

Ref: AMNS/ EC/SEIAA/24-25/01

Date: 20.09.2025

To,
The Member Secretary,
State Environment Impact Assessment Authority,
5RF-2/1,Acharya Vihar,Unit – IX,
OPTCL Colony, Anand Bazar, Bhoi Nagar,
Bhubaneswar, Odisha 751022.

Sub: Submission of half yearly report of compliance to the conditions of EC of 2 x 30 MW (Phase –I) Captive Power Plant of ArcelorMittal Nippon Steel India (P) Limited, Paradeep (EC obtained from SEIAA, Orissa vide letter no. SIA/OR/THE/289000/2022, dated 06.02.2023).

Dear Sir.

We are submitting herewith the half yearly report of compliance to the conditions of Environmental Clearance of 2 x 30 MW (Phase –I) Captive Power Plant of ArcelorMittal Nippon Steel India (P) Limited, Paradeep, Odisha for the period **October 2024 to March 2025**.

This is for your kind perusal.

Thanking you,

Yours faithfully

For ArcelorMittal Nippon Steel India (P) Limited.

Rajarshi Sinha

Unit Head, Captive Power Plant

Enclosed: As Above

R. Sinha

#### Copy to:

- 1. The Addl. Principal Chief Conservator of Forests (C), MOEFCC, Regional Office, A/3, Chandrasekharpur, Bhubaneswar 751023.Odisha.
- 2. Member Secretary, Odisha State Pollution Control Board, Bhubaneswar, Odisha.
- 3. Member Secretary, Central Pollution Control Board, Zonal Office, Kolkata.
- 4. Regional Office, Odisha State Pollution Control Board, Keonjhar, Odisha.



Environmental clearance of 60 (2x30mw) coal based Captive Power Plant, Phase-1 of ArcelorMittal Nippon Steel India Limited, located at Paradeep, Jagatsinghpur.

Environment Clerance File no.: SIA/OR/THE/289000/2022, issued on 06.02.2023.

Period: 1st October 2024 to 31st March 2025

S No	Condition Six monthly compliance Status				
	A. Statutory compliance:				
1		•			
2	Part C of Schedule 11 of Municipal Solid	Noted Shall be complied			
2	Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.				
3	MoEF & CC Notification G.S.R 02(E) dated 2.1.2014 as amended time to time regarding use of raw or blended otbeneficiated/washed coal with ash content not exceeding 34% shall be complied with, as applicable.	·			
4	MoEF & CC Notifications on Fly Ash Utilization S.O. 763(E) dated 14.09.1999, S.O. 979(E) dated 27.08.2003, S.O. 2804(E) dated 3.11.2009, S.O. 254(E) dated 25.01.2016 as amended from time to time shall be complied.				
5		, ,			
6	Committee of NB WL under the Wildlife	The industry premises is not coming under any forest range and reserved forest, hence Wildlife (Protection) Act, 1972 is not applicable.			
7	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its sitting criteria for height clearance.	08.08.2019.			
8	construction of the project. In case, groundwater is drawn during	Filtered slurry water from Pellet Plant of ArcelorMittal Nippon Steel India Limited, Paradeep is being used for the present phase-I. No ground water is being drawn or will be drawn for plant operation.			
	transportation of coal:				

1	EC is given on the basis of assumption of 5 to 8% of ash content and 500 km distance of transportation in rail/road/conveyor/any other mode. Any increase of %ash content by more than 1 percent, and/or any change in transportation mode or increase in the transport distance (except for rail) require application for modifications of EC conditions after conducting the 'incremental impact assessment,' and
	proposal for mitigation measures.
	C. Air quality monitoring and
4	Management:
1	Flue Gas Desulphurisation System shall Not required as per the latest MoEF&CC be installed based on Lime/Ammonia guidline. dosing to capture Sulphur in the flue gases to meet the SO, emissions standard of 100 mg/Nm³.
2	Selective Catalytic Reduction (SCR) Design furnace temperature is low (about system or the Selective Non-Catalytic 950 Deg C) and the monitoring report Reduction (SNCR) system or Low NOX shows NOx emission value within the Burners with Over Fire Air (OFA) system prescribed limit. As per the CTO issued by shall be installed to achieve NOX SPCB Vide Letter no. 5244-IND-IV-CON-emission standard of 100 mg/Nm³.  6408, dtd. 19.03.2025 the permissible NOX limit is mentioned 450mg/nm³. And our manual monitoring reports are far below the limit.
3	High efficiency Electrostatic Precipitators Our ESP is designed with 5 fields and twin (ESPs) shall be installed in each unit to hoppers to ensure PM values within the ensure that particulate matter (PM) prescribed limit. emission to meet the stipulated standards of 30 mg/Nm³.
4	Stacks of prescribed height 106 m shall Complied. be provided with continuous online monitoring instruments for SOx, NOx and Particulate Matter as per extant rules.
5	Exit velocity of flue gases shall not be less Complied and being monitored on monthly than 20-25 m/s. Mercury emissions from basis.  Stack shall also be monitored periodically.
7	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM 10, PM2.5 SO2, NOx within the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each, shall be carried out manually.  Adequate dust extraction/suppression Dust extraction system (Bag filters) and
	system shall be installed in coal handling, Dust suppression systems (High pressure

		water spraying system) have already been installed in coal handling, ash handling areas and working efficiently		
8	measures (DEs/DSs) be provided at all	Electrostatic Precipitators (ESP) of 99.9% efficiency, having 5 field are installed and ensured that the particulate emission is lying within the prescribed limit.		
1	standards prescribed as per the Noise	Air compressors are housed in suitable enclosures. Noise levels outside the		
	2000.	enclosures does not exceed the stipulated standards. The necessary PPEs such as ear plugs and earmuffs are provided to the employees working in high noise areas. Periodic medical examination of the people working in these areas is undertaken.		
2	generating equipment shall use Personal	The turbine and air compressors are housed in suitable acoustic enclosures. Noise levels outside the enclosures does not exceed the stipulated standards. The necessary PPEs such as ear plugs and earmuffs are provided to the employees working in high noise areas. Periodic medical examination of the people working in these areas is undertaken.		
3	hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss	Complied The necessary PPEs such as ear plugs and earmuffs are provided to the employees working in high noise areas. Periodic medical examination of the people working in these areas is undertaken		
	E. Human Health Environment:			
1	workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus	monitoring being conducted for workers/employees working at hazardous areas. Regular & Periodical health check- up is being carried out for employees and		

