Tables

Table 1.3.2　Typical Geological Sections

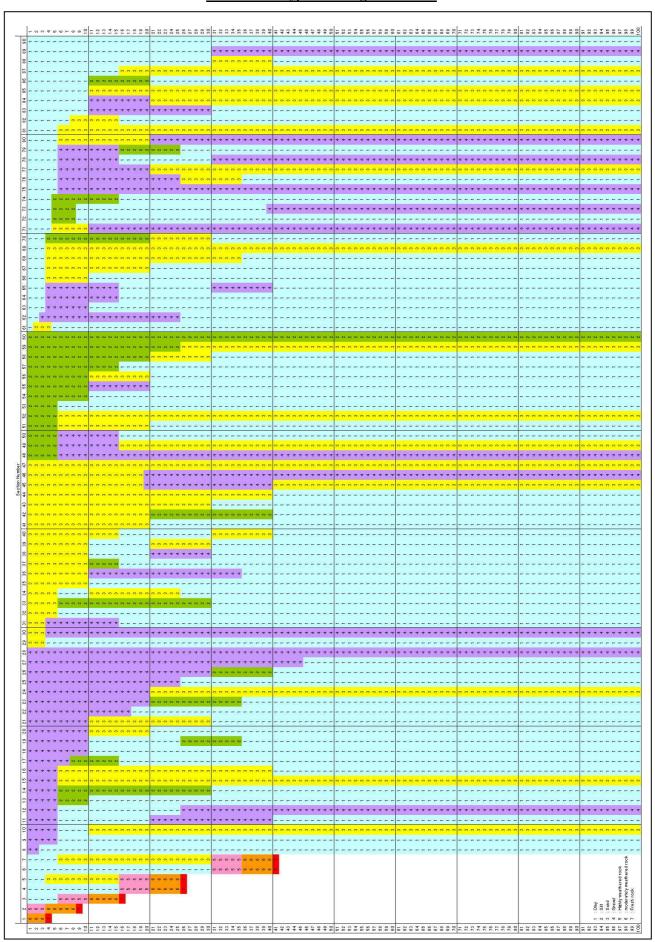**Legend:**

1	: Clay
2	: Silt
3	: Sand
4	: Gravel
5	: Highly weathered rock
6	: moderately weathered rock
7	: Fresh rock

