



Government of Nepal
Ministry of Physical Infrastructure and Transport
Singha Durbar, Kathmandu

Environmental Impact Assessment (EIA)

Annex

for the construction and upgrading of
Kathmandu (Nagdhunga)-Naubise-Mugling (KNM) Road and Bridges
Kathmandu, Dhading, Gorkha and Chitwan Districts
Bagmati and Gorkha Provinces



Volume 1: EIA Main Report

Volume: 2 (Annex)

Submitted through:	Submitted to:
Ministry of Physical Infrastructure and Transport Singha Durbar, Kathmandu	Ministry of Forests and Environment Singha Durbar, Kathmandu
Submitted by:	Prepared by:
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March 2020

नेपाल सरकार, वन तथा वातावरण
मन्त्रालयको सिति. २०७६. १. १२/१०४/
को...
निर्णय अनुसार स्वीकृत भएका ।

नेपाल सरकार
वन तथा वातावरण मन्त्रालय
सिंहदरबार, काठमाडौं

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Annex-1: Temperature data

Station Name: Kathmandu Airport (Index No.: 1030) Latitude: 27°42' Longitude: 85°22' Elevation: 1337

Maximum Temperature (°C)

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Jan	15.4	17	15.7	17.4	17.5	17.2	16.8	16.2	16.8	16.8	16.1	18.4	17.5	16.8	18.9	16.7
Feb	18.2	20.9	17.9	19.2	17.6	19.8	20.1	18.9	19.7	20.3	18.7	18.8	19.5	20.3	18.5	19
Mar	22.1	24.6	23.4	24	24.1	23.3	23.9	23.8	24.5	25.4	21.6	24	23	22.2	22.8	23.4
Apr	26.6	27.3	27.1	22.7	26.3	28.8	27.3	28.2	27.1	25	25.8	27.4	29.7	24.2	26.5	25.1
May	29	27.7	28.5	25.1	29.3	26.7	27.5	28.2	26.9	25.7	27.2	30.4	28.2	26.1	29.9	26.8
Jun	26	28.2	27	26.2	28.8	26.9	28.3	27.9	26.5	27.9	27.5	28.9	27.8	28	28.6	30.4
Jul	26.7	27.8	26.7	26.9	27.3	27.8	26.3	26.1	27.2	27.9	27.3	27.7	27.8	27	28.7	28.3
Aug	27.3	26.8	27.1	26.5	27.3	27.5	26.6	27.3	26.8	27.6	28.3	27.2	27.8	27.8	28.9	28.7
Sep	26.5	26	26.5	26.2	25.3	26.2	25.4	25.3	26.5	27.1	26.7	26.7	26.9	26.7	27.3	27.8
Oct	24	24.6	25.1	24.1	23.4	24.4	25.8	25.7	25	24	24.5	24.9	24.5	25.6	25.6	26
Nov	21.4	21.5	21.3	20.6	21	21.3	22.3	20.8	22.5	21.7	21	22.7	22.4	22.7	21.2	22.9
Dec	18.9	18.7	19.1	18.2	19.3	18	16.5	17.8	18.9	17.6	19.8	18	19.3	19.4	18.8	18.9

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jan	17.1	18.1	18.3	18.5	19.1	17.5	22	17.6	17.6	18.5	20	17.8	18.4	18	19.2	21

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Feb	20.7	20.4	20.1	20.6	21.6	21.7	19.9	22.9	19.1	21.8	20.7	19.6	21.1	19.5	21.6	25.7
Mar	25.9	26.6	24.7	23	23.9	25.6	22.1	25.3	27.8	23.1	25.3	25.4	25.8	25	23.4	28.3
Apr	28.3	29.1	26.4	27.1	28.6	30	26.2	27.5	30.5	26.8	28.3	29.3	28.5	24.6	27	32
May	27.5	28	27.1	29	28.9	29.7	27.2	28.6	27.5	27.9	29.6	31.5	30.7	28.5	28.6	29.3
Jun	28.3	29.1	28.9	28.8	28.4	29.4	29.2	27.8	29.4	28.7	29.3	27.8	27.6	29.4	30.2	28.9
Jul	28.1	27.1	28	27.6	28.3	28.1	27.6	28.2	28.2	28.3	29.1	27.7	27.6	28.6	27.8	28
Aug	29.2	28.9	28.8	27.5	27.9	29.5	28.3	27.9	28.5	27.9	28.9	28.2	27.8	28.6	28.3	27.8
Sep	26.3	26.7	26.9	27.4	28.9	28.9	27.5	27.8	28.4	27.5	28.2	27.6	27.7	28	29.2	28.6
Oct	27.2	24.9	24.8	25.6	28.4	28.6	25.6	26.7	25.9	27.1	26.8	27	26.1	25.2	29	26.5
Nov	22.6	22.2	22.2	23.4	24.4	23.7	24.4	22.1	23.4	23.4	23.5	23.2	24.4	22.9	25.4	24
Dec	19.4	19.3	18.7	20.5	20.3	20.7	20.2	19.1	19.7	21.1	20.4	19.5	21	18.5	22.2	21.4

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Jan	18.2	20.7	20.7	19	19.2	17.9	22.3	19.1	19.4	22.5	22.3	19.6	17.5	18.9	18.6	20.2	18.3
Feb	22	21.1	24.6	22.7	20.7	22	25.2	19.1	21.3	25.8	23.2	23.8	22.8	23.8	20.9	22.2	23.4
Mar	27.3	25.4	26.7	25.2	24.5	25.8	26.3	24.7	26	27.5	29.2	27	26.6	28.1	25.8	24.7	27
Apr	27.7	29	29.6	27.1	28.6	28.6	27.8	29.1	29.3	31.4	31.9	28.7	28.7	29.3	29.6	26.4	31.2
May	28.6	28.7	28.2	27.3	29.7	29.4	28.4	29.8	29	29.1	30.3	28.9	31.4	30	29.7	30.6	28.9
Jun	28.8	29	28.6	29.3	28.8	30.5	29.5	29.6	29.3	30.6	31.1	29.4	31.2	30	30.5	31.4	29.2
Jul	27.7	29	28.9	28.5	28.7	29.1	29.5	28.4	29.3	29.8	29.5	28.6	28.8	29.4	29.6	29.5	28.1

Aug	29.1	29.1	29	29	29.1	29	29.6	29.2	29.5	29.1	29.2	29.5	29.5	29.6	29.3	29.1	30
Sep	28.1	28.1	28.5	28.1	28.5	29.5	28.3	28.1	29.4	29.4	28.6	28.4	29.4	29.8	28.4	29.4	27.9
Oct	26	27.9	27.7	26.7	27.6	26.4	27.2	28	28.4	27.4	28	28.1	27.3	26.6	26.5	27.2	27.4
Nov	22.7	24.5	25.2	23.8	23.6	23.3	23.8	24.7	25.3	24	24.8	22.4	22.5	22.6	21.9	23.6	23.5
Dec	20.6	21.1	20.6	19.8	19.6	21	20.2	20.9	22.2	20.5	20.8	18.9	19.3	18.8	20.1	18.8	20.8

Minimum Temperature (°C)

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Jan	2.6	1.3	2	2	3.2	3.4	1.8	1.4	2.4	0.5	-0.2	2.5	1.9	2.9	2.8	1
Feb	2.9	2.7	3.3	2.7	3.2	4.5	3	4.1	5.2	3	2.1	4.1	4.9	4.8	3.5	1.6
Mar	8.2	8.7	6.2	7.4	8	6.4	7.8	6.9	6.8	7.1	4.9	6.2	8	8.2	7.3	5.8
Apr	11	11.2	11	13	10.5	11.9	12.9	11.4	11.6	11.3	10.4	12.6	12.1	12.5	10.9	10.2
May	14.6	15.4	15.4	15.1	16.1	15.9	16.1	15.3	15.4	13.5	17	15.6	16.2	16.3	14.4	15.3
Jun	19	18.8	18.6	19.6	18.1	19	18.9	18.9	18.5	17.6	19.2	19.1	20.2	19.1	18.5	18.1
Jul	20	20	19.5	20	20.2	19.8	19.9	19.7	19.5	19.7	19.8	20.5	20.8	20.5	20.3	20.5
Aug	19.8	19.7	19	19.6	19.4	19.4	20	19.6	18.8	19	20	20.1	20.3	20.4	20.2	20.2
Sep	18.7	18.4	18.1	17.9	17.6	18.2	17.6	18.1	17.3	17.4	18.5	17.5	19	18.6	17.9	19.1
Oct	10.8	12.1	13.5	13.6	12.5	14	15.6	14.7	10.8	11.7	13.7	13.1	12.1	12.8	11.2	13.7
Nov	7	8.1	6.9	6.7	7.3	6.6	6.3	6.3	8.7	8.6	9.1	9.7	7.2	6.6	7.9	7
Dec	2.2	3.4	1.3	2.8	1.9	1.7	1.2	2.5	0.5	2.3	3.3	4.9	4.1	2	3.7	1.5

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jan	0.1	2.6	2.7	2.4	3	2.7	3.4	2.1	2.4	2.8	2.7	1.1	2.4	1.7	1.6	1.3
Feb	2.4	3.8	3.5	5.3	5.3	2.1	5.1	3.8	3.1	5.4	3.4	4.2	4.8	3	4.5	6
Mar	8.3	9	7.2	8	7.5	6.9	7	8.2	7.4	5.9	9.4	7.5	9.7	7.6	7.4	7.5
Apr	11.2	12.1	11	10.9	11.2	8.6	10.8	10.7	11.1	10.6	10.7	10.4	10.6	10.6	11.4	13.9
May	17.1	15.5	13.9	13.3	15.9	15.5	15.7	15.5	14.1	15.4	15.5	16.4	15.8	13.8	17	17.1
Jun	20	19.2	18.9	19	18.4	18.9	19.8	19	17.9	18.7	19.4	20.1	18.7	18	20	18.8
Jul	20.3	19.6	19.9	20	20	19.5	19.9	20.3	19.2	20.3	20.2	19.8	20.4	20.2	20.2	20
Aug	19.8	20.1	19.5	19.4	19.8	19.2	19.3	19.7	19.5	20.1	19.8	19.5	19.7	19.9	20.2	19.8
Sep	17.3	18.1	18.1	18.4	18.6	18.6	18.5	18.4	17.8	18.1	18.5	18.1	18.6	18.2	18.8	19
Oct	14.4	13.7	12.3	12.9	13.4	13.3	13	12.5	12.7	13.2	11.5	13.2	13.6	10.6	15.3	14.5
Nov	5.8	7	8	7.8	6.4	6	7.3	5.7	6.5	8.1	6.3	8	8.2	7.1	9.2	8.5
Dec	3.4	4.8	2.8	4.2	5	1.8	3.7	2.5	2.5	3.9	2.2	4.7	3.2	3.8	3.3	5.3

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Jan	3.1	2.4	2.1	2.7	2	4.3	2	2.9	3	3.7	3.1	2.4	2.7	1.6	3.9	4.4	4
Feb	5.2	3	4.8	5.4	5.4	5.9	9.1	6.5	3.3	5.9	4.8	5.3	5.2	6.1	5.6	7	6.3
Mar	10.7	6.8	7.4	9.3	9	10.1	8.6	9.3	9.5	8.2	10.9	8.8	8.4	10.1	9.1	9.9	10.3
Apr	13.2	12.1	11.2	12.8	13.3	11.6	12.4	13.8	12.5	13.3	13.9	11.9	13	12.4	11.9	12.6	14.2
May	16.5	17.2	16.4	16.7	14.5	14.9	17.3	16.8	15.4	16	16.8	16.2	16	17.1	16.4	16.6	16.2

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Jun	19.1	19.8	19.2	19.6	19.1	19.2	19.4	19.5	19.6	18.9	19.5	19	20.1	20.1	20.1	19.7	19.5
Jul	20.2	20.1	20.1	20.2	20.3	20.6	20.9	20.6	20.3	20.7	20.6	20.5	20.6	20.4	20.9	19.8	20.4
Aug	20.6	20	19.9	19.8	20.5	20.6	20.3	20.5	20.1	20.5	20.6	20	20.2	20.2	20.6	20.1	20.1
Sep	19.3	18.1	18.5	18.2	19.4	19.5	18.9	19.2	18.7	18.6	19.2	19.1	19	18.9	19	18.9	19.3
Oct	13.1	13.5	14.3	13.5	14.8	14	13.7	15.3	13.5	14.4	14.9	14.2	12.7	15.9	13.7	13.7	15.5
Nov	7.5	9.4	8.5	8.4	9.3	8.4	9.2	8.9	8.7	7.8	9.9	9.5	6.5	7.7	10.1	9.5	8.5
Dec	4.5	3.4	3.7	4	4.4	3.5	5.1	3.8	6	5.3	2.9	4.1	4	4.8	4.8	4.3	5.8



Annex-2 Rainfall Data (Rainfall in mm)

Station Name: Gorkha (Index No.: 0809)

Latitude: 28°00' Longitude: 84°37'

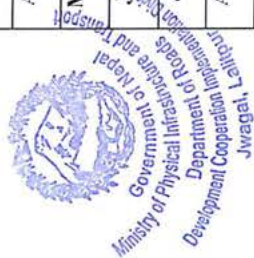
Elevation: 1097

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Jan	56.9	11	20.7	2	2.3	50.7	28	24.1	25.2	12.5	2	5.2	0	39.7	26.4	19
Feb	2.5	1.6	37	14	59.9	27.6	12.8	29.7	1.7	10.5	16	32.1	32	5.1	50.5	5.3
Mar	112.2	50.8	11.3	11.5	37.3	18.1	42.4	14.7	0	20.2	89.6	5.7	55.4	48.9	87.3	17.3
Apr	19.1	54.3	90.1	216.8	35.8	39.2	71.5	63	21	138.6	76.5	60	2	188.1	53.1	82
May	127.6	77.1	88.5	133.3	250.6	192.3	150.7	176.1	298.5	231.3	359.2	109.2	113.4	109	79.6	221.7
Jun	403.1	201.4	300.7	603.9	477.9	333.3	233.9	247.7	812	296.4	376.5	354.6	332	296.7	219.8	196.8
Jul	334.8	425.8	401.4	277	464	278.7	628.7	555.4	451	390.7	431	450.1	497.9	477.5	556.9	663
Aug	244.1	216.7	389.2	362.3	220.4	335.3	368	313.2	422	494.7	517.9	396.6	264.9	295	435.3	351.5
Sep	179.7	312.5	116.1	204.9	286.2	291.8	325.2	347.3	264	76.5	359.5	147.1	171.7	237.2	172.1	333.4
Oct	114.7	10.5	12.3	120.5	91.6	227.1	72.1	23.1	16.6	15.8	56.4	133.1	51.3	2.3	16.1	163
Nov	0	0.4	0	23.4	14.5	0	0	0	0.2	46.6	4.5	20.4	0	21.5	22	0
Dec	0	0	0	0	0	0	5.8	0	0	45.7	9.3	112.7	2.2	0	1.5	16.6
Total	1594.7	1362.1	1467.3	1969.6	1940.5	1794.1	1939.1	1794.3	2312.2	1779.5	2298.4	1826.8	1522.8	1721	1720.6	2069.6

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jan	23.1	2.9	0	3.9	0	161	6	21	2.8	8.5	38.2	7.6	60.6	24.7	8.1	0.2
Feb	7.4	0	17.6	8.4	0	0	68.9	17.2	0	13.1	14.1	41.7	40.2	14.4	12.2	0
Mar	22.1	25.9	60.1	72.4	36.2	96.1	110	100.2	0	51.6	92.5	20.2	19.3	32.8	21.3	0

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Apr	85	95.4	67.6	73.3	65.1	42.6	128.7	36.2	0	50.1	3.4	9.9	40.6	315.6	9	12.8
May	240.7	158	196.4	95.5	229.9	223.3	129.6	100.8	97.5	349.2	217.3	133	95	0	73.2	359
Jun	300.9	303.3	361	253.4	42.5	272.1	331.4	388.9	309	249.1	265.4	886.2	335.6	352.8	181.4	186.6
Jul	416.7	488	531	563.8	226	450.4	544.4	344.1	146.5	243.2	628.3	591.3	408	383.7	326.2	705.4
Aug	382	309.5	287.1	381	251	404.4	270.1	207.3	396.6	242	745.5	211.7	717.8	127.2	60.8	466.7
Sep	320.3	345.8	227.3	150.2	192.2	251.9	157.9	131.7	31.5	240	185.3	250.7	138.4	50.2	18.9	161.6
Oct	24.7	212.2	44.2	16	44.2	65.1	41.3	0	20.6	1.1	0	66	80.2	9.8	2.2	49.6
Nov	0	9.6	0	2	7.7	1	0.2	0	0	0	0	57.7	0	12.7	0	0
Dec	3.9	52.2	78.1	63.7	44.8	8.5	9.4	20.1	0	0	0	5.5	0	37.8	14.8	0
Total	1826.8	2002.8	1870.4	1683.6	1139.6	1976.4	1797.9	1367.5	1004.5	1447.9	2190	2281.5	1935.7	1361.7	728.1	1941.9

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Jan	14.4	7.5	48.3	34.2	27	50.2	0	0	0	0	4	5.5	24.9	13.8	14.5	57.7	2.3
Feb	14	34.2	33.7	64.2	2.5	4.8	0	107.1	0	0	39.9	30.1	76	68.5	56.9	23.5	1.8
Mar	9.5	3	13.3	56.8	0	51.7	20.6	44.4	30	24.3	33.4	17.1	3.1	11.7	66.3	83.7	16.4
Apr	54.6	98.5	190	46.4	143.4	106.3	67.6	84.5	137	65.4	147.9	94	116.2	68	15.4	57	9.6
May	250.9	241.2	213.9	111	132.7	206.6	125.1	101.1	153.6	141.3	184.2	233.1	78.8	221.6	65.8	76.6	174.1
Jun	432.3	360.1	205	346.7	363.8	103.8	227.9	489.3	440.6	208.4	246.6	398.3	463	403.6	260.1	301.9	282.2
Jul	281.9	409.9	497.6	567	411.4	255.5	293.7	363.1	208.6	383	477.2	497.9	494.7	391.7	320	241.4	532.8
Aug	473.7	527.5	332.9	333.9	275	293.6	216.7	175.7	405.9	492.3	490.6	517.3	258.6	297.6	435.6	240.8	235.2
Sep	153.7	178.5	174.8	147.4	216.3	105.5	129.3	353	88	52.8	246.8	181.8	365.5	392.1	272	46.6	162.3
Oct	0	2.5	16.2	3	39.3	98.5	1.8	37.6	9.4	107.9	29.4	1.4	14.7	114.8	120.4	21.3	107.9



Nov	0	9	17.5	0	2	0	2.8	7.3	0	1	0.3	22.5	0	0	0	0
Dec	0	0	18.3	0	0	0	28.5	0	0	0	0	0	0	0	36.3	0
Total	1685	1871.9	1743.2	1728.9	1613.4	1276.5	1114	1763.1	1473.1	1476.4	1900.3	1999	1895.5	1983.4	1663.3	1524.6

Station Name: Dhading (Index No.: 1005)

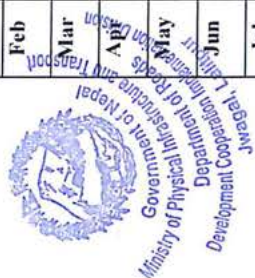
Latitude: 27°52' Longitude: 84°56' Elevation: 1420

