of Class 10th students has increased in **2023 (94.98%),** and **2022 (96.59%)** as compared to status of 2021 (95.26%), 2020 (75%), 2019 (67%) & 2018 (50%).

- **Class 12th (Science):** The passing % of Intermediate students has improved significantly as compared to figures of 30% in the year 2018, 45% (2019), 52.81% (2020), 81.86% (2021) to major improvement of **87.27% (2022)** and **73.31% (2023)** in Intermediate (Science).

- **Class 12th (Arts):** The passing % has also improved from 38.57% (2018) to 65.42% (2019) to 76.52% (2020) to 80.28% (2021) **to 94.23% (2022) and 88.56% in 2023** in Intermediate (Arts) Stream.

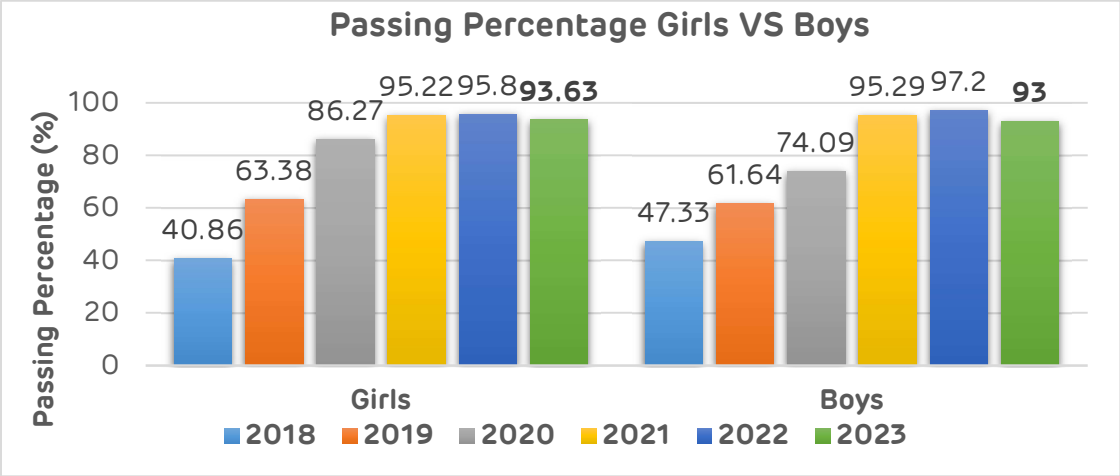
- **Class 9th:** Passing percentage increased from 91% (2019) to **98%** in the year **2020.**

- Similarly, the passing percentage of **JAC 8th Board** students has improved from **90.58%** in the year 2019 **to 94.80% in the year 2022 to 97.94% in the year 2023**.

Class-wise Improvement in Passing Percentages					
Academic Year	**Class 8th**	**Class 9th**	**Class 10th**	**Class 12th Science**	**Class 12th Arts**
2017-2018	0	0	50	30	38.57
2018-2019	90.58	91	67	45	65.42
2019-2020	NA	98	75	52.81	76.52
2020-2021	NA	NA	95.26	81.86	80.28
2021-2022	94.80	NA	96.59	87.27	94.23
2022-2023	97.94	NA	94.98	73.31	88.56
% Increase	**8.13**	**7.69**	**89.96**	**144.37**	**129.61**

**Exams were not conducted of class 8th & 9th in 2018*
***% increase figure from 2018 to 2023 of class 10 & 12*
****% increase figure from 2019 to 2023 of class 8*

5. **Passing Percentages of Girls Vs Boys:** The graph presents a sharp increase in the passing percentage of girls and boys as compared with the last 5 years. In the session 2017-18, girls passing percent was 40.86% which increased to **95.8% in 2021-22 and 93.63%** in the **session 2022-23**. Simultaneously, the boys' passing percentage in the session 2017-18 was 47.33% which increased to **97.2% in 2021-22 and 93%** in the **session 2022-23.**



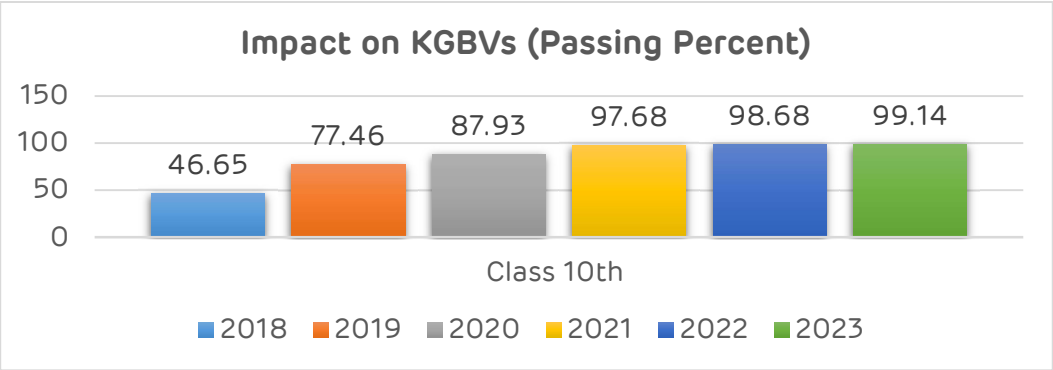
Passing Percentages of Girls Vs Boys						
Students	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Girls	40.86	63.38	86.27	95.22	95.8	93.63
Boys	47.33	61.64	74.09	95.29	97.2	93

Source: Education department of Godda district

6. **The Kasturba Gandhi Balika Vidyalaya (KGBV)** scheme was launched by the Government of India in August 2004 for setting up residential schools at upper primary level for girls belonging predominantly to the SC, ST, OBC and minorities dwelling in difficult and untapped rural areas. The scheme was applicable, in Educationally Backward Blocks (EBBs) where the rural female literacy is below the national average (46.13%: Census 2001) and gender gap in literacy is more than the national average (21.59%: Census 2001).

Impact on Kasturba Gandhi Bal Vidyalaya (KGBVs) in Godda district

There are 9 KGBVs in the district where a total of 2663 girl students have studied in 10th standard since 2018. The intervention of Adani Foundation has led to a significant improvement in the **passing percentage of girls' students** from lower 46.65 % (2018) to **99.14% (2023)** of standard 10th.



7. **Gyanodaya YouTube Channel: Gyanodaya YouTube Live class** for the students studying in class 10th and 12th. Live class benefits can be availed by the students of any district of Jharkhand state. The syllabus of live class is based on Jharkhand Board. So far, **67,649 views from April 2023 to February 2024.**

8. **Delivery of Gyanodaya Equipment & Handholding to New Gyanodaya Schools:** During the year 2023-24, Gyanodaya Smart Class equipment was delivered to **18 new Schools of 8 blocks of Godda district** namely, Godda, Podaiyahat, Basantrai, Boarijore, Mahagama, Pathargama, Thakurgangti and Mehrama. A detailed Handholding session was also conducted in each new Gyanodaya school to operate Smart Classes properly. In addition, teachers are being trained for the proper use of the content to ensure that the students can utilize it in the best possible manner. A nodal teacher is appointed with the help of Headmaster of the school. With help of other teacher at the school, nodal teacher keeps the record of various activities like total class conducted, student's attendance, daily test, and analysis test marks. The parents of the students are also involved, and they are made aware of the Gyanodaya Smart Class and the benefits of attending the Gyanodaya Class for their children.

List of Newly Added Gyanodaya Schools

S.No.	Block	School Name	HM Name/Teacher
1	Godda	Utkramit Middle School Dhamsain School	Amrendra Jha
2		Utkramit Middle School Khatnai Hindi Balak	Sarla Kumari
3		Plus 2 High School Motiya	Rahbar Alam
4		Utkramit Middle School KURMAN	Punam Kumari Devi
5	Mahagama	Middle School LOOGAI	Md. Samshad Ahmed
6		Utkramit Middle School PARAYARA	Bhudev Sah

7	Pathargama	Utkramit Middle School Amba bathen	Girish Rana
8		ST.Joseph Middle School Barmasia	Father
9		Utkramit Middle School RAJAON	Md. Abdurr Rashid
10	Thakurgangti	Utkramit Middle School SIMANPUR DIGHI	Pritvi Chand Hansda
11		Utkramit Middle School PAHARPUR DIGHI	Md. Zakaria Qureshi
12	Basantrai	Utkramit Middle School CHANGGE URDU	Bibi Afroza Khatun
13		JBAV BASANTRAI	Anita Kumari
14		Middle School MANJAR	Md. Rafiq Alam
15	Boarijor	Utkramit Middle School JAMMU JHARNA	Shalimuhin Ansari
16		Middle School Lohandiya Bazar	Sanjhli Hansda
17	Podaiyahat	Utkramit High School Tarkutta	Dinesh Prashad Hazari
18	Mehrama	Utkramit Middle School Goshichak	Dhiraj Singh Tomar

3.KGBV Project: Adani Foundation envision to ensure access and quality education to the girls of disadvantaged groups of society, reduce gender disparities, promote gender equality, retention of girls in schools, arresting girls' dropout rate, improving girls' enrolment in KGBVs and other govt schools and enhance the academic performance of girl students. The thrust of the project is to empower the Girl children in fields of education along with life skills by creating a learning ecosystem through addressing the educational challenges prevalent in KGBVs. The primary target group of KGBV project will be **4500+ Female students** (500 average students in each KGBV) (SC, ST, OBC, BPL, marginalized and weaker sections of society) of 9 KGBVs from Class 6th to 12th. In the 1st year, 2023-24, 6 KGBVs was covered (KGBV Godda, KGBV Sunderpahari, KGBV Pathargama, KGBV Mahagama, KGBV Thakurgangti and KGBV Basantrai) and remaining 3 KGBVs (KGBV Poreyahat, KGBV Boarijore, and KGBV Mehrama) will be covered in succeeding project duration.