Table 2.3.3   Actual ID No. List of Municipal Wards and VDC

Sr. No.	ID-No.	District	Name	Sr. No.	ID-No.	District	Name	Sr. No.	ID-No.	District	Name
1	11011	Kathmandu	Kathmandu Ward No.1	73	10191	Kathmandu	Gagalphedi	145	20131	Lalitpur	Harisiddhi
2	11021	Kathmandu	Kathmandu Ward No.2	74	10201	Kathmandu	Gokarneshwar	146	20141	Lalitpur	Imadol
3	11031	Kathmandu	Kathmandu Ward No.3	75	10211	Kathmandu	Goldhunga	147	20151	Lalitpur	Jharuwarasi
4	11041	Kathmandu	Kathmandu Ward No.4	76	10221	Kathmandu	Gongabu	148	20161	Lalitpur	Khokana
5	11051	Kathmandu	Kathmandu Ward No.5	77	10231	Kathmandu	Gothatar	149	20171	Lalitpur	Lamatar
6	11061	Kathmandu	Kathmandu Ward No.6	78	10241	Kathmandu	Ichankhu Narayan	150	20181	Lalitpur	Lele
7	11071	Kathmandu	Kathmandu Ward No.7	79	10251	Kathmandu	Indrayani	151	20191	Lalitpur	Lubhu
8	11081	Kathmandu	Kathmandu Ward No.8	80	10261	Kathmandu	Jhor Mahakal	152	20201	Lalitpur	Nallu
9	11091	Kathmandu	Kathmandu Ward No.9	81	10271	Kathmandu	Jitpurphedi	153	20211	Lalitpur	Sainbu
10	11101	Kathmandu	Kathmandu Ward No.10	82	10281	Kathmandu	Jorpati	154	20221	Lalitpur	Siddhipur
11	11111	Kathmandu	Kathmandu Ward No.11	83	10291	Kathmandu	Kabresthali	155	20231	Lalitpur	Sunakothi
12	11121	Kathmandu	Kathmandu Ward No.12	84	10301	Kathmandu	Kapan	156	20241	Lalitpur	Thaiba
13	11131	Kathmandu	Kathmandu Ward No.13	85	10311	Kathmandu	Khadka Bhadrakali	157	20251	Lalitpur	Thecho
14	11141	Kathmandu	Kathmandu Ward No.14	86	10321	Kathmandu	Lapsephedi	158	20261	Lalitpur	Tikathali
15	11151	Kathmandu	Kathmandu Ward No.15	87	10331	Kathmandu	Machhegaun	159	34011	Bhaktapur	Bhaktapur Ward No.1
16	11161	Kathmandu	Kathmandu Ward No.16	88	10341	Kathmandu	Mahadevsthan	160	34021	Bhaktapur	Bhaktapur Ward No.2
17	11171	Kathmandu	Kathmandu Ward No.17	89	10351	Kathmandu	Mahankal	161	34031	Bhaktapur	Bhaktapur Ward No.3
18	11181	Kathmandu	Kathmandu Ward No.18	90	10361	Kathmandu	Manamaiju	162	34041	Bhaktapur	Bhaktapur Ward No.4
19	11191	Kathmandu	Kathmandu Ward No.19	91	10371	Kathmandu	Matatirtha	163	34051	Bhaktapur	Bhaktapur Ward No.5
20	11201	Kathmandu	Kathmandu Ward No.20	92	10381	Kathmandu	Mulpani	164	34061	Bhaktapur	Bhaktapur Ward No.6
21	11211	Kathmandu	Kathmandu Ward No.21	93	10391	Kathmandu	Naikap Naya Bhaiyang	165	34071	Bhaktapur	Bhaktapur Ward No.7
22	11221	Kathmandu	Kathmandu Ward No.22	94	10401	Kathmandu	Naikap Purano Bhaiyang	166	34081	Bhaktapur	Bhaktapur Ward No.8
23	11231	Kathmandu	Kathmandu Ward No.23	95	10411	Kathmandu	Nayanpati	167	34091	Bhaktapur	Bhaktapur Ward No.9
24	11241	Kathmandu	Kathmandu Ward No.24	96	10421	Kathmandu	Pukhulachhi	168	34101	Bhaktapur	Bhaktapur Ward No.10
25	11251	Kathmandu	Kathmandu Ward No.25	97	10431	Kathmandu	Ramkot	169	34111	Bhaktapur	Bhaktapur Ward No.11
26	11261	Kathmandu	Kathmandu Ward No.26	98	10441	Kathmandu	Sangla	170	34121	Bhaktapur	Bhaktapur Ward No.12
27	11271	Kathmandu	Kathmandu Ward No.27	99	10451	Kathmandu	Syuchtar	171	34131	Bhaktapur	Bhaktapur Ward No.13
28	11281	Kathmandu	Kathmandu Ward No.28	100	10461	Kathmandu	Sheshnarayan	172	34141	Bhaktapur	Bhaktapur Ward No.14
29	11291	Kathmandu	Kathmandu Ward No.29	101	10471	Kathmandu	Sitapaila	173	34151	Bhaktapur	Bhaktapur Ward No.15
30	11301	Kathmandu	Kathmandu Ward No.30	102	10481	Kathmandu	Saukhel	174	34161	Bhaktapur	Bhaktapur Ward No.16
31	11311	Kathmandu	Kathmandu Ward No.31	103	10491	Kathmandu	Satungal	175	34171	Bhaktapur	Bhaktapur Ward No.17
32	11321	Kathmandu	Kathmandu Ward No.32	104	10501	Kathmandu	Sundarijal	176	35011	Bhaktapur	Madhyapur Thimi Ward No.1
33	11331	Kathmandu	Kathmandu Ward No.33	105	10511	Kathmandu	Sankhu Suntol	177	35021	Bhaktapur	Madhyapur Thimi Ward No.2
34	11341	Kathmandu	Kathmandu Ward No.34	106	10521	Kathmandu	Talkududechour	178	35022	Bhaktapur	Madhyapur Thimi Ward No.2
35	11351	Kathmandu	Kathmandu Ward No.35	107	10531	Kathmandu	Thankot	179	35031	Bhaktapur	Madhyapur Thimi Ward No.3
36	12011	Kathmandu	Kirtipur Ward No.1	108	10541	Kathmandu	Tinthana	180	35032	Bhaktapur	Madhyapur Thimi Ward No.3
37	12021	Kathmandu	Kirtipur Ward No.2	109	10551	Kathmandu	Tokha Chandeswori	181	35041	Bhaktapur	Madhyapur Thimi Ward No.4
38	12031	Kathmandu	Kirtipur Ward No.3	110	10561	Kathmandu	Tokha Saraswoti	182	35042	Bhaktapur	Madhyapur Thimi Ward No.4
39	12041	Kathmandu	Kirtipur Ward No.4	111	23011	Lalitpur	Lalitpur Ward No.1	183	35051	Bhaktapur	Madhyapur Thimi Ward No.5
40	12051	Kathmandu	Kirtipur Ward No.5	112	23021	Lalitpur	Lalitpur Ward No.2	184	35061	Bhaktapur	Madhyapur Thimi Ward No.6
41	12061	Kathmandu	Kirtipur Ward No.6	113	23031	Lalitpur	Lalitpur Ward No.3	185	35071	Bhaktapur	Madhyapur Thimi Ward No.7
42	12071	Kathmandu	Kirtipur Ward No.7	114	23041	Lalitpur	Lalitpur Ward No.4	186	35081	Bhaktapur	Madhyapur Thimi Ward No.8
43	12081	Kathmandu	Kirtipur Ward No.8	115	23051	Lalitpur	Lalitpur Ward No.5	187	35091	Bhaktapur	Madhyapur Thimi Ward No.9
44	12091	Kathmandu	Kirtipur Ward No.9	116	23061	Lalitpur	Lalitpur Ward No.6	188	35101	Bhaktapur	Madhyapur Thimi Ward No.10
45	12101	Kathmandu	Kirtipur Ward No.10	117	23071	Lalitpur	Lalitpur Ward No.7	189	35102	Bhaktapur	Madhyapur Thimi Ward No.10
46	12111	Kathmandu	Kirtipur Ward No.11	118	23081	Lalitpur	Lalitpur Ward No.8	190	35111	Bhaktapur	Madhyapur Thimi Ward No.11
47	12121	Kathmandu	Kirtipur Ward No.12	119	23091	Lalitpur	Lalitpur Ward No.9	191	35112	Bhaktapur	Madhyapur Thimi Ward No.11
48	12131	Kathmandu	Kirtipur Ward No.13	120	23101	Lalitpur	Lalitpur Ward No.10	192	35121	Bhaktapur	Madhyapur Thimi Ward No.12
49	12141	Kathmandu	Kirtipur Ward No.14	121	23111	Lalitpur	Lalitpur Ward No.11	193	35122	Bhaktapur	Madhyapur Thimi Ward No.12
50	12151	Kathmandu	Kirtipur Ward No.15	122	23121	Lalitpur	Lalitpur Ward No.12	194	35123	Bhaktapur	Madhyapur Thimi Ward No.12
51	12161	Kathmandu	Kirtipur Ward No.16	123	23131	Lalitpur	Lalitpur Ward No.13	195	35131	Bhaktapur	Madhyapur Thimi Ward No.13
52	12171	Kathmandu	Kirtipur Ward No.17	124	23141	Lalitpur	Lalitpur Ward No.14	196	35141	Bhaktapur	Madhyapur Thimi Ward No.14
53	12181	Kathmandu	Kirtipur Ward No.18	125	23151	Lalitpur	Lalitpur Ward No.15	197	35142	Bhaktapur	Madhyapur Thimi Ward No.14
54	12191	Kathmandu	Kirtipur Ward No.19	126	23161	Lalitpur	Lalitpur Ward No.16	198	35151	Bhaktapur	Madhyapur Thimi Ward No.15
55	10011	Kathmandu	Alapot	127	23171	Lalitpur	Lalitpur Ward No.17	199	35161	Bhaktapur	Madhyapur Thimi Ward No.16
56	10021	Kathmandu	Bad Bhanijyang	128	23181	Lalitpur	Lalitpur Ward No.18	200	35171	Bhaktapur	Madhyapur Thimi Ward No.17
57	10031	Kathmandu	Bajrayogini	129	23191	Lalitpur	Lalitpur Ward No.19	201	30011	Bhaktapur	Bageswori
58	10041	Kathmandu	Balambu	130	23201	Lalitpur	Lalitpur Ward No.20	202	30021	Bhaktapur	Balkot
59	10051	Kathmandu	Baluwa	131	23211	Lalitpur	Lalitpur Ward No.21	203	30031	Bhaktapur	Changunarayan
60	10061	Kathmandu	Bhadrabas	132	23221	Lalitpur	Lalitpur Ward No.22	204	30041	Bhaktapur	Chhaling
61	10071	Kathmandu	Bhimdhunga	133	20011	Lalitpur	Badikhel	205	30051	Bhaktapur	Chitpol
62	10081	Kathmandu	Budhnikantha	134	20021	Lalitpur	Bhardev	206	30061	Bhaktapur	Dadhikot
63	10091	Kathmandu	Chalnakhel	135	20031	Lalitpur	Bishnkhunarayan	207	30071	Bhaktapur	Duwakot
64	10101	Kathmandu	Chapali Bhadrakali	136	20041	Lalitpur	Bungamati	208	30081	Bhaktapur	Gundu
65	10111	Kathmandu	Chhaimale	137	20051	Lalitpur	Chapagaun	209	30091	Bhaktapur	Jhaukhel
66	10121	Kathmandu	Chunikhel	138	20061	Lalitpur	Chhampi	210	30101	Bhaktapur	Katunje
67	10131	Kathmandu	Dahachok	139	20071	Lalitpur	Devichaur	211	30111	Bhaktapur	Nagarkot
68	10141	Kathmandu	Daanchi	140	20081	Lalitpur	Dhapakhel	212	30121	Bhaktapur	Nankhel
69	10151	Kathmandu	Daksinkali	141	20091	Lalitpur	Dukuchhap	213	30131	Bhaktapur	Sipadol
70	10161	Kathmandu	Dhapashi	142	20101	Lalitpur	Ghusel	214	30141	Bhaktapur	Sirutar
71	10171	Kathmandu	Dharmasthali	143	20111	Lalitpur	Godamchaur	215	30151	Bhaktapur	Sudal
72	10181	Kathmandu	Phutung	144	20121	Lalitpur	Godawari	216	30161	Bhaktapur	Tathali

