


FIELD DATA COLLECTION SHEET

No	Field	Description
1	Slide No (LS .No.)	<i>SKM/SOUTH/78A08/2017/001</i>
2	State	<i>Sikkim</i>
3	District	<i>South Sikkim</i>
4	Toposheet	<i>No. 78A/08</i>
5	Name of the slide	<i>Gumpa Monastery, Upper Gurpisey</i>
6	NH/SH/Locality	<i>State Highway (Namchi-Damthang Road, South Sikkim)</i>
7	Latitude	<i>27°10'20.02" N</i>
8	Longitude	<i>88°22'19.2" E</i>
9	Length	<i>20 m</i>
10	Width	<i>8 m</i>
11	Height	<i>10 m</i>
12	Area	<i>160 m²</i>
13	Depth	<i>2 m</i>
14	Volume	<i>320 m³</i>
15	Run out distance	<i>30m</i>
16	Type of Material	<i>Debris</i>
17	Type of movement	<i>Complex (Slide/ Flows)</i>
18	Rate of movement	<i>Very Rapid</i>
19	Activity	<i>Active</i>
20	Distribution	<i>Advancing</i>
21	Style	<i>Single</i>
22	Failure mechanism	<i>Shallow rotational failure</i>
23	History	<i>20. 09. 2017 at 02:00hrs</i>
24	Geomorphology	<i>Denudational hills (palaeoslide character, slope is 45°-50)</i>
25	Geology	<i>Bed rock- Phyllite covered with debris of fine matrix. Rangit pebble slate Formation of Gondwana Super Group</i>
26	Structure	<i>NA (covered with thick soil cover) Failure plane: N50°E/40°SE</i>
27	Land use/ Land cover	<i>Moderately vegetated</i>
28	Hydrological condition	<i>Wet</i>
29	Triggering Factor	<i>Rainfall (heavy downpour)</i>
30	Death of persons	<i>3 Nos.</i>
31	People affected	<i>5 Nos.</i>
32	Live stock loss	
33	Communication	<i>Water supply line & electricity damaged</i>
34	Infrastructure	<i>2 houses damaged</i>
35	Agriculture/forest/Barren	<i>Forest</i>
36	Geo-scientific Causes	<i>Combination of factors like pore water pressure and reduction of strength on super- saturation, and unplanned cutting of slope</i>
37	Temporarily Remedial measures	<i>Initially the failure plane was covered with plastic sheet by the local people to avoid further penetration of water. However, proper drainage and retaining wall are suggested</i>
38	Remarks, if any	<i>The slide is of small magnitude as compare to other slides of the area. But due to sudden and rapid movement of earth material in the night time, casualty of three children of a family took place.</i>

39	Photos. Sketch of Plan & section of the slide	 <p data-bbox="539 757 1465 840">Fig. 1: Damage caused due to the Gurpisey Landslide, Namchi, South District, Sikkim.</p>
40	Summary/Abstract	<p data-bbox="539 840 1465 1249"><i>The failure was initiated early in the morning at around 02.00 hrs. Tragedy struck due to torrential rainfall over the past 24 hours. This caused loss of 03 human lives, injuries to 02 people and damages of property (Fig.1). A field visit was made to the affected area on 21.09.2017 for preliminary assessment of the landslide. Preliminary field observation confirmed that the Gurpisey landslide was characterised by a very rapid sliding movement along with fast fall of mud/debris material along a moderate to steep slope (>40°). The trend of the failure plane is N50°E/40°due SE and the failure mechanism is shallow rotational. The surrounding area of the landslide exposes with phyllite of Rangit pebble slate Formation of Gondwana Super Group covered with debris in fine matrix. Some parts of the affected area are also having forest land along with some settlements.</i></p>
41	Pdf	