- **KGBV School Assessment:** In 2023 an assessment was done of total **9 KGBV (Kasturba Gandhi Balika Vidyalaya)** schools at Godda in support with Eckovation Team and it had been seen that KGBV's face several challenges in providing quality education to girls from marginalized and disadvantaged communities.

  Some of the key challenges found during the assessment were:
  - Inadequate infrastructure,
  - Shortage of trained teachers,
  - Dropout rate,

- Social and cultural barriers,
- Limited access to technology, etc.

Intervention: This year development activities were carried out in **6 KGBVs** with respect to school infrastructure development (Beautification of School Campus area, and Kitchen and Construction of Dining shed, etc.), along with support provided of Kitchen Essentials (6 Roti Maker), Drinking Water facility (5 RO Water Cooler (60 Litre), and Dining Set for 3 KGBV creating adequate learning ambience and capacity building benefitting over **3350 girls students** from **6 villages**.

Gyanodaya Initiatives for Capacity building:

- **Monthly Parents Teacher Meeting:** Gyanodaya team participated and conducted PTMs in all **9 blocks** including **13 schools** of TPP core villages and discussed the importance and value of education and made them aware about Gyanodaya simulation and how the initiative is helping and will be helpful for their children. Over **200** Parents Teacher Meetings (PTMs) were conducted, and **1200+ Parents** participated.

4. Coaching Program for Jawahar Navodaya Vidyalaya (JNV)- Class 6 Entrance Examination,

an initiative of Utthan program of Adani Foundation was begun in January 2020 with an objective to address educational needs of poorer, rural, and tribal children, provide opportunities to bring them at par with others in the development of conducive environment and build their bright and secured career from right schooling by qualifying Navodaya entrance examination.

Methodology Adopted

1. Identification of students studying in govt schools for securing selection from rural quota (Enrolment Policy of JNV-75% rural quota, 25% urban quota, Total number of seats -80)
2. Enrollment of students for preparation of entrance examination in coaching centres followed by registration of students for appearing in entrance examination.
3. Special coaching classes by teachers (Offline mode) are conducted at different locations at village level and online access to learning materials by students (self-study and smart classes) are adhered.
4. The preparation of the examination includes arrangement of learning materials, stationery items and miscellaneous items.
5. Weekly Grand tests are conducted by teachers for evaluation of students' performance and proper follow-up of students is done for improvement area.

- **Enrollment for Session 2024-25:** The program is operational in **8 coaching centres** located in 8 core and pipeline villages of Godda district benefitting over **90 students** for preparation and qualifying the examination of Navodaya entrance examination for Academic Session 2024-25. The program is facilitated by **eight skilled Utthan Sahayaks (teachers),** adequate infrastructure and educational resources (bags, books, Stationary Materials, etc.)

5. Education Support to Palni

Story of Palni Kumari: Palni Kumari of Simdega, Jharkhand is a teenager nurtured by her only mother in family. At her minor age of 1.5 years, she lost her father. However, Palni and her mother did not lose the courage and showed remarkable resilience in dealing with the difficult situations. It is righty said, age is just a number if we envision to achieve our ambitions debarring all the obstacles and hurdles in the path.

Her perseverance and tenacity, led to pass the class 6th examination with 75% distinction marks and currently studying in 7th class standard. With a dream to fly high, she aspires to become Nurse and serve the poorer people along with the responsibilities of her mother in her shoulder. Together, Palni and her mother earn their bread and butter and paying school fees by selling chickpeas at the roadside of her locality.

Adani Foundation Support for Palni's Education: The Chairman of Adani Group, Hon'ble, Shri Gautam Adani has taken up the Noble work by taking the responsibilities of educating Palni, girl from a small town, Simdega to fulfil her dream of becoming a Nurse. For five years of duration, Adani Foundation will discharge the duty of Educating Palni Kumari and nurture her in a healthy environment.

6. Mainstreaming Rural children into Formal Education System

The Adani Foundation aims to mainstream the poor and marginalized children into formal education system who are deprived of quality education in core, railway line and pipeline villages. It focuses on mitigating the gap between educational resources and inability to access quality learning.

The Foundation had identified **51 Dropout children** of Amrakamat village of TPP core area who were earlier deprived of schooling. The factors associated were bridged by initiating the **Students Enrollment Campaign** in which children, parents and community were sensitized and educated on importance of schooling, Aadhar card, its registration and enrollment in the school. All children got issued with their

Aadhar card and they are now enrolled in **Primary education (Class 1 to Class 4)** in **Upgraded Middle School (UMS), Amrakamat**.

Apart from that, **Regular coaching classes** to a total of **58 children** are given by the Foundation in Coaching center, Amrakanoli and continuous monitoring of 51 children's status going to schools, its outcome and participation of parents is also done.

7. **Dustbin distribution under Swachhata Abhiyan in Schools and community institutions of TPP Core area:** The Adani Foundation initiated **Swachhata Abhiyan** in Schools and AWCs in which Dustbins were provided to schools located in TPP Core area, railway line area and pipeline area, Godda and Sahebganj. Around **24 schools and 3 AWCs** were supported by Dustbin for promoting culture of cleanliness and hygiene in campus area under the campaign. It will also ensure incorporation of self-mechanism of maintenance and cleanliness of school area by students and creating an ecosystem of conducive learning environment.

   The children, teachers and community were educated and sensitized on importance of waste management practices including biodegradable and non-biodegradable wastes, its disposal, scope of waste recycle and adoption of sanitation practices in home, schools, and workplaces.

   AF supported with **total 37 Dustbins** (TPP Core area- **25 dustbins** in **21 schools and 2 temple premises, & 12 dustbins** in pipeline area, Godda & Sahebganj). 1 Notice board distribution in Intermediate College Mahagama.

8. Support to Improve School Infrastructure

- **Support of Safe Drinking water facility:** Adani provided support to improve School Infrastructure of **Upgraded Middle School (UMS), Bhatdiha** located in Godda district with **1 Kent RO Water filter (20 LPH) on 22nd June 2023** benefiting over **300 students** in a year with an objective to improve Health, Nutrition, and Wellness of children and thereby, increase the attendance rate of students and academic performance.

- **Support of Kitchen Materials for Health & wellness:** Adani Foundation provided support of **Kitchen Utilities** for Health & Wellness of rural school going children in **Primary School, Petbi Santhali, Podaiyahat block, Godda district** on **7th August 2023** for better rural infrastructure and enable access to educational institutions for more than **200 tribal children**. The Kitchen materials comprised of total 8 items for preparation of Mid-Day Meal and its storage with safety,

hygiene and maintaining quality of food. Currently, 32 students are enrolled in the Primary School, Petbi Santhali.

9. Support of Children playing facilities in Children's Park at Godda:

Adani endeavors to provide a better infrastructure facility for the children of Godda district to enable them to access learning and playing accessories which is vital for their holistic development with respect to their physical, cognitive, social, and intellectual development. In **October 2023**, AF intervened in Children's Park located at Godda by providing support of **6 types of Playing items of 1 set each** consisting of 1 Double Swing, 1 Duck MGR, 1 Circular Swing, 1 Multiplay system, 1 See-Saw, and 1 Merry-Go-Round. This initiative availed the playing facilities for the children in Godda to spend time during leisure, also promoting recreational activities, social networking, solidarity and improving happiness index of their families.

10. Support of Basic facilities for Strengthening Anganwadi Centre:

Adani Foundation endeavor to combat malnutrition & state of hunger in particularly of children and community in more than 25 villages of core, railway line and pipeline area. The project goal includes to make Community Managed Sustainable Model of Anganwadi to ensure health & wellness and cognitive development for holistic development of 'Mother & Child' through improved infrastructure and availability of resources in Anganwadi Centres. Regular visits in **seven Model AWCs** is done with an objective to provide a caring environment that addresses the educative, health and nutritive requirements which is leading a transformation and holistic development in lives of more than **500 rural children.**

- **Kitchen Essentials and Learning Materials:** In December 2023 month, AF provided support to **2 AWCs namely, AWC Motia, Yadav tola and Motia, Chapota tola** with Kitchen materials and Chairs enabling health & wellness and holistic development of 60 children every year.

- **Uniform support:** Adani Foundation provided Uniform support for **500 Anganwadi children including 260 Girls and 240 Boys** in **22 Anganwadi Centres of TPP core villages** with an objective to transform the state of target groups comprising of children (0-5 years), adolescents, pregnant women, lactating mother, and community with advanced tools for their holistic development.

Anganwadi Uniform Distribution details					
S. I	**Date**	**Name of Centre**	**Girls**	**Boys**	**Total**
1	13/9/2022	Patwa	15	15	30
2	28/2/2023	Gangta	16	5	21
3	28/2/2023	Kahar Tola Motia	9	10	19
4	1/3/2023	Chapota Tola Motia	13	6	19
5	2/3/2023	Yadav Tola Motia	17	15	32
6	2/3/2023	Harijan Tola Motia	17	12	29
7	1/3/2023	Rampur Dumaria	8	8	16
8	2/3/2023	Harijan Tola Dumaria	13	10	23
9	2/3/2023	Sondiha	6	7	13
10	2/3/2023	Laiya Tola Choti Baksara	10	11	21
11	2/3/2023	Laiya Tola Bari Baksara	7	11	18
12	2/3/2023	Laiya Tola Bari Baksara	10	13	23
13	2/3/2023	Purwedih	8	6	14
14	3/3/2023	Baliakitta	9	9	18
15	3/3/2023	Basantpur Kachhua Tikar	16	17	33
16	4/3/2023	Basantpur Uttri Tola	21	14	35
17	13/3/2023	Petbi	11	16	27
18	13/3/2023	Gumma Santhali	10	10	20
19	14/3/2023	Gumma Laiya Tola	9	9	18
20	14/3/2023	Kauribahiyar Tetaria	9	8	17
21	14/3/2023	Kauribahiyar Harijan Tola	9	8	17
22	14/3/2023	Kanhadih Santhali	7	10	17
23	October'23	Rampur Dumaria	10	10	20
	TOTAL		**260**	**240**	**500**

Capacity Building & Awareness Programme

1. **Celebration of International Yoga Day 2023: International Yoga Day** was celebrated on **21st June 2023** at Officer Club, Shantivihar Township and community level in core and railway line villages. Over 200 members including employees and their family members had attended the yoga workshop organized at APJL site. Similarly, more than **800 students from 8 schools and 6 Anganwadi centres** of TPP core area had actively participated during the occasion and inculcated various Yoga asanas and their benefits to keep healthy and understood the importance of Yoga in holistic development of their life.