Table 2.4.1   Contents of 'View/ Query' Function

Main Menu 1: Bibliography		File format
List of maps and documents		Excel

Main Menu 2: Natural/ Social Conditions

	Sub-menu 1: Natural Conditions	
1	Topography	ArcView
2	Slope Gradient	ArcView
3	Geology	ArcView
4	Geomorphology	ArcView
5	Slope susceptibility	ArcView
6	Groundwater Table	ArcView
7	River	ArcView
8	Faults and Lineaments	ArcView
9	Epicentral Distribution in Nepal	ArcView

	Sub-menu 2: Social Conditions	
10	Administrative boundary	ArcView
11	Locality Classification	ArcView
12	Population	ArcView
13	Population Density	ArcView
14	Landuse	ArcView
15	Land Capability	ArcView
16	Land System	ArcView

	Sub-menu 3: Building Distribution	
17	Building Distribution（Total）	ArcView
18	Building Distribution（Predominant）	ArcView
19	Building Distribution（Stone）	ArcView
20	Building Distribution（Adobe）	ArcView
21	Building Distribution（Brick with Mud Mortar : regular）	ArcView
22	Building Distribution（Brick with Mud Mortar : well-build）	ArcView
23	Building Distribution（Brick with Cement Mortar）	ArcView
24	Building Distribution（RC Frame Masonry : up to 3 stories）	ArcView
25	Building Distribution（RC Frame Masonry : over 4 stories）	ArcView

	Sub-menu 4: Public Facility	
26	Public Facility（Hospitals）	ArcView
27	Facility Accessibility（Hospitals）	ArcView
28	Public Facility（Public Schools）	ArcView
29	Facility Accessibility（Public Schools）	ArcView
30	Public Facility（Fire Station）	ArcView
31	Facility Accessibility（Fire Station）	ArcView
32	Hazardous Facility（LPG Gas center & Petrol station）	ArcView

	Sub-menu 5: Infrastructure	
30	Lifeline（Water supply network）	ArcView
31	Lifeline（Electricity network）	ArcView
32	Lifeline（Electricity: Branch office coverage）	ArcView
33	Lifeline（Electricity: Sub-station coverage）	ArcView
34	Lifeline（Telecommunication network）	ArcView
35	Lifeline（Sewerage network）	ArcView
36	Road Network	ArcView
37	Bridge Location	ArcView
38	Road Length by Area	ArcView

Main Menu 3: Seismic Hazard Analysis

	Sub-menu 1: Ground Model	
1	Location Map of Boreholes	ArcView
2	Ground Model for Seismic Analysis	ArcView

	Sub-menu 2: Scenario Earthquake	
3	Source Fault Models for Scenario Earthquakes	ArcView

	Sub-menu 3: Peak Ground Acceleration Distribution	
4	Peak Ground Acceleration Distribution for EQ I	ArcView
5	Peak Ground Acceleration Distribution for EQ II	ArcView
6	Peak Ground Acceleration Distribution for EQ III	ArcView
7	Peak Ground Acceleration Distribution for EQ IV	ArcView