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Jan	54.6	12.2	45.6	0	0	35.3	33.2	31.6	14.8	14.4	23.4	0	0	16.4	73.6	25
Feb	24	0	46	12.2	49.4	43.7	0	28.7	0	13	16.4	0	34.2	0	172.6	33.8
Mar	74.2	55.8	25.8	17.6	29.7	41.9	92.4	17.2	0	17	9.4	26.6	73.6	77.4	92.4	26
Apr	0	43.8	82.4	172.8	23.8	32.6	77.1	27.2	133.3	158.6	52.6	15.6	32.2	83.6	35	85.4
May	109.6	67.6	113	181.1	145.7	207.1	195.4	266	125.4	297	311.8	35.6	60.4	311.2	177.6	243
Jun	325.2	79.2	306.6	1019.2	426.9	426.3	160.2	227.3	603.6	330.6	307.2	331.2	405.1	234.6	208.2	200
Jul	443.8	651.4	677.7	297.4	512	427.6	505.5	554.7	370.1	616.6	476.8	510.2	574	832	280.8	433
Aug	214.2	416.6	500.2	279.5	280.1	522	378	276.9	621.5	439.2	502.6	450.6	535.6	862.2	455.2	591.6
Sep	147.2	297.2	199.6	53.8	354.9	608	544.1	465.2	359.2	94	538.6	58.4	177.2	592	226.2	988.1
Oct	133.2	66.6	24.2	154.8	90.7	154.4	12.5	149.9	41.6	29	23.4	88	20	0	61.2	0
Nov	0	0	0	6.4	17.2	9	0	0	0	41.4	32.6	24	0	49.4	33.2	0
Dec	0	0	0	0	0	0	14.8	0	0	60	0	16.4	0	0	28	29
Total	1526	1690.4	2021.1	2194.8	1930.4	2507.9	2013.2	2044.7	2269.5	2110.8	2294.8	1556.6	1912.3	3058.8	1844	2654.9

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Jan	20.4	37	11.4	17	0	39	0	7	35	0	20	27	63.2	23.6	0	2

Feb	0	13.4	52	11	0	17	69.4	20	43	0	24.7	21	18	10	40.6	0
Mar	0	0	97.6	47.4	63	18	114	34.4	0	7	39.4	30	12	28.2	81.2	0
Apr	71.2	77.2	143.4	150	70.2	13	231	50	53.4	35	51.4	20	26.8	140.2	51.6	14.2
May	528.2	185	239.4	86.2	217.4	163.2	171.8	50.8	185	183.4	112	138.4	62.7	99.8	207	385.2
Jun	732.2	258.2	260.4	372.8	407.4	378.2	369.8	360	244.6	429	233.4	782.4	300.2	476	389.1	383.3
Jul	1339.4	624.8	610.4	648.2	569.2	453.4	555.4	336.6	145.8	413.9	260	307	424.2	289.2	395.3	779
Aug	365.6	527.2	902.2	939.9	392.2	421.3	725.2	506.1	343.6	346.4	348.8	398	703.5	311	291.6	502.5
Sep	463.8	309.4	362.4	497.2	156.8	145.8	307.2	169.4	289.6	304.5	175.6	175.9	193.4	137.2	419	309.4
Oct	0	165.6	32	5	68	4	153.6	0	63	0	0	22.8	39	101.4	40.8	102.4
Nov	0	0	0	40	0	2	0	0	0	0	17	42.8	0	21.8	8	0
Dec	5	60	48	0	56	0	0	0	0	0	11	1.6	0	119	0	0.2
Total	3525.8	2257.8	2759.2	2814.7	2000.2	1654.9	2697.4	1534.3	1403	1719.2	1293.3	1966.9	1843	1757.4	1924.2	2478.2

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Jan	6	0	41	20.2	45.6	46.4	0	0	3.4	0	0	DNA	11.4	16.2	0
Feb	1.6	14	31	44.2	0	5.6	0	67.6	0	0	9.2	42	32.5	DNA	0
Mar	24	3	29.4	76	0	28.6	24.8	52.2	70.8	41.4	68	DNA	60.8	DNA	127
Apr	49.6	67.4	74	40	114.8	39.5	63.2	123.8	121.1	73.2	173.6	DNA	DNA	DNA	150.1
May	269.4	247.6	247	116.2	270.2	108	137.4	98	107.5	190.6	DNA	DNA	DNA	DNA	121.5
Jun	353.2	333.5	252	394.5	275.6	133.4	81	401.6	414.9	77.4	96.8	DNA	DNA	DNA	81.8
Jul	390.5	585.5	523.8	720.8	471	423.6	DNA	406.2	500.6	590.8	578.8	DNA	DNA	500.5	DNA
Aug	601.6	496.4	603.2	457.3	449	369	196.1	321.3	627.6	424.6	542.5	DNA	344	DNA	DNA
Sep	239.4	190.4	164.1	365.5	177.4	177.2	434.4	351.2	113.9	99.7	417.2	255.6	279.4	116.2	DNA



Oct	0	0	18.4	0	110.8	84	28.2	55	5.5	64	27	DNA	0	124.3	DNA
Nov	0	29.8	10	0	0.2	0	0	0	0	0	0	DNA	0	0	DNA
Dec	5	0	13.4	12.4	0	0	10.4	0	0	0.1	0	0	0	0	DNA
Total	1940.3	1967.6	2007.3	2247.1	1914.6	1415.3	-	1876.9	1965.3	1561.8	-	-	-	-	-

Station Name: Thankot (Index No.: 1015)

Latitude: 27°41' Longitude: 85°12' Elevation: 1630

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Jan	DNA	13.2	34.8	6.4	0	34.4	30.6	32.4	40.2	24	0	12	0	21.3	21.7	30.3
Feb	DNA	3.6	28.8	6.4	38.4	65.2	8.8	28.4	5	20	27	34.7	13.9	0	33	5.5
Mar	DNA	76.4	40.4	18.4	65.6	67.2	42.4	4.4	0	34	125.6	0	67.5	60.9	42.5	23.8
Apr	DNA	26.8	53.6	194.6	19.2	29.2	68.8	52.4	100.6	163.2	190.4	142.6	15.7	152.6	73.6	75.5
May	DNA	81.8	188.8	208.4	63.6	140	297.6	165.6	285.6	213.2	208.9	73	73.3	113	25.9	138.3
Jun	169	192.2	231.2	618.6	318	542.4	115.2	174.8	780.8	334.2	384.2	471.5	263.5	125.5	58.5	94
Jul	330.8	245.8	427.4	276.8	729.2	495.4	546.6	732.8	457	578.6	656.9	701.1	590.3	371.6	123.1	485.6
Aug	298.2	338.4	371.8	296.2	195.6	409.6	549.8	458.2	516.2	670.6	541.8	885.6	654	202.2	267.6	287.9
Sep	133.6	202.4	200.8	46.4	266	611.4	488.4	401.6	423.8	100.6	542.1	136.9	405.2	261.7	221.7	340.1
Oct	219	8.4	12	138.8	131.2	224.4	44.4	41.2	34	92	230.5	41.8	123.3	0	14.3	43.2
Nov	0	0	0	0	24.8	13.6	0	0	0	0	0	41	0	34	36.5	0
Dec	0	0	0	0	0	0	14	0	0	57.2	3.7	100.8	9.6	0.9	0	39.7
Total	-	1189	1589.6	1811	1851.6	2632.8	2206.6	2091.8	2643.2	2287.6	2911.1	2641	2216.3	1343.7	918.4	1563.9

Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
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Jan	19.3	8.5	0	5.1	7.2	76.7	0	29.5	10.4	29.3	44.3	3.5	70.5	29.2	0	4.3
Feb	21.4	0	58.5	68.8	10	24.5	47.6	22.5	23.5	49.5	36.3	44.5	20.1	7.2	24	0
Mar	20.5	0	16.2	51.1	78	23.9	82.5	71.1	1	59.8	36.6	37.4	3.1	21.5	97.9	0
Apr	51.9	59.8	104.7	40.7	7.2	6.4	104.6	133.7	7	124.1	14.2	8.3	33.8	95.8	81.2	7.1
May	103.5	165.5	180.3	51	96.8	276.6	170.5	87.8	113.5	166	150.7	104.8	100.6	93.3	232.2	153.7
Jun	292.7	180.3	487.9	148.6	104.2	234.9	218.7	215	125.8	194.6	490.8	864.1	400.1	238	209.8	467.8
Jul	692.6	586.4	636.5	966.7	485	508.8	621.7	220.9	363.2	593.2	382	638.1	420.3	547.9	677.5	709
Aug	254.5	679.6	477.6	481.5	646.5	421.6	596.1	548.9	530.3	597	549.3	359.4	454.7	265.9	538.2	438.8
Sep	453.7	622.5	422.1	192.5	433.2	431.2	213.3	255.8	264.8	184.4	438.5	225.1	157.1	122.4	103.3	256.6
Oct	30.6	253.1	60.3	216.4	24.3	24.7	55.6	0	135.2	0	0	21.4	10.5	26.3	38.4	197.6
Nov	0	0	0	0	20.4	0	0	1	14.5	0	16	136.4	0	10.4	11.3	0
Dec	8.1	80.8	55.6	31.6	111.6	0.3	1	33.4	5.1	DNA	0	17.5	0	69.6	0	0
Total	1948.8	2636.5	2499.7	2254	2024.4	2029.6	2111.6	1619.6	1594.3	-	2158.7	2460.5	1670.8	1527.5	2013.8	2234.9

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Jan	1.6	7.7	48.8	21.3	8	64.4	0	0	11	0	0.3	16.2	22	19.4	0	11.7	0
Feb	3.3	34.7	48.7	100.7	0	22.3	0	117.3	0	0	40.8	69.6	53.5	58.9	5.4	51.2	32.1
Mar	28.8	9.9	67.6	42.1	17.5	54.6	13.3	58.7	47.5	17.8	11.9	20.4	7.9	1.1	46.8	46.8	8.8
Apr	31	56.6	42.9	60.1	98.2	74.5	104.3	116.7	54.1	28.5	50.8	68.3	111.6	64.6	56.8	117.6	4.3
May	172.5	209.8	340	43.6	229.5	61.9	99.9	98.3	117.2	140.5	153.8	172.9	85.6	244	76.7	66.7	174.7
Jun	363.9	283.8	215.4	209.9	145.5	223.9	246.2	271.7	392.3	82.7	293.3	354.9	198.6	276.9	57.2	123.5	255.6
Jul	342.8	447.6	849.2	558.8	517.9	224.6	266.1	320.9	275.8	380.4	396.2	443.2	422.1	276	225	408.9	433.9
Aug	552.6	355.9	439.5	267.7	DNA	314.2	214.2	346.2	340.8	465.2	465.7	394.4	328.4	288.5	344.8	354.1	193.6



Sep	126.1	224	145	180.2	180.8	94.1	273.9	402.9	158.8	109.7	397	278.5	394.6	87.8	149.4	58.4	213.8
Oct	28.1	42.3	14.3	7.8	32	77.8	5.2	23.2	9.2	83.9	26.5	23.2	0	133.1	129	25.6	50.2
Nov	0	38.5	5.2	0	2.5	0	2.9	1.5	0	3	0	25.9	0	0	0	0	DNA
Dec	0	0	0	13.4	0	4.3	33	0	4	2.6	0	0	0	0	28.7	0	DNA
Total	1650.7	1710.8	2216.6	1505.6	-	1216.6	1259	1757.4	1410.7	1314.3	1836.3	1867.5	1624.3	1450.3	1119.8	1264.5	-


 Government of Nepal
 Ministry of Physical Infrastructure and Transport
 Department of Roads
 Development Cooperation Implementation Division
 Jwagal, Lalitpur

Annex-3 Trishuli River, Discharge in cumecs

Station Name: Betrawati (Station No.: 447)

Latitude: 27°58' Longitude: 85°11'

Year	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Jan	49.1	47	53.3	42	48.5	49	45.8	52.4	52.5	51.9	50.8	55.3	57.7
Feb	46.9	43.6	42.8	38.2	42.1	45.7	40.3	38.8	50.7	51	45.8	49.6	48.4
Mar	51.2	45.4	43.4	38.8	43	62.5	42	39.7	58.4	50.4	44.3	51.1	49.7
Apr	58	61.3	54.7	60.3	56.1	82.7	44.2	39.9	62.2	63.3	58.1	66.4	62.7
May	86.4	166	105	84.8	93.3	89.7	77.2	113	69.5	78.5	82.5	108	142
Jun	204	337	198	262	274	212	165	283	141	293	235	234	245
Jul	561	501	442	575	615	369	345	536	361	599	512	595	451
Aug	574	586	451	588	539	520	448	386	320	519	577	682	542
Sep	361	336	267	355	339	357	394	317	337	407	333	336	370
Oct	179	228	144	168	148	129	200	118	200	174	154	142	157
Nov	107	122	87.6	99.9	95.6	85.6	104	82.2	96.1	102	96.2	85.5	79.6
Dec	67	77.9	56	65.5	62.2	60.1	67	64.7	68.7	67.3	69.7	65.1	56.3
Yearly	195.4	212.6	162.1	198.1	196.3	171.9	164.4	172.6	151.4	204.7	188.2	205.8	188.5

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Jan	46.9	57.2	52.2	50.5	47	42.5	53	49.6	44.7	43.9	48.9	43.1	65.2
Feb	40.9	49.6	44.5	46.6	40.3	36.2	46.9	45.2	40.2	38	42	39	56.3
Mar	39.1	49.6	43.8	41.8	42.1	38.8	53.1	43.8	41.8	36.6	38.7	34.6	43.3
Apr	55.5	56.6	52	55.7	41.4	60.3	61.1	49	57.4	51.7	48.8	36.9	88.6

May	118	113	62.3	110	79.3	DNA	121	68.4	150	86	106	72.8	193
Jun	396	285	160	256	324	DNA	294	213	350	242	399	366	333
Jul	904	595	408	547	557	515	626	573	755	790	707	669	649
Aug	746	904	814	837	657	DNA	825	565	871	779	869	756	846
Sep	556	611	508	522	448	DNA	498	374	421	594	635	443	496
Oct	221	208	184	220	150	179	189	113	176	269	169	148	211
Nov	99.8	90.2	87.6	89.2	79.7	116	90.1	66.3	72.9	92.9	79.1	70.2	88
Dec	69.2	64.8	61	61.5	57.8	64.4	61.7	56.5	53.5	61.7	54.7	50.6	61.6
Yearly	274.4	257.0	206.5	236.4	210.3	-	243.2	184.7	252.8	257.1	266.4	227.4	260.9

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Jan	47.6	49.3	52.4	45.3	43.9	54.2	54.2	52	50	47.9	43.1	47.1	47.1
Feb	41.3	39	54.1	41.7	41.8	46.4	48.6	46.6	45.1	42.7	40.1	39.2	40.4
Mar	41.3	43.1	53.6	36.2	42.1	44.5	45.5	47.4	42.7	43.2	40.2	35.4	40.7
Apr	57.8	51.4	63.5	41.2	58.3	53.8	57.5	58.6	43.6	49.9	51.3	34.5	51.6
May	84.3	113	105	125	92.9	76.6	75.1	71.8	72.7	83.3	107	62.6	145
Jun	314	332	251	336	190	276	132	144	201	219	282	178	226
Jul	722	697	725	666	422	451	314	394	506	467	596	367	333
Aug	869	875	867	463	496	536	383	568	566	495	518	487	426
Sep	722	566	471	323	382	292	277	479	406	343	296	320	250
Oct	234	290	248	157	190	152	169	163	176	132	205	141	148
Nov	103	97.1	86.4	78.6	104	92.7	86.3	86.9	89.5	71.8	96.5	71.8	101
Dec	64.3	63.5	49.1	52.9	67.5	69.2	64.2	63.3	65.4	52.6	64.3	53.8	71.1

Yearly	275.1	268.0	252.2	197.2	177.5	178.7	142.2	181.2	188.7	170.6	195.0	153.1	156.7
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Station Name: Kali Khola (Station No.: 449.91) Latitude: 27°50' Longitude: 84°33'

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Jan	DNA	DNA	177	183	174	161	172	172	178	175	170
Feb	156	DNA	153	150	148	131	138	126	155	155	151
Mar	158	119	171	148	161	115	128	98.7	137	150	142
Apr	162	167	191	187	229	173	184	121	221	201	174
May	275	677	379	257	549	376	445	247	471	226	385
Jun	1070	1900	1010	700	1230	1020	1590	767	969	887	1140
Jul	1980	2660	2360	2130	3100	3380	2680	1650	2730	3260	3140
Aug	2710	2750	3320	2090	3940	3000	3630	2200	3010	3720	3620
Sep	1970	1500	2050	1330	1810	2210	2440	1300	1500	2770	1930
Oct	DNA	648	787	520	779	1050	631	613	607	708	1020
Nov	DNA	415	395	295	398	416	332	333	319	359	371
Dec	DNA	237	259	257	266	247	205	228	220	214	244
Yearly	-	-	937.7	687.3	1065.3	1023.3	1047.9	654.6	876.4	1068.8	1040.6

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Jan	176	172	173	195	180	156	166	172	142	169	189
Feb	146	142	189	155	149	126	143	149	137	135	140



Mar	138	135	188	141	120	128	121	137	120	120	180
Apr	160	158	217	184	184	192	132	184	161	122	224
May	276	424	275	271	260	243	285	309	394	222	535
Jun	669	1010	1120	1630	509	603	1140	1150	1420	693	1090
Jul	2440	2430	2670	2940	1930	2680	3610	3060	3870	2440	1640
Aug	3150	2360	3260	4400	2660	3700	3430	3230	2870	3540	2480
Sep	1400	1940	2840	1420	1420	3320	2290	2380	1320	2140	1360
Oct	665	649	993	663	838	762	752	572	781	648	545
Nov	385	345	429	343	338	376	376	297	364	338	288
Dec	232	239	261	228	214	233	233	184	210	224	194
Yearly	819.8	833.7	1051.3	1047.5	733.5	1043.3	1056.5	985.3	982.4	899.3	738.8



Annex-4 Trishuli River, Maximum Instantaneous Discharge in cumecs

Station Name: Betrawati (Station No.: 447)

Latitude: 27°58' Longitude: 85°11'

Year	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Discharge	935	924	935	941	895	851	740	955	2100	884	1090	953	724

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Discharge	1540	1160	1540	1980	1180	1820	2040	1060	1490	1440	1640	1430	1520

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Discharge	1490	1150	1380	1260	734	906	495	876	1140	970	1040	750	750

Station Name: Kali Khola (Station No.: 449.91) Latitude: 27°50' Longitude: 84°33'

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Discharge	5680	5680	7580	3630	9420	14000	9420	6020	7950	13700	9420

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Discharge	5320	5340	7860	10400	5060	7240	7340	6120	10200	7770	5280



Annex 5: List of tracks that are existed along the existing highway connecting different villages