2. **Support to Mahila Mahavidyalaya, Godda to Organize One Day National Seminar:** Adani provided support to **Mahila Mahavidyalaya, Godda** to organize **One**

Day National Seminar & Student Faculty Exchange program which was held on **15th July 2023.** During the program, the main topics which was covered are: - **"Career opportunities through Skill Development"** under which subtopics comprised of Lifelong Learning for Skill Development, Skill Development and Employability, Up-Skilling and Re-Skilling, Digitalization and Future of Work. Along with other activities, Cultural program, Debates, Antyakshari and Rangoli Competition were also conducted.

This opportunity helped the students to enrich their learning, and skills, improve employee morale, achieving educational goals and benefitted more than **3000 students, teachers, and community** significantly.

3. **Support to S.B.S.S.P.S.J College, Pathargama for One Day National Seminar:** Adani provided support to Education committee members of S.B.S.S.P.S.J College, Pathargama to organize One Day National Seminar which was held in the college premise on **16th July 2023**. During the program, the main topics which was covered are: - "Importance of AQAR, Action taken on PEER Team Suggestion Report and Role of IQAC for subsequent cycle of NAAC Accreditation".

   The chief dignitaries of the program were Principal, Lecturer and N.S.S. Coordinator from 3 states who had attended the seminar in S.B.S.S.P.S.J College, Pathargama. This opportunity helped teacher and the students to enrich their learning, and skills, improve employee morale, achieving educational goals and leading to upgradation of overall education system of Godda district. The program benefitted more than **500 students, teachers, and community** significantly.

Supporting Sports & Cultural Events

- **Sports Kit Distribution: 63 Sports kits** were distributed to **57 Youth groups** comprising of football kit, carrom kit, cricket kit, volleyball kit along with Prizes (Winner Cups and Medals) under rural youth engagement program to promote recreational activity and sports events in **27** core, periphery, and pipeline villages of **7 blocks** of Godda and Sahebganj district. Over **900 players** benefited from the support which helped them to practice regularly and participate in several local level and district level sports tournaments. It also acts as a means of recreation for the sportsperson and aspirational players. The distribution of kit helped youth to be more engaged in constructive activity.

Sports Kit Distribution					
Particulars	**Date**	**Village**	**Block**	**Unit**	**No. Of Team**
T- Shirt to Youth Club	09.10.23	Kendua	Boarijore	1	1
Football Net	13.10.23	Dhamni Simaria	Boarijore	1	1
Cricket Kit	18.10.23	Kadawa tola	Godda	2	2
Cricket Kit (Wicket)	16.10.23	Petbi	Podaiyahat	1	1
Stationary items, school bags, trophy, Prizes, etc.	22.10.23	Sarauni (Malhara)	Podaiyahat	1	1
T-Shirt to Youth Club	24.11.23	Jamua	Godda	2	2
Football	24.11.23	Jamua	Godda	1	1
T-Shirt & Boot to Youth Club	24.11.23	Gangta	Godda	1	1
Football	24.11.23	Gangta	Godda	1	1
T-Shirt to Youth Club	04.12.23	Motia	Godda	6	6
1 Volleyball & T-Shirts	08.12.23	Dumaria	Godda	1	1
T-Shirt to Youth Club	22.12.23	Kauribahiyar Mal (Tetaria Santhali)	Godda	2	2
Jersey & 1 Football to Youth Club	26.12.23	Sounpur	Thakurgangti	2	2
T-Shirt & Trouser	17.01.24	Navdiha	Poreyahat	2	2
Track suit & Prizes	22.01.24	Godda	Godda	1	1
T-Shirt & Trouser	26.01.24	Gopladih	Godda	2	2
T-Shirt	27.01.24	Daldali Gopalpur	Boarijore	2	2
T-Shirt	01.02.2024	Chajora	Thakurgangti	2	2
T-Shirt	03.02.2024	Rampur	Poreyahat	2	2
T-Shirt	06.02.2024	Kajara, Pasai,	Poreyahat	2	2
T-Shirt	06.02.2024	Karnu	Mahagama	2	2
T-Shirt, Cricket Kit, Winner Cup	09.02.2024	Basantpur (Dudhiya Than)	Poreyahat	2	2
Set of Medals, Prizes, etc.	14.02.2024	Mandal Tola, Basantpur	Poreyahat	2	2
Set of Medals, Prizes, etc.	15.02.2024	Kakna	Godda	2	2
T- Shirt	16.02.2024	SBSSPSJ College Pathargama	Pathargama	2	2
T-Shirt, Football	17.02.2024	Bhagwanpur	Thakurgangti	2	2
T-Shirt, Football	19.02.2024	Jhirli	Boarijore	3	3
T-Shirt	28.02.2024	Mohani (Asadi-Madhuri)	Godda	4	1

T-Shirt, Football	06.03.2024	Bargachha, Hariyari	Mahagama	2	2
Football	06.03.2024	Bada Solbandha (Sahibganj)	Mandro	1	1
Winner Cup, Runner up Cup and Trophy (Small)	14.03.2024	Godda	Godda	4	1
Winner Cup, Runner up Cup, and T-Shirt for Cricket team	19.03.2024	Deobandha, Dumaria	Godda	2	2
Total				**63**	**57**

- **Support to Godda District Netball Association:** Adani endeavours to promote Youth & Sports Development Programme and encourage the youths to lead and perform in athletics at District, State and National Level. Talent of aspiring youths are explored, and they are further groomed & sharpen their skills in their domain sports field. In the last 13 years, more than 1300 players of Netball Sports from district are playing and have won medals by participating in 150 State Level and National Level Netball Sports tournament.

  At this juncture, Adani had supported the 'Godda District Netball Association' with grocery items for conducting **"9th Summer Residential Netball Training Camp"** participated by **300 players** at Gandhi Maidan, Godda. The outstanding players of the competition will be selected for further grooming & training session to participate in upcoming State Level and National Level Netball Sports tournament.

- **Sports Tournament: 59 sports tournament** including **Football (44), Cricket (5), Chess (1), and general sports event (9)** were organized with coverage of **107 villages** of core, and pipeline areas of Godda and Sahebganj district involving children & rural youths to instill them with confidence, develop their personality and motivate them for shaping bright future and development of youths in athletes. More than **12426 players** and **84000+** audience members had participated and cheered their favorite team from nearby villages, maintaining safety protocols.

Sports Tournament						
SN	**Sports**	**Date/Month/Year**	**No of Villages/ locations**	**No. of Teams**	**No. of Players**	**Average Audience Size**
1	Football Tournament in Kendua	09.10.23	1	16	240	800
2	Football Tournament in Dhamni Simaria	13.10.23	1	16	240	900
3	Football Tournament in Rajaunkala	26.10.23	1	16	240	1050
4	Cricket Tournament in Petbi	16.10.23	1	16	176	750
5	Cricket Tournament in Deobandha (Baran tola)	19.10.23	1	16	176	600
6	General Sports Tournament in Kadawa tola, Godda	18.10.23	1	2	24	1500
7	General Sports Tournament in Sarauni (Malhara)	22.10.23	1	5	50	2000
8	Sponsored for Golf League in Jamshedpur	Nov' 23- Apr'24	18	25	300	1850
9	Football Tournament in Bara Kendua	12.11.23	1	16	240	1700
10	Football Tournament in Ganga Rampur	17.11.23	1	16	240	1800
11	Football Tournament in Badgama	13.11.23-14.11.23	1	16	240	1950
12	Football Tournament in Jamua	24.11.23	1	16	240	2120
13	Football Tournament in Gangta	24.11.23-25.11.23	1	16	240	640
14	Football Tournament in Chhota Tetaria	08.12.23	1	16	240	970
15	National Championship for Chess Tournament in Dumka	6.12.23-10.12.23	20	150	300	2000
16	Football Tournament in Kauribahiyar Mal (Tetariya Santhali tola	21.12.23-22.12.23	1	16	240	1020
17	Football Tournament in Kumarshi	21.12.23-22.12.23	1	16	240	1450
18	Football Tournament in Sounpur	26.12.23-27.12.23	1	16	240	1260
19	Football Tournament in Jatharidih	27.12.23-29.12.23	1	16	240	1500
20	General Sports Tournament (Cricket & Football) in Sondiha	20.12.23-26.12.23	1	15	300	2000
21	Football Tournament in Charkatand	03.01.24	1	16	240	780
22	Football Tournament in Godda College	09.01.24	1	8	120	950
23	Football Tournament in Navdiha	17.01.24	1	16	240	1200
24	Football Tournament in Gopladih	26.01.24	1	16	240	2050
25	Football Tournament in Blathar	28.01.24	1	16	240	800
26	Football Tournament in Beldiha	29.01.24	1	16	240	650
27	Football Tournament in Chitarkothi	21.01.24-23.01.24	1	16	240	710
28	Football Tournament in Jhirli	15.01.24-16.01.24	1	16	240	1100
29	Football Tournament in Telgama	16.01.24-17.01.24	1	16	240	1350
30	Football Tournament in Daldali Gopalpur	27.01.24	1	16	240	1200
31	Football Tournament in Harkatta	30.01.24-31.01.24	1	16	240	1450
32	Godda Premier League (GPL) in Gandhi Maidan, Godda	07.01.24-14.01.24	1	8	88	3000
33	Sponsored for Airport Premier League (Cricket) 2023-24 in Ranchi	19.01.24-30-01.24	10	10	120	1500
34	Sports Programme in Godda	22.01.24	1	10	100	640
35	Football Tournament in Chajora	01.02.24-02.02.24	1	16	240	540
36	Football Tournament in Karnu	06.02.24-07.02.24	1	16	240	950
37	Football Tournament in Ratanpur	08.02.24-09.02.24	1	16	240	970
38	Football Tournament in Kajara (Pasai)	13.02.24	1	16	240	1500
39	Football Tournament in Harakkha	13.02.24-14.02.24	1	16	240	1300
40	Football Tournament in Bara Lohanda	14.02.24-15.02.24	1	16	240	1450
41	Football Tournament in Bhagwanpur	17.02.24-18.02.24	1	16	240	1260
42	Football Tournament in Jhirli	19.02.24-21.02.24	1	16	240	1750