	Sub-menu 4: Seismic Intensity Distribution	
8	Seismic Intensity Distribution for EQ I	ArcView
9	Seismic Intensity Distribution for EQ II	ArcView
10	Seismic Intensity Distribution for EQ III	ArcView
11	Seismic Intensity Distribution for EQ IV	ArcView

	Sub-menu 5: Liquefaction and Slope stability	
12	Water Table for Liquefaction Analysis	ArcView
13	Liquefaction Potential Distribution for EQ I	ArcView
14	Liquefaction Potential Distribution for EQ II	ArcView
15	Liquefaction Potential Distribution for EQ III	ArcView
16	Liquefaction Potential Distribution for EQ IV	ArcView
17	Slope Stability	ArcView

Main Menu 4: Seismic Damage Analysis		File format

	Sub-menu 1: Building Damage Distribution	
1	Heavily Damaged Building Number for Scenario EQ I	ArcView
2	Heavily Damaged Building Number for Scenario EQ II	ArcView
3	Heavily Damaged Building Number for Scenario EQ III	ArcView
4	Heavily Damaged Building Number for Scenario EQ IV	ArcView
5	Heavily Damaged Building Number for Scenario EQ V	ArcView
6	Heavily Damaged Building Ratio for Scenario EQ I	ArcView
7	Heavily Damaged Building Ratio for Scenario EQ II	ArcView
8	Heavily Damaged Building Ratio for Scenario EQ III	ArcView
9	Heavily Damaged Building Ratio for Scenario EQ IV	ArcView
10	Heavily Damaged Building Ratio for Scenario EQ V	ArcView

	Sub-menu 2: Casualty Distribution	
11	Death Toll Density for Scenario EQ I	ArcView
12	Death Toll Density for Scenario EQ II	ArcView
13	Death Toll Density for Scenario EQ III	ArcView
14	Death Toll Density for Scenario EQ IV	ArcView
15	Death Toll Density for Scenario EQ V	ArcView
16	Total Casualty Density for Scenario EQ I	ArcView
17	Total Casualty Density for Scenario EQ II	ArcView
18	Total Casualty Density for Scenario EQ III	ArcView
19	Total Casualty Density for Scenario EQ IV	ArcView
20	Total Casualty Density for Scenario EQ V	ArcView
21	Death Toll Number for Scenario EQ I	ArcView
22	Death Toll Number for Scenario EQ II	ArcView
23	Death Toll Number for Scenario EQ III	ArcView
24	Death Toll Number for Scenario EQ IV	ArcView
25	Death Toll Number for Scenario EQ V	ArcView

	Sub-menu 3: Infrastructure Damage Distribution	
26	Damage of Water Supply Network for EQ I	ArcView
27	Damage of Water Supply Network for EQ II	ArcView
28	Damage of Sewerage Network for EQ I	ArcView
29	Damage of Sewerage Network for EQ II	ArcView
30	Damage of Electricity Network for EQ I	ArcView
31	Damage of Electricity Network for EQ II	ArcView
32	Damage of Telecommunication Network for EQ I	ArcView
33	Damage of Telecommunication Network for EQ II	ArcView
34	Bridge Damage Distribution for EQ I	ArcView
35	Hazardous Points of Roads	ArcView
36	Accessibility of Roads for EQ I	ArcView

	Sub-menu 4: Fire Outbreak	
37	Fire Outbreak Rank for Scenario EQ I	ArcView
38	Fire Outbreak Rank for Scenario EQ II	ArcView

Main Menu 5: Miscellaneous

	Sub-menu 1: Statistics of Past Disasters	
1	Data source: Ministry of Home Affairs（MOHA）	Excel
2	Data source: Disaster Review 1997（DPTC）	Excel

	Sub-menu 2: Meteorological Fefatures	
3	Precipitation, Wind velocity, Temperature etc.	Excel

	Sub-menu 3: Social Survey	
	Map	
4	Location map of Social Survey	ArcView
5	Land Development Sites	ArcView
6	Newar Settlement	ArcView
	Result	
7	Report of Social Survey	Word

	Sub-menu 4: Building Inventory	
	Map	
8	Loation map of Building Inventory Survey	ArcView
	Result	
9	Report of Building Inventory Survey	Word

	Sub-menu 5: Blueprint Plan	
10	Blueprint for Kathmandu Valley Earthquake Disaster Mitigation	Word

Main Menu 6: Demonstration

1	Auto demonstration of outline result	PowerPoint

Main Menu 7: Video

1	Information Dissemination Video	Media file

Note:
  Scenario Earthquake
   I: Mid Nepal Earthquake
   II: North Bagmati Earthquake
   III: Kathmandu Valley Local Earthquake
   IV: 1934 Earthquake in present
   V: 1934 Earthquake in 1934

Table 2.6.1 Contents of the Database (1/4)