SN	Road Type	Road Start	Road End	VDC	Ward	Length Affected in meter	Affected road linking
1	Black Topped	Naagdhunga	Kalanki	Chandragari	3	7	Kalanki
2	Black Topped	Patale Ban	Sisort	Chandragari	3	3	Resort
3	Black Topped	Chisapani	Dhading			1	Dhading
4	Black Topped	Tile-ghar	Cement Factory			3	Cement Factory
5	Black Topped	Khani Khola	Jeevanpur			10	Jeevanpur
6	Black Topped	Khani Khola	Mayal Dhara	Naubise	7	4	Mayal Dhara
7	Black Topped	Naubise-8	Hetauda	Tribhuvan Path	8	3	Hetauda
8	Black Topped	Dharke	Saatghumti	Naubise	1	4	Saatghumti
9	Black Topped	Mahadevbesi	Ranibari	Tharke	3	3	Ranibari
10	Black Topped	Galchi	Kerungnaka	Baireni	8	3	Kerung Border
11	Black Topped	Chabish Kilo	Raile	Baireni	9	5	Raile
12	Black Topped	Gajuri	Chauki	Gajuri	1	6	Chauki
13	Black Topped	Phurkekholo	Dhading Besi	Gajuri	2	8	Dhading Besi
14	Black Topped	Malekhu	Malekhu	Gajuri	2	7	Malekhu
15	Black Topped	Malekhu	Makwanpur	Benighat	1	5	Makwanpur
16	Black Topped	Malekhu	Dumre	Benighat	1	5	Dumre
17	Black Topped	Benighat	Salintar	Benighat	8	5	Salintar
18	Black Topped	Kurintar	Mankamana	Darechokw	3	8	Kurintar(Way to Mankamana)
19	Black Topped	Muglin	Tamil Gau	Darechokw	4	6	Tamil Gau
20	Black Topped	East West Highway (Linked to Prithvi Highway)		Darechokw	4	8	
21	Gravel	Pipalamode	Sallaghari	Chandragari	3	3	Tileghar
22	Gravel	Sigrekholo	Dhunga Khani			1	Dhunga Khani
23	Gravel	Sigrekholo	Khani Khola			2	Khani Khola
24	Gravel	Tileghar	Sitapaila			2	Sitapaila
25	Gravel	Naubise	Ganesthan	Naubise	6	3	Ganeshthan
26	Gravel	Khani Khola	Dimatar	Naubise	7	2	Dimatar

SN	Road Type	Road Start	Road End	VDC	Ward	Length Affected in meter	Affected road linking
27	Gravel	Mahadevbesi	Makwanpur	Bhumesthan	4	5	Makwanpur
28	Gravel	Simle	Makwanpur	Bhumesthan	6	4	Makwanpur
29	Earthen	Naaagdhunga	Basant Tole	Chandragari	3	6	Kalanki
30	Earthen	Naaagdhunga	Koirala Chowk	Chandragari	3	10	Koirala Chowk
31	Earthen	Pipalamode	Dhakal Chowk			3	Dhakal Chowk
32	Earthen	Pipalamode	Dhading			3	Dhading
33	Earthen	Sikrekhola	Khukure Chowk			2	Khukure Chowk
34	Earthen	Khatri Pauwa	Khadi	Naubise	4	4	Khadi
35	Earthen	Kanakot	Kanakot			4	Kanakot Gau
36	Earthen	Kanakot	Pauwa School			3	Pauwa School
37	Earthen	Kanakot	Maran Ghat			1	Maranghat
38	Earthen	Kanakot	Kanakot			2	Kanakot Gau
39	Earthen	Sigrekhol	Dhunga Khani			1	Dhunga Khani
40	Earthen	Tileghar	Sigrekhol			4	Sigrekhol
41	Earthen	Khani Khola	Kharke Daanda			1	Kharke Daanda
42	Earthen	Khani Khola	Naubise	Naubise	2	15	Naubise
43	Earthen	Khani Khola	Naubise	Naubise	6	5	Naubise
44	Earthen	Khani Khola	Bhanjyang	Naubise	7	3	Bhanjyang
45	Earthen	Khani Khola	Bhatta Gau	Naubise	7	2	Bhattagau
46	Earthen	Khani Khola	Naubise	Naubise	7	8	Naubise
47	Earthen	Dharke	Jeevanpur	Naubise	1	10	Jeevanpur
48	Earthen	Dharke	Piple	Tharke	2	4	Piple
49	Earthen	Jungekhola	Saatghumti	Tharke	8	4	Saatghumti
50	Earthen	Simbazar	Remigau	Tharke	5	5	Remi Gau
51	Earthen	Saatkila	Luitel Chowk	Tharke	4	5	Luikel Chowk
52	Earthen	Simle	Raatmate	Bhumesthan	6	4	Raatmate
53	Earthen	Simle	Goganpani	Bhumesthan	6	5	Goganpani
54	Earthen	Baireni	Palangkharka	Baireni	8		Palangkharka
55	Earthen	Batsilla	Palangkharka	Baireni	8	5	Palangkharka



SN	Road Type	Road Start	Road End	VDC	Ward	Length Affected in meter	Affected road linking
56	Earthen	Galchi	Daltar	Baireni	8	7	Daltar
57	Earthen	Baireni	Koilighar	Baireni	9	4	Koilighar
58	Earthen	Baireni	Majhikhet	Baireni	9	3	Majhikhet
59	Earthen	Baireni	Karki danda	Baireni	9	5	Karki danda
60	Earthen	Balchhetar	Balchhetar	Pida	1	5	Balchhetar
61	Earthen	Bange	Raigau	Pida	2	5	Raigau
62	Earthen	Gajuri	Dharapani	Gajuri	1	5	Dharapani
63	Earthen	Kalika	Sunderpur	Gajuri	1	7	Sunderpur
64	Earthen	Chalise	Hatte	Gajuri	1	4	Hatte
65	Earthen	Malekhu	Chitwn	Gajuri	2	4	Chitwn
66	Earthen	Majhimtar	Pipaldaanda	Jogimara	9	10	Pipaldaanda
67	Earthen	Majhimtar	Baluwakhani	Jogimara	9	10	Baluwakhani
68	Earthen	Jogimara	Jogimara Bhanjyang	Jogimara	1	5	Jogimara Bhanjyang
69	Earthen	Kurintar	Lamidanda	Darechowk	3	10	Lamidaanda
70	Earthen	Kurintar	Lamidanda	Darechowk	3	8	Lamidaanda

Source: Field Survey, 2017

Annex 6: List of Water supply taps existed within the 25m ROW along the highway

SN	Type of water Supply	Material of pipe	Size	Water Tap/ Tank Type	Affected Length in meter	No. Of HHs Using Water Supply	Place	Ward	Remarks
1	Water Pipe	Black Plastic	1 inch		1000	50			
2	Water Tank				5	15			
3	Water Pipeline with Tap	Black Plastic	1 inch	Cement	3	10			
4	Water Pipeline with Tap	Black Plastic	1 inch		10	5			
5	Water Pipeline with Tap	Black Plastic	1 inch		4	10			
6	Water Tank with Pipeline	Black Plastic	1 inch		9	50			



7	Water Pipeline with Tap	Black Plastic	1 inch			15	3				
8	Water Pipeline with Tap	Black Plastic	1 inch			15	8				
9	Water Pipeline with Tap	Black Plastic	1 inch			15	25				
10	Water Pipeline with Tap	Black Plastic	1 inch			7	20				
11	Water Pipeline with Tap	Black Plastic	1 inch			10	10				
12	Water Pipeline	Plastic	1 inch (10 Nos.)			200	20				Along the Road connecting village
13	Water Pipeline with Tap	Black Plastic	1 inch	Cement		10	10				
14	Water Pipeline	Black Plastic	5 inches			300	50	Naubise	7		Bothside of the Road
15	Water Pipeline	Black Iron	5 inches			100	70	Naubise	8		
16	Water Pipeline	Black Plastic	3 Inch			500	200	Dharke	1		
17	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		10	10	Tharke	2		Along the Road
18	under Ground Water Pipeline	Black Plastic	5 Inch			500	50	Tharke	3		
19	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		7	20	Bhumesthan	4		
20	Water Pipeline Inside Land	Black Plastic	2 Inch			300	50	Bhumesthan	6		
21	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		6	10	Bhumesthan	9		
22	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		5	10	Bhumesthan	9		
23	Water Pipeline	Black Plastic	1 Inch (10 nos)			500	50	Baireni	8		
24	Water Pipeline	Black Plastic	2 Inch			500	50	Baireni	8		
25	Water Pipeline	Black Plastic	2 Inch			100	150	Baireni	9		
26	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		5	6	Baireni	9		
27	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		8	10	Baireni	9		
28	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		6	6	Baireni	7		
29	under Ground Water Pipeline	Black Plastic	2 Inch			4	130				Bothside of the Road
30	Water Pipeline with Tap	Black Plastic	1 Inch	Cement		200	15				
31	Tunnel(hydropower)	Iron				10		Baireni	1		From Balkhu Kholra
32	under Ground Water Pipeline	Black Plastic	5 Inch			150	200	Pida	1		
33	under Ground Water Pipeline	Black Plastic	1 Inch (20 nos)			200	50	Pida			Bothside of the Road
34	under Ground Water Pipeline	Black Plastic	2 Inch			100	50	Pida			
35	Water pipeline	Plastic Pipe	10 Inch			10		Pida	2		For Mill
36	Water pipeline	Black Plastic	1 Inch (22 nos)			150	50	Pida			Bothside of the Road

37	Water pipeline	Black Plastic	3 Inch			300	250	Gajuri	1	
38	Water Pipeline with Tap	Black Plastic	1 Inch		Cement	8	30	Phurke Khola		
39	Water pipeline	Black Plastic	5 Inch			100	60	Gajuri	2	
40	Water Pipeline with Tap	Black Plastic	1 Inch		Cement	5	20	Benighat	1	
41	Water pipeline	Black Plastic	5 Inch (1nos)			1000	50	Gajuri	2	Leftside of Road
			1 inch (10 Nos.)							
42	Water pipeline	Black Plastic	2 Inch			1000	300	Benighat	1	Bothside of the Road
43	Water pipeline	Black Plastic	2 Inch (8nos.)			200	50			
44	Water pipeline	Black Plastic	2 Inch			100	40	Salang Ghat	9	Bothside of the Road
45	Water Pipeline with Tap	Black Plastic	1 Inch		Cement	10	50			
46	Water Pipeline with Tap	Black Plastic	1 Inch		Cement	8	20			
47	Water Pipeline with Tap	Black Plastic	1 Inch		Cement	10	10	Benighat	8	
48	Water pipeline	Black Plastic	1.5 Inch (2 nos)			150	50	Chadauri Bajar		Bothside of the Road
49	Water pipeline from Tank	Black Plastic	5 inches, 1 Inch (4 nos.)			500	150	Dhusa	1	
50	Water pipeline	Black Plastic	3 Inch (3 nos)			500	100	Dhusa	1	
51	Water pipeline	Iron	5 inches			300	100	Jogimara	9	
		Black Plastic	1 inch (3 Nos.)							
52	Water pipeline	Iron	2 inches			500	50	Dare Chowk	4	Bothside of the Road
		Black Plastic	1 inch (2 Nos.)							
53	Water pipeline	Black Plastic	2 Inch			800	50	Dare Chowk	7	Gaon Tira Gayeko
54	Water pipeline	Iron	5 Inch			1500	100	Dare Chowk	3	
		Black Plastic	10 inches							
55	Water pipeline	Iron	5 Inch			200	250	Dare Chowk	8	
						12165				

Annex 7: List of existing cultural sites, religious trees and waiting place situated near to alignment

List of existing physical cultural structures along the KNM corridor

S.No	Type of Sites	District	VDC	Ward	Area Occupied (sq.m)	Distance From alignment in meter	Remarks
1.	Ganesh Mandir (Temple)	Kathmandu	Naagdhunga	4	9	15	
2.	Shiv Mandir	Kathmandu	Naagdhunga	4	12	15	
3.	Shiv Mandir (Temple)	Kathmandu	Naagdhunga	4	25	2	Likely affected
4.	Shiv Mandir	Kathmandu	Naagdhunga	4	1	1	Likely affected
5.	Shiv Mandir	Kathmandu	Naagdhunga	4	4	5	Likely affected
6.	Ganesh Mandir	Dhading	Naubise	4	9	5	Likely affected
7.	Shree Krishna Mandir	Dhading			16	6	Likely affected
8.	Shiv Mandir	Dhading	Naubise	5	16	4	Likely affected
9.	Muktinath Mandir	Dhading	Naubise	2	80	10	
10.	Lakeswor mahadev mandir	Dhading	Naubise	6	100	10	
11.	Santosi Mata Mandir	Dhading	Naubise	6	9	7	Likely affected
12.	Buddhako Pratima	Dhading	Naubise	1	6	8	Likely affected
13.	Krishna Mandir	Dhading	Naubise	1	8	7	Likely affected
14.	Radha Krishna Mandir+Chautara	Dhading	Tharke	3	30	8	Likely affected
15.	Radha Krishna+Shivparbati Mandir+Chautara	Dhading	Bhumesthan	4	75	7	Likely affected
16.	Shiv Mandir	Dhading	Bhumesthan	6	25	8	Likely affected
17.	Shiv Mandir	Dhading	Dhade	8	25	5	Likely affected
18.	Kalpeswor mahadev Mandir	Dhading	Dhade	8	36	8	
19.	Shiv Mandir + Chautara	Dhading	Bhumesthan	9	50	10	
20.	Shiv mandir	Dhading	Baireni	8	16	10	
21.	Krishna Mandir	Dhading	Baireni	8	20	10	
22.	Ramjanaki mandir	Dhading	Baireni	8	100	20	
23.	Shiv mandir	Dhading	Baireni	8	49	15	
24.	Bhimsen Mandir	Dhading	Baireni	9	16	5	Likely affected
25.	Shiv Mandir	Dhading	Pida	1	100	20	



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Government of Nepal
Department of Road and Transport
Development Cooperation Implementation
Jwagal, Lalitpur

S.No	Type of Sites	District	VDC	Ward	Area Occupied (sq.m)	Distance From alignment in meter	Remarks
26.	Shiv Mandir	Dhading	Pida	3	25	15	
27.	Shiv Mandir	Dhading	Pida	2	16	3	Likely affected
28.	Krishna Mandir + Chautara	Dhading	Pida	2	50	8	Likely affected
29.	Shiv + Krishna Mandir	Dhading	Pida	2	16	10	
30.	Shiv Mandir + Pratikshyalaya	Dhading	Pida	2	120	5	Likely affected
31.	Siddeswor Mahadev	Dhading	Gajuri	1	100	5	Likely affected
32.	Shree Krishna Mandir	Dhading	Gajuri	1	16	10	
33.	Ganesh Mandir	Dhading	Gajuri	1	12	8	Likely affected
34.	Shiv mandir	Dhading	Gajuri	1	12	8	Likely affected
35.	Ganesh Mandir	Dhading	Gajuri	1	64	5	Likely affected
36.	Ganesh Mandir	Dhading	Gajuri	1	24	5	Likely affected
37.	Shiv mandir	Dhading	Gajuri	1	30	6	Likely affected
38.	Shiv Mandir	Dhading	Gajuri	2	25	7	Likely affected
39.	Ganesh Mandir	Dhading	Benighat	1	15	9	
40.	Mandir						
41.	Shree Pabitra Shivalaya Mandir	Dhading	Benighat	9	25	6	Likely affected
42.	Shiv Mandir	Dhading	Benighat	9	40	7	Likely affected
43.	Bachhako Chidan Mathi banayeko Mandir	Dhading	Benighat	8	16	5	Likely affected
44.	Shiv Parbati Mandir	Dhading	Benighat	8	16	5	Likely affected
45.	Shiv Mandir	Dhading	Benighat	8	20	7	Likely affected
46.	Bisnu Mandir	Dhading	Dhusa	1	25	8	Likely affected
47.	Shivalaya	Dhading	Jogimara	9	12	6	Likely affected
48.	Shiv Mandir	Dhading	Jogimara	9	64	8	Likely affected
49.	Shiv Mandir + Pratikshyalaya	Chitwan	Darechowk, Pipal Chautara	3	50	8	Likely affected
50.	Shiv Parbati Mandir	Chitwan	Darechowk	3	25	8	Likely affected
51.	Siddha Baba mandir + Chautara	Chitwan	Darechowk	4	75	4	Likely affected

List of religious trees and waiting place along the existing KNM and along the proposed new alignments

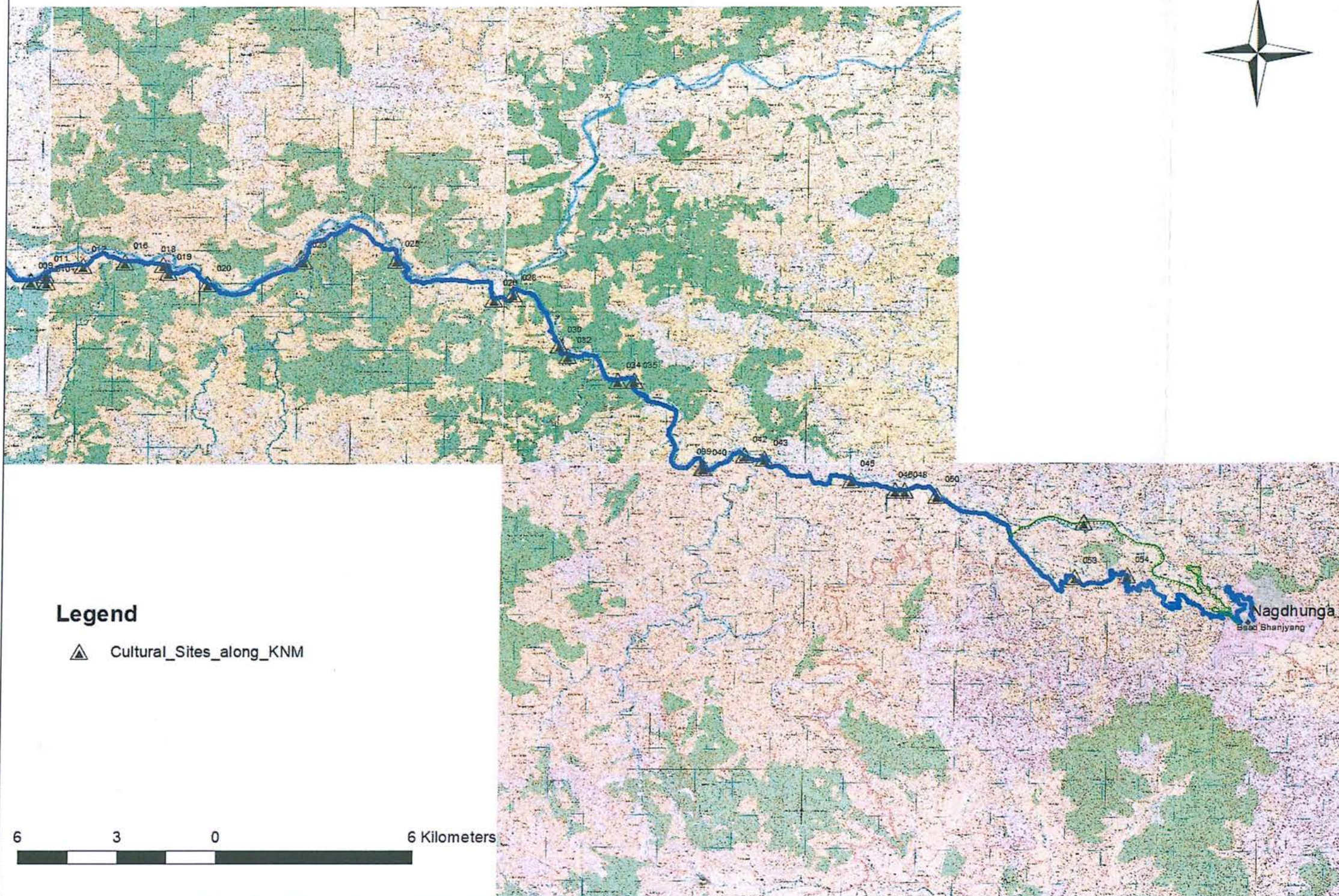
S.No	Type Of Sites	District	VDC	Municipality/ RM	Area (sq.m)	Distance from alignment (m)
52.	Chautara (Religious tree)	Dhading	Kapletar	Thakre RM	16	5
53.	Chautara	Dhading	Naubise-6		20	10
54.	Pratikshyalaya (Waiting place)	Dhading	Naubise-7		16	10
55.	Pratikshyalaya	Dhading	Naubise-7		20	4
56.	Chautara	Dhading	Naubise-1		12	5
57.	Chautara	Dhading	Tharke-4		12	5
58.	Pratikshyalaya	Dhading	Tharke-4		7	6
59.	Chautara	Dhading	Tharke-3		20	8
60.	Chautara	Dhading	Tharke-3		16	10
61.	Chautara	Dhading	Bhumesthan-4		16	7
62.	Chautara	Dhading	Bhumesthan-6	Thakre RM	50	8
63.	Chautara	Dhading	Bhumesthan-6		21	5
64.	Chautara	Dhading	Bhumesthan-9		16	10
65.	Pratikshyalaya	Dhading	Baireni-8		10	10
66.	Pratikshyalaya	Dhading	Baireni-8		15	10
67.	Pratikshyalaya	Dhading	Baireni-8		21	15
68.	Pratikshyalaya	Dhading	Baireni-8		18	15
69.	Pratikshyalaya	Dhading	Baireni-9		12	10
70.	Pratikshyalaya	Dhading	Baireni-1		64	5
71.	Pratikshyalaya	Dhading	Baireni-9		25	4
72.	Pratikshyalaya	Dhading	Baireni-9	Gajuri RM	24	15
73.	Pratikshyalaya	Dhading	Baireni-7		15	15
74.	Pratikshyalaya	Dhading	Pida-1		15	8
75.	Chautara	Dhading	Pida-2		50	6
76.	Chautara	Dhading	Pida-2		16	8
77.	Pratikshyalaya	Dhading	Pida-2		24	8

