

**Report on the Review, Monitoring, and Progress of Eco-Restoration  
Blocks in Gujarat**



**Green Credit Cell**

**Indian Council of Forestry Research and Education (ICFRE)**

**Prepared by: Shahid A M (Scientist-B)**

**April 2025**

## **Monitoring of GCP activities and sensitizing of State machinery (SNOs/DFOs/RFPs/DEPS) of Gujarat State under Green Credit Programme (GCP)**

Name: Mr. Shahid A M  
Designation: Scientist B, Green Credit Cell, ICFRE  
Places Visited: Aravalli, Sabar Kantha and Gandhinagar (Gujarat)  
Duration: 23.03.2025 to 26.03.2025

### **Detailed Timeline of the Tour Programme**

#### **23.03.2025: Arrival in Ahmedabad, Gujarat**

- Discussion with Ms. Kanakba Rathod, ACF, Assistant Director-PERG, GCP-In charge, Gujarat to strategize and coordinate the upcoming site visits across Gujarat.

#### **24.03.2025: Site Visit in Aravalli Forest Division**

- Meeting with Sh. Sanjay Srivastava, IFS (SNO, Gujarat), virtually joined by IOs from Aravalli, Sabar Kantha and Gandhinagar Forest Divisions.
- Addressed progress updates, photograph uploads, and baseline data collection.
- Visited four sites in Aravalli Forest Division (Reg No. 471, 340,467 and 466) with Sh. Sreejit Basu (IOCL representative).

#### **25.03.2025: Site Visit in Aravalli and Sabar Kantha Forest Division**

- Visited two sites (Reg No. 421 and 692) in Aravalli Forest Division and three (Reg No. 410, 411 and 414) in Sabar Kantha Forest Division with Sh. Sreejit Basu (IOCL representative).
- Briefed ground staff on monitoring protocols and baseline data collection.

#### **26.03.2025: Sabar Kantha and Gandhinagar Site Visits**

- Visited two sites (Reg No. 798 and 420) in Sabar Kantha Forest Division and one (Reg No. 879) in Gandhinagar Forest Division. The site at RDF Khedbhrama (Reg No.798) was accompanied by Dr. Ajay Kumar Jha, SM (Env.), NHPC.
- Discussed monitoring procedures and baseline data collection.
- Meeting was done with Sh. Harsh Thakkar, DCF and Implementing Officer, Sabar Kantha FD at his office at Sabar kantha and Dr. Chandresh Shanadre, DCF and Implementing Officer, Gandhinagar at his office to brief on key aspects such as digital cost estimation, progress reporting, and the monitoring mechanism.

Detailed site wise field checklist was duly filled at each site and was signed by the officials present at the site.

**Meetings/discussions held with forest officials at Gujarat**



**The following table provides GCP site wise Information on progress of activities and issues observed during the visit.**

S No.	GCP Reg No.	State/Division/Range	Financial Expenditure/Entity	Description and Progress of activities in Brief	Remarks/Issues
1.	692	Gujarat/Aravalli/Malpur	28,82,219/-, Power Grid Corporation Ltd.	Slight slopy and plain area. Sparse vegetation of local species in the field. Fencing- barbed wire-1200RMT, Contour boundary trench-1000RMT Sign board present but needs modification. Irrigation measure- Borewell-1nos, tank storage-2 Nos, Watch and Ward- 2 (night) + 1 (day) SMC works- Contour trench-4200 RMT Percolation tank-2 Nos, Pitting-7777 Nos, Plantation done	Sign board needs modification as prescribed by ICFRE. Grazing by Nilgai and casualty due to porcupine, Wild boars' attacks were found. <b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).
2.	466	Gujarat/Aravalli/Meghraj	37,97,115/-, IOCL	Slopy terrain. Fencing- Barbed wire-1400RMT, Boundary trench-1000RMT Sign board installed but needs modification. Irrigation measure- Borewell-1nos, tank storage-2 Nos, 1 lakh liters. SMC works- CCT-1000 RMT, Percolation tank-4 Nos. Earthen check dam-4 Nos. Stone bund-500 cmt, Pitting- 11110Nos, Plantation done	Sign board needs modification as prescribed by ICFRE. Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found. <b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).
3.	467	Gujarat/Aravalli/Meghraj	37,27,508/-, IOCL	Plain terrain. Fencing- Barbed wire-1400RMT, Boundary trench-1590 RMT Sign board installed but needs modification. Irrigation measure- Borewell-1Nos, tank storage-2 Nos, 1 lakh liters. SMC works- CCT-1000 RMT, Percolation tank-4 Nos. Earthen check dam-4 Nos. Stone bund-500 cmt Pitting- 11110Nos, Plantation done	Sign board needs modification as prescribed by ICFRE. Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found. <b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).
4.	340	Gujarat/Aravalli/Modasa	1,07,06,258/-, IOCL	Plain terrain and slight sloppy. Fencing- Barbed wire-2700RMT, Boundary trench-3400 RMT	Sign board needs modification as prescribed by ICFRE.