No.	Data name	Location	File format	Reference year (Source Date)	Item	Data type	Data source	Base unit	Amount	Data unit	Description
Bibliography											
1	Bibliography	/Eqdm-ktm	Excel	this Study	Title, Organization etc.	Table	collected	–	–	–	List of collected documents
Natural/ Social Conditions											
Natural Conditions											
1	Topography	/Eqdm-ktm/GIS data/Natural Conditions	ArcView	1994/95	Elevation	Polygon	Survey Dept.	Mesh*	282600 meshes	elevation (m)	Contour map of elevation
2	Slope Gradient	/Eqdm-ktm/GIS data/Natural Conditions	ArcView	this Study	Slope gradient	Polygon	produced	Mesh*	282600 meshes	degree	Maximum gradient at each mesh
3	Geology	/Eqdm-ktm/GIS data/Natural Conditions/Geology	ArcView	1998	Geological classification	Polygon	DMG	–	19 classes	–	Geological classification
4	Geomorphology	/Eqdm-ktm/GIS data/Natural Conditions/Geomorphology	ArcView	1998/2001	Geomorphologic and geological classification	Polygon	DMG+investigated	–	15 classes	–	Geomorphologic and geological classification
			ArcView	1998/2001	Landslide	Line	DMG+investigated	–	–	–	Location of landslide
5	Slope susceptibility	/Eqdm-ktm/GIS data/Natural Conditions/Geomorphology	ArcView	this Study	Relative height	Line	investigated	–	–	height (m)	Relative height between different terrace surfaces
6	Groundwater Table	/Eqdm-ktm/GIS data/Natural Conditions	ArcView	1990	Groundwater table	Line	NWSC	–	–	elevation (m)	Contour map of groundwater table
7	River	/Eqdm-ktm/GIS data/Natural Conditions/River	ArcView	2000	River	Line	KVTDC	–	–	–	Distribution of river system
8	Faults and Lineaments	/Eqdm-ktm/GIS data/Natural Conditions/fault	ArcView	up to 2001	Faults and lineaments	Line	DMG, Yagi, UNDP Report+investigated	–	–	–	Distribution of faults and lineaments
9	Epicentral Distribution in Nepal	/Eqdm-ktm/GIS data/Natural Conditions/fault	ArcView	up to 2001	Epicentral distribution	Point	DMG	–	1090	magnitude (Ms)	Location, date and magnitude of earthquakes up to 2001
Social Conditions											
10	Administrative boundary	/Eqdm-ktm/Basemap	ArcView	2000/2001	Administrative boundary	Polygon	KVTDC, KVMP, Lalitpur, Bhaktapur, Kirtipur and Madyhapur-Thimi Municipality	Ward/VDC	–	–	Boundary of district, municipality, VDC and ward of municipality
11	Locality Classification	/Eqdm-ktm/GIS data/Social Conditions/Area-Type	ArcView	2000/2001	Locality classification	Polygon	KVTDC Gorkhapatra	–	–	–	Locality classification of core area, urban, sub-urban and rural area
12	Population	/Eqdm-ktm/GIS data/Social Conditions/Population	ArcView	projected in 1998	Population	Polygon	National Research Associates	Ward/VDC	–	person	Projected population in 1998 at each ward/VDC
13	Population Density	/Eqdm-ktm/GIS data/Social Conditions/Population	ArcView	projected in 1998	Population density	Polygon	National Research Associates	Ward/VDC	–	person/ha	Projected population density in 1998 at each ward/VDC
14	Land Use	/Eqdm-ktm/GIS data/Social Conditions/Landuse	ArcView	2000	Land use	Polygon	KVTDC	–	14 types	–	Land use
15	Land Capability	/Eqdm-ktm/GIS data/Social Conditions/Land Capability	ArcView	1978/79	Land capability	Polygon	ICIMOD	–	4 classes	–	Land capability
16	Land System	/Eqdm-ktm/GIS data/Social Conditions/Land System	ArcView	1978/79	Land system	Polygon	ICIMOD	–	7 types	–	Land system
Building Distribution											
17	Building Distribution (Total)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of total number	Polygon	surveyed	Mesh	–	nos	Building distribution of total number
18	Building Distribution (Predominant)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of predominant type	Polygon	surveyed	Mesh	7 types	–	Building distribution of predominant type
19	Building Distribution (Stone)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of stone	Polygon	surveyed	Mesh	–	nos	Building distribution of stone
20	Building Distribution (Adobe)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of adobe	Polygon	surveyed	Mesh	–	nos	Building distribution of adobe
21	Building Distribution (Brick with Mud Mortar : regular)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of regular brick with mus mortar	Polygon	surveyed	Mesh	–	nos	Building distribution of regular brick with mud mortar
22	Building Distribution (Brick with Mud Mortar : well-build)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of well-build brick with mud mortar	Polygon	surveyed	Mesh	–	nos	Building distribution of well-build brick with mud mortar
23	Building Distribution (Brick with Cement Mortar)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of brick with cement mortar	Polygon	surveyed	Mesh	–	nos	Building distribution of brick with cement mortar
24	Building Distribution (RC Frame Masonry : up to 3 stories)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of RC frame masonry up to 3 stories	Polygon	surveyed	Mesh	–	nos	Building distribution of RC frame masonry up to 3 stories
25	Building Distribution (RC Frame Masonry : over 4 stories)	/Eqdm-ktm/GIS data/Social Conditions/Building	ArcView	this Study	Building distribution of RC frame masonry over 4 stories	Polygon	surveyed	Mesh	–	nos	Building distribution of RC frame masonry over 4 stories
Public Facility											
26	Public Facility (Hospitals)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	2000	Hospital distribution	Point	KVTDC	–	45	nos	Location and classification of hospitals
27	Facility Accessibility (Hospitals)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Accessibility of each hospital	Polygon	produced	–	–	distance (m)	Accessibility of each hospital
28	Public Facility (Public Schools)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Public school distribution	Point	surveyed	–	338	nos	Location and classification of public schools
29	Facility Accessibility (Public Schools)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Accessibility of each public school	Polygon	produced	–	–	distance (m)	Accessibility of each public school
30	Public Facility (Fire Station)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Fire station distribution	Point	surveyed	–	3	nos	Location of fire station
31	Facility Accessibility (Fire Station)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Accessibility of each fire station	Polygon	produced	–	–	distance (m)	Accessibility of each fire station
32	Hazardous Facility (LPG Gas center & Petrol station)	/Eqdm-ktm/GIS data/Social Conditions/Public Facility	ArcView	this Study	Gas center	Point	surveyed	–	–	nos	Location of gas center
			ArcView	this Study	Petrol station	Polygon	surveyed	Ward/VDC	–	nos	Number of petrol station in each ward/VDC

Table 2.6.1 Contents of the Database (2/4)