2	Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.			
3	agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from	1		
4	power plant.  Sewage Treatment Plant shall be provided for domestic wastewater.  F. Water quality monitoring and	Complied. The treated sewage water is being used for gardening purpose.		
1	cooling system including cooling towers			
2				
3	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.			
4	Rainwater harvesting in and around the plant area he taken up to reduce drawl of fresh water. If possible, recharge of	Since water table in the area is high, there is no need to have to recharge the ground water table in the area. The surface run-off water is channelised through a multistage collecting pit and the clear water is being used for gardening and dust suppression.		
5	monitoring of groundwater quality in and	The ground water and surface water quality are being monitored regularly by the authorized party of OSPCB and is being		

	presence of heavy metals (Hg, Cr, As, s) Pb, etc.) shall be carried out as per CPCBo guidelines. Surface water quality a monitoring shall be undertaken for majord surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.	observation from the reports, groundwater and surface water quality is not impacted
6	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, the sewage, etc. conforming to the prescribed standards shall be recirculated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.	ne water quality at guard pond is nonitored round the clock thorough
7	Hot water dispensed from the condenser B should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.	Being complied.
8	Based on the commitment made by the Warroject Proponent, Sewage Treatments Plants within the radius of 50 km from from proposed project, the treated sewage of 20 KLD from STP 10 KLD shall be used us an alternative to the fresh water source was minimize the fresh water drawl from payriace water bodies.	surface water bodies. Filtered slurry water rom Pellet Plant of ArcelorMittal Nippon Steel India Limited, Paradeep is being used for the present phase-I. No ground vater is being drawn or will be drawn for
9	Wastewater generation of 20 KLD from B various sources (viz. cooling towerm blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l:oil & grease:20mg/l;Copper:1mg/l;Iron:1 mg/l;Free Chlorine:0.5:zinc:LO mg/l;Total Chromium:0.2mg/l; Phosphate: 5.0 mg/l;	•
10	Sewage generation of 05 KLD will be be treated by setting up Sewage Treatment of plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/1; Fecal Coliforms (Most Probable Number): <1000 per 100 ml.	· ·

	G. Risk Mitigation and Disaster. Management:	
1	environmental safeguards shall be provided in the plant area to control	Entire coal yard is surrounded by 17 no.s rotary pole mounted fire water monitors and fully pressurized Fire Hydrant line with continuous running of Jockey pump round the clock 24 X 7. Standby fire pumps including Emergency Diesel engine fire pump are also provided for uninterrupted fire water supply in case of emergency. Water is sprinkled on top layers of coal to reduce the coal dust as well as minimize fires.
2	such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in	Storage facility for storing of LDO has been made in the area having minimum risk. Risk assessment has also been done in EIA study and an on-site emergency plan has been prepared & duly approved in the office of Director of Factories & Boiler. Periodic mock drills conducted in presence of govt. authorities & nearby industries and report submitted. Presently LDO is not being used in CPP.
3	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Complied.
4	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.	·
5	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster Situations.	
	H. Green belt and Biodiversity conservation:	
1	of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.	Green belt is developed by planting local species of Radhachuda, karanj, sishoo, mehgani, chakunda, etc. Also fruit bearing trees like mango, jackfruit, chikoo, guava, are planted surrounding plant. More than 36500 saplings were planted inside the plant area of around 36.5 acres of land. The survival rate is more than 95%.
2	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.	
3	Suitable screens shall be placed across the intake channel to prevent entrainment	We are using filtered slurry water supplied by pellet plant, ArcelorMittal Nippon Steel India Ltd. No sea water is being used in the power plant.

	juvenile fish, etc., during extraction of seawater.			
	I. Waste management:			
1	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.			
2	Procedure (TCLP) test shall be conducted for any substance, potential of	The leach test and ground water quality is being carried out quarterly & monthly frespectively for monitoring of ground water quality. No heavy metal is found leached with ground water.		
3	liner as per the soil conditions. Adequate dam/dyke safety measures shall also be	The present ash pond is designed with impervious lining of bentonite and that detailed engineering is done by NIT Rourkela to ensure all environmental safety and measures against hazards.		
4	utilization should be ensured. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry. Mercury and other heavy metals (As, Hg, Cr, Pb, etc.) will be monitored in the	ed o. sh We have provided necessary silos for ed storage of ash. Ash is conditioned in ask and conditioner and then transported through ry.trucks to local brick manufactures. Ask g, pond is lined with impervious material and the ensured leach test from ash pond. Its No harmful material found in wate riysamples taken from nearby area. The ded the conditional condit		
5	Unutilized ash shall be disposed off in the ash pond in the form of High			
6	In case of waste-to-energy plant, major problems related with environment are fire smog in MSW dump site, foul smell and impacts to the surrounding populations. Therefore, the following measures are required to be taken up:			
	<ul> <li>i) Water hydrant at all the dumpsites of MSW area to be provided so that the fire and smog could be controlled</li> </ul>			

	ii) Sprayer like microbial consortia may be provided for arresting the foul smell emanating from MSW area.	
	J. Monitoring of compliance:	
1	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted 'to the Ministry.	·
2	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.	
3	implemented as envisaged in the ER	RPO charges per unit is already considered as per statutory compliance.
4	· · · · · · · · · · · · · · · · · · ·	
5	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the	External audit for water and energy is being carried out on regular basis. Also internal audits are being carried out on regular schedule for by our internal BEE certified energy auditors.
6	Environment Cell (EC) shall be constituted by taking members from different divisions, headed by a qualified person on the subject, who shall be	A separate Environment Cell both at the project and company head office has been established with well qualified and senior environment professionals.  The Senior environment professional is reporting to the Head of the Organization.
7	The project proponent shall (Post-EC Monitoring):	
	a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government:	·