				<p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos.</p> <p>SMC works- CCT-3200 RMT, Percolation tank-8 Nos. Earthen check dam-4 Nos. Stone bund-500 cmt</p> <p>Pitting- 39996 Nos, Plantation done</p>	<p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
5.	471	Gujarat/Aravalli/Modasa	72,94,404/-, IOCL	<p>Plain terrain and slight sloppy.</p> <p>Fencing- Barbed wire-915 RMT, Boundary trench-2480 RMT</p> <p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos, only one working</p> <p>SMC works- CCT-1500 RMT, Percolation tank- 7 Nos. Earthen check dam-4 Nos. Stone bund-500 cmt, Timhru trench -650 RMT</p> <p>Pitting- 2442 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
6.	421	Gujarat/Aravalli/Modasa	82,68,356/-, IOCL	<p>Plain terrain and slight sloppy.</p> <p>Fencing- Barbed wire-2300RMT, Boundary trench-2650 RMT</p> <p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos</p> <p>SMC works- CCT-3500 RMT, Percolation tank- 3 Nos. Earthen check dam-3 Nos.</p> <p>Pitting- 33330 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
7.	410	Gujarat/Sabarkantha/Raigarh	1,77,30,802/-, IOCL	<p>Plain terrain and slight sloppy.</p> <p>Fencing- Barbed wire-1205 RMT and chainlink-2020 RMT.</p> <p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos with pipeline 3420 mtr,</p> <p>SMC works- CCT-4000 RMT, Contour-15000 Nos. Percolation tank- 74 Nos. Earthen bund-5 Nos. Chowkidaar-6 Nos,</p> <p>Pitting- 55550 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
8.	414	Gujarat/Sabarkantha/Vadali	1,07,46,619/-, IOCL	<p>Plain terrain and slight sloppy.</p> <p>Fencing- Pointing wall-595RMT, Boundary trench-770RMT, Barbed wire-935 RMT, Stonewall- 160 RMT.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine,</p>

				<p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos with storage tank-2Nos- Concrete type, pipeline 3245 RMT</p> <p>SMC works- CT-5000 Nos (1RMT), SCT-4000 Nos (2RMT)</p> <p>Percolation tank- 5 Nos. Earthen bund-6 Nos. Chowkidaar-2 Nos, Pitting- 44440 Nos, Plantation done.</p>	<p>Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
9.	420	Gujarat/Sabarkantha/ RDF Khedbhrama	73,78,340/-, Power Grid Corporation	<p>Plain terrain and slight sloppy rocky.</p> <p>Fencing- Barbed wire-1405 RMT, CC wall- 610 RMT.</p> <p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-1 Nos with pipeline</p> <p>SMC works- CC Tank- 1 Nos (1.5 Lakh liter, SCT-8000 Nos (2RMT)</p> <p>Percolation tank- 6 Nos. tadab-1 No 1035 cmt. Chowkidaar-2 Nos, Pitting- 16665 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
10.	798	Gujarat/Sabarkantha/ RDF Khedbhrama/9 ha	41,47,544/-, NHPC Limited	<p>Sloppy rocky.</p> <p>Fencing- Barbed wire-1850 RMT, 1Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-1 Nos with pipeline 1500 RMT, Concrete tank-1.5Lakh liters tadab-1Nos 1980 cmt</p> <p>SMC works- Percolation tank- 3 Nos. tadab-1 No 1980 cmt. Chowkidaar-3 Nos, Pitting- 9999 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>
11.	411	Gujarat/Sabarkantha/ Raigarh/50 ha	1,76,88,209/-, IOCL	<p>Sloppy rocky.</p> <p>Fencing- chain link -1523 RMT, Barbed wire-1397 RMT, boundary trench-3500 RMT</p> <p>Sign board installed but needs modification.</p> <p>Irrigation measure- Borewell-2 Nos with pipeline 3097 RMT, SMC works- SCT-16000 Nos, CCT-2000RMT, Percolation tank- 89 Nos. tadab-1 No 1980 cmt. Chowkidaar-6 Nos, Pitting- 55550 Nos, Plantation done.</p>	<p>Sign board needs modification as prescribed by ICFRE.</p> <p>Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found.</p> <p><b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).</p>

12.	879	Gujarat/Sabarkantha/ Raigarh/15 ha	88,50,474/-, Power grid corporation	Plain and slight slopy with gullies erosions Fencing- CC wall- 850 RMT, Barbed wire-1586 RMT, boundary trench-3500 RMT Sign board installed but needs modification. Irrigation measure- nil, SMC works- Checkwall- 2 Nos- 7mt length, 11mt length, SCT- 4500 Nos., Chowkidaar-1 Nos, Pitting- 16665 Nos, Plantation done.	Sign board needs modification as prescribed by ICFRE. Grazing by Nilghai and casualty due to porcupine, Wild boars' attacks were found. <b>Suggestion:</b> Vadoliya for individual plants recommended (protection using thorny bushes around each plant).
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The detailed field checklist duly filled and signed by officials is also been attached within this report.