No.	Data name	Location	File format	Reference year (Source Date)	Item	Data type	Data source	Base unit	Amount	Data unit	Description
Infrastructure											
30	Lifeline (Water supply network)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Water Supply	ArcView	1999	Intake	Point	NWSC	–	22	nos	Location and name of water intake
			ArcView	1999	Reservoir	Point	NWSC	–	15	nos	Location, name and capacity of reservoir
			ArcView	1999	Well	Point	NWSC	–	45	nos	Location and name of well
			ArcView	1999	Main pipeline	Line	NWSC	–	–	length (m)	Main pipeline network
			ArcView	1993	Distribution network	Line	NWSC	–	–	length (m)	Distribution pipeline network by each pipe diameter
31	Lifeline (Electricity network)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Electricity	ArcView	2001	Transmission network	Line	NEA	–	–	length (m)	Transmission network by each voltage
			ArcView	2001	Distribution network	Line	NEA	–	–	length (m)	Distribution power supply network
			ArcView	2001	Sub-station	Point	NEA	–	16	nos	Location, name and status of sub-station
			ArcView	2001	Branch office	Point	NEA	–	9	nos	Location and name of branch office
			ArcView	2001	Transformer	Point	NEA	–	1542	nos	Location of transformer
32	Lifeline (Electricity: Branch office coverage)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Electricity	ArcView	2001	Coverage	Polygon	NEA	Ward/VDC	–	area (m²)	Coverage of each branch office
33	Lifeline (Electricity: Sub-station coverage)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Electricity	ArcView	2001	Coverage	Polygon	NEA	Ward/VDC	–	area (m²)	Coverage of each sub-station
34	Lifeline (Telecommunication network)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Telecommunications	ArcView	2001	Primary Network	Line	NTC	–	–	length (m)	Primary network line
			ArcView	2001	Exchange building	Point	NTC	–	11	nos	Location and name of exchange building
			ArcView	2001	Cabinet	Point	NTC	–	493	nos	Location of cabinet
			ArcView	2001	Manhole	Point	NTC	–	1452	nos	Location of manhole
35	Lifeline (Sewerage network)	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Sewerage	ArcView	1993	Distribution network	Line	NWSC	–	–	length (m)	Sewerage network by each diameter and material
			ArcView	1993	Sewerage plant	Point	NWSC	–	2	nos	Location and name of sewerage plant
36	Road Network	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Road	ArcView	1999/2000	Road Network	Line	KVTDC, ICIMOD	–	–	length (m)	Road network by each class
37	Bridge Location	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Bridge	ArcView	2001	Bridge Inventory	Point	DOR	–	54	nos	Location, name, road, length and construction year of bridge
38	Road Length by Area	/Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Road	ArcView	this Study	Road Length by Area	Polygon	produced	Ward/VDC	–	meter/ha	Load length in each Ward/VDC
Seismic Hazard Analysis											
Ground Model											
1	Location Map of Boreholes	/Eqdm-ktm/GIS data/Natural Conditions/Geomorphology	ArcView	this Study	Borehole distribution	Point	DMG, etc.+ investigated	–	349	nos	Location and ID No. of each borehole
2	Ground Model for Seismic Analysis	/Eqdm-ktm/GIS data/ground model	ArcView	this Study	Ground model	Polygon	produced	Mesh	–	–	Ground model for seismic analysis
Scenario Earthquake											
3	Source Fault Models for Scenario Earthquakes I: Mid Nepal Earthquake II: North Bagmati Earthquake III: Kathmandu Valley Local Earthquake IV: 1934 Earthquake	/Eqdm-ktm/GIS data/ground model	ArcView	this Study	Source fault model	I, II and IV; Polygon III; Line	produced	–	–	–	Source fault model for scenario earthquakes
Peak Ground Acceleration Distribution											
4	Peak Ground Acceleration Distribution for EQ I	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Peak ground acceleration	Polygon	produced	Mesh	–	gal	Peak ground acceleration distribution for scenario earthquake I
5	Peak Ground Acceleration Distribution for EQ II	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Peak ground acceleration	Polygon	produced	Mesh	–	gal	Peak ground acceleration distribution for scenario earthquake II
6	Peak Ground Acceleration Distribution for EQ III	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Peak ground acceleration	Polygon	produced	Mesh	–	gal	Peak ground acceleration distribution for scenario earthquake III
7	Peak Ground Acceleration Distribution for EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Peak ground acceleration	Polygon	produced	Mesh	–	gal	Peak ground acceleration distribution for scenario earthquake IV
Seismic Intensity Distribution											
8	Seismic Intensity Distribution for EQ I	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Seismic intensity	Polygon	produced	Mesh	–	MMI	Seismic intensity distribution for scenario earthquake I
9	Seismic Intensity Distribution for EQ II	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Seismic intensity	Polygon	produced	Mesh	–	MMI	Seismic intensity distribution for scenario earthquake II
10	Seismic Intensity Distribution for EQ III	/Eqdm-ktm/GIS data/Seismic Hazard	ArcView	this Study	Seismic intensity	Polygon	produced	Mesh	–	MMI	Seismic intensity distribution for scenario earthquake III
11	Seismic Intensity Distribution for EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Seismic intensity	Polygon	produced	Mesh	–	MMI	Seismic intensity distribution for scenario earthquake IV
Liquefaction and Slope stability											
12	Water Table for Liquefaction Analysis	/Eqdm-ktm/GIS data/liquefaction	ArcView	this Study	Water table for liquefaction analysis	Polygon	investigated	Mesh	–	depth (m)	Water table for liquefaction analysis
13	Liquefaction Potential Distribution for EQ I	/Eqdm-ktm/GIS data/liquefaction	ArcView	this Study	Liquefaction potential	Polygon	produced	Mesh	–	grade	Liquefaction potential distribution for scenario earthquake I
14	Liquefaction Potential Distribution for EQ II	/Eqdm-ktm/GIS data/liquefaction	ArcView	this Study	Liquefaction potential	Polygon	produced	Mesh	–	grade	Liquefaction potential distribution for scenario earthquake II

Table 2.6.1 Contents of the Database (3/4)