<ul><li>b. Upload the clearance letter on the web site of the company as a part of information to the general public.</li><li>b. Upload the clearance letter on the web site of the company as a part of information to the general public.</li></ul>	
c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at <a href="http://parviesh.nic.in">http://parviesh.nic.in</a> .	
d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;	
e. monitor the criteria pollutants level namely; PM (PM10 & PM2.5 incase of ambient AAQ), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company:	
f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (upload in Parivesh side and the copies as well as by e-mail) to the Regional Office of MoEF & CC, the respective Zonal Office of CPCB, SEIAA, Odisha and the SPCB;	
g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;	

	h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.	·		
	K. Effluent Release:			
1	At the effluent release point, maximum temperature of the discharge water shall not be more than 5°C and salinity shall not exceed 50 ppt with respect to that of the ambient seawater.			
2	Use of antifouling agents like chlorine / hypochlorite, shall be carefully controlled. The chlorine concentration shall not exceed 0.2 ppm at the effluent release point.	·		
3	The effluent when released at the selected location shall attain sufficient dilution so that near ambient water quality (particularly temperature and salinity) is attained within 500 m from the release location, at low tide.			
4	The location of the diffuser shall be marked with a solar lighted buoy to avoid accidents.			
5	The site selected based on, mathematical modeling shall ensure absence of recirculation of the effluent plume in the seawater intake area under all tidal conditions.			
6	The effluent shall be released through a properly designed multiport diffuser above the seabed to facilitate its efficient initial mixing with the receiving seawater.			
7		NA		
8	Continuous online monitoring system for Temperature and Salinity shall be installed to monitor the quality of effluent.			
	L. Common to intake and effluent:			
1	The pipeline shall be buried below the seabed at a depth to ensure its stability			

	under rough sea conditions particularly during cyclone / tsunami. The depth of burial will depend on the seafloor strata but normally the top of the pipeline shall be at least 1M below the bed level. In the surf and intertidal zones, the pipeline shall be buried below the maximum scour level.	
4	In case of open channel, the channel shall be constructed as per the recommendations of State Coastal Zone Management Authority (SCZMA).	
1	Exposed pipeline section and riser shall be protected by armour stone from waves, boats anchoring, fishing activities etc.	
-	The location of the riser & diffuser shall be marked with a solar lighted buoy to avoid accidents from boats.	• •



## Half yearly CSR Highlights

(October 2024- March 2025)

# ArcelorMittal Nippon Steel india, Paradeep



#### **Thematic Area wise Highlights**

#### Health

- 4845 patients were treated through Mobile Medical Unit in 100 camps as a part of doorstep delivery of basic health care services.
- World Heart Day observed at Bhutmundai village on 1st October where 35 villagers participated. Dr. Niranja Diweldi as a resource person emphasized on the importance of heart health and encouraged people to take preventive measures against heart diseases. He advised to adopt health lifestyle including small changes to individual diet, exercise routine, and stress management to improve heart health.

#### Education

- The Smart class at Nuagarh middle school was inaugurated in the presence of Jharana Tripathy, Headmaster Nuagarh Middle School, Prasant Kumar Mohapatra, Headmaster Nuagarh High School, Dr. Vikas Yadvendu, Head CSR, AMNS India, Bishnupriya Sethi, DSWO of Jagatsinghpur, along with Smt. Rajashree Sahoo, CDPO of Kujang Block
- On October 8, 2024, the Model Anganwadi project hosted a launch event at Nuagarh Panchayat Bhawan. Chief Guest Smt. Bishnupriya Sethi, DSWO of Jagatsinghpur, along with Special Guest Smt. Rajashree Sahoo, CDPO of Kujang Block, Dr. Vikash Yaduvendu, CSR Head at AMNS, Smt. Kusum Gaur National Partnership Officer from HPPI, Mr. Debendra Rout, Sarpanch of Nuagarh Panchayat, graced the occassion. The program commenced with a lamp-lighting ceremony led by the chief guest and other dignitaries.
- Training of AWW, AEH and ASHA on Health and Nutrition- On dated 29th Jan. 2025, Project organize a Training of Anganwadi Worker, Anganwadi Helper and ASHA. The Training was Conduct at CDPO Office Campus. 75 Participants from 25 Anganwadi are attend in the meeting. The training was organized under the supervision of CDPO Smt. Rajeshree Sahoo, CDPO Kujang, .Mr. Basant Dash retired teacher attend as resource person.
- As of February 2025, significant progress has been made, including 25 meetings of Women's Health Clubs and 20 meetings of Adolescent Girls Groups, engaging a total of 183 participants. 25 meetings with Anganwadi workers were conducted to strengthen their work and activities, resulting in enhanced community awareness of education and critical health issues.
- ArcelorMittal Nippon Steel India (AM/NS India) inaugurated the Smart Model Anganwadi Centres on 25<sup>th</sup> of march 2025 in Musadia and Singitali villages as a part of its Corporate Social Responsibility (CSR) project 'Padhega Bharat'. AM/NS India, in collaboration with Humana People to People India (HPPI), is working to transform 25 existing Anganwadi centres in Paradeep region into Smart Anganwadis.



