



The Singareni Collieries Company Limited

(A Government Company)



Sustainable Development Activities



Sustainable Development Activities in SCCL

SCCL is carrying out the following Sustainable Development Activities under Mission GREEN in all the areas as per the directions of Ministry of Coal.



Afforestation/Plantation



Mine Tourism



Mine Water Management



Renewable Energy



Waste management



Alternative Livelihoods



Skill Development



Rejuvenation of Traditional Water Bodies



AFFORESTATION / PLANTATION

SCCL is taking up Progressive as well as final mine closure activities like stabilization of OB dumps, backfilling of de-coaled areas, extensive plantation on OB dumps and vacant lands with native plant species for eco-restoration of mined out areas as per the Environment Management Plan (EMP). OB dump plantation helps in preventing soil erosion and controlling dust pollution in mining areas. It also aids in the restoration of degraded land, improves greenery and biodiversity and supports compliance with environmental regulations.

So far, plantation has been done in an area of 15,796 ha with 5.585 crores of saplings (1984 -2025). About 2.328 crores of saplings have been distributed to the public free of cost. SCCL has taken up Miyawaki plantation in 20.60 ha with 1.73 lakh saplings.



Dump plantation



Block Plantation

Nurseries

- SCCL is having its own nurseries in 13 locations for raising native forest species with a capacity of around 50 lakh seedlings to cater the needs of plantation.
- Fruit bearing plants like Custard apple, Jamun, Guava, Mango, Sapota, Mosambi, Pomegranate, Guava, Lemon, Jackfruit and Coconut are being procured from private nurseries for distribution purpose under CSR.
- About 20 to 25 tons of different legume seeds are being sown on the OB dumps every year in order to improve nutrient status of the soil as well as to develop good greenery





SCCL Nurseries



Bio-Diversity observed on the reclaimed over burden dumps

Outcome:

Afforestation (plantation) activities have led to a significant improvement in biodiversity by creating green habitats for various flora and fauna. The increase in tree cover has enhanced ecological balance, improved soil quality, supported wildlife movement and contributed to better air quality, thereby strengthening the overall environmental sustainability of the region.

CMPDIL conducted a study of Carbon Foot Print Analysis in SCCL for the year 2021-22. From the present emissions and emission reductions, it is evident that SCCL has achieved Carbon Neutrality in the Year 2021-22. Hence, the carbon neutral status of SCCL is being maintained with the implementations of various measures proposed by SCCL for sustainable development.



MINE TOURISM

SCCL is developing Eco-parks /Tourism sites in the reclaimed mining areas for recreational activities and tourism purpose.

GKOC ECO-PARK: SCCL developed an Eco-Park in the reclaimed mining area of Gautham Khani Opencast Project (GK OC) with its own funds as advised by the Ministry of Coal.

Following facilities are made available in the Eco park developed at GK OCP:

- ❖ Development of Lawns and gardens along with theme plantation
- ❖ Butterfly garden
- ❖ Palmatum
- ❖ Boating arrangement in the water reservoir with life guard arrangement
- ❖ Trekking arrangement on OB dumps
- ❖ Bird watching arrangement on OB dumps
- ❖ Vinayaka Vanam
- ❖ Water fountains
- ❖ Yoga centre and Open Gym
- ❖ Canteen and Rest Rooms.



Eco-Park- GK OC

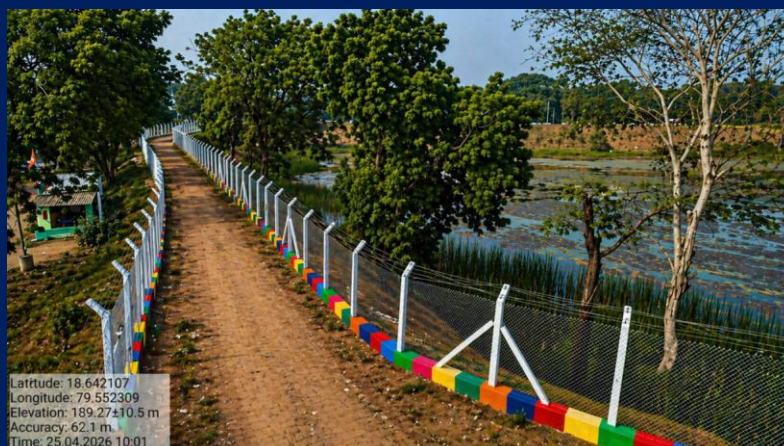
Two More eco-parks, namely Srirampur OC– II Eco-Park and RG OC-II Eco-Park, are being developed and are scheduled for inauguration in July, 2026.



RG OC-II ECO-PARK: SCCL developing another Eco-Park in 9.00 Ha (approx) with a budget of Rs.353 Lakhs near RG OC-II Project, Pannur Village, Ramagiri Mandal, Peddapalli District of Telangana State.

The following facilities are proposed for development in the RG OC–II Eco-Park.