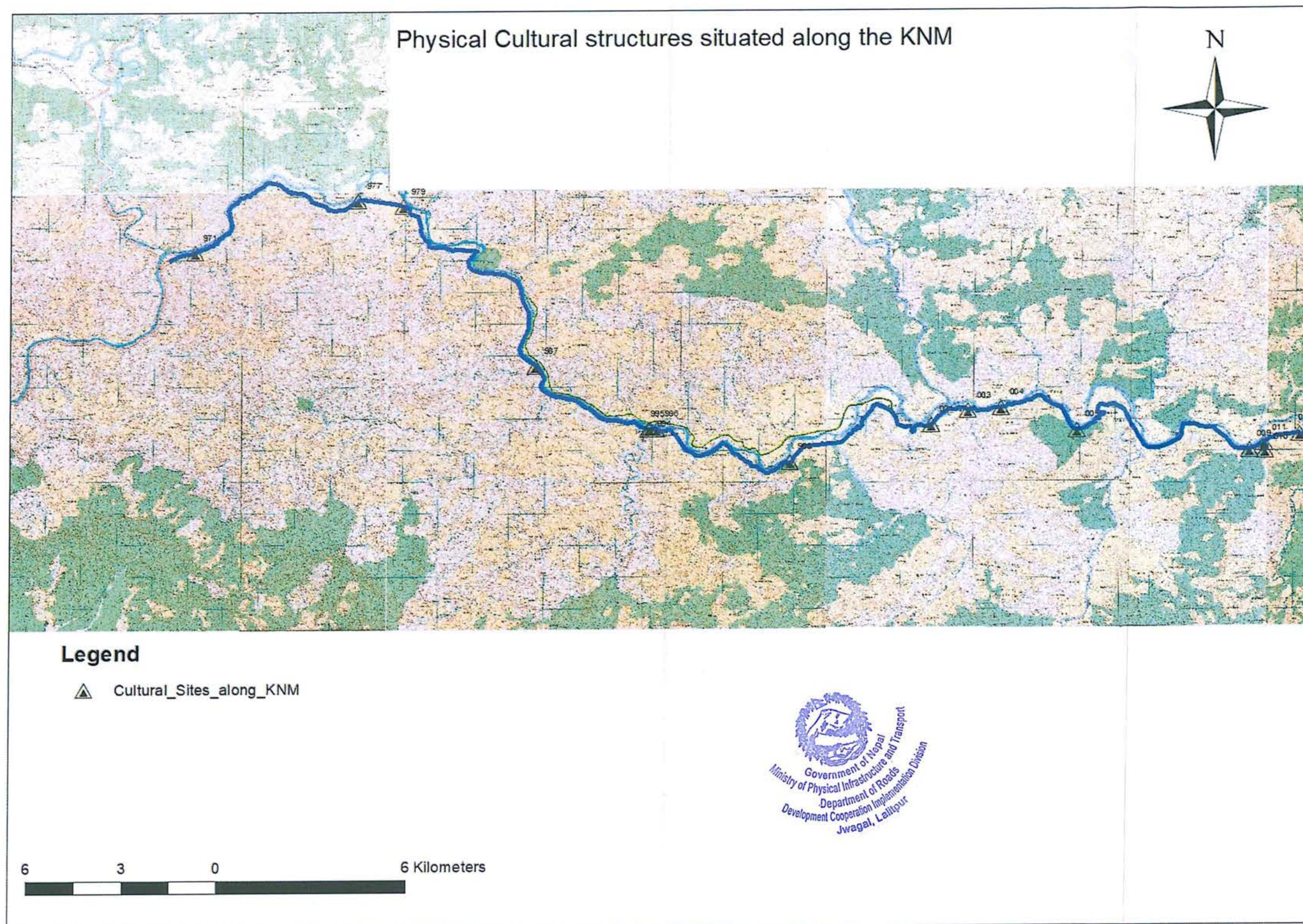
S.No	Type Of Sites	District	VDC	Municipality/ RM	Area (sq.m)	Distance from alignment (m)
78.	Pratikshyalaya	Dhading	Pida-2		30	5
79.	Pratikshyalaya	Dhading	Gajuri-1		16	6
80.	Chautara	Dhading	Gajuri-1		16	10
81.	Chautara + Pratikshyalaya	Dhading	Gajuri-1		15	6
82.	Chautara	Dhading	Gajuri-1		16	6
83.	Pratikshyalaya	Dhading	Gajuri-1		20	4
84.	Chautara	Dhading	Gajuri-1		50	5
85.	Pratikshyalaya	Dhading	Gajuri-2		20	7
86.	Chautara	Dhading	Benighat-1, Malekhu		400	8
87.	Chautara	Dhading	Benighat-1		25	6
88.	Chautara	Dhading	Benighat-9		60	7
89.	Pratikshyalaya	Dhading	Benighat-8		28	7
90.	Pratikshyalaya	Dhading	Benighat-8		36	6
91.	Pratikshyalaya	Dhading	Benighat-8		36	6
92.	Pratikshyalaya	Dhading	Dhusa-1		36	6
93.	Pratikshyalaya	Dhading	Jogimara-9		25	8
94.	Chautara	Dhading	Jogimara-9		100	8
95.	Chautara	Chitwan	Darechowk-9		36	6
96.	Chautara	Chitwan	Darechowk, -9, Chumling		36	10
97.	Pratikshyalaya	Chitwan	Darechowk-7, Kuringhat	Ichakamana RM	25	8
98.	Chautara	Chitwan	Darechowk-3		50	7
99.	Chautara	Chitwan	Darechowk-3		25	
					25	
100.	Pratikshyalaya	Chitwan	Darechowk-3		20	
					15	7
					25	8

S.No	Type Of Sites	District	VDC	Municipality/ RM	Area (sq.m)	Distance from alignment (m)
101.	Pratikshyalaya	Chitwan	Darechowk-3, Pipal Chautara		20	8
102.	Chautara	Chitwan	Darechowk-4		16	4
103.	Pratikshyalaya	Chitwan	Darechowk-4		25	8
104.	Chautara	Chitwan	Darechowk-4, Mugling		16	8
					12	
					9	
					16	
Benighat-Narshimhatar Section						
Sisnekhola-Dharke Section						
105.	Chautara + Pratikshyalaya	Dhading	Jeevanpur-9, Dharke		40	5
106.	Chautara	Dhading	Jeevanpur-9, Dharkebas		16	20
107.	Pratikshyalaya	Dhading	Naubise-5		24	10
108.	Chautara	Dhading	Naubise-3		20	15

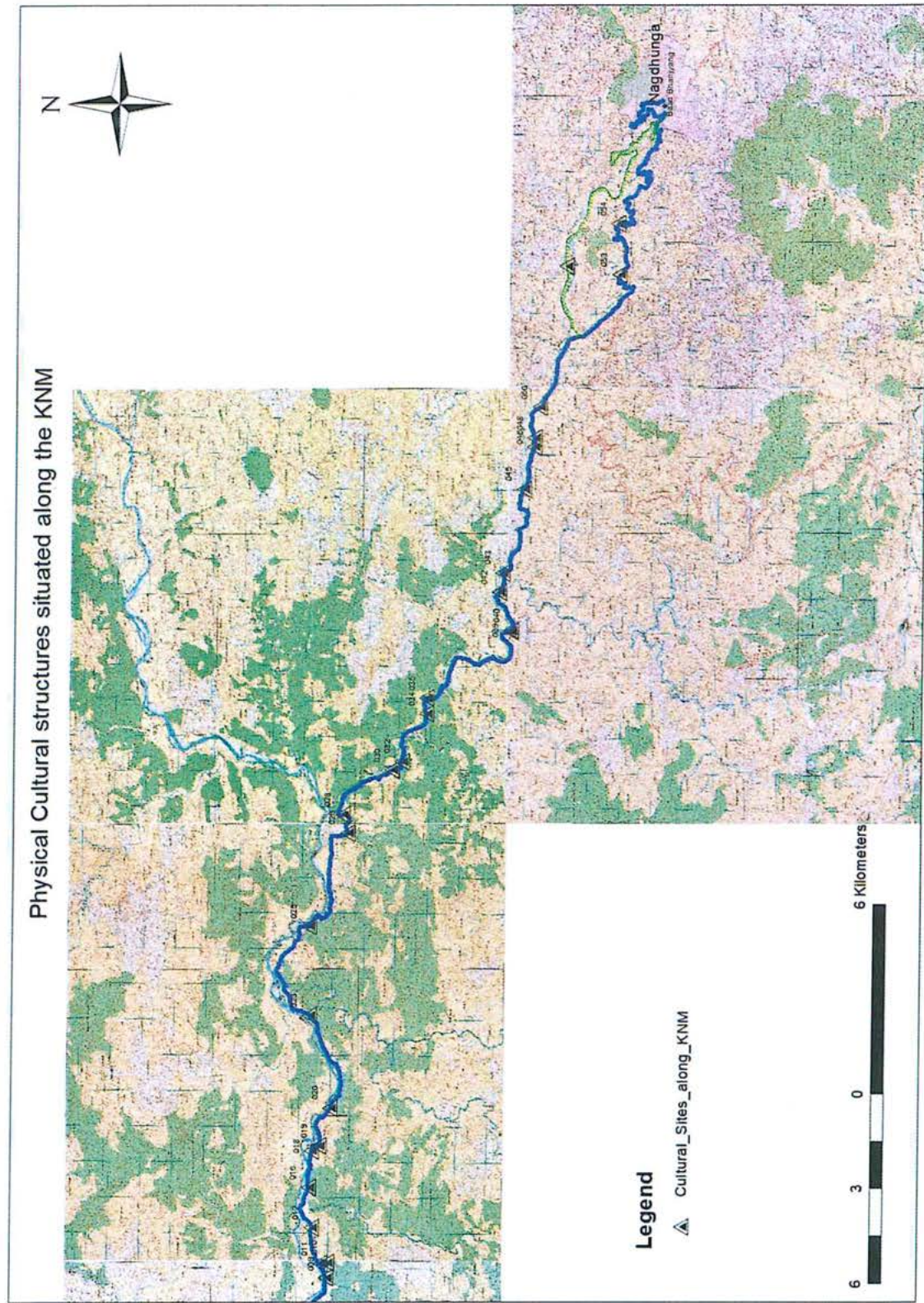


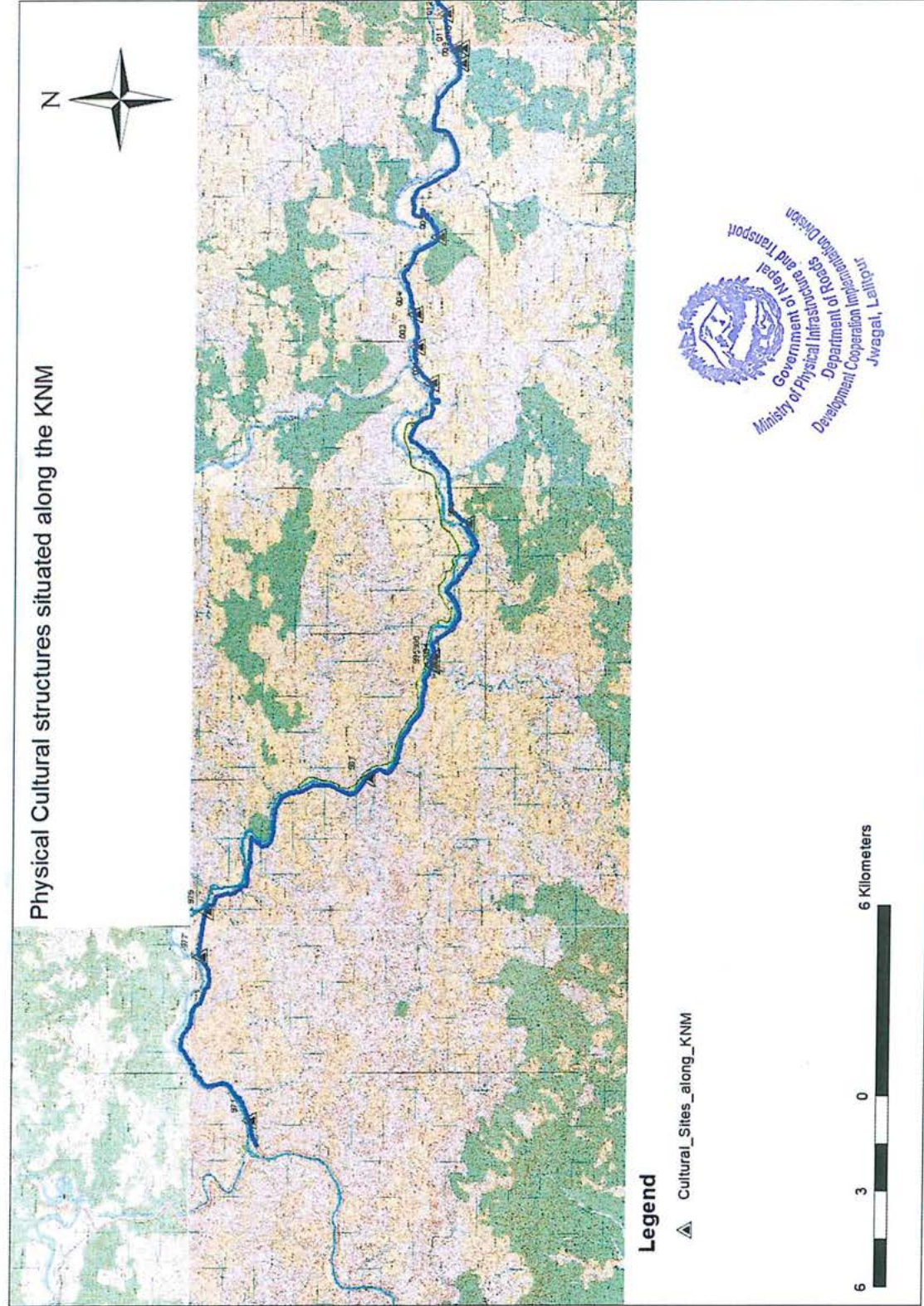
Physical Cultural structures situated along the KNM





Physical Cultural structures situated along the KNM





List of physical cultural structures situated close to KNM as listed in Map above.

Sn.	Points	X	Y	Physical Cultural Structures	Elevation
1	971	84° 34' 11.666" E	27° 51' 28.258" N	IchhaKamana/Sidhababa&religious Chautaro at right	262.698
2	977	84° 36' 59.582" E	27° 52' 20.352" N	Small Durga Bhavani temple at right	254.2751
3	979	84° 37' 45.118" E	27° 52' 14.397" N	Religious Trees(Bar/Pipal) Chautaro at left side	278.8576
4	987	84° 40' 1.738" E	27° 49' 30.122" N	Mowa Khola Bridge	280.6305
5	994	84° 41' 57.391" E	27° 48' 24.626" N	Hugdi Khola Bridge	299.2657
6	995	84° 42' 0.178" E	27° 48' 23.078" N	Small Shiva Temple at right	299.1904
7	996	84° 42' 5.932" E	27° 48' 24.986" N	Religious trees(Bar/Pipal)Chautaro at right side	300.9717
8	999	84° 44' 22.602" E	27° 47' 50.745" N	Small temple at right side	337.97
9	1	84° 46' 47.457" E	27° 48' 28.657" N	Small temple at left side	335.646
10	3	84° 47' 24.859" E	27° 48' 42.849" N	Gomati Khola Bridge	330.9315
11	4	84° 47' 58.138" E	27° 48' 45.769" N	Two small temples at left	336.9843
12	5	84° 49' 16.434" E	27° 48' 22.588" N	Small temple at right side	349.9829
13	9	84° 52' 13.998" E	27° 48' 1.329" N	Small temple at left	358.7285
14	10	84° 52' 29.722" E	27° 48' 0.472" N	Small temple at left side	354.9943
15	11	84° 52' 28.311" E	27° 48' 7.795" N	Small temple with three pipal trees at right	353.8557
16	12	84° 53' 5.057" E	27° 48' 17.324" N	Sidheshwor Mahade Temple at right	384.9441
17	16	84° 53' 46.603" E	27° 48' 20.650" N	Temple&Religious trees(Bar/Pipal)Chautaro at left	384.0235
18	18	84° 54' 24.390" E	27° 48' 17.687" N	Religious Trees(Bar/pipal) chautari at right	400.2773
19	19	84° 54' 29.096" E	27° 48' 9.672" N	Temples(2at left & 1at right& Bar/Pipal chautaro)	400.8452
20	20	84° 55' 8.323" E	27° 47' 58.817" N	Religious trees(Bar/pipal) chautari at right	383.0871
21	23	84° 56' 42.901" E	27° 48' 21.479" N	Religious trees(Bar/Pipal)& a temple at left	400.5294
22	25	84° 58' 14.630" E	27° 48' 22.388" N	Chiraundi Khola Bridge	422.5005
23	26	84° 59' 51.000" E	27° 47' 43.575" N	2 small temples;one at left and one at right	416.3864
24	28	85° 0' 9.791" E	27° 47' 48.911" N	a small temple at right	410.5767
25	30	85° 0' 55.707" E	27° 46' 57.951" N	Small temple at right side close to road	456.0679
26	32	85° 1' 4.787" E	27° 46' 47.664" N	Religious trees(Bar/Pipal)& a temple at right	463.1451
27	34	85° 1' 54.109" E	27° 46' 22.789" N	Religious trees(Bar/Pipal)chautaro at right side	466.8551