#### **Livelihood and Skill Development**

- 125 numbers of manual sprayer machines were supported to 125 farmers for watering and pesticide applications. The distribution was conducted in the presence of Nuagarh Sarpanch, Mr. Debendra Nayak.
- 8 SHGs of 35 women adopted mushroom production initiative and they have produced a total of 532 kg of mushrooms across all units. With an average production of 15 kg per woman, and an average selling price of ₹250 per kg.
- 125 numbers of manual sprayer machines were supported to 125 farmers for watering and pesticide applications. The distribution was conducted in the presence of Nuagarh Sarpanch, Mr. Debendra Nayak.
- Kalinga Bali Yatra is the largest open-air festival and it is organized every year in the sea coast of Paradeep city. The festival started this year on 15th November'24 and continued for eight days i.e 22nd November'24. Our SHG women members also set up their stall in the fair and showcase and sold their products like millet product ready to eat food, handicraft items, jute bags, soft toys, paper products, phenyls, dry food etc.
- A group of 47 farmers, accompanied by two project staff members, one Artificial Insemination Technician (AIT), and two Community Resource Persons (CRPs), visited the Extension Department of Odisha University of Agriculture and Technology (OUAT), Bhubaneswar.
- The SAFAL project team organized a vibrant celebration of National Farmer's Day, 2024, at Paradeep to honor the contributions of farmers and promote sustainable livestock farming practices. The event brought together farmers, local leaders, and stakeholders to emphasize clean milking practices and distribute essential farming materials.
- This Quarter, total 292 kg of mushroom have been produced which made the profit of Rs. 80,100/- from 37 participants from Nuagarh, Baldia, Chakradharpur and Bhutmundai villages.
- As a part of animal breed development programme, 101 Artificial Insemination has undertaken this month with the birth of 29 high yield calves.
- 10 new biogas units have been successfully installed with the contribution for beneficiaries. This intervention promotes clean energy usage, reduces dependence on firewood and chemical fertilizers, and supports sustainable waste management at the household level.
- Promotion of Sports and Culture
- Project- Udaan
- AMNS INDIA organized inter village cricket league by taking 10 teams from three grampanchayats. The four-day long day and night tournament was organized by CSR department under it's flagship project named "UDDAN"



- On January 19, 2025, the mini stadium developed by ArcelorMittal Nippon Steel India as part of its CSR initiative at the Paradeepgarh village playground was inaugurated by Sri Sampad Chandra Swain, Hon'ble Minister of State (Ind. Charge), Industries, Skill Development and Technical Education, Govt. of Odisha.

#### Nirman-

- With an aim to empower women of its operational areas and to make them self-reliant, ArcelorMittal Nippon Steel India, as part of its CSR initiative under "Nirman," has set up a Lok Vikas Kendra (LVK) at Nuagarh village, which was inaugurated today by Sri Sampad Chandra Swain, Hon'ble Minister of State (Ind. Charge), Industries, Skill Development and Technical Education, Govt. of Odisha, and local MLA in the presence of Sri Debendra Rout, Sarpanch, Nuagarh on February 02, 2025.

#### Other Initiatives

- AMNS INDIA supported the district administration with relief materials in managing the cyclone affected villagers as a part of precautionary measures as a part of managing the cyclone Dana.
- International Womens Day observed on 8<sup>th</sup> March 2025 at Nuagarh, Paradeepgarh and Bhutmundai Grampanchayts with more than 1900 women participants with arranging various competitions like debate, song, music chair and other recreational activities.



# Thematic area updates Health

- Health is a basic priority under the CSR arm of AMNS India. To provide basic health care service at the doorstep of the villagers, AMNS is running mobile Medical Unit in it's periphery villages.
- The unit is equipped with one Doctor, One Pharmacist, One driver cum attendant and is supervised by Social Protection Officer.
- In this quarter, the MHU has provided 4845 no. Of treatment in total Camp Organized 100.
- 13 numbers of Health Awareness Sessions at the MHU sites of seasonal and chronic diseases, on Arthritis, Dysentery, Cold & Cough in which 429 direct beneficiaries participated and got awareness about the precautionary measures.
- World Heart Day observed at Bhutmundai village on 1<sup>st</sup> October where 35 villagers participated. Dr. Niranja Diweldi as a resource person emphasized on the importance of heart health and encouraged people to take preventive measures against heart diseases. He advised to adopt healthy lifestyle including small changes to individual diet, exercise routine, and stress management to improve heart health.











#### Eye Check Up Camp-

Eye Screening and Eyeglasses out reach programme was completed at Paradeep periphery areas in partnership with vision spring foundation. The programme initiated to create awareness on importance of eye health and eyeglasses and as a part of the programme eye-screenings was also conducted and eyeglasses were also provided to those who were found with defective refractory error. 3121 school children from 19 schools and 250 truck drivers were got benefited from the programme.



#### **Education**

#### Al based Smart Class Inauguration-

- Al based smart classrooms are transforming education by integrating advanced technologies to enhance learning experiences. It provides students personalized and customized educational contents. Al powered tools facilitate better collaboration among students through digital platforms. In this stride, AM/NS established 08 smart classes in 08 middle schools where 1600 students will be benefited.
- The Smart class at Nuagarh middle school was inaugurated in the presence of Jharana Tripathy, Headmaster Nuagarh Middle School, Prasant Kumar Mohapatra, Headmaster Nuagarh High School, Dr. Vikas Yadvendu, Head CSR, AMNS India, Bishnupriya Sethi, DSWO of Jagatsinghpur, along with Smt. Rajashree Sahoo, CDPO of Kujang Block





#### Anganwadi Development-

 Arcelor Mittal Nippon Steel India, in partnership with Humana People to People India is implementing the "Strengthening of 25 Anganwadi Centres for a Healthy and Educated Community" project in the Paradip block of Jagdishpur, Odisha. The project aims to



enhance the health status of women, adolescents, and children by improving access to quality reproductive and child health services provided by trained frontline health workers and Anganwadi centres across 25 villages.