43	Football Tournament in Rupuchak	24.02.24-25.02.24	1	16	240	1300
44	Football Tournament in Dhankunda	27.02.24-29.02.24	1	16	240	1320
45	General Sports Tournament in Rampur	03.02.2024-04.02.2024	1	8	88	1400
46	General Sports Tournament in Basantpur (Dudhiya Than)	09.02.2024-11.02.2024	1	8	88	1470
47	General Sports Tournament in Mandal Tola, Basantpur	14.02.2024	1	5	80	1560
48	General Sports Tournament and Cricket Tournament in Kakna	15.02.2024	1	6	120	1390
49	General Sports Tournament in SBSSPSJ College Pathargama	16.02.2024	1	8	150	2000
50	Football Tournament in Bhagwanpur, Thakurgangti	17.02.2024-18.02.2024	1	16	240	2150
51	Football Tournament in Jirli, Boarijor	19.02.2024-21.02.2024	1	16	240	1250
52	Football Tournament in Rupchak, Pathargama	24.02.2024-25.02.2024	1	16	240	2300
53	Football Tournament in Dhankunda	27.02.2024-29.02.2024	1	16	240	2200
54	Football Tournament in Mohani (Asadi-Madhuri)	28.02.2024-01.03.2024	1	16	240	1200
55	Football Tournament in Goradih (School Tola) Boarijor	04.03.2024-06.03.2024	1	16	240	1400
56	Football Tournament in Bargachha, Hariyari	06.03.2024-08.03.2024	1	16	240	1900
57	Football Tournament in Bada Solbandha (Sahibganj)	06.03.2024-07.03.2024	1	16	240	1890
58	Football Tournament in Bisaha, Pathargama	11.03.2024-12.03.2024	1	16	240	2160
59	Cricket Tournament in Deobandha, Dumaria	19.03.2024-24.03.2024	4	6	66	2245
	Total		**107**	**978**	**12426**	**84095**

COMMUNITY HEALTH PROGRAMME

Mobile Health Care Unit (MHCU)

In this financial year 2023-24 (April'23- March'24), four Mobile Health Care Units have together catered to **66142 patients including 20649 male, 28540 female and 16953 children** from around **126** Core, Periphery, Railway line and Pipeline villages of Godda and Sahebganj district. Adani Foundation runs its own MHCU (1) in core villages, while it has partnered with Helpage India (1) and Wockhardt Foundation (2) to extend primary medical services in periphery and pipeline villages respectively. All these four MMUs provide services in the villages as per schedule through a team of a Doctor, a Pharmacist, an ANM, and a Social Protection Officer. AF supported mobile medical facilities goes a long way to ensure access of poor people to quality primary health care services at their doorstep.

2.Specialized Medical Camps: During the Year 2023-24, Adani Foundation endeavored to cater health needs in a specific health issue of the masses amidst Epidemic outbreak by adhering to safety protocols. The Foundation strives to be a catalyst to 'Sustainable human development' and serves the deprived and marginalized human mankind and community with means of rendering appropriate services at grassroots. The triggers adopted for development encompass health as one of the major elements for holistic development of an individual. Moreover, the drive aligns with **Sustainable Development Goals (SDG) 3, 'Ensure healthy lives and promote well-being for all at all ages.**

In the year 2023-24, Foundation had organized **96 Specialized Health Camps in specializations namely, Ophthalmic (12), Paediatrics (23), Gynec (20), Cardio (23), Osteo (18) at Health & Wellness Centre, Motia** & **16 General Health Camps** was conducted in **13** intervention villages of core, railway line and pipeline area of Godda district. **Total 2535 patients (1606 patients at Wellness center and 929 patients in General Health Camps)** including **707 males, 1234 females and 594 children from over 15 villages** were screened, treated, and provided with free medicines.

Specialized Medical Camps was organized with an objective to provide critical and specialized health care services in villages to cater untreated illness/ medical issues concerning women/ girls and children, elders, and community for whom access to safe and standard health services remains a challenge.

3. **Support to District Health department for Measles (Rubella) Awareness Program**: Adani provided support to District Health department, Godda with IEC materials (School Poster, Anganwadi Poster and Hand Bill) on 19th April 2023 to organize Awareness program cum Vaccination campaign on Prevention and Curative Measures of Measles (Rubella) diseases in children aged 9 Months to 15 years old. The intervention was carried out in schools, Anganwadi Centre, and hospitals which aided the frontline health workers, social activist, village leaders to educate, inform and aware the children, parents, and community about Rubella Vaccination for children. It benefited around **3000+ children.**

SN	Particulars	Unit
1	School Poster	750
2	Anganwadi Poster	500
3	Hand Bill	10000
	Total	**11250**

4. **Blood Donation Drive:** The Adani Power (Jharkhand) Limited, Godda and Adani Foundation, Godda organized the **Blood Donation Camp** under joint aegis of Medical CSR and OHC to mark the **61st Birthday of Sh. Gautam Adani, Chairman of the Group** on **2023 June 24th** at Officer's Club, Motia site. The Site Head, APJL, Mr. Naresh Goel, Mr. Ramesh Jha, Chief Business Officer, Operations & Maintenance (O & M), and Mr. Prasun Kumar Chakraborty, Vice President - Operations & Maintenance (O & M) greeted the medical officers from District Health department, Godda with a flower bouquet and jointly inaugurated the Blood Donation Camp by performing the lamp lighting rituals. All the dignitaries recognized the good work of the blood donors and gave away the certificates to boost the morale of donors. More than **370** employees, contractors' staff and workers donated blood on this occasion creating an indelible mark of the highest collection on a day in the district.

The occasion witnessed the enthusiasm and passion among the blood donors to serve the cause of humanity. The idea was to save human lives at the time of emergency. The Adani Foundation played a major role in organizing the camp and the efforts of all the organizers including the HR-Administration and OHC were appreciated by all. T- Shirts, Certificates, Selfie point, Banner, Dangler, Prizes (Umbrella & Cap), juice, and snacks were arranged for the donors and the organizers on the occasion. Donors were also awarded certificates of appreciation duly signed off by the **Adani Foundation Chairperson, Mrs. Priti G. Adani**, that provided a sense of elevation to all. It turned out to be a memorable moment.

5. Plantation on the eve of 61st Birthday of Chairman of the Group:

On **61st Birthday of Honourable Sh. Gautam Adani, Chairman** of the Group on **June 24th, 2023, Plantation Drive** was organized in **High School, Baksara of TPP Core area.** Over **250 school children** and School Management Committees (SMCs) had volunteered in plantation activity who planted more than **150 fruit and non-fruit plants** in the campus of school premises.

The ownership of plantation of each plant was taken up by every student. The program was led by students and School Management Committees (SMCs) who expressed their heartfelt gratitude and noble gesture to Sh. Gautam Adani on the special day and embarked an ambitious project **-Vruksha se Vikash (Planting 100 million tree)** of Adani Foundation.

The day marked a significance towards environment protection, afforestation, enhancement of greenery, social and economic development by spreading the message among school children, PRI members, and community.
The program was presided by esteemed dignitaries who graced the auspicious occasion with their presence and motivated the children to become the changemaker of the society.

6. Awareness Drive on Specialized Health Camps:

Health Camp Awareness Drive has been initiated to inform, aware and educate the villagers and community of 17 core and railway line areas of the intervention of Adani Foundation of providing free Specialized Health Care services at PHC Motia, instrumental in safeguarding the life of approx. **2000** economically backward and marginalized rural population of the society.

Door to door household visit and awareness campaign is conducted in each village in which the target households are informed about Doctors' schedule, specialization of diseases diagnosed, and sensitized about the importance of good health and productive life for a happy living. Five doctors of concerned specialization namely, Gynec, Pediatrics, Osteo, Cardio, & Ophthalmic are deputed at PHC, Motia on respective days and time duration in monthly and fortnightly manner where the patients reach to the health centre along with their health card for diagnosis of their health complication and follow-up as per doctor's prescription.

7. Linking Poorer to Social Security Entitlement- Ayushman Card:

Adani Foundation had organized an Ayushman Card-Registration Drive with an objective to link poorer and needy families with government schemes to provide access to basic facilities for better healthcare which offers health insurance coverage for medical expenses. At the onset, an awareness campaign was organized in tribal and rural areas of Godda and Sahebganj district. During the

campaign, the villagers were informed and educated about Ayushman Health scheme, process of registration, benefits of Ayushman Card, etc. The AF team led the Registration program for linking the needy families with Ayushman Card with active participation of community.