Sn.	Points	X	Y	Physical Cultural Structures	Elevation
28	35	85° 2' 10.175" E	27° 46' 22.673" N	a small temple at right	467.9421
29	39	85° 3' 18.935" E	27° 44' 54.910" N	Khahare Khola Bridge	539.689
30	40	85° 3' 19.047" E	27° 44' 53.726" N	Religious trees(Bar/Pipal)& a temple at right	540.6714
31	42	85° 3' 59.790" E	27° 45' 9.196" N	Religious trees(Bar/pipal chautaro)	561.9308
32	43	85° 4' 19.870" E	27° 45' 5.505" N	Religious trees(F.Benja/Reli)& a small temple	575.5045
33	45	85° 5' 46.428" E	27° 44' 44.532" N	Religious trees (Bar/pipal chautari) at right	584.5226
34	46	85° 6' 29.796" E	27° 44' 34.007" N	Religious tree (Pipal Chautari) at left	633.4473
35	48	85° 6' 39.377" E	27° 44' 33.827" N	Religious Tree (Pipal chautari) at right side	645.225
36	50	85° 7' 11.083" E	27° 44' 29.405" N	Temple and bar and Pipal chautaro at right side	649.4069
37	53	85° 9' 26.884" E	27° 43' 8.608" N	Religious Tree (Pipal chautari) at Right	934.5496
38	54	85° 10' 19.253" E	27° 43' 10.051" N	2 small temples at right side	1002.797
39				A small temple along S-D	0



Annex 8: Spoil Disposal Sites, Stone Crusher, Sand cleaner and Gas station along the existing KNM

Sn.	Section	Cut Vol. (Cu.m.)	Fill Vol. (Cu.m.)	Cumulative Vol. (Cu.m.)	Reusable Vol. (Cu.m.)	Disposable Vol. (Cu.m.)	Disposable Site
1.	Nagdhunga -Naubise (0+00~12+400)	55,052	5,796	49,256	12,314	36,942	1+600; 2+650; 4+000
2.	Naubise - Baireni (0+00~24+200)	142,810	32,032	110,778	27,694	83,083	1+550; 5+250; 10+300; 11+950; 16+000; 19+600; 22+250
3.	Baireni -Bishaltar (24.20~53+00)	188,430	17,106	171,324	42,831	128,493	26+900; 28+300; 33+850; 35+400; 38+500; 40+600; 47+200; 50+400
4.	Bishaltar -Mugling (53+00~82+400)	155,479	13,560	141,919	35,480	106,439	53+500; 56+050; 61+100; 63+800; 68+050; 71+050; 74+400; 79+950
5.	Sisne Khola - Dharke (0+00~11+200)	839,530	283,194	556,336	245,423	310,913	0+00~+200; 2+400; 7+100~300; 7+500~900; 9+100
6.	Bishaltar - Phisling (0+00 ~ 15+300)	1,084,615	389,192	695,423	380,568	314,856	5+500; 9+400; 10+600; 11+800
TOTAL		2,465,916	740,880	1,725,036	744,309	980,726	35 Sites

Spoil Disposal Site of Bishaltar Phisling Alignment

S.N	Longitude	Latitude	ZONE	DISTRICT	Rural/Municipality
1	84.709984	27.8018	Gandaki	Gorkha	Gandaki RM - 7
2	84.723428	27.8029	Gandaki	Gorkha	Gandaki RM - 7
3	84.745605	27.8062	Gandaki	Gorkha	Gandaki - 8
4	84.751368	27.8063	Gandaki	Gorkha	Gandaki - 8
5	84.690133	27.8106	Gandaki	Gorkha	Gandaki - 6
6	84.66191	27.8295	Gandaki	Gorkha	Gandaki - 6
7	84.749108	27.804	Bagmati	Dhading	Benighat Rorang - 7

8	84.758427	27.814	Bagmati	Dhading	Benighat Rorang - 5
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Labour Camp Site of Bishaltar Phising Alignment

S.N	Longitude	Latitude	ZONE	DISTRICT	Rural/Municipality
1	84.731573	27.8021	Gandaki	Gorkha	Gandaki RM - 7
2	84.737022	27.80514	Gandaki	Gorkha	Gandaki - 8
3	84.709769	27.80558	Gandaki	Gorkha	Gandaki RM - 7
4	84.690246	27.81132	Gandaki	Gorkha	Gandaki - 6
5	84.75421	27.81322	Gandaki	Gorkha	Gandaki - 8
6	84.665496	27.84279	Gandaki	Gorkha	Gandaki - 6

Labour Camp Site of Sisnekhola Dharke Alignment

S.N	Longitude	Latitude	ZONE	DISTRICT	Rural/Municipality
1	85.194014	27.7103	Bagmati	Dhading	Dhunibeshi - 8
2	85.190937	27.7191	Bagmati	Dhading	Dhunibeshi - 2
3	85.178012	27.7289	Bagmati	Dhading	Dhunibeshi - 2
4	85.166505	27.7296	Bagmati	Dhading	Dhunibeshi - 8
5	85.139151	27.7351	Bagmati	Dhading	Dhunibeshi - 5

Spoil Disposal Site of Existing Alignment

S.N	Longitude	Latitude	ZONE	DISTRICT	Rural/Municipality
1	85.033776	85.03378	Bagmati	Dhading	Thakre - 1
2	84.86091	84.86091	Bagmati	Dhading	Gajuri - 2
3	84.907124	84.90712	Bagmati	Dhading	Gajuri - 5
4	84.905459	84.90546	Bagmati	Dhading	Gajuri - 5
5	84.643956	84.64396	Narayani	Chitwan	Darechok-1
6	84.602185	84.60219	Narayani	Chitwan	Darechok-3
7	84.625074	84.62507	Narayani	Chitwan	Darechok-3
8	84.625124	84.62512	Narayani	Chitwan	Darechok-3
9	84.617203	84.6172	Narayani	Chitwan	Darechok-3

List of stone crusher situated close to ROW along the existing KNM

S.N	Longitude	Latitude	Elevation	Name	DISTRICT	Municipality Wards
1	85.073273	27.749511	678.2	Crusher	Dhading	Thakre - 6
2	85.041663	27.766778	575.4	Crusher	Dhading	Thakre - 1
3	85.039459	27.767298	570.9	Crusher	Dhading	Thakre - 1
4	84.949714	27.813099	407	Crusher	Dhading	Gajuri - 5

Source: Field survey, 2017

List of Sand Cleaner situated close to ROW along the existing KNM

S.N	Longitude	Latitude	Elevation	Name	DISTRICT	Municipality Wards
1	84.925855	27.797073	392.2	Sand Cleaner	Dhading	Gajuri - 5
2	84.927351	27.797366	393.5	Sand Cleaner	Dhading	Gajuri - 5
3	84.988087	27.800406	432.1	Sand Cleaner	Dhading	Galchi - 6
4	84.973026	27.800446	443	Sand Cleaner	Dhading	Galchi - 6
5	84.986406	27.800689	427.4	Sand Cleaner	Dhading	Galchi - 6
6	84.980636	27.800746	421.7	Sand Cleaner	Dhading	Galchi - 6
7	84.982027	27.800782	422.8	Sand Cleaner	Dhading	Galchi - 6
8	84.983246	27.800822	425.9	Sand Cleaner	Dhading	Galchi - 6
9	84.905988	27.802789	385.7	Sand Cleaner	Dhading	Gajuri - 5
10	84.912573	27.803846	382.3	Sand Cleaner	Dhading	Gajuri - 5
11	84.889398	27.807381	370.3	Sand Cleaner	Dhading	Gajuri - 1

Source: Field survey, 2017

Gas Stations situated along the existing KNM highway

S.N	Longitude	Latitude	Elevation	Name	Labels	DISTRICT	Municipality Wards
1	85.123215	27.737347	782.7	Petrol Pump	Petrol Pump	Dhading	Thakre - 7
2	85.044621	27.7653	582.6	Bhumeshwor Petrol Pump	Petrol Pump	Dhading	Thakre - 1
3	85.041785	27.766746	575.5	Great Himal Petrol Pump	Petrol Pump	Dhading	Thakre - 1

4	85.010911	27.788684	539.8	Highway Fuel Center	Petrol Pump	Dhading	Galchi - 7
5	84.999993	27.79555	451.5	Baireni Oil Store	Petrol Pump	Dhading	Galchi - 6
6	84.985581	27.800722	426.1	Dhading Oil Store	Petrol Pump	Dhading	Galchi - 6
7	84.706627	27.802788	320.1	Trishuli	Petrol Pump	Dhading	Benighat Rorang - 9
8	84.936677	27.803014	440.6	Kedareswor Petrol Pump	Petrol Pump	Dhading	Gajuri - 5
9	84.895047	27.806007	369.7	Bhimsen Oil Center	Petrol Pump	Dhading	Gajuri - 5
10	84.895865	27.80604	373.9	Sand Cleaner	Petrol Pump	Dhading	Gajuri - 5
11	84.826257	27.810565	380.9	Bihani Traders	Petrol Pump	Dhading	Benighat Rorang - 3
12	84.815397	27.811749	339.7	Gangasagar Oil Store	Petrol Pump	Dhading	Benighat Rorang - 3
13	84.958631	27.814658	435.8	Amlashwor Oil Store	Petrol Pump	Dhading	Galchi - 4
				LPG industry			
S.N	Longitude	Latitude	Elevation	Name	Labels	DISTRICT	Municipality Wards
1	84.972506	27.800547	443.3	Namaste Gas Industries	Gas Station	Dhading	Galchi - 6



Annex 9: EIA Public Hearing Minutes

भाज मिति २०६८/१२/२६ गते यस दफिनेरी जगा(पाली) बडा म. ड. (खै) खत्रीपौवा को न्यू एम्प्लिफिकेड कल्व प्राइवेट लि. को (नाग दुडा) - नौकिले - मुली ड. सडक बनावोजना वाला वरिष्ठ प्रभाव अनुमान (EIA) सम्बन्धी सार्वजनिक सुनवाईको कार्यक्रममा तपसिलका स्थायित्व निम्नान्वित नगरिक समाज, स्थानीय सरकारीवालाहरू, (जमेतिडल प्रतिनिधीहरू, स्थानिक कल्व, सहकारी संस्था) उपनिधीहरू हुन्का दुपत्तिवीमा हुनफल संचालन गरि सुनुवाई का क्रममा प्राप्त राय सुझावहरू संकलन गरियो ।

क्र.सं.	नाम	पेशा/पद	हेतु/ना	फोन नं.	सि
१	अरुण खत्री	जगिरे	धुविकेशी	९८०१०५७५०२	४
२	गोविन्द लामा	डिप्टी	धुविकेशी	९८४१२४७६६	५
३	केदार शङ्कर कुँवर	डिप्टी	धुविकेशी	९८४१२४७६६	५
४	प्रबल पाली	नौकरी	धुविकेशी	९८२१००११२८	५
५	निर बर पाण्डे	नौकरी	धुविकेशी	९८३१२३३१९	५
६	राम कुमार डोरी	न. म. पा. डि. स.	" "	९८४१२३३२२	५
७	सुमित्रा लामा		" "	९८४१२३३२२	५
८	मिना लामा		" "	९८४१२३३२२	५
९	फुल मीनपा लामा			९८४१२३३२२	५
१०	रघुचन्द्र लामा	उपवसायी	" - २	९८४१२३३२२	५
११	हरिचन्द्र थापा	कृषक	" ३	९८४१२३३२२	५
१२	कृष्ण वर मण्डारी		" ४	९८४१२३३२२	५
१३	कृष्ण वर रेग्मी	कृषक	" ५	९८४१२३३२२	५
१४	पुष्पकमल अर्जुन	उपवसायी	" ६	९८४१२३३२२	५
१५	राम राजा पाण्डे	समान क्र. क्र. स.	" ७	९८४१२३३२२	५
१६	दिपक लामा	समान क्र. क्र. स.	" ८	९८४१२३३२२	५
१७	मेषा		" ९	९८४१२३३२२	५
१८	पिनेस लामा	डा. ई. आ. स.	" १०	९८४१२३३२२	५
१९	सागर डोरी	उपवसायी	" ११	९८४१२३३२२	५
२०	शिवराज सुन्दर	स. वि. पु. वि.	" १२	९८४१२३३२२	५
२१	मंगल कुमार लामा	न्यू एम्प्लिफिकेड कल्व प्राइवेट लि.	" १३	९८४१२३३२२	५
२२	गंगा लामा	महिला सञ्जाल समिती जगल्लुपुर्वा कोषाध्यक्ष	" १४	९८४१२३३२२	५

क्र.सं.	नाम	पेशा/पद	डेगना	क्र.सं.	लाभ
१२	महजु नामाड.	कृषि	धुलिबेशी-९	मन्थु ९	९२२५९६
२३	कुलमाया नामाड.	व्यापार	" - ९	मन्थु ९	९२२५९६
२४	विपक राना	डाईनेट	९	९८४९०	३२२६८
२५	प्रमोद, बन्धु	खेली	९	९८४९०	३२२६८
२६	पम्पा नामाड.	कृषि	धुलिबेशी-९	मन्थु ९	९२२५९६
२७	विपु प्रसाद उप्रेती	कृषि	धुलिबेशी ९	७८५१५५४८	विपु
२८	केशव खेरी	कृषि	धुलिबेशी-९	९८४९०	३२२६८
२९	राजेश भट्टराइ	कृषि	धुलिबेशी-९	९८४९०	३२२६८
३०	प्रेम राई	—	"	—	—
३१	श्याम कजो थापा	कृषि	"	—	—
३२	विशाल भट्टराइ	कृषि	" ५-	९८४९०	३२२६८
३३	राम दास खेरी	व्यापार	" २	९८४९०	३२२६८
३४	हेम प्रसाद कुँडा	कृषि	धुलिबेशी ९	९८४९०	३२२६८
३५	विशाल नामाड.	पञ्चायत	" ६	९८४९०	३२२६८
३६	महेन्द्र खेरी	—	९-४	९८४९०	३२२६८
३७	राम दास खेरी	—	९-५	—	—
३८	विशाल खेरी	—	"	—	—
३९	राम दास खेरी	—	"	—	—
४०	महेश खेरी	—	—	—	—
४१	कान्दी लामा	—	—	—	—
४२	कुमारी तामाङ	मैमा	धुलिबेशी	९८४९०	३२२६८
४३	बाल कृष्ण भट्टराइ	मैमा	धुलिबेशी	९८४९०	३२२६८
४४	राम दास खेरी	मैमा	" ३	—	—
४५	बाल कृष्ण खेरी	व्यापार	धुलिबेशी-२	९८४९०	३२२६८
४६	अमल आचार्य	Environmentalist	धुलिबेशी-६	९८४९०	३२२६८
४७	बाल कृष्ण खेरी	Environmentalist	धुलिबेशी-७	९८४९०	३२२६८
४८	मनोज आचार्य	वा.प्र./सडु विभाग	धुलिबेशी	९८४९०	३२२६८
४९	राम दास खेरी	कृषि	धुलिबेशी २	९८४९०	३२२६८
५०	कृष्ण उ. खेरी	व्यापार	धुलिबेशी-६	९८४९०	३२२६८
५१	बाल कृष्ण खेरी	कृषि	धुलिबेशी-९	९८४९०	३२२६८
५२	सिद्धा लामा	पञ्चायत ५ अर्थ	" १-	९८४९०	३२२६८

- १७) हालको धुमाकरो सडक रैबानुनले धुमिवेशी न. पा. व. नं. ३ र ५ को धुमिवेशी फाँटलाई जोगाउने हिलाबले पुर्नरैबानुन गर्नु पर्ने ।
- २७) एक कि.मी. को दुरीमा खुला राष्ट्रिय राजमार्ग (५० मि लडु प्रोत्साधिकार) ले हालको अवस्थामा उर्वर कृषियोग्य जमिन र बलाबलमा अतुलनीय गति पुग्ने देखिन आएकोले, सिस्नेटौला-धार्के सडक लण्ड निर्माणको औचित्य पुनरावलोकन गर्नु पर्ने ।
- ३७) सडक निर्माणका क्रममा गति हुने सार्वजनिक संरचना जस्तै - बाटो, कुलो, चारा, इत्यादीको निर्माण क्रममा सम्बोधन गर्नु पर्ने ।
- ४७) सडक निर्माणका क्रममा स्थानिय प्रोत्साहक मानोरञ्जन, का स्थल हट्ट, पार्क हट्ट आदी निर्माण गर्नु पर्ने ।
- ५७) त्रिभुवन राजपथ निर्माण क्रममा उपलब्ध गराउनु पर्ने मुआब्जा अधिकतमले प्राप्त बगरको उत्र हुनाले, यहाँ प्रस्तावित सडक लण्ड निर्माणका क्रममा प्रीति प्राप्त गर्ने सम्बन्धमा रहेको आकाङ्क्षा लिम्बोचन गर्नु पर्ने ।
- ६७) आवश्यकता क्रममा स्थानिय र स्थानिक निकाय तैयार समन्वयका लागि ध्यान पुर्‍याउनु पर्ने ।
- ७७) हाल काम गरिरहेको ५० मि. प्रोत्साधिकार लाई ३० मि. काम गर्नु पर्ने छुट्टा लुकाव बापत रुपमा आएकोले यस सम्बन्धमा ध्यान पुर्‍याउनु पर्ने ।
- ८७) प्रत्यक्ष प्रभावित जनता र स्थानिय स्को लोकावाला हट्ट लाई विशेष रुपमा समितित गरेर छुट्टा दलफल र लुनवाड गर्नु पर्ने ।

९) सबै क्षेत्रका सम्बन्धित सरकारी निकायका जिम्मेवार व्यक्तिको यस सार्वजनीक सुनवाई कार्यक्रममा उपस्थित हुन पर्ने ।

(Handwritten signatures and names)

आज मिति २०६८।१२।२६ गते नेपाल भारत द्वैतीय व्यापार तथा आवागमन आयोगको अन्तर्गत काठमाण्डौ (नागादुङ्गा) - मोरिले - मुग्लिन सडक आयोजनाको वातावरणीय प्रभाव मूल्याङ्कन (EIA) सम्बन्धी सार्वजनिक सुन्वाईको तेश्रो कार्यक्रमा गल्दी गाँडपालीडा-६ (साविक वैरेनी गाविस-५) जिन्टेरा स्थित सिम नेपालको प्राङ्गणमा तपशिलका स्थानिय निवास उमिनिधीहरू, नगरिक समाज, स्थानिय सरकार, वाला, राजनैतिक दलका प्रतिनिधीहरू, स्थानिय क्लव, सरकारी संस्थाका प्रतिनिधिहरूका उपस्थितीमा हलफल संचालन गरि सुन्वाईका क्रममा प्राप्त राय सुझावहरू संकलन गरियो ।

