

**1. Project Title** : Land features mapping for route alignment of proposed power transmission lines

**2. Scope and Objectives:**

This project has been taken up at the request of Power Grid Corporation of India Ltd. (PGCIL). The main objective of this project is to generate land feature map covering 8 Kms on both side of alignment for 10 sites of NER.

**3. Centre/Unit** : North Eastern Space applications Centre (NESAC)

**4. Funding Agency** : Power Grid Corporation of India Ltd. (PGCIL)

**5. Study Area** : Total 10 sites of transmission lines alignment as given below:

- 220 KV Byrnihat-Shillong
- 220 KV Guwahati-Amingaon
- 132 KV Nagle Bibra-Tura
- Land feature maps along the basin of Dikrong river near Harmati area
- 132 KV Bilasipara-Gauripur T/L (Gaurang river crossing)
- 132 KV Rupai-Chapakhowa T/L (Lohit river crossing)
- 132 KV Gerukamukh-Likabali T/L (Subansiri river crossing)
- 132 KV Bornagar-Barpeta T/L & 220 KV BTPS-Rangia T/L (Beki river crossing)
- 220 KV BTPS-Rangia T/L (Pagladiya river crossing)
- 220 KV BTPS-Rangia T/L (Pagladiya river crossing)

**6. Methodology:** Land feature maps have been generated as per DOS/LULC 50K project standard from the latest IRS P6 LISS 3 multispectral satellite imageries. SOI topomaps were used for demarcation of proposed alignment sites. Major roads along with important places have also been incorporated into the maps.

**7. Data Used** : IRS P6 LISS 3 (2008-2009) satellite imageries, SOI topomaps (1:50K)

**8. Status of the Project:** Completed

**9. Results :**

Land feature maps for the above alignment sites have been prepared and delivered to the user.

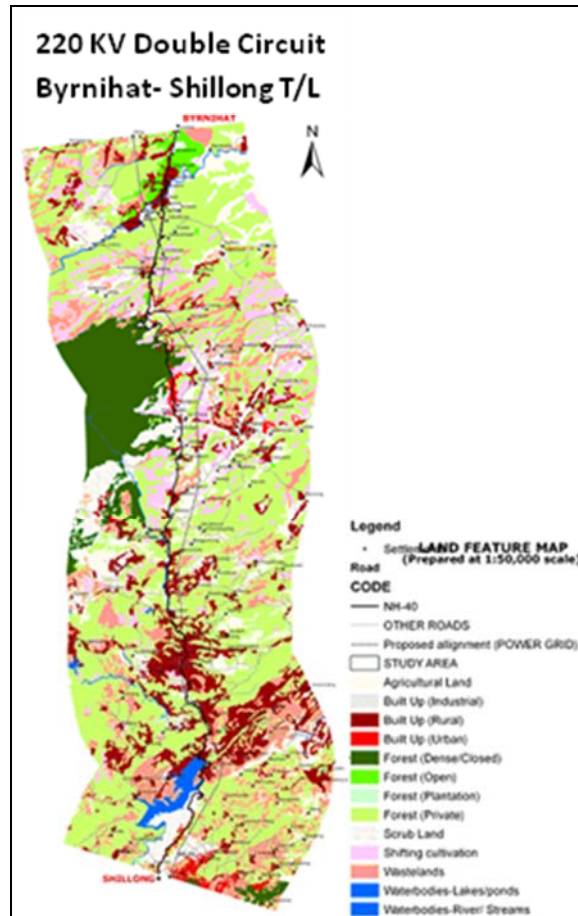


Fig.1 Land feature map of 220 KV Byrnihat-Shillong alignment site

**10. Utilization/Success Stories:**

GPCIL has utilized such inputs for strengthening the transmission systems in the entire NER including Sikkim.

**11. Duration :** 6 months