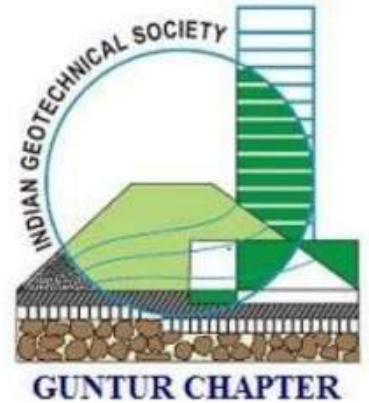


We invite you all to the
IGS GUNTUR CHAPTER



Webinar

LANDSLIDE HAZARD AND MONITORING

by



Dr. D. Neelima Satyam

Associate Professor & Head

Department of Civil Engineering

Indian Institute of Technology Indore

Madhya Pradesh, India

Organized by IGS Student chapter, GEC

GUDLAVALLERU ENGINEERING COLLEGE

SeshadriRao Knowledge Village, Gudlavalleru-521356, A.P

Department of Civil Engineering

02 JULY, 2020 @ 6.00 PM

Meet us @



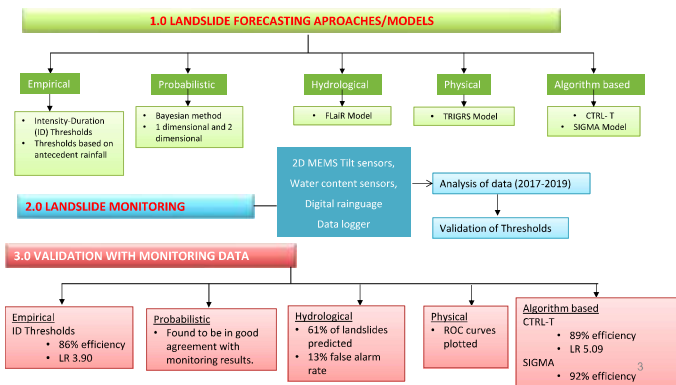
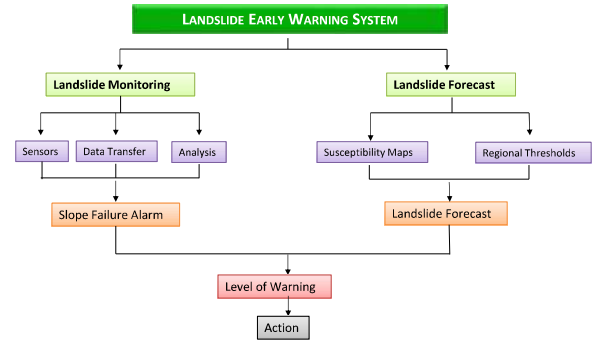
Meeting ID : 879 8964 6514

Password : 557692

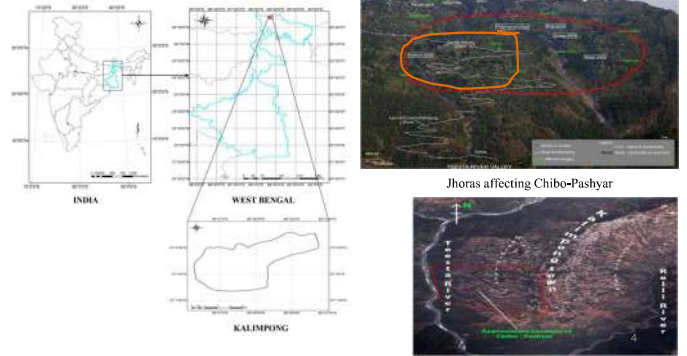
**LANDSLIDE HAZARD ASSESSMENT & MONITORING:
A CASE STUDY OF DARJEELING HIMALAYAS**



Dr. D. Neelima Satyam
Associate Professor and Head
Department of Civil Engineering
IIT Indore

