

Review on Study the Investigation of mass Movement along Malshej Ghat

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Abstract: Landslide is a characteristic wonder which is happen due to either by artificial or because of regular variables. Landslide events in slope improvement zones assume a critical part to adjust the landslide. Slope cutting and leveling for home and improvement of zone in a case of synthetic action which is an explanation behind land sliding around there Natural factor, for example, excess precipitation, surge in waterway are the case of characteristic factor so that for reason for understanding their specialized perspective we embrace examination in malshej ghat in this year(2017-18).In our in examination and overview we gather soil and rock test from site in which we will done different test for researching their properties . In our review with our guide we take GPS perusing implies scope, Longitude and rise of these point and furthermore comprehended the topographical and geomorphologic qualities of shake and soil. The principal phase of our task is the study of malshej ghat and gathering topographical data of site and next stage is accumulation of test of each point and testing the soil and rock sample and their outcome can be contrast with ASTM. After testing we decide to specify area is prone to landslide .if the area is prone to landslide we providing the remedial measure.

KEY WORDS: Hillside, Latitude, Longitude, GPS

1. INTRODUCTION

In the recent time the hazard due to natural manmade activity in India and all around the globe is increasing rapidly.one such example of natural hazard is landslide which have the effect in socio economical way the society. The downward and outward movement of the consolidated and unconsolidated soil and rock matter from any geomorphic features due to natural and manmade caused are termed as landslide. Such movement or displacement occurs under the influence of gravity force pressure of water gently aids the phenomenon as it make the rock and soil media weak and mobile. . India is a one of the fastest developing country in the world. The rate of development in India is very rapid. A land slide is happen when the piece of normal incline can't sustain its own weight because of regular or anthropogenic reason. For instance, Soil strata on an elusive surface beneath it or toe of slant cut by synthetic action can turn out to be overwhelming with delayed substantial rain fall and may slide down because of expanding weight of soil strata the mass of moving soil material and stone can be crush the property along its way of

development and cause demise of individuals and living hood. Generally landslide is occur in low slope gradient ground too .Increasing demand of infrastructure and cheap residence has caused the development on hill. Malshej ghat is having heavy and prolonged rainfall and most prone area to landslide and till not studied by the landslide point of

view by any national and international researchers.

Every year there is news in newspaper about national and international researchers .Every year there is news in Newspaper about malshej ghat is having highest chances to be in the landslide activity. Every year there is news in newspaper about malshej ghat is having highest chances to be the landslide activity. During our visit to landslide incident were present in complex manner. The geological survey of India carried out study of landslide hazard which is divided into two types

I) Before Disaster Studies

II) After Disaster Studies

I) Before disaster Studies

The identification of susceptible slope is done by landslide hazard zonation (LHZ) mapping technique on the various scales or by studying the slope which are carried individually. There are mainly five type zone in India

1. Very high hazard
2. High hazard
3. Moderately high hazard
4. Low hazard
5. Very low hazard

II After Disaster study

In the after disaster studies the detailed analysis of the landslide which have occurred already is done and the remedial measure are suggested.



Image- 2: Satellite image of malshej ghat

Table-1: Traversing of Malshej Ghat

Sr.No	Location	Lat-Long	Chainage of RL	Type of	H	L	Nature of slope
1	150 m from Sushant Hotel	19°19.722'N and	2	Sliding	70m	60m	Steep
2	Just 25 m From first location	19.19°764'N and	1	Sliding	40m	35m	Moderate to steep
3	At the border Of thane pune dist.	19°465'N 73°47.219'E	3	Sliding	15m	100ft	Moderate to steep
4	At 500 m From Tunnel right corner	19°70'N 73°46.929'E	4	Sliding	80m	40.6m	Moderate to steep

5	50m from corner Of II water fall	19°117'N 73°46.898'E	1	Sliding	80m	50m	Vertical Steep
6	50 m from III location	19°28.132'N 73°46.878'E	2	Sliding	80m	50m	Vertical
7	50 m from IV Waterfall	19°137'N 73°46.836'E	3	Sliding	80m	50m	Vertical
8	50m from V Waterfall	19°20.197'N 73°46.742'E	4	Sliding	80m	50m	Vertical
9	50 m from VI Waterfall	19°20.227'N 73°46.691'E	5	Sliding	80m	50m	Vertical
10	50 m from VII waterfall	19°20.227'N 73°46.632'E	6	Sliding	80m	50m	Vertical
11	50m from VII Waterfall	19°278'N 73°490'E	7	Sliding	80m	50m	Vertical
12	50 m from IX waterfall	19°20.333'N 73°46.552'E	8	Sliding	80m	50m	Vertical

13	50 m from X waterfall	19°40'7"N 73°48'0"E	9	Sliding	80m	50m	Vertical
14	50 m from XI Waterfall	19°33'35"N 73°27'85"E	10	Sliding	80m	50m	Vertical
15	End point of Valley	19°48'3"N 73°46'7"E	11	Sliding	80m	70ft	Vertical

4. CONCLUDING REMARK

Conclusion of our project after studying various parameter and investigation the site we measurably found that anthropogenic and natural phenomenon are the reason for landslide in malshej ghat. Heavy rainfall in July to August 2017 is a main reason of landslide in malshej ghat. There is need to provide various landslide control and prevent measures like netting, bolting and shortcreating etc.

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