- ❖ Development of Lawns and gardens along with theme plantation.
- ❖ Water fountains
- ❖ Walking Track
- ❖ Bird watching arrangement
- ❖ Children play area
- ❖ Boating
- ❖ Butterfly garden and Rest room.



SRP OC- II ECO-PARK: SCCL developing Eco-Park in 5.66 Ha (approx) with a budget of Rs.175 Lakhs near SRP OC-II Project, Ramaraopet Village, Jaipur Mandal , Mancherial District of Telangana State.

The following facilities are proposed for development in the SRP OC - II Eco-Park:

- ❖ Development of Lawns and gardens along with theme plantation.
- ❖ Water pond for boating
- ❖ Elevated view point structure
- ❖ Water Fountains
- ❖ Cafeteria
- ❖ Walking Track

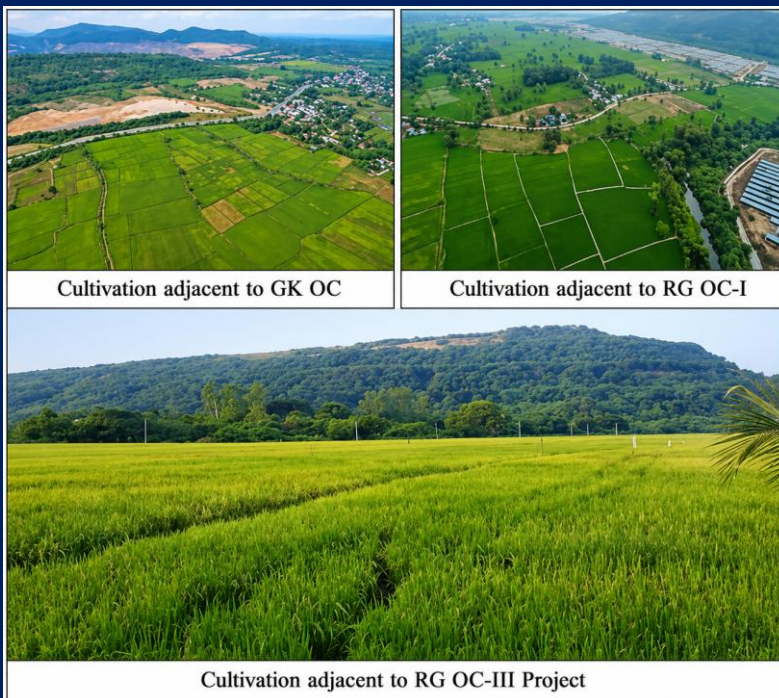


MINE WATER MANAGEMENT

- After meeting the industrial requirement, part of the excess mine discharge water is being supplied to SCCL colonies and surrounding villagers for drinking purpose after treatment in filter beds.
- The remaining excess mine discharge water is channeled through settling tanks before discharging in to nearby agriculture tanks for community use such as irrigation and for ground water recharge.

Outcome:

- Average mine water pumped: **1205 LKL per annum**
 - **385 LKL (32%)** utilized for industrial purposes within SCCL
 - **820 LKL (68%)** supplied for community use
- **795 LKL/year** supplied for irrigation, supporting about 13,625 acres of agricultural land.
- **25 LKL/year** supplied for domestic use, benefiting nearly 4.56 lakh people in 158 villages.



Mine water utilized for irrigation purpose



Mine Water supply to community for drinking



RENEWABLE ENERGY-SOLAR

To reduce the utilization of coal based thermal power for industrial and domestic use, SCCL ventured in to large scale production of electricity through harnessing of renewable sources of energy like solar energy to reduce the dependence on depleting coal reserves and also to reduce carbon footprint. Accordingly, SCCL has so far established solar power plants with a total installed capacity of 245.50 MW.



Solar Power Plants in SCCL

Plants commissioned till date

S.No.	Area	Capacity (MW)	Synchronized on
1	Manuguru	30	07.09.2020
2	Yellandu	39	05.03.2021
3	Ramagundam -3	50	31.12.2021
4	STPP	10	10.02.2020
5	Mandamarri - 1	28	04.08.2021
6	Mandamarri - 2	15	27.05.2021
7	Kothagudem -1	37	03.11.2021
8	Bhupalapalli	10	05.06.2021
9	STPP (Floating)	05	22.01.2023
10	Kothagudem-2	10.5	17.02.2024
11	Chennur	11.0	27.09.2024
	Total	245.50	

The existing 245.50 MW solar capacity enables an estimated reduction of about 3.42 lakh tonnes of CO₂ emissions annually.