No.	Data name	Location	File format	Reference year (Source Date)	Item	Data type	Data source	Base unit	Amount	Data unit	Description
15	Liquefaction Potential Distribution for EQ III	/Eqdm-ktm/GIS data/liquefaction	ArcView	this Study	Liquefaction potential	Polygon	produced	Mesh	–	grade	Liquefaction potential distribution for scenario earthquake III
16	Liquefaction Potential Distribution for EQ IV	/Eqdm-ktm/GIS data/liquefaction	ArcView	this Study	Liquefaction potential	Polygon	produced	Mesh	–	grade	Liquefaction potential distribution for scenario earthquake IV
17	Slope Stability	/Eqdm-ktm/GIS data/Natural Conditions/Geomorphology	ArcView	this Study	Slope stability	Line	investigated	–	–	grade	Hazardous area distribution
Seismic Damage Analysis											
Building Damage Distribution											
1	Heavily Damaged Building Number for Scenario EQ I	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building number	Polygon	produced	Mesh	–	nos	Heavily damaged building number distribution for scenario earthquake I
2	Heavily Damaged Building Number for Scenario EQ II	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building number	Polygon	produced	Mesh	–	nos	Heavily damaged building number distribution for scenario earthquake II
3	Heavily Damaged Building Number for Scenario EQ III	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building number	Polygon	produced	Mesh	–	nos	Heavily damaged building number distribution for scenario earthquake III
4	Heavily Damaged Building Number for Scenario EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Heavily damaged building number	Polygon	produced	Mesh	–	nos	Heavily damaged building number distribution for scenario earthquake IV
5	Heavily Damaged Building Number for Scenario EQ V	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Heavily damaged building number	Polygon	produced	Mesh	–	nos	Heavily damaged building number distribution for scenario earthquake V
6	Heavily Damaged Building Ratio for Scenario EQ I	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building ratio	Polygon	produced	Mesh	–	ratio (%)	Heavily damaged building ratio distribution for scenario earthquake I
7	Heavily Damaged Building Ratio for Scenario EQ II	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building ratio	Polygon	produced	Mesh	–	ratio (%)	Heavily damaged building ratio distribution for scenario earthquake II
8	Heavily Damaged Building Ratio for Scenario EQ III	/Eqdm-ktm/GIS data/Damaged Building	ArcView	this Study	Heavily damaged building ratio	Polygon	produced	Mesh	–	ratio (%)	Heavily damaged building ratio distribution for scenario earthquake III
9	Heavily Damaged Building Ratio for Scenario EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Heavily damaged building ratio	Polygon	produced	Mesh	–	ratio (%)	Heavily damaged building ratio distribution for scenario earthquake IV
10	Heavily Damaged Building Ratio for Scenario EQ V	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Heavily damaged building ratio	Polygon	produced	Mesh	–	ratio (%)	Heavily damaged building ratio distribution for scenario earthquake V
Casualty Distribution											
11	Death Toll Density for Scenario EQ I	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll density	Polygon	produced	Ward/VDC	–	person/km^2	Death toll density distribution for scenario earthquake I
12	Death Toll Density for Scenario EQ II	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll density	Polygon	produced	Ward/VDC	–	person/km^2	Death toll density distribution for scenario earthquake II
13	Death Toll Density for Scenario EQ III	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll density	Polygon	produced	Ward/VDC	–	person/km^2	Death toll density distribution for scenario earthquake III
14	Death Toll Density for Scenario EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Death toll density	Polygon	produced	Ward/VDC	–	person/km^2	Death toll density distribution for scenario earthquake IV
15	Death Toll Density for Scenario EQ V	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Death toll density	Polygon	produced	Ward/VDC	–	person/km^2	Death toll density distribution for scenario earthquake V
16	Total Casualty Density for Scenario EQ I	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Total casualty density	Polygon	produced	Ward/VDC	–	person/km^2	Total casualty density distribution for scenario earthquake I
17	Total Casualty Density for Scenario EQ II	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Total casualty density	Polygon	produced	Ward/VDC	–	person/km^2	Total casualty density distribution for scenario earthquake II
18	Total Casualty Density for Scenario EQ III	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Total casualty density	Polygon	produced	Ward/VDC	–	person/km^2	Total casualty density distribution for scenario earthquake III
19	Total Casualty Density for Scenario EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Total casualty density	Polygon	produced	Ward/VDC	–	person/km^2	Total casualty density distribution for scenario earthquake IV
20	Total Casualty Density for Scenario EQ V	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Total casualty density	Polygon	produced	Ward/VDC	–	person/km^2	Total casualty density distribution for scenario earthquake V
21	Death Toll Number for Scenario EQ I	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll number	Polygon	produced	Ward/VDC	–	person	Death toll number distribution for scenario earthquake I
22	Death Toll Number for Scenario EQ II	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll number	Polygon	produced	Ward/VDC	–	person	Death toll number distribution for scenario earthquake II
23	Death Toll Number for Scenario EQ III	/Eqdm-ktm/GIS data/casualty	ArcView	this Study	Death toll number	Polygon	produced	Ward/VDC	–	person	Death toll number distribution for scenario earthquake III
24	Death Toll Number for Scenario EQ IV	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Death toll number	Polygon	produced	Ward/VDC	–	person	Death toll number distribution for scenario earthquake IV
25	Death Toll Number for Scenario EQ V	/Eqdm-ktm/GIS data/1934Result	ArcView	this Study	Death toll number	Polygon	produced	Ward/VDC	–	person	Death toll number distribution for scenario earthquake V
Infrastructure Damage Distribution											
26	Damage of Water Supply Network for EQ I	/Eqdm-ktm/GIS data/lifeline/water	ArcView	this Study	Damage of water supply network	Polygon	produced	Ward/VDC	–	points	Damage of water supply network for scenario earthquake I
27	Damage of Water Supply Network for EQ II	/Eqdm-ktm/GIS data/lifeline/water	ArcView	this Study	Damage of water supply network	Polygon	produced	Ward/VDC	–	points	Damage of water supply network for scenario earthquake II
28	Damage of Sewerage Network for EQ I	/Eqdm-ktm/GIS data/lifeline/sewage	ArcView	this Study	Damage of sewerage network	Polygon	produced	Ward/VDC	–	points	Damage of sewerage network for scenario earthquake I
29	Damage of Sewerage Network for EQ II	/Eqdm-ktm/GIS data/lifeline/sewage	ArcView	this Study	Damage of sewerage network	Polygon	produced	Ward/VDC	–	points	Damage of sewerage network for scenario earthquake II
30	Damage of Electricity Network for EQ I	/Eqdm-ktm/GIS data/lifeline/electricity	ArcView	this Study	Damage of electricity network	Polygon	produced	Ward/VDC	–	meter	Damage of electricity network for scenario earthquake I
31	Damage of Electricity Network for EQ II	/Eqdm-ktm/GIS data/lifeline/electricity	ArcView	this Study	Damage of electricity network	Polygon	produced	Ward/VDC	–	meter	Damage of electricity network for scenario earthquake II