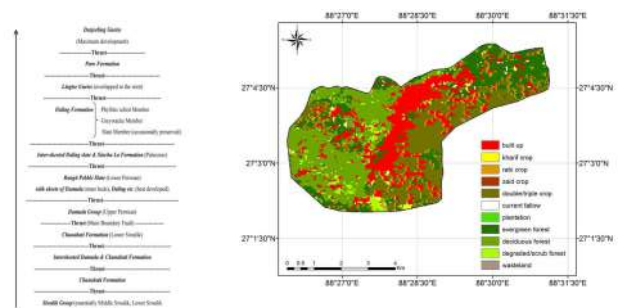


LOCATION OF CHIBO PASHYAR



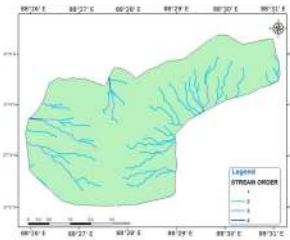
Field Survey

- Extensive reconnaissance survey was carried out covering both eastern and western slope of the town with support from local NGO (Save The Hills).
- Soil samples were collected from specific sites to calculate the geotechnical properties of the soil for slope stability analysis.

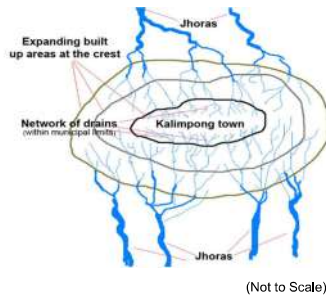


Typical stratigraphy of the study area (Acharyya, 1968)

Land Use/LandCover Map of Kalimpong (Source: NRSC Hyd)



Drainage map of the Kalimpong town



(Not to Scale)

The water during the monsoon is augmented by huge amounts of surface runoff because of reduction in ground seepage



Observed damages during field visit (Dikshit and Satyam, IIS, 2018)



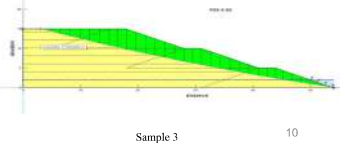
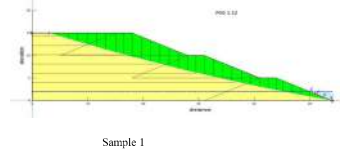
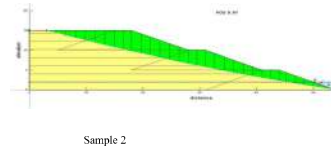
Landslide damages at Chibo Pashyar



Laboratory Testing of Soil Samples & Slope Stability Analysis

Three soil samples were taken from 3 landslide locations at Chibo-Pashyar area and tested in the GTE lab

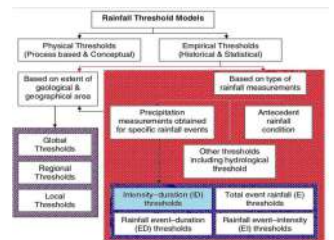
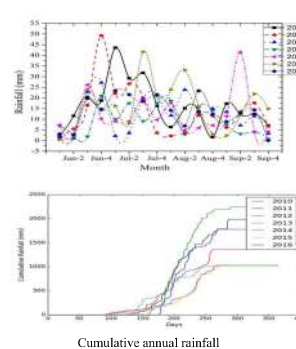
Sample No	Moisture content (%)	Cohesion (c)	Friction Angle (ϕ)
1	4.03	0.20	28
2	3.9	0.23	33
3	3.9	0.16	32



Observations from field survey & Laboratory analysis:

1. Field observation revealed that the number of reactivated landslides is quite lower than the number of new landslides. Some minor reactivation is only observed in Chibo-Pashyar region.
2. Observations also shows that the lack of proper drainage system/rainfall which is the key reason for the increase in landslide activities.
3. Rapid expansion of settlements and towns along the roads are causing frequent landslides.
4. Three soil samples were collected from the study area for the slope stability analysis
5. From the analysis it is clear that Factor of safety is much lower than the minimum required (1.25) as per IS.