क्र.सं.	नाम	पेशा/पद	ठेगाना	मो.नम्बर	सहि
१	भारत डोक्ट	अध्यक्ष	वैरेनी (साविक)	९८५१६६५५६१	
२	राम प्रसाद खवाली	हलफलको अध्यक्ष	वैरेनी (साविक)	९८५१०३५३२	
३	नवराज खतिवडा	विद्यार्थी	वैरेनी-६	९८५९५०५३५	
४	राजन प्र. अधिकारी	प्र.अ.	का.मा.वि.	९८५३५३३३०	
५	रामशाह अधिकारी		गाल्दी-६	९८६१०८७२३१	
६	रामप्रसाद अधिकारी	शिक्षक (प्र.मा.वि.)	गल्दी-६	९८५९६०५००६	
७	रामचन्द्र खतिवडा	गो.सं. अध्यक्ष	गल्दी-६	९८५१७८६५५६	
८	गो.सं. अध्यक्ष	गो.सं. अध्यक्ष	गल्दी-६	९८५१७८६५५६	
९	माधव अधिकारी		गल्दी	९८५११८७२२२	
१०	वेद प्रसाद खाला	विद्यार्थी	"	९८५९७८०८५	
११	सुन्दर खत्री	विद्यार्थी	"	९८५९७८०८५	
१२	केदार खतिवडा	(गो.सं. अध्यक्ष)	गल्दी-६	९८५९७८०८५	
१३	मोहनप्रसाद खतिवडा	(राजनीतिक कार्यकर्ता)	गल्दी-६	९८०५२२०६६	
१४	रामचन्द्र अधिकारी	व्यापारी	गल्दी-६	९८५९९२२३९०	
१५	प्रधान खतिवडा	व्यापारी	गल्दी-२	९८५९०५९०८६	
१६	कृष्ण हरी खतिवडा	गल्दी, गो.सं. अध्यक्ष		९८०९०५९०८६	
१७	मो.प्रसाद खतिवडा	" गो.सं. प्र.अ.	-	९८०९०५९०८६	
१८	माधव प्रसाद खतिवडा	समाज सेवि.स	गल्दी-२	९८०९०५९०८६	
१९	राधा तिमलिया	उपाध्यक्ष	गल्दी-९	९८५९६८८८८	
२०	रेशम राई खतिवडा		गल्दी-६	९८५९०५९०८६	
२१	शेखरी खतिवडा		गल्दी-६	९८५९०५९०८६	

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क्र.सं.	नाम	पेशा/पद	ठेगाना	मो. नं.	सं.
२२	राजु अधिकारी	पडा अध्यापक	गलिङ गा.पा. ४	९८४९२६८६६	१
२३	राज कुमारी रिमाल	इ.प.स. तैयारी शिक्षिका/ग.प. १	ग.प. १	९८४९०८८८८	१
२४	सु. प्रसाद शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
२५	राज कुमार रिमाल	ग.प. १	ग.प. १	९८४९२६८६६	१
२६	शिव प्रसाद	ग.प. १	ग.प. १	९८४९२६८६६	१
२७	राज प्रसाद	ग.प. १	ग.प. १	९८४९२६८६६	१
२८	अर्जुन व. गुरुङ	ग.प. १	ग.प. १	९८४९२६८६६	१
२९	उद्यम उ. काराजु	ग.प. १	ग.प. १	९८४९२६८६६	१
३०	हेमल मजारी	ग.प. १	ग.प. १	९८४९२६८६६	१
३१	रमेश रिमाल	ग.प. १	ग.प. १	९८४९२६८६६	१
३२	शरत कुमार	ग.प. १	ग.प. १	९८४९२६८६६	१
३३	चन्द्र बहादुर अधिकारी	ग.प. १	ग.प. १	९८४९२६८६६	१
३४	शिव रिमाल	ग.प. १	ग.प. १	९८४९२६८६६	१
३५	शिवरि अधिकारी	ग.प. १	ग.प. १	९८४९२६८६६	१
३६	दिलिप शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
३७	अ.रा. उ. शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
३८	Sangeet अधिकारी	Common	ग.प. १	९८४९२६८६६	१
३९	राज बहादुर शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
४०	रा. उ. शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
४१	ममक बुवाका	ग.प. १	ग.प. १	९८४९२६८६६	१
४२	राजन जोषी	ग.प. १	ग.प. १	९८४९२६८६६	१
४३	शिवरज शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
४४	गौरा शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१
४५	रा. शम्शेर	ग.प. १	ग.प. १	९८४९२६८६६	१

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१. निर्माण-योग्य ठाउँको सडकको केन्द्र बिन्दु यकिन गराई सडक निर्माणको काम अगाडी बढाउनु पर्ने। पुरानो सडकको नक्सालाई आधारभूत सडक केन्द्र तय गर्नु पर्ने।
२. निर्माणको क्रममा निम्नीपडा ग्राहो हुँदा लगाएतका वस्तुहरू उचित व्यवस्थापन गर्नु पर्ने। खोलाभन्दा उच्च निम्नीपडा वस्तुहरू सिधै खोला/नदीमा व्यवस्थापन गर्नु नहुने।
३. सडक विस्तार हुँदा तल्लो रूपमा ग्राही समान रूपमा दायाँ बायाँ दुवै तर्फ कार्यान्वयन गराउनु पर्ने। पुल पुलामा भएर समानता पनि दुवै तर्फ समान रूपमा सडक विस्तार गर्नु पर्ने।
४. ऐलानी जग्गाभन्दा वरिष्ठ सम्पत्तिहरूलाई उचित तालीमको व्यवस्था सुनिश्चित गर्नु पर्ने।
५. विमलटार - फिफ्टीङ्ग को साविकको सडक पारोलाई आधारभूत स्तर-नोती गरी कार्यान्वयन गर्दा उत्तम हुने।
६. हालको साविक राजमार्गको स्तर-नोती गर्नु नयाँ निर्मली नदी चारो वार नयाँ राजमार्गको निर्माण गर्नु पर्ने।

Handwritten signatures and initials in the middle section, some with names like 'Ranjan' and 'Daman'.

आज मिति २०६८/१२/२८ गते नेपाल कानून क्षेत्रीय व्यापार तथा भातायाल आयोजना अन्तर्गत काठमाडौं (नागदुङ्गा) - नौविले - मुल्लिङ्ग सडक आयोजनाको वातवरणिय प्रभाव मुल्याङ्कन (EIA) सम्बन्धी सार्वजनिक सुनवाईको कार्यक्रम भएर बेनिघाट रोडाङ्ग गाउँपालिका-५ को वडा कार्यालय, बेनीघाट को प्राङ्गणमा तपशिलका स्थानिय निवाय प्रतिनिधी, नागरिक समाज प्रतिनिधी, स्थानिय लोकास्वाला, राजनैतिक दलका प्रतिनिधिरू, स्थानिय कलक, लहकारी लह्या, लगाएत निम्न-समुदायहरूको प्रतिनिधीत्वमा/उपस्थितीमा इलाकल कार्यक्रम तैनात न गारे सुनवाईका क्रममा प्राप्त राय सुझावहरू संकलन गर्ने कार्य गरियो ।

क्र.सं.	नाम	पद/पेशा	ठेगाना	सो.नम्बर	सिद्धि
१	गणेशदेव रेग्मी	समाजसेवी	गणेशदेव रेग्मी	१८६५२०६००	१८
२	मन्दीपनाथ त्रिपाठी	ज.का.सभापति	वडा नं. ५ मुल्लिङ्ग	१८५११६१७५	१८
३	वल्लभ विद्यावान	राजनेता	११५ विद्यावान	१८५११६१७५	१८
४	रमेश राज पाँडे	ज.का.सभापति	गणेशदेव रेग्मी	१८५११६१७५	१८
५	बा.प्रसाद त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
६	विष्णुहरि विष्ट	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
७	अमृत ओझा	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
८	इन्द्राजी त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
९	रामकृष्ण विष्ट	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१०	प्रकाश राज विष्ट	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
११	राम कुमार विष्ट	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१२	रामेश त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१३	मौला विष्ट	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१४	कृष्ण (म) त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१५	सुब्बा कुमार त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१६	वासुदेव त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१७	सुब्बा त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१८	रामेश त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
१९	कृष्ण त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
२०	मौला त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
२१	कृष्ण त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८
२२	मौला त्रिपाठी	गणेशदेव रेग्मी	गणेशदेव रेग्मी	१८५११६१७५	१८

क्र.सं.	नाम	पद / पेशा	हेतु/कारण	फो. नम्बर	नोट
२२	जाति प्रसाद कटेल	कृषि	वेमिघाट २	३२४३६३३०२६	काटेल
२३	सानो काली श्रेष्ठ	कृषि	" २	३८९३४०८४९९	काटेल
२४	तिलाराम महराज	कृषि	" ५	५२४९६९६६९६	मिल
२५	भूपेन्द्र वि. रेग्मी	स्वास्थ्यकर्मी	गण्डकी नदी	३८०६२९०४३	काटेल
२६	गणेश कुमार	वापार	वेमिघाट ५	३८०८६६६६६६	काटेल
२७	पुष्पराज कटेल	कृषि	" २	३८९३३२८०२२	काटेल
२८	प्रभुपति खेडाई	कृषि	मन्थली	X	काटेल
२९	रमेश गौली	"	" २	"	काटेल
३०	पुष्पराज कटेल	"	" २	"	काटेल
३१	अर्जुन खत्री	कृषि	काटेल	"	काटेल
३२	प्रकाश खत्री	कृषि	वेमिघाट ६	३८९३३३३३३३	काटेल
३३	अर्जुन खत्री	"	"	३८९३३३३३३३	काटेल
३४	अर्जुन खत्री	"	"	"	काटेल
३५	राज कुमार खत्री	वापार	"	३८०३३३३३३३	काटेल
३६	अर्जुन खत्री	कृषि	वेमिघाट २	३८९३३३३३३३	काटेल
३७	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
३८	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
३९	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४०	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४१	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४२	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४३	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४४	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४५	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४६	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४७	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४८	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
४९	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
५०	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल
५१	अर्जुन खत्री	कृषि	"	३८९३३३३३३३	काटेल

क्र.सं.	नाम	पदा पेशा	हेजाना	फो.नं.मा	मिति
५२	राजेश्वरी विजुवाल	शिक्षक	के.रा.५	८८५६२५५३	३०/५
५३	सत्यदेव शिलवाल	क्षेत्र	" ५	९८०८१३२१३५	३०/५
५४	चन्द्रकान्त कस्ते	नीकरी	के.रा. ५	८८०८५६३५२	३०/५
५५	सन्तोष शर्मा	"	रा.रा. ५	८८०८५६६५२	३०/५
५६	कैलाश विजुवाल	"	विशालरा	८८०८५६८५०	३०/५
५७	प्रेमनाथ विजुवाल	क्षेत्र	"	९८०८५६८५२	३०/५
५८	बिलास विजुवाल	क्षेत्र	विशालरा	९८०८५६८५३	३०/५
५९	रामक विजुवाल	क्षेत्र	विशालरा	९८०८५६८५४	३०/५
६०	उमेश विजुवाल	क्षेत्र	विशालरा	"	३०/५
६१	मदन "	क्षेत्र	"	"	३०/५
६२	प्रेमनाथ कुँडेल	क्षेत्र	बेनिघाटका	८८०८५६८५५	३०/५
६३	बन्धुनाथ	क्षेत्र	बेनिघाटका	८८०८५६८५६	३०/५
६४	गुणक " कुँडेल	क्षेत्र	बेनिघाट	८८०८५६८५७	३०/५
६५	शक्ति ठगेल	क्षेत्र	बेनिघाट	९८०८५६८५८	३०/५
६६	राजेश कुँडेल	क्षेत्र	"	९८०८५६८५९	३०/५
६७	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६०	३०/५
६८	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६१	३०/५
६९	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६२	३०/५
७०	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६३	३०/५
७१	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६४	३०/५
७२	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६५	३०/५
७३	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६६	३०/५
७४	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६७	३०/५
७५	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६८	३०/५
७६	राजेश कुँडेल	क्षेत्र	"	९८०८५६८६९	३०/५
७७	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७०	३०/५
७८	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७१	३०/५
७९	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७२	३०/५
८०	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७३	३०/५
८१	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७४	३०/५
८२	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७५	३०/५
८३	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७६	३०/५
८४	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७७	३०/५
८५	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७८	३०/५
८६	राजेश कुँडेल	क्षेत्र	"	९८०८५६८७९	३०/५
८७	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८०	३०/५
८८	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८१	३०/५
८९	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८२	३०/५
९०	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८३	३०/५
९१	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८४	३०/५
९२	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८५	३०/५
९३	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८६	३०/५
९४	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८७	३०/५
९५	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८८	३०/५
९६	राजेश कुँडेल	क्षेत्र	"	९८०८५६८८९	३०/५
९७	राजेश कुँडेल	क्षेत्र	"	९८०८५६८९०	३०/५
९८	राजेश कुँडेल	क्षेत्र	"	९८०८५६८९१	३०/५
९९	राजेश कुँडेल	क्षेत्र	"	९८०८५६८९२	३०/५
१००	राजेश कुँडेल	क्षेत्र	"	९८०८५६८९३	३०/५

क्र.सं.	नाम	पेसा	ठगाना	क्र.सं.	नोट
८३	रिक्ता प्रसाद	रुपैया	वेनीधर	५८०५०९३०५	
८४	अशोक जिस	रुपैया	॥	९९२३१६९००९	
८५	लिखा नाथ विस्माल	रुपैया	॥	९९५१६१७५२२	
८६	नगर विस्माल	रुपैया	॥	९९५१९१०५१८	
८७	शिवराज खेडाई	रुपैया	॥	९९५१९१०५१८	
८८	रामकृष्ण विस्माल	रुपैया	॥	९९५१९१०५१८	
८९	राजेश पाण्डे	रुपैया	॥	९९५१९१०५१८	
९०	मानव सुन्दर	रुपैया	॥	९९५१९१०५१८	
९१	पुष्पकेश्वर विस्माल	रुपैया	॥	९९५१९१०५१८	
९२	सन्देश कार्की	रुपैया	॥	९९५१९१०५१८	
९३	रवि प्रसाद	रुपैया	॥	९९५१९१०५१८	
९४	रामकृष्ण विस्माल	रुपैया	॥	९९५१९१०५१८	
९५	शिवराज खेडाई	रुपैया	॥	९९५१९१०५१८	



१०/११/२०१७

१. नौविसे दौवि भुगिल्डु; सभाको सदस्य सुधार समान रूपमा गरिनुपर्ने।
२. हाल नौविसे दौवि भुगिल्डु; सभा १५ मिटर दायाँ बायाँ सडक बेचाधिकार खुल्ला गरिसकेको।
३. विशालटार-जिल्ला-सडक निर्माणको अग्रिमलाई प्रस्तावित गर्ने र उक्त स्थानहरूमा पर्ने परिवारको जोविमईलाई सम्बोधन गर्नुपर्ने।
४. सार्वजनिक सुबर्वाईमा सडकको प्राविधिक पत्रका विवरणको हदको उपस्थिति हुनुपर्ने।
५. १५ मिटर लम्बा कौहीर सडक विस्तार गरिपुग्नेमा श्रमिकको अविलम्ब क्षतिपूर्ति उपलब्ध गर्नुपर्ने।
६. सडकको बेचाधिकार सम्बन्धी अग्लाई सम्बन्धीत निश्चय ले प्रस्तावित गर्ने।
७. विशालटार लगायतका क्षेत्रमा विकल्पतया हुँदा हुँदै (केति-थाग्य बृष्टी जमिनको विचार सडक बनाउने प्रस्ताव-लाई प्राविधिक रूपमा प्रस्तावित गर्ने।
८. आयोजनाको कार्य समयमै सुरु हुनुपर्ने र क्षतिपूर्ति कप्तन दिन उदान गरिने रकम चलन-चल्ती अनुसार समयमै उदान गरिनुपर्ने।
९. जनसहभागिताको विषयलाई ध्यान दिनु पर्ने।
१०. सडक निर्माणका क्रममा विस्थापित घर परिवारलाई पुनर्वास तथा पुनर्स्थापनाको व्यवस्था गरिनु पर्ने।
११. सडकको दायाँ बायाँ बृहत्करण गरीनु पर्ने।
१२. कडा स्तरिय गुनासो सुनवाई समितिको गठन गरि आयोजनाको काम अगाडी बढाउनु पर्ने।
१३. सडक विस्तारको सवालमा स्थानियको कुनै विरोध नरहेको तर जनतालाई आयोजनाका काम ब्याबुलापहर्द का सम्वन्धमा सुसूचित गर्नु पर्ने र सडक विस्तारको सवालमा राज्यको स्पष्ट नीति हुनु पर्ने।
१४. नयाँ प्रस्तावित विशालटार-जिल्ला-केवल्लिङ सडकले क्षतिपूर्ति वा संस्चना तथा जग्गाको चलन-चल्तीको हलमा जग्गाको व्यवस्था गरिनुपर्ने।

जीवन। २

आज मिति २०६८/१२/२५ का दिन नेपाल भाषा क्षेत्रिय व्यापार तथा आवागमन आयोगको अन्तर्गत काठमाडौं (नागदुङ्गा) - नौविस - मुलिकु सडक आयोजनाको वातावरणीय प्रभाव मूल्याङ्कन (EIA) सम्बन्धी सार्वजनिक सुनवाईको कार्यक्रम भएर गाउँको गाउँपालिका - ६ को श्री लेखी वृषी सहकारी संस्था लिमिटेड, भूमिचोको गोरखाको कार्यालय प्राङ्गणमा तपासिलका स्थानिय निवाय प्रतिनिधी, नागरिक समाज प्रतिनिधी, स्थानिय सरोकारवाला राजनैतिक दलका प्रतिनिधी, स्थानिय कुल संघ सहकारी संस्था लगाएत विभिन्न समुदायहरूको प्रतिनिधित्वमा। उपस्थितिमा दलभल कार्यक्रम संचालन गरि सुनवाईको क्रममा आज राम्रर सुझावहरू छिंकलन गर्ने कार्य सम्पन्न गरियो।

क्र.सं.	नाम	पद/पेशा	केस/मा	फोन नं.	सिंह
१.	होम बहादुर खनामगर	अध्यक्ष	गाउँपालिका-६	९८५५४०१००	२५०
२.	अविन्द्र राणा मगर	सिंह	" " - ८	९८४०४९२५६०	२५०
३.	सुप्रमाया खेपाङ	सिंह	" " - ६		मुक
४.	विमला थापा मगर	"	" " - ६		सिंह
५.	जेपे खेपाङ	"	" " - ६		जेपे
६.	लोक नारायण	वृषी	" - ६ कुलसंघ		लोक
७.	राजकुमार कार्की	-	गाउँपालिका-६		सिंह
८.	देवी लामा प्रजा	वृषी	गाउँपालिका-६	९८५५४०१००	२५०
९.	प्रियव्रत रेकर्	स.वि.पु.वि.	मुलिकु	९८५५४०३३५८	२५०
१०.	विदुर तिमिलेखा	सिंह	गाउँपालिका-६	९८५५४०३३५८	२५०
११.	सुबिला खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१२.	सुमनाल पुना	-	गाउँपालिका-६	९८५५४०३३५८	२५०
१३.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१४.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१५.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१६.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१७.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१८.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
१९.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
२०.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
२१.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०
२२.	सुप्रमाया खेपाङ	वृषी	गाउँपालिका-६	९८५५४०३३५८	२५०

अथ

प्रस्ताव नं. १.

प्रस्ताव नं. १ ग्रामी इलाम जहाँ सडकको नेताधिष्ठित ३० मिटर (दोभो बाँधो १२/१२ मि.) स्थानिय सरोकारवाला हवाला प्राग गरिएको ।

प्रस्ताव नं. २.

प्रस्ताव नं. २ ग्रामी इलाम जहाँ प्रस्तावित विशाल टार - फिटिल दुः सडक खण्ड यथास्थित निर्माण कार्यका लागि स्थानिय सरोकारवाला धनि इगो रूपमा सहयोग गरिने दुवै सो सो कार्या-व्रजन शिवाजी सिद्ध हुनु पर्ने ।

प्रस्ताव नं. ३:-

प्रस्ताव नं. ३ ग्रामी इलाम जहाँ प्रस्तावित विशाल टार - फिटिल दुः सडक खण्ड मा पर्ने प्रस्तावित टार परिवारलाई चलनचल्तीको मुक्तमूल्य निर्धारणका आधारमा दानिपूर्ति (मुआवजा) को अवस्था आयोजना कार्या-व्रजन हुनु अगाव अवस्था गरिनु पर्ने ।

प्रस्ताव नं. ४.