A total of **601 rural and tribal families from 12 periphery and pipeline villages of Godda and Sahebganj district** had successfully registered and availed Ayushman Card.

Ayushman Card Enrollment details					
SN	**Duration**	**Block**	**Panchayat**	**Village**	**HH**
1	Jan'24	Godda	Lobhanda	Makundi Dikwani (Yadav tola)	72
2	Jan'24	Godda	Lobhanda	Makundi Dikwani (Harijan tola)	44
3	Jan'24	Godda	Pairdih	Kauribahiyar	34
4	Jan'24	Godda	Pairdih	Kauribahiyar Mal	36
5	Dec'23	Borio	Bara Toufir	Chhota tetariya	60
6	Jan'24	Borio	Bara Toufir	Bara tetariya	26
7	Jan'24	Borio	Bara Toufir	Bara lohanda	25
8	Jan'24	Borio	Bara Toufir	Chhota lohanda	51
9	Jan'24	Borio	Bara Toufir	Chhota Panchgar	51
10	Jan'24	Borio	Bara Toufir	Satichouki Pangro	71
11	Feb'24	Borio	Bara Toufir	Panchgar	60
12	Feb'24	Mandro	Ambadiha	Solbandha	26
13	Mar'24	Borio	Bara Toufir	Adro	25
14	Mar'24	Borio	Bara Toufir	Nirapara	20
		Total			**601**

Health Awareness Programmes

Medical Services

- **Health Awareness:** with collaborative efforts of Adani Foundation, Helpage India and Wockhardt Foundation in Peripheral, Pipeline & Railway Line village area to provide support for better community health. Health Awareness Program are organised in area to aware rural people about harmful diseases, maintenance of cleanliness, direction for balance diet which help them to fight from diseases and the COVID 19 virus affecting the populations at large scale followed by all safety norms. School children and community persons have become more vocal with active approach towards curbing diseases and sharing of such valuable information among community. **10000+ villagers** benefitted.

- **Critical Health cases:** Diagnosis of critical cases of laborers working in TPP (site office) is done by CSR Medical Team regularly in an emergency manner.

- **Ambulance Facility to Poor Patients**: Families from 13 core villages have been benefitted from this initiative of Adani whose families remain loyal and grateful to company for the support provided by us in times of distress. Ambulance service is given to poor people belonging to TPP area in times of medical emergency or for transfer of critical patients to higher centre and for COVID health check-up, doing home quarantine and quarantine center and treatment like Bhagalpur, Deoghar, Ranchi, and Patna & Other nearby hospitals. **70+ patients benefitted from ambulance facility.**

Seasonal Assistance

- **Support to tribal community for cultural event:** Adani Foundation supported the tribal community with financial assistance, and traditional attire for the celebration of event with joy and happiness in tribal villages of TPP Core and Pipeline area. Over **600 tribals in 6 villages** of Godda district were supported with 1 set of Lungi- Panchi and T-Shirt for men and women benefitting tribal community to celebrate their festivals with huge zeal, joy and enthusiasm and unite their community in tackling the social challenges.

Support to Tribals on Social Occasions						
SN	**Particulars**	**Date/ Month**	**Village**	**Block**	**Unit**	**Beneficiary**
1	Lungi- Panchi & T-Shirt	11.01.24	Jhirli	Mahagama	32	32
2	Lungi- Panchi & T-Shirt	11.01.24	Govindpur	Mahagama	28	28
3	Lungi- Panchi	16.02.24	Nayabad	Godda	69	69
4	T-Shirt	16.02.24	Nayabad	Godda	62	62
5	Lungi- Panchi	17.02.24	Petbi Santhali & Mali	Podaiyahat	105	105
6	T-Shirt	17.02.24	Petbi Santhali & Mali	Podaiyahat	93	93
7	Lungi- Panchi	23.02.24	Gangta	Godda	111	111
8	T-Shirt	23.02.24	Gangta	Godda	102	102
	Total				**602**	**602**

- **Support of Musical instruments for Cultural program:** On May 2023, on dated 18th May 2023, Adani Foundation provided **Musical instruments (Dholak-1,**

Harmonium-1, & 2 pairs of Kartal instrument- Hand Cymbals Manjira Pair) support to community members of Tardiha village of Pathargama block in Godda district. The support will aid the village committee members to organize cultural program of their traditions benefitting over **2000 rural population** in villages.

- **Adani provided Saree support** to **1330 poorer and tribal women** residing in remote villages in Godda district which will enable celebration of festivals of their traditions during several occasion in proper attire.

- **Support to community for Religious and cultural event:** On 11th December 2023, AF provided support to villagers in Shiv temple, Dumaria village of TPP Core area, Godda with 1 set of traditional musical instruments (1 Harmonium, 1 Dholak, 1 Kartal and 3 Jhaal) benefitting over 2000 villagers to celebrate the festival with huge zeal, joy and enthusiasm and unite their community in tackling the social challenges. The villagers, especially the devotees, will conduct religious programs on several occasions in Shiv temple located in Dumaria village.

- **Material support (Breath Analyzer) to Govt office, Godda: On January 2024,** Adani provided support to Government department, Godda with **10 Breath Analyzer** for Road safety near all Police station area routed in Godda district of Jharkhand. It will assist the administration and local police team in monitoring, controlling, and safeguarding the public, crowd management during festivals celebration, road traffic control, etc. in Godda district. It will also enable prompt handling of sudden danger and emergency situations, ensure safety and security of public, controlling road **accidents, etc.**

- **Relief Materials Support to Affected Families from Natural Hazards**

1.1 Tarpaulin Assistance for Natural Disaster Management: Under 'Poorer Welfare & Assistance' program, Adani supported the poorer and weaker sections of society affected from natural calamities or uncertain disasters such as fire, flood, cyclone, thunderstorm, etc.

Adani instantly supported **19** affected families of **7** core, railway line and periphery villages with 19 Tarpaulin sheets in August and September 2023 for addressing the issue and safeguarding over **90 beneficiaries** in Godda district.

2.1 Poor Assistance Programme- Mosquito Net Distribution: Adani Foundation believes in assisting the community who are marginalized and deprived of basic facilities for survival. The health of the villagers is made secure and protected from several diseases which leads to fatalities and death cases in the villages. Assistance of Mosquito Net to the poorer households helps them to be

prevented from any vector-borne epidemic and common occurring water borne diseases such as Dengue, Malaria, etc. On dated 29th August 2023 and 30th August 2023, around **190 tribal households** were assisted with 190 Mosquito nets in tribal village namely Nayabad (61), Gangta (96), Mali Gangta (20) and Basmitikar (13) of Motia panchayat, Godda block of TPP Core area, Godda. Similarly, on dated 29th November 2023, **3500 Mosquito nets** were provided to District administration at Collectorate Office, Godda for mitigating health issues by preventing around **5000 rural and tribal population.**

3.1 Blanket Support under Relief Program in Winter Season: Adani has provided blankets support to over **1500 poorer and tribal community** in Podaiyahat, Korka, Gandhigram, Pathargama, and TPP Core area, Godda to provide relief and cope up with cold winter under 'Poorer Welfare & Relief Program'. The community upon receiving the blanket expressed heartfelt gratitude to Adani for providing them the immediate relief support. The strong ties with community and more solidarity are observed in the villages.

ii. **Team Participation in cultural event:** Adani supported the local villagers in organizing festivals and social events to strengthen ties and build relation with community. It emphasizes to celebrate the cultural program with huge joy and enthusiasm among the rural people. Social occasion program such as Sawan Mahotsav, Bhagwad Katha, International Day of Indigenous Peoples, Ganesh Chaturthi, Janmashtami, Vishwakarma Puja, etc. was celebrated in the villages benefitting more than **2000 rural and tribal communities**.

Welfare Support

i. **Assistance in Health, Marriage, Death, and Social Occasion:** Adani provides financial support to poor people for such events which require huge expense such as marriage ceremony, educational needs, major illness including hospitalization of patient, death rituals of a person and during social occasions. **2517** beneficiaries from more than 16 villages have been extended financial support to the tune of **Rs. 37,27,092/-**

Awards & Accolades

a) **Recognition from Health Ministry on Eradication of TB:** On **12th July 2023** at Ranchi district, Adani Power (Jharkhand) Limited, Godda has been felicitated by **Ministry of Health and Ministry of Labour and Employment** for contributing towards **Eradication of TB in Godda district** in association with District administration. The award was received by **Sh. Sanjeev Shekhar, Head- Corporate Affairs and Sh. Subodh Singh, CSR Head**

Jharkhand in Seminar Hall of Project Building- Jharkhand Mantralaya, Dhurwa, Ranchi district.

b) **Felicitation with Jharkhand Samajik Utkrishtta (Social Excellence) Award 2023:** On dated **12th September 2023**, the Adani Power (Jharkhand) Limited was graced with **Jharkhand Samajik Utkrishtta Award 2023** for contributing to upliftment and development of the society in Godda district of Jharkhand. The Adani Foundation's service towards upliftment of community in social, economic, and environmental sphere has impacted around lakhs of the poorer and marginalized groups of society of Godda district.

The Award was felicitated by **Mr. Ajay Kumar Singh, D.G.P, Jharkhand** in the presence of **chief guest Mr. Banna Gupta, Health Minister of Jharkhand** and government delegates during a seminar held in Ranchi, Jharkhand. The award was received by **Mr. Sanjeev Shekhar, Corporate Affairs, Ranchi and Mr. Prawin Kumar, Corporate Affairs, Godda** from Adani Group.