- Project Launch Event On October 8, 2024, the project hosted a launch event at Nuagarh Panchayat Bhawan. Chief Guest Smt. Bishnupriya Sethi, DSWO of Jagatsinghpur, along with Special Guest Smt. Rajashree Sahoo, CDPO of Kujang Block, Dr. Vikash Yaduvendu, CSR Head at AMNS, Smt. Kusum Gaur National Partnership Officer from HPPI, Mr. Debendra Rout, Sarpanch of Nuagarh Panchayat, graced the occassion. The program commenced with a lamp-lighting ceremony led by the chief guest and other dignitaries.
- All 25 Anganwadi workers and helpers participated in the event. Smt. Kusum Gaur from HPPI outlined the project's aims and objectives, highlighting the commitment to creating a nurturing environment for children at Anganwadi centres. DSWO and CDPO emphasized their commitment to improving child health and education within the community. The Sarpanch extended his best wishes to the Anganwadi workers and assured his support for the mission.
- The project successfully gained support from the Anganwadi centres and received an official government approval letter.





#### Three days Capacity building of Anganwadi staff, ASHA on health and nutrition:

On the date 20 to 22nd, November-2024 capacity building training of Anganwadi worker, Helper and ASHA worker was organized on the topic of Health and nutrition. Mrs Chhabibala Nayak from ICDS participated as a guest. Resource person Srutipragnya Mohapatra provided training about health and nutrition and perfect health by using balanced nutrious food. Total 25 Anganwadi worker, 25 Anganwadi Helper and 25 Asha worker attended the 3-day session from 25 Anganwadi.

## AM/NS INDIA

Training of AWW, AEH and ASHA on Health and Nutrition- On dated 29th Jan. 2025, a Training of Anganwadi Worker, Anganwadi Helper and ASHA was organized in the office campus of CDPO at Kujang. 75 Participants from 25 Anganwadi centres attended the meeting. The training was organized under the supervision of CDPO Smt. Rajeshree Sahoo, CDPO Kujang, and Mr. Basant Dash eminent retired teacher provided the training as resource person. The training emphasized on the topic of Health & Nutrition. Mr. Daipayan Panigrehi, Nation Program Manager from Partner organization, Humana participated in the event and described the importance of nutrition in human body. The resource person conducted training on Health and Nutrition, Important of exercise, nutrition food, nutrition recipe, physical and mental health etc. The focus of the programme was to provide a refresher training to the Anganwadi workers for the easy understanding of the children and maternal health development.





#### Inauguration of Anganwadi Center-

- ❖ ArcelorMittal Nippon Steel India (AM/NS India) inaugurated the Smart Model Anganwadi Centres on 25<sup>th</sup> of march 2025 in Musadia and Singitali villages as a part of its Corporate Social Responsibility (CSR) project 'Padhega Bharat'. AM/NS India, in collaboration with Humana People to People India (HPPI), is working to transform 25 existing Anganwadi centres in Paradeep region into Smart Anganwadis.
- ❖ The Musadia Model Anganwadi Centre was inaugurated by Smt. Bishnu Priya Sethi, District Social Welfare Officer (DSWO), Jagatsinghpur in the presence of Smt. Rajashree Sahoo, Child Development Project Officer (CDPO), Kujang block, Dr. Vikas Yadvendu, Head CSR, AM/NS India, Shri Sanjeev Bhatt, Development Director, HPPI and Shri Debendra Rout, Sarpanch, Nuagarh Panchayat. More than 300 women including Anganwadi workers, helpers and village locals were present on the occasion.







#### **Livelihood and Skill Development**

#### Vegetable cultivation and marketing support

- The vegetable farming project has commenced in Baldia, Chakdharpur, Nuagarh, and Paradeepgarh, involving 124 farmers. These farmers have begun cultivating their land using the provided resources, which may improve their annual income. Regular check-ins and production updates are collected from the farmers. The average output in a month from a single field of average 4 decimal of land is 6 kg cucumber, 25 kg bitter gourd, 30 kg ridge gourd, 25 kg bottle gourd. 125 numbers of manual sprayer machines



were supported to 125 farmers for watering and pesticide applications. The distribution was conducted in the presence of Nuagarh Sarpanch, Mr. Debendra Nayak.

#### Promotion and demonstration of paddy

Paddy harvesting is being done in the 200 farmers. Production data has been collected for 200 farmers. As per previous year data, the average yield has been increased 0.95 quintal per acre. Also, the farmers are trained in the scientific and efficient method of paddy cultivation like SRE method, IPM and INM practice, semi organic cultivation practice and post-harvest technology.

SI. No.	Particular	Quantity				
1	Total cover of land	78.51 acre	78.51 acre			
2	Variety	Gayatri /CR 1810 4304 decimals				
	wise land Cover	Kalachampa	1710 decimals			
	Cover	Puja	937 decimals			
		Varsha /MTU 1061	900 decimals			
		Variety	Total Production (in Quintal)	Average production per Ac (quintal)	Average production previous year (quintal)	Increase in yield (quintal per acre)
3	Total produc	tion	1464	18.94	17.99	0.95
4	Variety	Gayatri /CR 1810	790	18.55	18.01	0.54
	wise land Cover	Kalachampa	345	20	19.3	0.70
	COVE	Puja	189	20.33	18.65	1.68
		Varsha /MTU 1061	139	16.31	16	0.31



Higher paddy production can boost the income of farmers and contribute to the overall economy, especially in regions where paddy is a staple crop in this region. Increased production can help ensure a stable supply of rice, which is a primary food source for many populations around the Paradeep region.