प्रस्ताव नं. ४ ग्रामी इलाम जहाँ प्रस्तावित सडक खण्डको निर्माणका क्रममा इगो रूपमा हुने गरी ग्रामा निर्माणकारहरूको दानि इलाम जहाँ प्रस्तावित अवस्था गरिनु पर्ने ।

प्रस्ताव नं. ५

प्रस्ताव नं. ५ मा इलाम जहाँ प्रस्तावित सडक खण्ड मा रहेको प्रस्तावित टार परिवारको सदस्यहरूलाई बेमुल्फीमा आयो आर्जन मुलक (रोडगाडी मुलक) शिपहरूको लागि को अवस्था गरिनु पर्ने ।

प्रस्ताव नं. ६

प्रस्ताव नं. ६ मा इलाम जहाँ प्रस्तावित सडक खण्डको निर्माण संचालन कार्यका लागि वेडा स्थायि गुनासी सुनइका सुनवाई समिती (स्थानियको सलजवकाभा) गठन गरिनु पर्ने ।

प्रस्ताव नं. ६

प्रस्ताव नं. ६ ग्रामी इलाम जहाँ प्रस्तावित सडक खण्ड निर्माणका क्रममा निम्नी कुडा, माटो, गिट्टी, आदीको विवरण सिधै गरीमा नफ्याली उलिन

अथ एन प्रस्ताव नं. ७



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पुस्तक ११-३.

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प्रस्ताव नं. ११

9/11/19 - 1 - 92

[Handwritten signatures and scribbles]

Annex 10: Recommendation Letters





चन्द्रागिरी नगरपालिका

नगर कार्यपालिकाको कार्यालय

चन्द्रागिरी नगरपालिका
३ नं. प्रदेश नेपाल

फोन नं : ०१-४३१५७६६

मिति : २०७५.१०.४.२४

प.सं. :- ०६५१६६

च.नं. :- ४२

श्री सडक विभाग
भू-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर ।

विषय: सिफारीस सम्बन्धमा ।

प्रस्तुत विषयमा सडक विभाग भू-वातावरण तथा सामाजिक शाखा प्रस्ताव रहेको ९.६ कि.मी नागढुंगा-नौबिसे-मुग्लिन सडक स्तरोन्नती, नयाँ निर्माण तथा संचालन कार्यको लागि सडक आयोजना कार्यान्वयन क्रममा यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरी आयोजना कार्यान्वयन गर्नु हुन निर्देशानुसार सिफारिस गरिन्छ ।



सीता परियार
प्रमुख प्रशासकीय अधिकृत



धुनिवेशी नगरपालिका नगर कार्यपालिकाको कार्यालय

खानिखोला, धादिङ
३ नं. प्रदेश, नेपाल



प.सं. ०७५/०७६
च.नं. १२२

मिति:- २०७५/०५/०४

श्री सडक विभाग
भू-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर।

विषय :- सिफारिस सम्बन्धमा।

प्रस्तुत विषयमा सडक विभाग भू-वातावरण तथा सामाजिक शाखाको प्रस्ताव रहेको ९६ कि.मि. नागादुङ्गा-नौविसे-मुग्लीन सडक स्तरोन्नती, नयाँ निर्माण तथा संचालन कार्यको लागि सडक आयोजना कार्यान्वयन क्रममा उक्त सडकको नक्सा डिजाइन उपर जनताको गुनासो रहेको र धार्के सितापाईला सडकमा जोडिएपछि पुनः नयाँ ट्याक आवश्यक किन परेको हो ? सो को औचित्य पुष्टि गराई यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरी आयोजना कार्यान्वयन गर्नुहुन मिति २०७५/०५/०४ को आदेशानुसार सिफारिस साथ अनुरोध छ।


(विष्णुप्रसाद पौडेल)
शाखा अधिकृत

वोद्यार्थ:-
श्री वातावरण तथा श्रोत व्यवस्थान (ERMC(p.) Ltd.)



“निजामति कर्मचारीको प्रतिवद्धता: पारदर्शिता र चुस्तता”

फोन : ०१०-४०११९७, इमेल:- dhunibeshimun@gmail.com, info@dhunibeshimun.gov.np, www.dhunibeshimun.gov.np



बेनीघाट रोराङ गाउँपालिका
गाउँ कार्यपालिकाको कार्यालय

विशालहरा गाउँपालिका
३ नं. प्रदेश, नेपाल

३ नं. प्रदेश, नेपाल

पत्र संख्या :- ०७५/०७६

चलानी संख्या :- १४२

मिति :- २०७५/०४/२७

विषय:- सिफारिस सम्बन्धमा ।

श्री सडक विभाग

भू- वातावरण तथा सामाजिक शाखा

चाकुपाट, ललितपुर ।

प्रस्तुत विषयमा सडक विभाग भू- वातावरण तथा सामाजिक शाखा प्रस्ताव रहेको ९६ कि.मी. नागढुंगा-नौबिसे -मुग्लिङ सडक स्तरन्नोती, नयाँ निर्माण तथा संचालन कार्यको लागि सडक आयोजना कार्यान्वयन क्रममा यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरी आयोजना कार्यान्वयन गर्नु हुन निर्देशानुसार सिफारिस गरिन्छ ।

(Signature)
०७५/०७६

(हर्ष बहादुर थापा)

प्रमुख प्रशासकिय अधिकृत

हर्ष बहादुर थापा
प्रमुख प्रशासकिय अधिकृत





इच्छाकामना गाउँपालिका गाउँ कार्यपालिकाको कार्यालय

प.सं. ०६५१०६६

च.नं. ८०



मिति २०६५/०५/२६

श्री सडक विभाग
भू-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर ।

विषय:- सिफारीस सम्बन्धमा ।

प्रस्तुत विषयमा सडक भू-वातावरण तथा सामाजिक शाखा प्रस्ताव रहेको ९६ कि.मी नागढुंगा -नौबिसे -मुग्लिन सडक स्तरोन्ती नयाँ निर्माण तथा संचालन कार्यको लागि सडक आयोजना कार्यान्वयन क्रममा यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा सांस्कृतिक वातावरणमा प्रभाव नपर्ने गरी साथै बनेका संरचना भत्काउँदा पिडितलाई क्षतिपूर्ति दिने गरी १५ मिटर कायम गर्ने गरि आयोजना कार्यान्वयन गर्नुहुन सिफारीस साथ अनुरोध गरिन्छ ।




गिता कुमारी गुरुङ्ग
(गाउँपालिका अध्यक्ष)
गाउँपालिका
अध्यक्ष



गजुरी गाउँपालिका

गाउँ कार्यपालिकाको कार्यालय

गजुरी, धादिङ
३ नं. प्रदेश, नेपाल



प.सं. २०७६/०७७

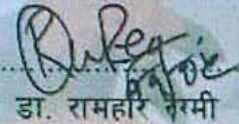
च.नं. १५६९

मिति : २०७६/११/०५

श्री सडक विभाग, भू-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर ।

विषय : सिफारिस सम्बन्धमा ।

प्रस्तुत विषयमा तहाँ कार्यालय अर्न्तगत काठमाडौं नागढुंगा-नौबिसे-मुग्लिङ सडक स्तरोन्नती, नयाँ सडक निर्माण तथा संचालन आयोजना कार्यान्वयनको क्रममा यस गजुरी गाउँपालिका अर्न्तगत क्षेत्रको भौतिक, जैविक, आर्थिक, सामाजिक तथा सांस्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरि आयोजना कार्यान्वयन गर्नु हुन निर्देशानुसार सिफारिस गरिन्छ ।


डा. रामहरि रेग्मी

नि. प्रमुख प्रशासकीय अधिकृत

नि. प्रमुख प्रशासकीय अधिकृत

जननी जन्मभूमिश्च स्वर्गादपि गरीयसी



"सक्षम निजामती प्रशासन विकास, समृद्धि र सुशासन"

फोन नं.: +९७७-०१०-४०२१४२, ४०२१४५, ४०२१३९ ईमेल: info@gajurimun.gov.np, वेबसाइट: www.gajurimun.gov.np



थाक्रे गाउँपालिका गाउँ कार्यपालिकाको कार्यालय

थाक्रे, मन्थलीवेशी धादिङ
३ नं प्रदेश, नेपाल

पत्र संख्या : ०६६/०६६
चलानी नं.: २९६६

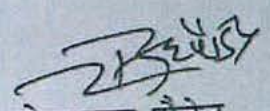
मिति: २०७६/११/०५

विषय : सिफारिस सम्बन्धमा ।

श्री सडक विभाग
भु-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर ।

प्रस्तुत विषयमा सडक विभाग भु-वातावरण तथा सामाजिक शाखा प्रस्तावक रहेको ९६ कि.मि. नागढुंगा नौविसे मुग्लिन सडक स्तरोन्नती, नयाँ निर्माण तथा संचालन कार्यको लागि सडक आयोजना कार्यान्वयनको क्रममा यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा सास्कृतिक वातावरणमा न्युन प्रभाव वा प्रभाव नै नपर्ने गरि आयोजना कार्यान्वयन गर्नु हुन सिफारिस गरिन्छ ।




शेषकान्त पौडेल
नि प्रमुख प्रशासकीय अधिकृत
शेषकान्त पौडेल
नि प्रमुख प्रशासकीय अधिकृत



गल्छी गाउँपालिका गाउँ कार्यपालिकाको कार्यालय

बैरेनी, धादिङ
बागमती प्रदेश, नेपाल
(कर्मचारी प्रशासन शाखा)



पत्र संख्या :- ०७६/७७
चलानी नं. : ९४४८

२०७६/११/०६

श्री सडक विभाग, भू-वातावरण तथा सामाजिक शाखा
चाकुपाट, ललितपुर ।

विषय : सिफारिस सम्बन्धमा ।

प्रस्तुत विषयमा तह्रौँ कार्यालय अन्तर्गत काठमाडौँ नागदुगा-नाँबिसे-मुग्लिङ सडक स्तरोन्नती, नयाँ सडक निर्माण तथा संचालन आयोजना कार्यान्वयनको क्रममा यस गल्छी गाउँपालिका अन्तर्गत क्षेत्रको भौतिक, जैविक, आर्थिक, सामाजिक तथा सांस्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरि आयोजना कार्यान्वयन गर्नु हुन निर्देशानुसार सिफारिस गरिन्छ ।



(मोहनकुमार श्रेष्ठ)
प्रमुख प्रशासकीय अधिकृत

मोहनकुमार श्रेष्ठ
प्रमुख प्रशासकीय अधिकृत



गण्डकी गाउँपालिका
Gandaki Rural Municipality
गाउँ कार्यपालिकाको कार्यालय
Office of the Rural Municipal Executive
भुम्लीचोक गोरखा
Bhumlichok, Gorkha



पत्र संख्या (Reference No) ०७६/०७३

धरावी नं. (Dispatch No) : ४२९

गण्डकी प्रदेश, नेपाल

मिति (Date) :

२०७६/११/०६

श्री सडक विभाग, भू-वातावरण तथा सामाजिक शाखा
 चाकुपाट, ललितपुर ।

विषय :- सिफारिस सम्बन्धमा :

प्रस्तुत सन्दर्भमा तहाँ कार्यालय अन्तर्गत काठमाडौं नागढुंगा-नौविसे-मुग्लिङ सडक स्तरोन्नती, नयाँ सडक निर्माण तथा संचालन आयोजना कार्यान्वयनको क्रममा यस गण्डकी गाउँपालिका अन्तर्गत पर्ने स्थानहरूमा भौतिक, जैविक, आर्थिक, सामाजिक तथा सास्कृतिक वातावरणमा न्यून प्रभाव पार्ने गरि आयोजना कार्यान्वयन गर्नु हुन निर्देशानुसार सिफारिस गरिन्छ ।

(*[Signature]*)

राकेश गुरुङ २०७६/११/०६

प्रमुख प्रशासकीय अधिकृत

गण्डकी गाउँपालिका



Annex 11: Public hearing and list of people consulted

Public Hearing

A public notice was published in a national daily newspaper inviting all the interested and relevant stakeholders for their participation in public hearing. Formal letter is distributed to all the project affected Municipalities and Rural Municipalities one week prior to the hearing inviting in the public hearing. Ministry of Forest and Environment was also invited sending formal letter. Formal invitation letter is also distributed to local elites and local ward presidents etc. Municipalities and Rural Municipalities were requested to invite relevant stakeholders, including local representatives from political parties, and project affected people for the hearing.

The published notice was also affixed on the notice boards of offices of Rural Municipality, Municipality, School, Health Post, market areas etc. as far as possible in order to inform about the project, the date and venue of public hearing.

Public hearing was carried out at four locations along the entire stretch of road alignment, covering all project affected Rural Municipalities and Municipalities. Public hearings were carried out after preparing the draft of EIA. A leaflet was prepared in Nepali language for Public Hearing mentioning major findings, potential impacts and suggestions as well as suggested mitigation measures. The leaflet was distributed to all concerned stakeholders and all the participants during the time of Public Hearing Programme. The program was conducted with participation of representatives from project affected municipalities, Mayors, DoR, NGOs, CBOs, political parties, local teacher, local farmers, project affected people, locals and other public representatives. Formal letters send to all the project affected and interested stakeholder are attached herewith in the following section. Further, the recommendation letters have been collected from all project affected Rural Municipalities and Municipalities and are attached herewith.

Date of publication of public notice: (2074/12/15 Aarthik National Daily)

Location of public hearing:

Sn.	Venue of public hearing	Date of public hearing	Time	Number of participants
1.	New Activities Youth Club, Ward 9, Khatripauwa, Dhunibesi Municipality.	April 9 2018 २०७४/१२/२९	11 AM	52
2.	RIMS Hall, Jintetar, Bairani Ward 6, Galchhi Rural Municipality	April 10 2018 (२०७४/१२/२७)	11 AM	57

3.	Ward office of Bishaltar Ward 5, Benighat-Rorang Rural Municipality	April 11 2018 (२०७४/१२/२८)	11 AM	95
4.	Agricultural Hall, Phisling, Gandaki Rural Municipality	April 12 2018 (२०७४/१२/२९)	11 AM	55

Public notice published in national newspaper



नेपाल सरकार
मौक्तिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग
वैदेशिक समन्वय महाशाखा
नेपाल-भारत क्षेत्रीय व्यापार तथा यातायात आयोजना
ज्वागल, ललितपुर

काठमाडौं (नागढुङ्गा)-नौबीसे-मुग्लिङ सडक आयोजनाको वातावरणीय प्रभाव मूल्याङ्कन अध्ययनको लागि सार्वजनिक सुनवाई (Public hearing) सम्बन्धी सूचना

प्रकाशित मिति : २०७४/१२/१५

नेपाल र भारत सरकारबीच काठमाडौं उपत्यकालाई जोड्ने एवं व्यापार तथा यातायातका लागि हालसम्मको एक मात्र मुख्य यस काठमाडौं (नागढुङ्गा)-नौबीसे-मुग्लिङ सडक खण्ड (१६ कि.मि.)लाई एसियाली राजमार्गको स्तरमा पुर्‍याउने यस आयोजनाको मुख्य उद्देश्य रहेको छ । नेपाल-भारत क्षेत्रीय व्यापार तथा यातायात आयोजनाअन्तर्गत त्रिभुवन तथा पृथ्वी राजमार्गको काठमाडौं(नागढुङ्गा)-नौबीसे-मुग्लिङ सडक खण्डलाई दुई लेन स्तरमा चौडा गरी व्यापार तथा पारवहनको मुख्य माध्यम यातायात प्रवाहलाई थप सुस्त, व्यवस्थित एवं सुरक्षित बनाउने लक्ष्य रहेको छ । उपर्युक्त प्रस्तावित सडक खण्डमा दुई लेन स्तरमा सडक निर्माणकार्य निम्नानुसार गरिनेछ ।

(क) साविक नागढुङ्गादेखि मुग्लिङसम्मको (१६ कि.मि.) सडक खण्डलाई सुचारु तथा स्तरोन्नति गरी दुई लेन स्तरको बनाउने,

(ख) सिस्नेखोलादेखि धार्कसम्म दुईलेनको थप ११.२ कि.मि. नयाँ सडक (सल बादिङ्ग जिल्लाको धुनीबेशी नगरपालिका साविक छत्रेदेउराली, नौबीसे, र धात्रे गा.वि.स. छिचोले) निर्माण गर्ने ।

(ग) बेनीबाट रोराङ्ग गाउँपालिकाको विशालटारबाट त्रिशूली नदीपारि गोरखा जिल्लाको बेनिबेशी (हाल गोरखा जिल्लाको गण्डकी गाउँपालिका साविक ध्यालचोक गा.वि.स., मुग्लिङचोक गा.वि.स., र तादिलचोक गा.वि.स.) हुँदै पुनः त्रिशूली नदी पार गरी फिस्लिङ्ग (चितवन जिल्लाको इच्छाकामना गाउँपालिका साविक दारेचोक गा.वि.स.)मा जोड्न करिब १५३ कि.मि. लम्बाइको दुई लेनको नयाँ सडकखण्ड निर्माण गर्ने ।

सडक विभागअन्तर्गत मू-वातावरण तथा सामाजिक शाखाले उक्त प्रस्ताव कार्यान्वयन गर्न लागेकोमा सो प्रस्ताव कार्यान्वयन गर्नुअघि उक्त प्रस्तावको वातावरणीय प्रभाव मूल्याङ्कन (EIA) अध्ययन गर्ने सिलसिलामा प्रस्ताव कार्यान्वयन गर्दा प्रभावित हुने क्षेत्रहरूको भौतिक, जैविक, सांसायनिक, सांस्कृतिक र आर्थिक तथा सामाजिक प्रणाली, यिनका अवयवहरूको अन्तर्क्रिया तथा अन्तर्सम्बन्धमा के कस्तो प्रभाव पर्दछ भनी एकीन गर्न वातावरणीय प्रभाव मूल्याङ्कन प्रतिवेदन तयार गराइने र उक्त प्रतिवेदनअन्तर्गत प्रभावित क्षेत्रमा पर्ने नगरपालिका, गाउँपालिकामा वातावरण संरक्षण नियमावली २०५४ (पछिल्लो संशोधन)को नियम ७ उपनियम २ बमोजिम सार्वजनिक सुनवाईको कार्यक्रम गर्नुपर्ने भएकोले सो कार्यक्रममा उपस्थित भई आफ्नो राय/सुझाव उपलब्ध गराइदिनुहुन अनुरोध गरिन्छ । प्राप्त राय/सुझावका आधारमा यस वातावरणीय प्रभाव मूल्याङ्कन प्रतिवेदनलाई अन्तिम रूप दिइनेछ ।

प्रस्तावको नाम : काठमाडौं (नागढुङ्गा)-नौबीसे-मुग्लिङ सडक आयोजना (१६ कि.मि.) ।

प्रस्ताव कार्यान्वयन गर्दा प्रभाव पर्ने नगरपालिका/ गाउँपालिकाहरू:

१. धादिङ्ग जिल्ला : धुनीबेशी नगरपालिका, धात्रे गाउँपालिका, गल्छी गाउँपालिका, गजुरी गाउँपालिका, बेनिघाट रोराङ्ग गाउँपालिका ।
२. गोरखा जिल्ला : गण्डकी गाउँपालिका ।
३. चितवन जिल्ला : इच्छाकामना गाउँपालिका ।

सार्वजनिक सुनवाईको कार्यक्रम

स्थान	सार्वजनिक सुनवाईको मिति	समय
न्यु थाकटमिडिङ युवा बलब, वडा नं ९, खत्रिपौवा, धुनीबेशी नगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
रिम्स (RIMS) हल, जिन्टेदार, बेरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्ग गाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
फिस्लिङ्ग, मो.पु पारि कृषिमवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे

प्रस्तावकर्ताको नाम र ठेगाना	परामर्शदाताको नाम र ठेगाना
मू-वातावरण तथा सामाजिक शाखा सडक विभाग, पाटन, ललितपुर टेलिफोन नं : ०१५२२०५०५ इमेल gesunit@dor.gov.np	ई.आर.एम.सी./ जिई.सि/यु.सी (प्रा.) ली नयाँ बानेश्वर, काठमाडौं टेलिफोन नं : ०१ ४४८३०६४, ४४६५८६३, ९८५१०३६६५३ फ्याक्स नं : ०१ ४४७९३६९ इमेल safe@ermc.wlink.com.np

Invitation letter for public hearing to Dhunibesi Municipality, Dhading



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : १७७-७१२२४१६८६
: १७७-७१२२४१६८७
फ्याक्स : १७७-७१२२४२२३२
ईमेल : dorfcbb@dor.gov.np

वैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. १/५/०७४-७५-५५७

रता नं. ६९० मिति २०७४/१२/१३
मिति २०७४/१२/१६
कार्यालय धु. न. पा.