**GCP Reg No. 692**



**Barbed wire fencing**

**Measurement of seedling height**



**With Forest Officials and Sign Board**

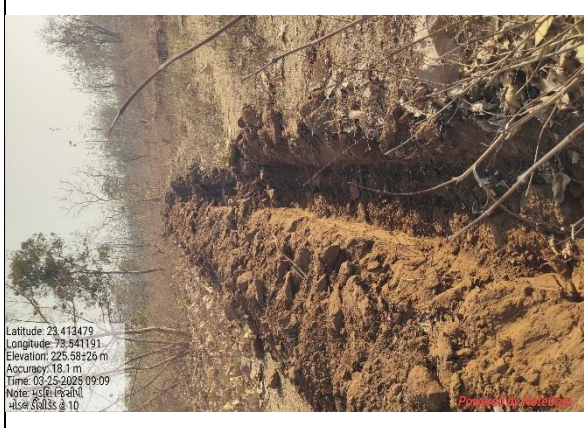
**Measurement of seedling height**



**Storage tank**

**Borewell**

**GCP Reg No. 466**



**Signboard**

**Continous contour trench**



**Mini Percolation Tank**

**Barbed wire fencing**



**Storage tank**

**Measurement of seedlings**



**Bunds**

**Borewell**

GCP Reg No. 467



Barbed wire fencing

Measurement of seedlings



Mini percolation Tank

Sign board



CCT

With forest officials and chowkidaar

**GCP Reg No. 340**



**Barbed wire fencing**

**Sign board**



**Mini percolation Tank**

**Measuring plant height**



**Borewell and Pipeline for Irrigation**

**With Forest officials**

**GCP Reg No. 471**



**Earthen check dam**



**Measurement of plant height**



**Khimru trench**



**Sign board**



**Borewell**



**With Forest officials team**

GCP Reg No. 421



Barbed wire fencing



Continuous contour trench



Mini percolation tank



Measurement of plant height



Pipeline for irrigation



Forest Officials with Sign board

**GCP Reg No. 410**



**Chain link cum barbed wire fencing**

**Measuremnet of plant hieght**



**Pipeline for irrigation**

**Mini percolation tank**



**Stone dikes**

**With Forest officials**

**GCP Reg No. 414**



**Cement pointed pucca wall fencing**

**RCC storage tank**



**Barbed wire fencing**

**Check dam**



**With Forest Officials**

**Sing board**

**GCP Reg No. 420**



**Borewell and pipeline system**

**Mini percolation tank**



**Measurement of plant height**

**Pucca wall fencing**



**Pipeline for irrigation**

**Forest officials**

**GCP Reg No. 798**



**Barbed wire fencing**

**Mini percolation tank**



**Seedling planted with Khamna**

**Measurement of plant height**



**Pipeline system for irrigation**

**With forest officials**

**GCP Reg No. 411**



**Chain link cum barbed wire fencing**

**Measurement of plant height**



**Staggered contour trench**

**Mini percolation tank**



**Light system for protection from cattles/nilghais**

**Pipeline for irrigation**

**GCP Reg No. 879**



**Pucca wall fencing**

**Seedlings planted**



**Staggered contour trench with bamboo species planted**

**RCC check dam**



**Measurement of plant height**

**Sign board**

**Conclusion:**

The tour program across Aravalli, Sabar Kantha and Gandhinagar Forest divisions of Gujarat under the Green Credit Programme (GCP) proved to be highly productive and instrumental in strengthening the implementation framework. The meetings with State Nodal Officers, Implementing Officers, and frontline staff across divisions facilitated clarity on key aspects such as digital cost estimation, progress reporting, and the monitoring mechanism. Hands-on training on GCP portal operations ensured capacity building of field staff. Site visits enabled on-ground assessment of plantation progress and soil-moisture conservation activities, while interaction with representatives from Indian Oil Corporation Limited and NHPC Limited reinforced the importance of collaborative implementation. Baseline data collection protocols for soil and biodiversity were well communicated, laying the foundation for scientifically robust assessment of eco-restoration impacts. The tour also provided an opportunity to address region-specific challenges, align strategies, and enhance the overall monitoring system. The field-level engagement and discussions with implementing teams have significantly contributed to improving the effectiveness, transparency, and accountability of GCP operations. Few suggestions to improve the protection of planted seedlings like using Vadoliya technique to provide individual care to the seedlings against grazing was suggested. Similarly, the need for uniform template for sign board was found necessary due to variations in sign board across the sites. Overall, the visits provided an opportunity to assess GCP implementation, train officials on portal usage, and ensure effective review of progress of activities under Green Credit Programme in various sites of Gujarat. The coordination with local forest departments and Entity representatives was strengthened through the visit.

Name and Signature of the Inspecting Official:



Shahid A.M.

Scientist -B