Estimation of rainfall thresholds using empirical & mathematical models



Flowchart for rainfall induced landslide threshold (Kanungo and Sharma, 2014)

GUDLAVALLERU ENGINEERING COLLEGE

Seshadri Rao Knowledge Village:: Gudlavalleru

DEPARTMENT OF CIVIL ENGINEERING

List of Participants attended for the programme organised on 02 July 2020

S No	Full name	Designation	Organisation	Place of work	Phone number
1	Kirankumar Gadi	Manager	NA	NA	8332802479
2	Polisetty Praneet Sai Kumar	Assistant Professor	Gudlavalleru Engineering College	Gudlavalleru	7843397410
3	Reena James Rodrigues	PG student	Basaveshwar Engineering College Bagalkot	Bagalkot	+919900326237
4	Divya Priya Balasubramani	Assistant Professor	VIT University	Vellore	9159950022
5	Adarsh H. S.	Student	Basaveshwar engineering college, Bagalkot	Bagalkot	9538128455
6	Er. TEMURA RAHUL	POST GRADUATE	LIFE MEMBER, IGS	HYDERABAD	7893078941
7	PHANI KUMAR VADDI	Sr.Gr.Assistant Professor	Gudlavalleru Engineering College	Gudlavalleru	09885606107
8	Nikhil Karmarkar	Student	Goa College of Engineering	Ponda	8551053868
9	Priyadharshini M R	Research scholar	anna university chennai	tamil nadu	7418269369
10	NARENDRA SAMADHIYA	Professor	Indian Institute of Technology Roorkee	Roorkee	09412073058
11	Mamoni Begum	Student	Jorhat Institute Of Science and Technology	College	9101414700
12	Changalpattu Naga Bharath	Assistant Professor	Gudlavalleru Engineering College	Gudlavalleru	8106111138
13	naga mohan jonnalagadda	Assistant Professor	KKR AND KSR Institute of Tech and Sciences	GUNTUR	9492466399
14	Ansari Abdullah	PhD Research Scholar	IIT Delhi	Delhi	9834501668
15	Dr.Ch.Nageshwar Rao	Professor,	VNRVJIET	Hyderabad	8317520251
16	A MANIMARAN	Assistant Professor	SRM Institute of Science and Technology	Chennai	9840890333
17	Ch Ajay	Student	Gudlavalleru Engineering College	Gudlavalleru	7981586079
18	VIMAL KUMAR	Student	BABASAHEB BHIMRAO UNIVERSITY	LUCKNOW	7054978978
19	Sachin D	AM	ICT	Delhi	8762696586
20	Kalapala keerthi	Student	Gudlavalleru Engineering College	Gudlavalleru	9603713089
21	J V Gurusurthy	Professor	G. Pulla Reddy Engineering College, Kurnool	Kurnool	9440588766
22	Ishfaq Ahmed Dar	Assistant Professor	S.S.M College of Engineering	Baramulla	9419057402
23	Prakash V Surya	Senior Geotechnical Expert	AICA GC Mumbai Metro	Mumbai	7827145566
24	Yemineni hemanth kumar	Student member	Gudlavalleru engineering college	Gudlavalleru	7095657605
25	S D VENKATA SYAM	Civil engineering	GUDLAVALLERU ENGINEERING COLLEGE	STUDENT	7670831244
26	Sagar Shrivastava	Student	Gyan Ganga Institute of Technology and Science	NA	9424604202
27	Sumon Saha	Deputy Project Manager	Simplex Infrastructures Limited	Saudi Arabia	6540746768
28	Sanjay Verma	Honorary Secretary	IGS Jabalpur Chapter	Jabalpur	+919425803337
29	Adiki Purandhar	B.tech civil	Consultant	Hosapete	9880630530
30	Bhanuprakash H R	Student	Basaveswar Engineering College, Bagalkot	Student	7022115410
31	Mayank Rawat	Student	Babasaheb bhim rao ambedkar university	Lucknow	7488183167
32	Yadugani Srinivas	Assoc. Prof.	Osmania University	INDIA	9849641543
33	MOHAN RAJ. P	Student	Excel Engineering College	Komarapalyam	9994764289
34	K N Durga Vara Prasad	Student	Gudlavalleru Engineering College	Gudlavalleru	8688382788
35	Angadala Ramu	Student	Gudlavalleru Engineering College	Gudlavalleru	9014717822
36	M A VINNY HARRIS	STUDENT	SASI Institute of Tech and Engg	Tadepalligudem	9959694693