Table 2.6.1 Contents of the Database (4/4)

No.	Data name	Location	File format	Reference year (Source Date)	Item	Data type	Data source	Base unit	Amount	Data unit	Description
32	Damage of Telecommunication Network for EQ I	/Eqdm-ktm/GIS data/lifeline/telephone	ArcView	this Study	Damage of telecommunication network	Polygon	produced	Ward/VDC	–	meter	Damage of telecommunication network for scenario earthquake I
33	Damage of Telecommunication Network for EQ II	/Eqdm-ktm/GIS data/lifeline/telephone	ArcView	this Study	Damage of telecommunication network	Polygon	produced	Ward/VDC	–	meter	Damage of telecommunication network for scenario earthquake II
34	Bridge Damage Distribution for EQ I	/Eqdm-ktm/GIS data/Damaged Facility/Bridge	ArcView	this Study	Bridge damage	Point	produced	–	–	grade	Bridge damage distribution for scenario earthquake I
35	Hazardous Points of Roads	/Eqdm-ktm/GIS data/Damaged Facility/Road	ArcView	this Study	Hazardous points of roads	Point	produced	–	–	–	Hazardous points of roads distribution
36	Accessibility of Roads for EQ I	/Eqdm-ktm/GIS data/Damaged Facility /Eqdm-ktm/GIS data/Social Conditions/Infrastructure /Road	ArcView	this Study	Accessibility of road	Line	produced	–	–	grade	Accessibility of roads for scenario earthquake I
	Fire Outbreak										
37	Fire Outbreak Rank for Scenario EQ I	/Eqdm-ktm/GIS data/Damaged Facility/fire	ArcView	this Study	Fire outbreak rank	Polygon	produced	Ward/VDC	–	grade	Fire outbreak rank for scenario earthquake I
38	Fire Outbreak Rank for Scenario EQ II	/Eqdm-ktm/GIS data/Damaged Facility/fire	ArcView	this Study	Fire outbreak rank	Polygon	produced	Ward/VDC	–	grade	Fire outbreak rank for scenario earthquake II
Miscellaneous											
	Statistics of Past Disasters										
1	Data source: Ministry of Home Affairs (MOHA)	/Eqdm-ktm/others	Excel	up to 2000	Statistics of past disasters	Table	MOHA	–	–	–	Loss of lives by disasters from 1983 to 2000 Loss of lives and properties from 1995 to 2000
2	Data source: Disaster Review 1997 (DPTC)	/Eqdm-ktm/others	Excel	up to 1997	Statistics of past disasters	Table	DPTC	–	–	–	Comparison of the disaster in 1997 with the past disasters
	Meteorological Features										
3	Meteorological features (rainfall, wind, temperature etc.)	/Eqdm-ktm/others	Excel	1990	Meteorological features	Table, Graph	NWSC	–	–	–	Meteorological features such as precipitation, rainy days, pan evaporation, sun shine hour, temperature, humidity and wind velocity
	Social Survey										
	Map										
4	Location map of Social Survey	/Eqdm-ktm/others/Social Survey	ArcView	this Study	Location of social survey	Polygon	surveyed	–	–	–	Location map of social survey
5	Land Development Sites	/Eqdm-ktm/others/Social Survey	Excel ArcView	2001	Location of land development sites	Polygon	surveyed	–	–	–	Location of land development sites
6	Newar Settlement	/Eqdm-ktm/others/Social Survey	Excel ArcView	2001	Location of Newar settlement	Polygon	surveyed	–	–	–	Location of Newar settlement
	Result										
7	Report of Social Survey	/Eqdm-ktm/others	Word	this Study	Result of social survey	Text, Graph	surveyed	–	–	–	Characteristics of land development sites such as name, project period
	Building Inventory										
	Map										
8	Location map of Building Inventory Survey	/Eqdm-ktm/others/Building Inventory	ArcView	this Study	Location map of building inventory survey	Point, Polygon	surveyed	–	–	–	Location map of building inventory survey
	Result										
9	Report of Building Inventory Survey	/Eqdm-ktm/others	Word	this Study	Result of building inventory survey	Text, Graph	surveyed	–	–	–	Result of building inventory survey
	Blueprint Plan										
10	Blueprint for the Kathmandu Valley Earthquake Disaster Mitigation	/Eqdm-ktm/others	Word	this Study	Blueprint earthquake disaster mitigation	Text	investigated	–	–	–	Blueprint for the Kathmandu Valley earthquake disaster mitigation (Report Vol.I)
Demonstration											
1	Auto demonstration of outline result	/Eqdm-ktm/Demo	PowerPoint	this Study	Objectives, Process, Accomplishment, Recommendation	slideshow	produced	–	–	–	Outline of the Study
Video											
1	Information Dissemination Video (Video for the pilot community meeting)	/Eqdm-ktm/Video/Mpegav	Media file	this Study	Disaster Imagination Game (DIG), Community Activities	movie	produced	–	–	–	Promotion video for information dissemination on earthquake disaster

Note:
∗; 50m square mesh
Scenario Earthquake
  I: Mid Nepal Earthquake
  II: North Bagmati Earthquake
  III: Kathmandu Valley Local Earthquake
  IV: 1934 Earthquake in present
  V: 1934 Earthquake in 1934