#### Vegetable demo plots - on trellis

In response to the challenge of limited land availability in the project area, vertical farming techniques are being introduced to maximize productivity in small landholdings. One of the key interventions under this approach is the promotion of high-value creeper vegetable cultivation on trellises. This technique allows efficient use of vertical space, leading to higher yields, improved crop quality, and better plant health—especially on plots as small as 12.5 decimals per farmer.

Under this initiative, 50 farmers across 5 villages have been selected to establish vegetable demonstration plots, covering a total of 50 acres of land. These plots are supported with essential inputs such as bamboo, fish nets, GI wire, improved seeds (bitter gourd, ridge gourd, and cucumber), and fertilizers. In addition, farmers receive ongoing capacity-building training and technical guidance to ensure proper implementation and adoption of the trellis model. This intervention is designed to enhance household income and food security through sustainable vegetable cultivation.

This encouraging outcome demonstrates the economic viability of vertical farming in smallholder settings and highlights the potential for wider adoption in resource-constrained rural areas.

SI.	Village	No. of	Farmers	Individual Total Production till	Individual income
No.	Name	benefitted		now (kg)	(Rs.)
1	Balidia	13		517	1789.61
2	Barei	12		402	1507.50
3	Bhutumund	4		142	1597.50
	ai				
4	Chakradhar	4		165	1856.25
	pur				
5	Pipal	8	•	301	1693.12
6	Singitali	9		339	1695







#### Promotion of organic techniques -vermiculture/ vermiwash/jivamrut

To encourage sustainable agricultural practices and reduce dependency on chemical fertilizers, the SAFAL project has been actively promoting vermicomposting as a viable and eco-friendly alternative. Traditionally, farmers in the region used basic methods to decompose cow dung for fertilizer. However, to enhance the quality and effectiveness of organic manure, the project introduced improved techniques through the use of HDPE vermibeds and vermiculture.

Under this intervention, 150 farmers have been supported with vermicompost units, which include high-quality vermibeds, earthworms, and technical training on compost preparation, management, and application. This approach has not only led to improved soil fertility and higher crop yields, but also significantly reduced input costs by minimizing chemical fertilizer usage.

Many farmers are now incorporating vermicompost into their fields regularly, resulting in healthier, more resilient crops. Additionally, surplus vermicompost is being packaged and sold, creating an extra income stream and reinforcing the benefits of organic farming for both economic and environmental sustainability.

The support of new vermi beds marks another step forward in expanding organic farming practices across the project area, empowering farmers to adopt environmentally responsible techniques while improving their agricultural productivity and income potential.

Sl. No.	Village Name	No. of Farmers benefitted till	Average Individual Total Production till
	Ŭ.	now	now (kg)
1	Nuagarh	8	87
2	Balidia	45	87
3	Singitali	16	87
4	Handia	1	87
6	Bhimanasi	8	87
8	Chakradharpur	8	87
9	Bhutmundai	17	87
10	Barei	29	87
11	Pipal	18	87



#### Farm field school on dissemination knowledge sharing-

19 Farmers' Field School meetings were conducted to build the capacity of local farmers in sustainable and organic farming techniques. The sessions focused on disseminating practical knowledge and skills, with a live demonstration of preparation of Jivamrut, a traditional bio-fertilizer that promotes soil health and crop yield. Farmers gained hands-on experience in preparing and applying Jivamrut, along with insights into the benefits of organic inputs over chemical fertilizers. This field school empowered farmers with eco-friendly practices, reinforcing sustainable agriculture and strengthening their technical expertise for improved productivity and soil conservation.

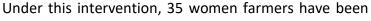




#### Off farm livelihood

#### **Mushroom Cultivation**

Mushroom cultivation has emerged as a promising offfarm livelihood opportunity in the project villages, particularly given the favourable local climate for paddy straw mushrooms. With strong participation from active SHG women eager to explore micro-enterprise options, the SAFAL project initiated targeted support to promote mushroom farming as a sustainable and profitable activity.



engaged—33 members organized in 9 groups and 2 individual farmers—to cultivate paddy straw and oyster mushrooms. The project has facilitated training programs, exposure visits, and financial assistance, enabling these women to confidently start and sustain their mushroom units.

To date, a total of 970 kg of mushrooms have been produced, generating an additional income of ₹2,91,000. The low space requirement, minimal investment, and quick returns make mushroom farming an ideal livelihood solution, particularly for women. This initiative has significantly contributed to improving financial independence, food security, and entrepreneurial capacity among women in the region.





The continued success of this initiative is inspiring more farmers to explore mushroom cultivation, thus strengthening the foundation for sustainable rural livelihoods and women-led enterprises in the project area.

#### **Backyard Poultry support**

Backyard poultry farming has proven to be a viable and sustainable alternative source of income, especially for women, landless farmers, and marginalized groups with limited access to cultivable land. As part of its livelihood diversification strategy, the SAFAL project has introduced this intervention to promote small-scale poultry farming for income generation and food security. Under this initiative, 20 poultry houses were constructed with financial support from the project, benefiting 20 selected farmers. Importantly, farmers contributed their own labor during construction, encouraging ownership and accountability. Each farmer was provided with 25 poultry chicks, along with essential inputs such as starter and grower feed, feeders, and drinkers as one-time support.

In the first cycle, the intervention achieved an outstanding survival rate of 95.8%, with 479 out of 500 chicks surviving. The birds reached an average weight of 1,175g within 48 days, and at a market price of ₹300/kg, the projected earning per household is around ₹18,750, generating a total output value of ₹3,59,250 in a single cycle.

This intervention has not only improved household income but also contributed to nutritional security, women's empowerment, and economic resilience in the target villages.