37	nukathoti sravani	student	Gudlavalleru engineering college,Gudlavalleru	chirala	7995757051
38	POTU LAKSHMAN NARAYANA	Student	Gudlavalleru engineering college	Gudlavalleru	8499096391
39	KASIBHATLA SAI KARTHIKEYA	Student	Gudlavalleru Engineering college	Gudlavalleru	9553681778
40	Kamma Supreem	BTech	gudlavalleru engineering college	gudlavalleru	8464036205
41	Nandyala Jogendra Sai Babu	Student	Gudlavalleru engineering college	Gudlavalleru	9866527427
42	M.pushpadanth	Student	Gudlavalleru engineering college	Gudlavalleru	8919396177
43	MAJJI CHANTI BABU	Student	Gudlavalleru	Gudlavalleru	8555904103
44	Angadala Ramu	Student	Gudlavalleru Engineering College	Gudlavalleru	9014717822
45	Gudavalli laalu sekhar	Student	Gec	Home	8688704595
46	KOLLURI SHARMILA	Student	Gudlavalleru Engineering College	Gudlavalleru	9542377926
47	Nukathoti sravani	Student	GUDLAVALLERU ENGINEERING COLLEGE	GUDLAVALLERU	7995757051
48	K.Gopi kumar	Student	Gudlavalleru engineering college	Gudlavalleru	7093339568
49	Jannu Girish	student	Gudlavalleru Engineering College	Gudlavalleru	9347980561
50	Katta Naga Durga Vara Prasad	Student	Gudlavalleru Engineering College	Gudlavalleru	8688382788
51	R.Hemanth kumar	B-tech	Gudlavalleru engineering college	Gudlavalleru	6305350568
52	Ch.Naga Venkata Durga Prasad	Student	Gudlavalleru Engineering College	Mutcherla	9182411690
53	Kalapala keerthi	Student	Gudlavalleru engineering college	Gudlavalleru	9603713089
54	Mureboina Murali Krishna	Student	Gudlavalleru Engineering College	Gudlavalleru	9705247637
55	ADURI. NAVEEN SAI KUMAR	STUDENT	GUDLAVALLERU ENGINEERING COLLEGE	GUDLAVALLERU	7989581719
56	Gundiga.Vijaya	B.Tech	Gudlavalleru Engineering College	Gudlavalleru	9347063919
57	Inteti. Sai Suresh	Good	Gudlavalleru engineering college	Gudlavalleru	9182989391
58	P yeshwanth dinakar	B tech	Gudlavalleru engineering college	Student	9618758527
59	Peddeneni yaswanth	Student	Gudlavalleru engineering college	Gudlavalleru	7981684524
60	Kammili Divya sri	B-Tech	Gudlavalleru Engineering College	Gudlavalleru	6303566865
61	Yemineni hemanth kumar	Student	Gudlavalleru Engineering College	Gudlavalleru	7095657605
62	Sivaji. kodali	Student	Gudlavalleru engineering college	Student	6300301340
63	Mohammed.Nishat Rahamatullah	B.tech	Gudlavalleru Engineering College	None	9398642554
64	Tarun Manikanta	Student	Gudlavalleru Engineering College	Gudlavalleru	8985895997
65	Subrahmanyam Ugb	Student	Gudlavalleru engineering college	Not working	7731081995
66	Jaddu Siva Rama Koteswara Rao	Civil Engineering	Gudlavalleru Engineering College	Gudlavalleru	9652417024

GUDLAVALLERU ENGINEERING COLLEGE

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)

Seshadri Rao Knowledge Village, Gudlavalleru

Department of Civil Engineering

STUDENT DEVELOPMENT PROGRAMME

Academic Year:- 2020-21
Programme No:- 1
Title of Programme:- Landslide Hazard And Monitoring
Resource Person Details:-

Sl.No	Resource Persons	Designation	Organization
1	Dr.Neelima Satyam	Associate Professor & Head	IIT Indoor Mandya Prasad ,India

Object(S) of the programme:- The objective of this programme is to provide an opportunity for the students to gain knowledge on Landslide hazard and monitoring

Expected Outcome:- The students are expected to gain exposure on Landslide hazard and monitoring

Target Audience:- II,III& IV B.Tech CE Students

No. of Audience:- 70



Dr. D. Neelima Satyam

Associate Professor & Head
Department of Civil Engineering
Indian Institute of Technology Indore
Madhya Pradesh, India


Coordinator


H.C.E
Head of Civil Engineering
Gudlavalleru Engineering College
Seshadri Rao Knowledge Village
GUDLAVALLERU-521356.