WASTE MANAGEMENT

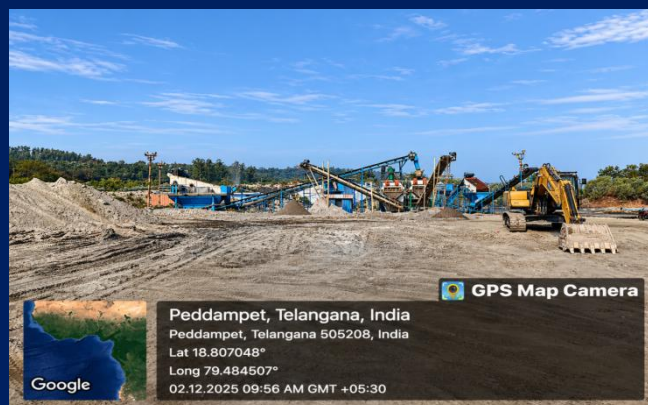
SCCL has established 3 processed OB plants (at BHPL, RG-1& MM area) for extracting sand from OB. Processed Overburden and Bottom Ash from Thermal Power Plants are being used in place of river sand for stowing in underground mines since the year 2011 under waste to resource concept & conserving the Rivers.



POB Plant at KK OCP, Mandamarri



POB plant at KTK OC-II, BHPL



POB plant at MOCP, Ramagundam

Outcome:

About 373.56L.Cu.m of stowing material was used in UG mines during 2011-12 to 2025-26. Out of this, 190.40 L.Cu.m is sand (50.97%), 127.71 L.Cu.m (34.19%) is Bottom ash and 55.45 L.Cu.m (14.84%) is POB.

Utilization of River sand for stowing in underground mines has come down from 96.75% (2011-12) to 26.92% (2025-26).



ALTERNATIVE LIVELIHOODS- INVOLVEMENT OF SHG

In the processes of taking up Mission GREEN initiatives like plantation, development of Eco-parks, installation of solar power plants & POB plants etc., SCCL is following open tender system, where local bidders will participate and they will engage Project Displaced Families (PDFs) and Project Affected Families (PAFs) to the extent of their availability for carrying out the Mission GREEN works. Further, in all the 13 nurseries also Project Displaced Families (PDFs) and Project Affected Families (PAFs) (mostly female) are being engaged.



Local employment in nurseries

Apiculture (bee farming) project was implemented in the Bellampalli, Kothagudem, Bhupalpalli, and Ramagundam areas to enhance the livelihood and economic security of women farmers through Self-Help Groups (SHGs). A total of 400 women have been trained under this programme. The initiative is being carried out over a three-year period in partnership with the Manab Kalyan Welfare Society (MKWS).



SKILL DEVELOPMENT TRAINING

- To empower people from local communities, employment-oriented vocational training programmes are being organized for unemployed youth and women to enhance their skills and livelihood opportunities.
- Free coaching for Army & police recruitment selections are conducted regularly for unemployed youth to become employable.
- Unemployed youth of surrounding villages are being trained in various trades and given opportunity to work in outsourced jobs in open market.
- Many Training programs like Tailoring, Beautician, Maggam work etc are being organized at free of cost which are aimed at empowering women to live respectable quality of life.
- Many women who are trained under the programs of Singareni Seva Samithi are now entrepreneurs. These women are not only earning for themselves but also helping many other women by employing them.
- Further, Mutually Aided Co-operative Societies (MACS) formed with PDFs & PAFs are being engaged in different out sourcing works of the company.



Tailoring



Beautician course



Army & Police recruitment training



Maggam works

Outcome: This achievement has strengthened the employability and income-generating capacity of beneficiaries, particularly local youth. It has enhanced access to livelihood opportunities, promoted self-employment, and contributed to socio-economic development in the surrounding communities by building a skilled and sustainable workforce.



REJUVENATION OF TRADITIONAL WATER BODIES

SCCL has carried out de-silting of 25 Nos.of agricultural Tanks at different locations up to 2025-2026.

1. Desilting of Motla Vagu (Manuguru Area)



2. Kattu vagu (Manuguru area)



3. Samithi singaram Checkdam (Manuguru area)



4. Thammireddy Kunta (Manuguru area)



5. Podapotrala Cheruvu (Manuguru area)



6. De-Silting Of Kodipunjula vagu (Manuguru area)



CREATION OF NEW WATER BODIES

SCCL started a new program in line with “**Mission Amrit Sarovar Guidelines**” of the Ministry of Coal in the month of April, 2025 to augment the ground water in SCCL command areas and in the surrounding villages.

Area	KGM	MNG	YLD	BHPL	RG-I	RG-II	RG-III	SRP	MMR	BPA	STPP	Total
No. of tanks	08	06	06	05	07	05	05	05	05	05	05	62
Storage capacity (in m ³)	48,999	18,784	30,430	30,000	31,000	8,950	38,990	34,500	10,650	60,820	7,944	3,21,067

Outcome: The development of 62 new water tanks with a total storage capacity of 3.21 lakh cubic metres (703 lakh gallons) has significantly enhanced water conservation across all areas of SCCL. This initiative has improved groundwater recharge, ensured water availability for operational and community needs and reduced dependency on external water sources.

Additionally, the rejuvenation/ de-silting of existing water tanks in surrounding villages under CSR initiatives have strengthened local water security, supported agriculture and contributed to sustainable livelihood development in the region.





Tank at Kothagudem



Tank at Manuguru



Tank at Ramagunadam-3 Area