SUSTAINABLE LIVELIHOODS

1. **Adani Skill Development Centre:** Adani Skill Development Centre- ASDC, Godda was inaugurated by Executive Director AF- Education and Skills on 27th September 2018. Total Eight trades viz. Welder, Fitter, Mason and Bar bender, General Duty assistant, Hospitality, Electrical, industrial Sewing Machine Operator, and Digital Literacy classes is offered in which over **4600** candidates were trained and benefitted till last Financial Year 2022-23.

   Enrollment in New Batch in 2023-24: In 2023-24, a new training batch of Domain Business trades was started from April 2023 onwards. A **total of 498 candidates** are enrolled including **25** candidates in **Fitter Mechanical Assembly, 34 in Digital Literacy trade, 278 admissions in SMO trade and 161 in Domestic Data Entry Operator trade.** The Self-learning model enables the candidate to build repository of knowledge through access of learning materials provided in the link and after the completion of course, the candidates appear on examination to self-evaluate their performance followed by certification duly provided by NSDC.

2. **Handloom Upskilling Training Centre in Bhagaiya, Thakurgangti:** Adani endeavour to promote Bhagaiya Silk Cluster located in Bhagaiya village at Thakurgangti block, Godda district, Jharkhand, known for traditional handloom silk

manufacturing and weaving, also known as Resham Nagar. More than 1,000 households from Bhagaiya village (100%) and Manikpur village (30%) belonging to OBCs, and minority community are linked to the initiative and earning their living judiciously. The process involves, reeling, unwinding, spinning, and weaving of silk. The Handloom Up-skilling Training program has been started to promote and stabilize such groups by bridging the existing gaps with respect to capacity building (Skilling) in varied segments including advanced method of silk production, making value added products, supply chain management, marketing skills and others.

The **Handloom Up-skilling Training program** has been started to promote and stabilize such groups by bridging the existing gaps with respect to capacity building (Skilling) in varied segments including advanced method of silk production, making value added products, supply chain management, marketing skills and others. **The Inauguration Program was conducted on 28th May 2023 at Handloom Bhagaiya Silk Training Centre** with active participation of around 150 guests and trainees during the ceremony and made the event successful. **In new session 2023-24,** a total of **5 Batch** of **Bhagaiya Silk training trade (1st to 4th batch** with **30 trainees in each batch and 5th batch with 40 trainees),** are enrolled benefiting over **160 candidates** under training program.

3. **Celebration of World Environment Day (5th June 2023) at TPP Core Area:** On the occasion of **World Environment Day on June 5**, Adani Foundation had organized series of community engagement activities such as **Awareness Rally, Plantation drive, oath-taking ceremony and school level competitions (drawing and paintings)** in several TPP Core area location including 10 schools, Primary Health Centers (PHCs), 4 Anganwadi, Panchayat Bhawan, and public places with participation of more than 5 Mukhiyas, 1200+ students, 400+ local people, 80 schoolteachers, and 35 SMC Adhyaksh & team members.

   The program was inaugurated in the presence of Village Head, PRI members, schoolteachers, students, and community who delivered speeches and motivated the students on importance of Environment Day and conservation of environment. Various environmental & global issues such as deforestation, environmental pollution, soil erosion, land degradation, health issues and global warming based on sign boards, posters, placards, etc. were informed to the community within radius of 2 km in their villages.

   During the plantation drive, more than **100 plants** (Ashoka & Neem) were planted at different community places such as schools, Anganwadi centers, PHC, Panchayat Bhawan, and other public places. The program had a significant response from the participants which sharpened the art and craft skills of students, their imaginations

and prospectives towards environment and preservation of biodiversity was well conveyed.

Total Number of Plantation: 50 plants in schools, 10 each in Primary Health Centers (PHCs), Anganwadi centers, Panchayat Bhawan, and 21 in Public Places.

4. Vruksh Se Vikas or Vruksha Se Samrudhi or Vruksha for Vikas (V4V) - Planting 100 million trees: Promote Environment Conservation, Ecological Restoration, Conservation of Biodiversity, and Income generation of farmers.

Adani Foundation will be implementing a project called - Vruksh Se Vikas / Vruksh Se Samrudhi / Vruksh for Vikas (V4V) to contribute towards a global commitment to plant 100 million trees by end of **2030** there by contributing to one trillion tree campaign. Hence, Adani Foundation, Godda within its ambit and intervention areas would be implementing the Plantation project with objectives of income generation, increasing areas covered by trees, and ecological restoration.

Community Awareness was started in intervention villages of Godda and Sahebganj district about Program, its objectives, importance, and the benefits of plantation. The Vision of Adani Foundation on Survival of Plantation was also spread and instilled among the community to a Shared Vision. Every individual and community beneficiary will take ownership and responsibility of the survival of plantation.

The essentials of plantation related to place selection, water requirements, fencing, bio-fertilizer, pits digging, cluster plantation, etc., was properly communicated during the interaction and meetings held with interested Households, Community Based Organisation and PRI members. Total target of plantation in Godda is **22 Lakh plants** by year **2030**. In this year **2023-24**, **a total of 25,000 plantations** as per target have been made of Mango, Neem, Ashoka, Guava, Citrus (Lemon), Gulmohar, Saptaparni, Peepal, Jamun, Jackfruit, and Ficus (Banyan tree) saplings at household, school, AWC, and other institution level with coverage of around 900 households, and 6 community institutions in more than 18 villages. It is assured 95% survival of total 25,000 plantation. The **area brought under green cover is 234.7 acres** promoting biodiversity and ecological restoration and benefiting over 1000 farmers.

5. Skill Development & Employment Generation for Youths at Women's College at ITI, Godda

Under Public Private Partnership (PPP) Model, an MoU was signed between Directorate of Employment and Training, Department of Labor, Employment, Training and Skill Development, Government of Jharkhand, and Adani Skill Development Centre (ASDC), Ahmedabad on dated 6th April 2022 to commence Vocational training program under affiliation of NCVT at Women's ITI, Siktia (Godda).

The Vocational training program is operational in Women's ITI, Siktia (Godda) in two trades, 1. Sewing Technology and 2. Fashion Design & Technology since FY 2022-23. A total of **35 students** from intervention villages are attending training courses in each training timeline for **1 year in ITI in two trades namely, Sewing Technology & Fashion Design trade**. The opportunities provided by the Skilling program have paved way for the rural youths to achieve their ambitions, become self-reliant, generate local employment, and become economically stable in Godda region.

6. **Adani Annapurna -Vermicomposting in villages:** Adani Annapurna - Vermicomposting program was started with an objective to enable farmers to become Vermi-Entrepreneurs to boost their income and uplift their socio-economic condition and promotion of Sustainable Livelihood practices among farmers in more than **13** TPP core, railway line and pipeline villages.

Since FY 2022-23, over **68 small & marginal farmers** were supported with **83 units of Vermibed** for Vermicompost production along with trainings to 350 new farmers on organic farming and Vermicomposting in over 13 core, railway line and periphery villages namely, Motia, Baliakitta, Baksara, Dumaria, Jajalpur, Gumma, Belbharna, Sarwa, Sunderpahari, Ranidih, Karnu, Mahagama, Boarijore, etc. of Godda district. It resulted in a positive response by farmers for doing organic based farming and entrepreneurship.

The farmers have cultivated the culture of organic farming by application of vermicompost and other organic fertilizers in agriculture and plantation of horticulture plants which has increased the crop yields and productivity of the farm produces by 15%. While, the remaining produce is sold to other progressive farmers, vegetable growers, etc. in nearby villages and rural markets which has augmented their livelihood due to increase in earnings by minimum Rs. 2000- Rs. 5000 on an average per farmer per annum.

- **Exposure Visit and Training on Vermicomposting:** One day Training program on Vermicomposting was organized in KGBV (Kasturba Gandhi Balika Vidyalaya), Sunderpahari on 20th December 2023 with participation of around 200 girls and 10 teachers of KGBV. The theoretical training and implementation of vermicompost unit installation in school campus had educated and provided insights to the

students and teachers on various aspects of Vermicompost production, organic farming, economic benefits to farmers and importance of environment conservation and ecological restoration. **2 Vermicompost units** were installed in KGBV Sunderpahari during the training program.

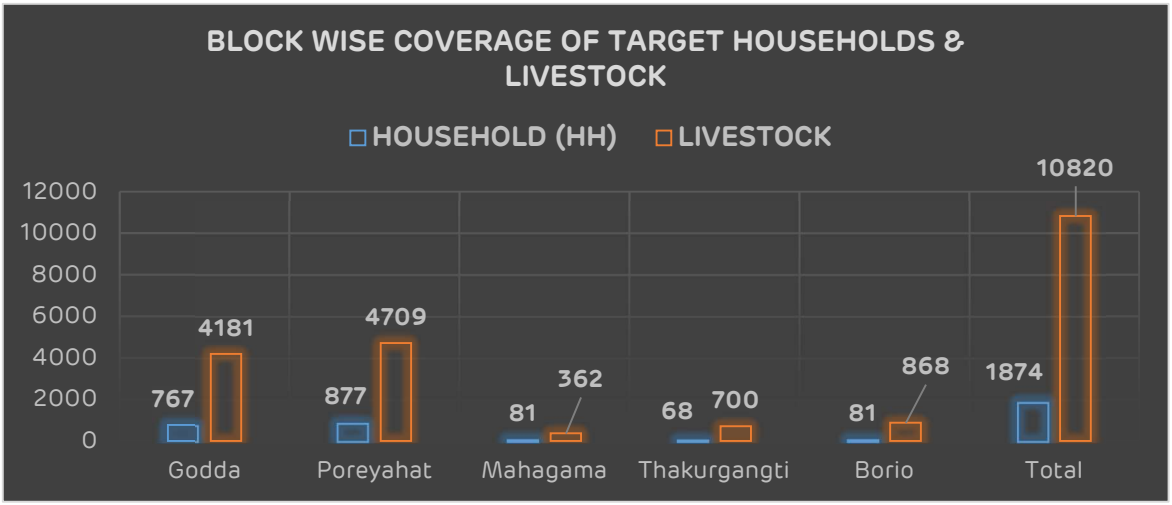
7. **Kamdhenu- Veterinary Health Camp:** Veterinary Health Camp was organized in the intervention villages including core, periphery, railway line and pipeline areas of Thermal Power Plant with an objective to treat and cure the diseases occurring in the cattle's and livestock to prevent them from fatalities and strengthen the financial status of poor and needful households during the outbreak. Adani Foundation in association with **Animal Husbandry Department, Godda** had organized **Specialized Health Camp for Livestock on 04th Oct. 2023 to 06th Nov. 2023** with mutual guidance and needful support of **Dr. Manoj Kumar Singh- District Animal Husbandry Officer (DHO).**