The increasing body weight of birds and income from egg sales signal promising scalability and sustainability for backyard poultry as a livelihood model. SAFAL continues to build capacity and provide technical guidance to ensure long-term success of this intervention.







#### **Livestock Development Program**

For the sustainable development and potential earning of livestock farmers AM/NS in partnership with BAIF introduced animal breed development programme in periphery villages at Paradeep. It has given potential progress by giving birth of improved high yielding calves.

Overall, AI has revolutionized livestock breeding by making it possible to achieve genetic improvements and enhance productivity efficiently at the door step of the villagers. It not only helps the farmers to reduce the risk of low breed but also confirms and ensures the breed of cattle suitable for the environment.

#### Total AI done till now:

No of Al	SS	Conventional
454	243	211

#### No. of calving done till now

No of Calving		Male
done	Female	
99	62	37

#### **Organizing Stall at Baliyatra Festival-**

Kalinga Bali Yatra is the largest open-air festival and it is organized every year in the sea coast of Paradeep city. The festival started this year on 15th November'24 and continued for eight days i.e 22nd November'24. Several stalls selling toys, gift items, handloom garments, household items, etc. were set up during the festival. Our SHG women members also set up their stall in the fair and showcase and sold their products like millet product ready to eat food, handicraft items, jute bags, soft toys, paper products, phenyls, dry food etc . CSR team supported these women in arrangement for putting up the stall, arranging uniform dress code, logistics and transport for eight days in the venue. The stall was inaugurated by Mr. J. Sonal, collector and District Magistrate of Jagatsinghpur. This motivated the women by generating income for them by selling the product to the visitors.







#### Farmer exposure to on-going project area

An exposure visit was recently organized under the SAFAL project, a flagship initiative funded by AM/NS India. The visit aimed to familiarize farmers with modern agricultural practices and integrated farming systems, equipping them with knowledge to enhance productivity and sustainability.

A group of 47 farmers, accompanied by two project staff members, one Artificial Insemination Technician (AIT), and two Community Resource Persons (CRPs), visited the Extension Department of Odisha University of Agriculture and Technology (OUAT), Bhubaneswar. The program provided a platform for participants to observe and learn about state-of-the-art farming technologies, innovative cropping systems, soil health management techniques, and integrated farming approaches combining agriculture, livestock, and allied activities.



Experts at OUAT showcased demonstrations of advanced agricultural tools and techniques, along with interactive sessions on the significance of diversification in farming. The farmers expressed enthusiasm and shared their appreciation for the practical knowledge they gained. Many plan to adopt integrated systems, such as combining horticulture and livestock management, to maximize their income and build climate resilience.

The exposure visit aligns with the SAFAL project's broader mission of empowering farmers in Jagatsinghpur district through knowledge dissemination and sustainable practices. By promoting eco-friendly and efficient farming methods, the project continues to contribute to rural livelihood development and food security.

Such initiatives underline the commitment of AMNS India and BISLD Odisha to nurturing a self-reliant and prosperous farming community.

#### **Celebration of National Farmer's Day-**

Paradeep, December 23, 2024 – The SAFAL project team organized a vibrant celebration of National Farmer's Day, 2024, at Paradeep to honor the contributions of farmers and promote sustainable livestock farming practices. The event brought together farmers, local leaders, and stakeholders to emphasize clean milking practices and distribute essential farming materials.

The program was graced by the presence of Dr. Santosh, a veterinary doctor from BAIF. The event was inaugurated by Mrs. Sasmita Behera, the Sarpanch of Paradeepgarh, who appreciated the SAFAL project's efforts in improving rural livelihoods and fostering awareness among livestock farmers.

The event's primary objective was to educate farmers on clean milking practices, a vital aspect of ensuring high-quality dairy production and animal health. Dr. Santosh led an informative session 15



highlighting the importance of hygiene in dairy farming, providing practical demonstrations, and answering farmers' queries.

In addition to knowledge sharing, 100 farmers were provided cow mats to enhance cattle comfort and hygiene, reflecting the project's commitment to improving livestock productivity and welfare.

Farmers expressed their gratitude for the initiative, emphasizing how such programs support their day-to-day activities and help them adopt better farming practices. The SAFAL team reaffirmed its dedication to empowering rural communities and strengthening sustainable agricultural practices.

The celebration of National Farmer's Day served as a meaningful platform for knowledge exchange, community building, and fostering a spirit of collaboration.



#### Skill Development-

#### Inauguration of Center of Excellence at Govt. ITI, Paradeep

ArcelorMittal Nippon Steel India (AM/NS India), in collaboration with Schneider Electric, has launched a Centre of Excellence (CoE) at Govt. ITI Paradeep as part of its Corporate Social Responsibility (CSR) efforts. This initiative aims to address skill gaps in the building and manufacturing sectors by establishing specialized laboratories focused on Residential Wiring, Basic Automation, and Industrial Wiring. These facilities are designed to equip students with essential skills in building automation and industrial manufacturing, ultimately boosting their

employability both within India and internationally.

The Center of Excellence (CoE) laboratory was officially inaugurated by Shri Suresha G, Executive Director of Odisha Operations at AM/NS India. The event was graced by the presence of notable dignitaries, including Dr. Vikas Yadvendu, Head of Corporate Social Responsibility (CSR) at AM/NS India, Shri R. N. Sahu, Principal of Government ITI Paradeep, Smt.

Kalpana Panigrahi, Principal of Government Polytechnic Jagatsinghpur, Shri Laxmikant Biswal, Principal of SIPT ITI Patamundai, and Shri Dharmendra Behera, Employment Officer of Jagatsinghpur.

Center of Excellence (CoE), which aims to benefit 40 students annually along with 15 trainers. This initiative is designed to equip participants with skills and opportunities directly aligned with their field of study, helping them pursue relevant career paths instead of transitioning to unrelated industries. Building and industry-focused courses can be expanded to include training and certification in WorldSkills, significantly improving the quality of students' skills.





#### **Promotion of Sports & Culture-**

#### **Inter Village Cricket Touranment-**

AMNS INDIA organized inter village cricket league by taking 10 teams from three grampanchayats. The four-day long day and night tournament was organized by CSR department under it's flagship project named "UDDAN". 150 players from 10 teams of Nuagarh, Baldia, Handia, Singitali, Musadia, Paradeepgarh, Chakradharpur, Bhutmundia, Phulbelari, Pipal villages participated in the occasion. The last final match between Paradeepgarh and



Bhutmundai could not be organized due to bad weather. AMNS supported the teams with fooding, transport, uniform and cricket kit. The event was organized in the presence of Mr. G. Suresha- ED, Odisha asset, Dr. Vikas Yadvendu- Head CSR, Mrs. Sashmita Behera, Sarpnach Paradeepgarh and other villagers and local representatives.

#### **Inauguration of Stadium-**

On January 19, 2025, the mini stadium developed by ArcelorMittal Nippon Steel India as part of its CSR initiative at the Paradeepgarh village playground was inaugurated by Sri Sampad Chandra Swain, Hon'ble Minister of State (Ind. Charge), Industries, Skill Development and Technical Education, Govt. of Odisha, and local MLA in the presence of Sri Suresha G, Executive Director, Odisha Operations, AM/NS India; Smt. Sasmita Behera, Sarpanch, Paradeepgarh; Shri



Debendra Rout, Sarpnach, Nuagarh; Sarpanch, Bhutmundai Sri. Rohit Jena and Dr. Vikas Yadvendu, Head-CSR, AM/NS India. Under this project the company has built an audience gallery, stage along with the development of the entire filed and pitch area.

With an aim to fostering sportsmanship and a vibrant sports culture among local youth and nearby communities, ArcelorMittal Nippon Steel India (AM/NS India) under its CSR initiative Udaan organised the day & night inter village cricket tournament at Paradeepgarh in Jagatsinghpur district which started on December 17, 2024. Ten teams from ten villages including Nuagarh, Baldia, Handia, Mushadia, Singitali, Paradeepgarh, Chakradharpur, Bhutmundei, Pipal and



Phulbelari had participated in the tournament. Paradeepgarh won as a champion whereas Bhutmundai sttod as runners up. The teams were awarded by the guests and were congratulated for their better future. These initiatives will provide the local youth a platform to showcase their sporting talents.



#### **Community Infrastructure Development-**

With an aim to empower women of its operational areas and to make them self-reliant, ArcelorMittal Nippon Steel India, as part of its CSR initiative under "Nirman," has set up a Lok Vikas Kendra (LVK) at Nuagarh village, which was inaugurated today by Sri Sampad Chandra Swain, Hon'ble Minister of State (Ind. Charge), Industries, Skill Development and Technical Education, Govt. of Odisha, and local MLA in the presence of Sri Debendra Rout, Sarpanch, Nuagarh on February 02, 2025.

Under this project, the women members of the Self-Help Groups (SHG) of the Nuagarh village will impart training on mushroom cultivation, tailoring, terracotta, soft toy making, various millet products, processed dry food, and phenyl making. In addition to the vocational training.

The Lok Vikas Kendra (LVK) will be playing a pivotal role in transforming the lives of the women. More than 600 women will be benefitted by this project. This will help the local women to develop and set up their own unit. To provide them sustainable livelihood opportunities, the company is also facilitating market linkages and value chain development for the products produced by the communities.





#### Other Initiatives-Relief Support-

- AMNS INDIA supported the district administration with relief materials in managing the cyclone affected villagers as a part of precautionary measures as a part of managing the cyclone Dana.
- The main challenge in the disaster affected area is the availability of dry food, water bottles, polythene sheets etc..
- Realizing the situation AMNS INDIA has supported the district administration with following relief items as a part of need of the hour.

## AM/NS INDIA

 The materials were delivered at the block headquarters in the office of Block development Officer Kujang and Municipality office Paradeep.

A total of

Dry Rice- 1500 KG

Sugar- 700 KG

Biscuit- 2000 Packets

Water Bottle- 7000 Numbers

Match Box- 1000 Packets

Candle- 2000 Nos.

Polythene Sheet- 1000 Pieces



#### **Observation of International Womnes Day 2025**

"Arcelor Mittal Nippon Steel, through it's CSR Initiatives, is engaged in various Socio-economic development activities in the filed of Health, Education, Sustainable Livelihood, infrastructure Development etc. Among these Women Empowerment has gained it's importance.

As a part of the process International Women's Day was celebrated in the periphery Gram panchayats of AMNS plant at Paradeep in Nuagarh, Paradeepgarh and Bhutmundai Grampanchayats on 8<sup>th</sup> March 2025. Women and ladies from the nearby villages participated in the programme to make it a grand success. Many competitions like Debate, Quiz, song was organized to show case their talent and they were also awarded with prizes. Many representatives from with Self Help Group women, village health worker, Anganwadi supervisor, and others participated in the event.

Local PRI members like Mr. Debendra Rout Sarpanch Nuagarh, Mrs. Sasmita Behera Sarpanch Paradeepgarh, Mr. Rohit Swain, Sarpnch, Bhutmundai and other Intellectuals of Paradeep region participated in the event and presented their views on women progress and empowerment. In this occasion the guests were of the opinion that though Govt has taken many schemes for upliftment of rural women, CSR support has also accelerated the speed of development".







#### For the month of October 2024- March 2025

Sl. No	Thematic Area	Lives Touched
1	Health	8345
2	Education	11538
3	Livelihood/Skill Development	2279
4	Portable Water & Infra	600
5	Other Initiatives	4050
Total		26812

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