DAY WISE VETERINARY HEALTH CAMP					
SN	**DATE**	**BLOCK**	**VILLAGE**	**HOUSEHOLD**	**LIVESTOCK**
1	04.10.2023	Poreyahat	Sondiha	95	668
2	05.10.2023	Poreyahat	Parasi	79	510
3	06.10.2023	Poreyahat	Maldih	81	439
4	07.10.2023	Godda	Patwa	63	339
5	08.10.2023	Godda	Belbarna	53	368
6	09.10.2023	Poreyahat	Gumma Santhali	77	340
7	10.10.2023	Godda	Kauribahiyar	102	415
8	11.10.2023	Poreyahat	Petwi	77	328
9	12.10.2023	Poreyahat	Petwi Santhali	69	279
10	13.10.2023	Poreyahat	Baliyakitta	85	560
11	14.10.2023	Poreyahat	Basantpur	96	500
12	15.10.2023	Poreyahat	Baksara	81	382
13	16.10.2023	Poreyahat	Baksara	69	349
14	17.10.2023	Poreyahat	Gumma	104	477
15	18.10.2023	Godda	Karikado	68	354
16	19.10.2023	Godda	Motiya	89	409
17	20.10.2023	Godda	Dumariya	95	603
18	03.11.2023	Godda	Nayabad	53	327
19	04.11.2023	Godda	Gangta	59	282
20	05.11.2023	Godda	Motiya	71	522
21	05.11.2023	Godda	Dumariya	78	439
22	06.11.2023	Godda	Karnu & Govindpur	81	362
23	29.10.2023	Mandro	Chota Tetariya	30	409
24	02.11.2023	Mandro	Sati Chauki Khutari	51	459

25	05.11.2023	Thakurgangti	Bahadurchak & Niyamatchak	68	700
Total				**1874**	**10820**

Number of Village, Households and Livestock covered during Camp

COVERAGE: Total **26 Veterinary Health Camps** were conducted in **25 villages of 5 blocks** namely Godda, Poreyahat, Thakurgangti, Boarijor, Mahagama (Godda district) and Mandro (Sahebganj district) benefitting over **1874** households directly by providing door to door services to around **2000 livestock farmers**. A total of **10,820** cattle and Livestock were screened during the camp.



Block Wise Details of Household and Livestock covered during the Camp

- **Treatment of Domesticated Livestock:** Total **10820** domesticated cattle and Livestock were screened including 3375 Cow, 3084 Goat, 1950 Heifer Calf, 811Buffalo, 69 Buckling, 327 Hen, 358 Ox, and 69 Pigs respectively during the camp.

- **Diseases Identified and Diagnosed:** The screening and health check-up included Vaccination, Deworming, Ticks, and Parasites, Demolition, Infertility Check-ups, Weakness treatments and General treatment to the animals. The most common diseases were found to be Endoparasites, Osteoporosis, Ectoparasites, Enterotoxaemia, and Unknown Fever/Pyrexia of Unknown Origin (PUO), Wounds, Pregnancy Diagnosis, Repeat Breeding (RB), Dermatitis, and Lymphadenitis. The farmers were advised to do routine deworming and vaccination along with feeding of supplemental mineral-vitamin mixture to improve their body nutrient status and overall health.

8. **Library Development for Sustainable Agriculture:** Adani Foundation provided support of Almirah to School Management Committee of Bahadurchak (Niyamatchak) School, Godda district on 20th January 2024 for Library development on Sustainable agriculture and dairy activities benefitting more than 200 tribal and rural farmers. A total of 24 Books on 8 subjects related to farming activities was also provided for strengthening farmers of TPP Core villages.

9. Chief Guest Visits & Important Days Celebration

- **Celebration of 74th Van Mahotsava Program:** Van Mahotsav is a pan-India tree planting festival celebrated in July every year. This initiative was nationally recognized in 1950 by Dr K M Munshi, who was the Union Minister for Agriculture and Food during that period. **On 26th July 2023, 74th Van Mahotsava Program** was organized at Dighi village of pipeline area, Godda district in participation with chief dignitaries from local administration, PRI members, Adani's staff, and community.

  During the program, importance of celebrating Van Mahotsav, afforestation, its benefits, and shared vision of environment protection, ecological restoration and biological diversities was informed to the participants. It was succeeded by planting saplings in the vicinity by the chief guests.

- **27th Adani Foundation Day Celebration: Adani Foundation Day** was celebrated on **11th August 2023** to earmark **27 years** of the Adani Foundation's work at site level. The message of Adani Foundation was spread among the community by joining hands with the masses and instilling values and spirit which signifies Unity, Peace, Solidarity and Holistic Development.

  The 27th Adani Foundation Day was celebrated at **Baksara and Amrakanoli village** of Poreyahat block, Godda district by site team and stakeholders including rural beneficiaries, PRI members, and community. It was a festive occasion to celebrate with great joy and enthusiasm by filling the colours of hope and dreams of success, worshiping the human identity and integrity, and encouraging the values of everyone. On the occasion Tribal Puja Celebration, tribal dance representing the culture of Santhal Pargana community, Plantation activity near Pond and playful activities by children was organized followed by message from Mukhiya with a gesture to showcase the legacy of Adani Foundation. All community members put forth their well wishes and expressed their heartlet gratitude to Adani Foundation on breaking the taboos and hurdles of their lives and becoming the foundation for the development of human mankind.

- **Celebration of Memorial Ceremony at Baksara village:** Memorial Ceremony was held to pay patriotic tribute to great 'freedom fighter, Vishwanath Mandal' on his ninth-death anniversary on **6th October 2023 in Baksara village** of Podaiyahat block of TPP Core area, Godda. During the occasion of Baksara Mahotsava, several activities were conducted to discharge services to the needy and poorer in Baksara village. The program commenced at 9:30 a.m. with flower offerings by Chief dignitaries and conduction of sports & cultural activities including Welcome Song, Patriotic Song, etc. with participation of school children, rural youths, and community members.

  On the occasion, **prize distribution to 14 school students (10 girls and 4 boys)** on winning sports competition in High school, Baksara including stationary items (56 Copies), 14 drinking water bottles and 14 medals. A total of **1200+ participants including 50 children** were present to pay tribute during the occasion.

RURAL INFRASTRUCTURE DEVELOPMENT

Water Conservation, Ground water recharge

1. **Construction of Stairs at 9 Ponds:** Pond plays a crucial role in the functioning of natural cycle with enhancement of livelihood of human mankind, and natural species of flora and fauna. It enhances the soil moisture in the agricultural land, increases the water storage capacity of other harvesting structures and recharges ground water level in catchment area enabling access to drinking water namely wells, community wells and hand pumps.

   In **April'23- March'24, Construction of Stairs at 9 Ponds** was done in **9 villages.** It will enable around **138 farmers** dependent on these ponds to conveniently irrigate their land in **55-60 acres** prominently during Kharif season. It will also provide an opportunity for them to initiate integrated farming including agriculture, pisciculture, livestock development, etc. which will generate multiple sources of income and boost their income by minimum Rs. 5,000 in a year. This initiative will also aid around **500-600** community members in doing their domestic work in their daily routine and conduct cultural and religious programs with great joy and festivity.

Drinking Water Facility

1. **Drinking water facility in villages –Borewell, Water tank, tap water, Community Well etc.: -** In this year 2023-24, **19 drinking water facilities** was provided with respect to **12 units of Water tank, Borewell, and Tap water facility**, **6 wells renovation and 1 Motor Repairing** at Anganwadi Centre, Rampur Dumaria **covering 10 villages** of core, railway line and pipeline area benefitting more than **2500 population** directly. The work will facilitate the villagers, students, devotees, and community during the summer season and all the year for drinking, domestic and religious purposes.

2. **Installation, Renovation & Repairing Work of Hand pump:** Hand pumps are primary source for drinking water and other domestic needs in the TPP area. Adani Foundation has taken up the hand pumps maintenance and repairing work of hand pumps, its installation and construction of hand pump platform in core, railway line and pipeline villages of Godda and Sahebganj district. With this work, we are ensuring 100% functionality of the hand pumps and water availability in the area.

   This year **13 hand pumps** were installed in **13 core and periphery villages** benefiting more than **2900 rural population** of Godda district. The branding of hand pumps installed by Adani Foundation has also been done for its recognition among the community and better monitoring system. Along with that, **2 Handpump platforms** were constructed at Nayabad.

Educational infrastructure Development

- **1 School Infrastructure Development in TPP Core area:** The School Infrastructure of High School located in Motia village of TPP Core area, was strengthened including **Construction work of Boundary Wall and Main Gate**. It will bridge the infrastructural gap in pursuing education for more than 500 poorer and rural children every year in a proper space with a safe and conducive learning environment.

- **Strengthening 4 Educational institutions in Godda district:** Adani carried out infrastructure development work in the educational institutions comprising of schools and colleges enabling the children of Godda district residing near to periphery and pipeline area to complete their education till minimum higher level.

  The renovation work was carried out in: -

1. Mahila Vidyalaya, Godda consisting of Gate work, Circle shaped seating place, renovation of boundary wall, etc.,
2. Fencing Boundary at SBSSPSJ College, Pathargama,
3. Renovation of Pravat Tara Mission School at Pipra Village, Mehrama Block,
4. Building Renovation work of Inter College, Mahagama.

The intervention will cater to adequate educational infrastructure needs for **2000+ poorer, tribal children and youths** of Godda district to complete at least higher-level education till graduation level.

- **School Infrastructure Development of Kasturba Gandhi Balika Vidyalaya (KGBV):** In this year school development activities were carried out in **5 KGBVs (Kasturba Gandhi Balika Vidyalaya)** with respect to school infrastructure upgradation enabling adequate learning ambience for girls to study along with proper dining, drinking, and residential facilities benefitting over **2000 girls per year (400 girls on an average per KGBV).**

SN	Description	Work Status
1	**KGBV Pathargama-** Beautification of School Campus area, and Kitchen and Construction of Dining shed	Completed
2	**KGBV Godda-** Beautification of School Campus area and Kitchen and Construction of Dining shed	Completed
3	**KGBV Mahagama-** Beautification of School Campus area and Kitchen and Construction of Dining shed	Completed
4	**KGBV Sunderpahari-** Beautification of School Campus area	Completed
5	**KGBV Thakurgangti-** Beautification of School Campus area and Kitchen	Completed

Other Village development structures

1. **Construction of 13 Model Bathroom & Soak pit near Handpump:** Model Bathroom and Soakpit/ Recharge pit has become a critical component in the socio-economic development of rural people and ecological restoration. It serves the objective of providing access to amenities like health, hygiene and sanitation for women, children, and tribal community. Some time ago people had no bathroom facility in their village, and they were using open places for toilet as well as bathing purpose which invites unhygienic condition and diseases among the people and makes the women more vulnerable to several social issues.

Construction of **13 Model Bathroom and Soakpit** in **8 villages** of core and periphery area of Godda district has addressed the needs of around **1000 women, girls and the community** who lived in vulnerable condition. It has reduced their drudgery and safeguarded dignity of women and girls fostering social inclusion and equity. Development of such structures in rural habitation has also ensured alignment with Sustainable Development Goals, namely, 'Goal 3- Ensure healthy lives and promote well-being for all at all ages' and 'Goal 6. Ensure availability and sustainable management of water and sanitation for all'.

Model Bathroom						
S.N	**Duration**	**Block**	**Village**	**No. Of Bathroom**	**Total HHs**	**Beneficiary**
1	23-Jun	Godda	Gangta	2	30	150
2	23-Jul	Mahagama	Ghat Ghoria	1	18	90
3	Oct'23	Mehrama	Hanuman Temple, Kokra Khas village	1	42	90
4	Dec'23	Podaiyahat	Baksara (Sah tola)	1	25	75
5	Dec'23	Podaiyahat	Baksara (Laiya tola)	1	30	90
6	Dec'23	Godda	Nayabad	2	35	105
7	Dec'23	Godda	Gangta	1	20	60
8	Dec'23	Podaiyahat	Petbi	1	25	75
9	Dec'23	Podaiyahat	Basantpur	2	60	180
10	Jan'24	Podaiyahat	Baliakitta	1	36	108
Total				**13**	**321**	**1023**

2. **Construction of 19 Seating Place (Chabutra) in villages:** Construction of **19 Seating place** has been done in **12 core and pipeline villages** benefiting more than **5500 rural and tribal population**. Normally villages do not have common places in the village for seating purposes mainly for elders, senior citizens and devotees coming to worship in temples situated in villages. This is being used by the common people in the village for seating purposes and for conducting village level meetings, SHG meetings and cultural activities at a small level.

Seating Places					
S. N	**Duration**	**Block**	**Village**	**Unit**	**Beneficiary**
1	23-Apr	Godda	Badi Lobandha (Near Siktia)	1	460
2	23-Apr	Godda	Choti Lobandha (Near Siktia)	1	655
3	23-May	Mahagama	Ramchandrapur	1	610
4	23-May	Godda	Patwa near Hanuman temple	1	250
5	23-May	Mahagama	Kushmara	1	335

6	23-May	Mahagama	Shivkitta	1	300
7	23-Jun	Godda	Gangta (Near AWC)	1	224
8	23-Aug	Godda	Singheswar Temple, Dare, Godda	6	1500
9	23-Aug	Mahagama	Anjana	1	NA
10	Dec'23	Podaiyahat	Basmotitikar	1	350
11	Jan'24	Podaiyahat	Telgama	1	270
12	Feb'24	Mehrama	Balbadda	3	550
Total				**19**	**5504**

3. **Construction of Conference Hall at Sibu Soren Janjatiya Inter College, Borio Block** at cultural heritage sites in Sahebganj to provide adequate infrastructure to hold meetings, seminars, and cultural events benefiting over **591 tribals students, teaching staffs & community.**

4. **Construction of Community Hall at TPP area for Community Programs** for Promotion of cultural activity and local events at village level for community. It helps share peace and harmony among the community. As we are committed to providing better community structures to the village, we have constructed 1 community hall in Motia village of TPP core area. This hall is also being used for community purposes by over **200 villagers** on several occasions.

SN	Duration	Village	Unit
1	April 2023	Motia	1
	Total		**1**

5. **Construction/Renovation of Boundary wall at 3 villages** comprising of construction of boundary wall at Jaherthan at Telgama village, Boarijore block of pipeline area, Godda, boundary wall construction in community hall at Diyara Village, Godda and Renovation of Boundary wall at Motia Panchayat Bhawan. It will address the needs of PRI members and around **900 villagers per year** to conduct panchayat and village level meetings on developmental programs of government, registration of beneficiaries to the govt. schemes, awareness generation among right beneficiary, conduction of SHGs meeting, cultural and religious activities, etc. The boundary wall renovation will enable safety in panchayat Bhawan and religious premises and promote horticulture plantation activities with maximum survival count resulting conservation of natural resources and ecology.

6. **Construction of 2 Drains** was carried out in various core villages, namely **150m Drain at Petbi Village**, and **110m drain at Patwa Village,** for proper drainage system and sanitation in the rural area benefiting over **3500 rural population**.

7. **Development of Workshop unit at Women's ITI Siktia, Godda:** To provide better training infrastructure facilities to the students of Skill development program operational in Women's ITI Siktia, Godda.

8. **Renovation and construction of 19 community structures:** We have taken up the renovation & upgradation of old, defunct, and dilapidated community structures and cultural heritage structures in 16 intervention villages to restore, adapt and conserve structures of heritage and cultural value benefiting more than **20,000 beneficiaries.** Moreover, it enables the villagers to organize local festivals, perform puja rites and conduct village level meetings such as SHG meeting, Gram Sabha, Sports Committee meeting, etc.

9. **Repairing of 1 Village Road** at Basantpur village of TPP Core area, Podaiyahat block of Godda district to provide better rural infrastructure facilities benefiting **3000+ villagers** for safe and smooth commuting**.**

10. **Construction of Paver Pathway, and Renovation of Well and bathroom at Bhavanipur Village, Vikram Shila-** Aim to provide better rural infrastructure in the villages. This connecting path will benefit the tourists who visit Vikramshila, an archaeological site of National importance benefiting **5000+ visitors every year.** This will also promote tourism and economic empowerment in the region. Also, Renovation of Well and bathroom construction work was carried out benefiting **200 population** per year from Bhavanipur village.

11. **Renovation of Children's Park at Lohiyanagar, Godda:** Renovation of Children's Park at Lohiyanagar, Godda for better playing and recreational facilities for around **1000 children and public** of Godda district every year.

12. **Construction of Kitchen in Satsang Bhawan** in Deobandha village of periphery area enabling to perform cultural and religious activities on several occasions benefiting over **1500 community members** every year.

Annexure – III

Total Plant Area : 3.22 HA

Green Belt Developed area: 1.06 HA (33%)

Sl. No	Species	Sl. No	Species
1	Jamun	22	Ashoka
2	Hyophorbe lagenicaulis	23	Latina
3	Murraya peniculata	24	Ficus Benghalensis
4	Golden Bamboo	25	Ficus Benjamin
5	Curry Tree	26	Pipal
6	Hibiscus	27	Amaltas
7	Mango	28	Pterospermum acerifolium
8	Lemon	29	Sisham
9	Guava	30	Peltaform
10	Hemelia	31	Royal Palm
11	Clerodendrum inerme	32	Hedge
12	Parijat Tree	33	Shrubs
13	Bakul	34	Dypsis Decaryi
14	Conocarpus	35	Areca Palm
15	Alestonia Scholaris	36	Plumeria Champa
16	Foxtail Palm	37	Caeselpinia
17	Bahunia	38	Cycas Circinalis
18	Ticoma	39	Phalsa
19	Micheia Chama	40	Jamun
20	Bouganvelia	41	Neem
21	Pilkhan	42	Nerium

Greenery in Township Entrance

Green Belt along the Road

Green Belt along the road

Green Strips

Greenery in Township

Green Belt along the boundary

Green Lawn with plantation

Plantation along the Boundary

Green Belt near Building

Plantation along the road

Plantation along the Road

Plantation along the road

Plantation

Green Play Ground

Temple with Greenery

Annexure- IV

Installation of Solar Street Lights at Residential Township