श्री धुनिबेसी नगरपालिकाको कार्यालय ,
धादिङ्ग ।

विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौ । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु याष्टिभीटिज युवा क्लब, वडा नं १, खिचिपौवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	विहान ११:३० बजे
धुनिबेसी न.पा.	२, ५, ७, ८, ९			
थुके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेटर, बैरेनी वडा नं ६, गल्छी गाँउपालिका	२०७४/१२/२७	विहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाँउपालिका	२०७४/१२/२८	विहान ११:३० बजे
द्रुम्धकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषिभवन, गण्डकी गाँउपालिका	२०७४/१२/२९	विहान ११:३० बजे



१२/१३
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल इन्जिनियर

Invitation letter for public hearing to Bhuwaneshwori Secondary School, Dharke



नेपाल सरकार भौतिक पूर्वाधार तथा यातायात मन्त्रालय सडक विभाग

फोन नं. : १७७-३१५५३१६-६
: १७७-३१५५३१६-७
फ्याक्स : १७७-३१५५३१६-२२
ईमेल : dorfb@dor.gov.np

वैदेशिक समन्वय महाशाखा

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. १/५/०७४-७५ ~ २४७

मिति : २०७४/१२/१३

श्री भुवनेश्वरी मा वि, धार्के,
धुनिवेशी न.पा., धार्केड.

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु याष्टिभीटिज युवा क्लब, वडा नं १, बिपिबा, धुनिवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ७, ८, ९			
धार्के गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय तल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिल्मीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



१२/१३
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर

Invitation letter for public hearing to Thakre Rural Municipality



भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग
वैदेशिक समन्वय महाशाखा

फोन नं : ९७७-०१५२४१६८१
९७७-०१५२४१६८३
फ्याक्स : ९७७-०१५२४२४३२
ईमेल : doarr@doarr.gov.np

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना
कम्पोजन-१०
ललितपुर, नेपाल
मिति : २०७४/१२/१३

पत्र संख्या:- वै.स.म. ९/५/०७४-७५
चलानी नं:- ५४७

श्री थाके गाउँपालिकाको कार्यालय,
धादिङ्ग ।

दर्ता नं. : ६४९१ विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

दर्ता मिति : २०७४/१२/१६

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
बन्दागिरी न.पा.	२	न्यु पान्थिभीटिज युवा क्लब, वडा नं ९,	२०७४/१२/२९	बिहान ११:३० बजे
धुलिखेली न.पा.	२, ४, ६, ७, ८, ९	धुलिखेली, धुलिखेली नगरपालिका		
थके गा.पा.	१, २, ६, ७, ८	रिम्स (RIMS) हल, जिन्टेटर, बैरेनी वडा नं ६, गन्डकी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गन्डकी गा.पा.	४, ६, ७			
गन्डकी गा.पा.	१, २, ३, ६	वडा कार्यालय हल, विशालटार वडा नं ४, बेनिघाट रोरांग गाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
बेनिघाट रोराङ्ग गा.पा.	३, ४, ५, ८, ९, १०			
इच्छाकामना गा.पा.	३, ४	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गन्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे
गन्डकी गा.पा.	१, २, ६, ७, ८			

(रोहीत कुमार बिसुराल)

सिनीयर डिभिजनल ईन्जिनियर



Invitation letter for public hearing to Dhunibesi Municipality Ward 9, Khanikhola, Dhading



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-७१२४११८६
: २७७-७१२४११८७
फ्याक्स : २७७-७१२४१२३२
ईमेल : dorfc@dar.gov.np

वैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. १/१/०७४-७५-२४७

मिति : २०७४/१२/१३

श्री धुनिवेशी न.पा., व.नं. ०९,

खान्खोला, धादिङ्ग ।

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौ । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु यास्मिटीटिज युवा क्लब, वडा नं १, खत्रिपौवा, धुनिवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ४, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ४, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ४, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ४, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
दुष्खकामना गा.पा.	३, ४			
गन्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीह, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



Ministry of Physical Infrastructure and Transport
Department of Roads
Development Cooperation Implementation Division
Jwagal, Lalitpur

३४
२०७४/१२/१३

१२/१३
(रोहित कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर

Invitation letter for public hearing to Galchi Rural Municipality, Dhading



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१५२४१६८६
: २७७-०१५२४१६८७
फ्याक्स : २७७-०१५२४२२३२
ईमेल : dorfc@dor.gov.np

बैदेशिक समन्वय महाशाखा

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. १/५/०७४-७५ - २४/७

मिति : २०७४/१२/१३

श्री गल्छी गाउँ पालिकाको कार्यालय,
धादिङ्ग ।

दर्ता नं.: १३६९
मिति: २०७४/१२/१८

विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु याक्तिभीटिज युवा क्लब, वडा नं १, खिपौवा, धुनीवेशी नगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, बिरालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर

**Invitation letter for public hearing to Benighat-Rorang Rural Municipality
Ward 5, Benighat.**



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-७१५५४१६
: २७७-७१५५४१६
फ्याक्स : २७७-७१५५४२५२
ईमेल : dorfc@dor.gov.np

वैदेशिक समन्वय महाशाखा

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५-२४७

मिति : २०७४/१२/१३

श्री नेमिधारा ११/३५/लि.५१
वडा नं. २
बेनिघाट

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौ । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू याष्टिभीटिज युवा क्लब, वडा नं ९,	२०७४/१२/२६	विहान ११:३० बजे
धुमिवेसी न.पा.	२, ५, ६, ७, ८, ९	खुमिपौवा, धुनीवेशीनगरपालिका		
धके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	५, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, वैरेनी वडा नं	२०७४/१२/२७	विहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६	६, गल्छी गाँउपालिका		
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं	२०७४/१२/२८	विहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५	५, बेनिघाट रोराङ्गगाँउपालिका		
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाँउपालिका	२०७४/१२/२९	विहान ११:३० बजे



रोहीत कुमार विसुराल
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



फर्ती नं १०६
२०७४/१२/१३

नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

वैदेशिक समन्वय महाशाखा

फोन नं. : २७७-०१५५४१६६६
: २७७-०१५५४१६६७
फ्याक्स : २७७-०१५५४२५३२
ईमेल : dorfc@dor.gov.np

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-
चलानी नं.:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना
वै.स.म. ९/५/०७४-७५ -२४७

मिति : २०७४/१२/१३

श्री
रिम्स-नेपाल
धादिङ्ग, बैरेनी

विषय: सार्वजनिक सुनुवाइ आयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू यास्टिभीटिज युवा क्लब, वडा नं ९,	२०७४/१२/२६	बिहान ११:३० बजे
धुनिबेसी न.पा.	२, ५, ६, ७, ८, ९	छत्रिपौवा, धुनीबेसीनगरपालिका		
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, बैरेनी वडा नं ६, गल्छी गाँउपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, बिशालटार वडा नं ५, बेनिघाट रोराङ्गगाँउपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिल्सीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाँउपालिका	२०७४/१२/२९	बिहान ११:३० बजे



१२/१३
(रोहित कुमार बिसुराल)

सिनीयर डिभिजनल ईन्जिनियर

क्र. १- १४३
०६४/१२/१८



नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१५५४१६८३
फ्याक्स : २७७-०१५५४१६८३
ईमेल : dorfcib@dar.gov.np

बैदेशिक समन्वय महाशाखा

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५-५४७

मिति : २०७४/१२/१३

श्री गजुरी गाउँ पालिकाको कार्यालय,
धादिङ्ग ।

विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू यास्विभीटिज युवा क्लब, वडा नं ९,	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९	खविपौवा, धुनिवेशीनगरपालिका		
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, वैरेनी वडा नं ६,	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६	गल्छी गाउँपालिका		
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५	५, बेनिघाट रोराङ्गगाउँपालिका		
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी	२०७४/१२/२९	बिहान ११:३० बजे
		गाउँपालिका		



(रोहीत कुमार विसुराल)

सिनियर डिभिजनल इन्जिनियर



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : १७७-०१५५४१६६
: १७७-०१५५४१६७
फ्याक्स : १७७-०१५५४२५३२
ईमेल : dorfc@dor.gov.np

बैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

चलानी नं.:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

वै.स.म. ९/५/०७४-७५ ~ २४७

मिति : २०७४/१२/१३

श्री सेक्टर नगरपालिका, गजुरी

संनका गजुरी
१५/६
२०७४/१२/१८
मिति -

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु याक्टिभीटिज युवा क्लब, वडा नं ९, छविपौवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
थडे गा.पा.	१, २, ६, ७, ८			
गन्धी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, बैरेनी वडा नं ६, गन्धी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे


(रोहीत कुमार बिसुवाल)

सिनियर डिभिजनल ईन्जिनियर





नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१५५४१६८६
: २७७-०१५५४१६८७
फ्याक्स : २७७-०१५५४२५३२
ईमेल : dorfc@dor.gov.np

बैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५-५४७

मिति : २०७४/१२/१३

श्री गण्डकी गाउँ पालिकाको कार्यालय,
गोरखा ।

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौ । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु),राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू याफ्टिभीटिज युवा क्लब, वडा नं ९, खुम्लिपोवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० वजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
खुम्लि गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० वजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० वजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भोटे पुरी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० वजे



(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१५५४११८६
: २७७-०१५५४११८७
फ्याक्स : २७७-०१५५४२२२२
ईमेल : dorfcbb@dor.gov.np

बैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५ ~ २४७०

मिति : २०७४/१२/१३

श्री रा.पु. (मडा बस्ती)

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.....

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु),राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु यास्मिटीज युवा क्लब, वडा नं ९,	२०७४/१२/२६	विहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९	खत्रिपौवा, धुनिवेशीनगरपालिका		
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	५, ६, ७	रिम्स (RIMS) हल, जिन्टेर, बैरेनी वडा नं	२०७४/१२/२७	विहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६	६, गल्छी गाँउपालिका		
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं	२०७४/१२/२८	विहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५	५, बेनिघाट रोराङ्गगाँउपालिका		
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्तीङ्ग, भो.पु. पारी कृषीमवन, गण्डकी गाँउपालिका	२०७४/१२/२९	विहान ११:३० बजे



१२/१३
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : १७७-०१५५४१६६
: १७७-०१५५४१६७
फ्याक्स : १७७-०१५५४२५३
ईमेल : dorfc@dor.gov.np

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-
चलानी नं.:-

बैदेशिक समन्वय महाशाखा
नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना
बै.स.म. ९/५/०७४-७५-५४७ मिति : २०७४/१२/१३

श्री इच्छाकामना गाउँपालिकाको कार्यालय,
चितवन ।

विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु यास्मिटीटिज युवा क्लब, वडा नं ९,	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९	खत्रिपौवा, धुनिवेशीनगरपालिका		
धके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६,	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६	गल्छी गाउँपालिका		
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५, ८	५, बेनिघाट रोराङ्गगाउँपालिका		
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी	२०७४/१२/२९	बिहान ११:३० बजे
		गाउँपालिका		

६०५ ३५२
०६४/१२/१८



१२/१३
(रोहित कुमार विसुराल)
सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : ९७७-०१५५ ४१६८६
: ९७७-०१५५ ४१६८७
फ्याक्स : ९७७-०१५५ ४२५३२
ईमेल : dorfc@dor.gov.np

वैदेशिक समन्वय महाशाखा

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५ ~२४७

मिति : २०७४/१२/१३

श्री

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु),राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू याक्लिभीटिज युवा क्लब, वडा नं ९, खत्रिपोवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, बैरेनी वडा नं ६, गल्छी गाँउपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाँउपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाँउपालिका	२०७४/१२/२९	बिहान ११:३० बजे



१२/१३
(रोहित कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

वैदेशिक समन्वय महाशाखा

फोन नं. : १७७-०१५५४१६८६
१७७-०१५५४१६८७
फ्याक्स : १७७-०१५५४२५३२
ईमेल : dorfeb@dor.gov.np

कृपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

चलानी नं.:-

वै.स.म. १/५/०७४-७५ -५४८०

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

मिति : २०७४/१२/१३

श्री बेनिघाट रोराङ्ग गाउ पालिकाको कार्यालय,
धादिङ्ग ।

विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु),राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु यासिटीमिडिज युवा क्लब, वडा नं १, खत्रिपोवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	५, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे

६.०.१२



२२/१३
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१५५४१६८६
: २७७-०१५५४१६८७
फ्याक्स : २७७-०१५५४२५३२
ईमेल : dorfeb@dor.gov.np

कृपण्डोल-१०
ललितपुर, नेपाल

वैदेशिक समन्वय महाशाखा

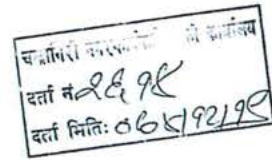
पत्र संख्या:-
चलानी नं.:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

वै.स.म. ९/५/०७४-७५ - ५४७

मिति : २०७४/१२/१३

श्री चन्द्रागिरी नगर पालिकाको कार्यालय,
काठमाडौं ।



विषय: सार्वजनिक सुनुवाई आयोजना गर्ने सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भई आयोजना क्षेत्रमा सार्वजनिक सुनुवाई गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाई कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यु यासिटीभेडिङ युवा क्लब, वडा नं १ , खत्रिपौवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ७, ८, ९			
यके गा.पा.	१, २, ६, ७, ८			
गल्ली गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेटर, बैरेनी वडा नं	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६	६, गल्ली गाँउपालिका		
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५,	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५	बेनिघाट रोराङ्गगाँउपालिका		
गन्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाँउपालिका	२०७४/१२/२९	बिहान ११:३० बजे



(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : १७७-०१५५४१६८६
: १७७-०१५५४१६८७
फ्याक्स : १७७-०१५५४२५३२
ईमेल : dorfc@dor.gov.np

बैदेशिक समन्वय महाशाखा

कुण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

चलानी नं.:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना
बै.स.म. १/५/०७४-७५ ~ २४७

मिति : २०७४/१२/१३

श्री चन्द्रागिरी न.पा. न.स. ०२

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू यास्मिटीडिज युवा क्लब, वडा नं १, खडिपौवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेडार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ४			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



२०७४/१२/१३
न.स. सुर्खेत
अध्यक्ष

१२/१३
(रोहीत कुमार विसुराल)

सिनियर डिभिजनल ईन्जिनियर





नेपाल सरकार

भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

वैदेशिक समन्वय महाशाखा

फोन नं. : २७७-०१५५४१६८६
: २७७-०१५५४१६८७
फ्याक्स : २७७-०१५५४२५३२
ईमेल : dorfcbb@dar.gov.np

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. ९/५/०७४-७५ ~२४७

मिति : २०७४/१२/१३

श्री

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागी हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु),राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू याक्टिभीटिज युवा क्लब, वडा नं ९, खत्रिपौवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ५, ६, ७, ८, ९			
धके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ५, ६			
बेनिघाट रोराङ्ग गा.पा.	३, ५, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङ्गगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ५			
गण्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



१२/१३
(रोहीत कुमार बिसुवाल)

सिनियर डिभिजनल ईन्जिनियर

दस्तावेज नं. १४



नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग

फोन नं. : २७७-०१४२४१६८६
: २७७-०१४२४१६८७
फ्याक्स : २७७-०१४२४१६८७
ईमेल : dorfcbb@dor.gov.np

बैदेशिक समन्वय महाशाखा

कुपण्डोल-१०
ललितपुर, नेपाल

पत्र संख्या:-

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

चलानी नं.:-

वै.स.म. १/५/०७४-७५-२४७

मिति : २०७४/१२/१३

श्री चन्द्रोदय सा. वि.

बेनिघाट-रोराङ-५, बिनामटार

विषय: सार्वजनिक सुनुवाइआयोजना गर्न सम्बन्धमा ।

सडक विभाग, वैदेशिक समन्वय महाशाखा, नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तर्गत अध्ययन भईरहेको काठमाडौं (नागदुङ्गा)-नौविसे-मुग्लिङ सडकको स्तरोन्नति, नयाँ निर्माण तथा संचालन कार्यको वातावरणिय प्रभाव मुल्यांकन (EIA) को प्रतिवेदन तयार भइ आयोजना क्षेत्रमा सार्वजनिक सुनुवाइ गर्न आवश्यक भएकोले उक्त कार्यक्रममा तहाँको उपस्थितिको लागि हार्दिक निमन्त्रणा गर्दछौं । साथै आयोजनाले असर पर्ने तथा छोएका नगरपालिका (साविक गा.वि.स.हरु), राजनितिक दलका प्रतिनिधिहरु, नागरिक समाज साथै अन्य सम्बन्धित सबै सरोकारवाला व्यक्तिहरुलाई निम्न उल्लेखित मिति, स्थान र समय अनुसार भेलाका लागि पत्राचार गरिदिनु हुन अनुरोध गरिन्छ ।

सार्वजनिक सुनुवाइ कार्यक्रम:

नगरपालिका	वडा	स्थान	मिति	समय
चन्द्रागिरी न.पा.	२	न्यू याक्लिभीटिज युवा क्लव, वडा नं ९, खड्गपोवा, धुनीवेशीनगरपालिका	२०७४/१२/२६	बिहान ११:३० बजे
धुनिवेशी न.पा.	२, ४, ६, ७, ८, ९			
थके गा.पा.	१, २, ६, ७, ८			
गल्छी गा.पा.	४, ६, ७	रिम्स (RIMS) हल, जिन्टेदार, बैरेनी वडा नं ६, गल्छी गाउँपालिका	२०७४/१२/२७	बिहान ११:३० बजे
गजुरी गा.पा.	१, २, ४, ६			
बेनिघाट रोराङ गा.पा.	३, ४, ७, ८, ९, १०	वडा कार्यालय हल, विशालटार वडा नं ५, बेनिघाट रोराङगाउँपालिका	२०७४/१२/२८	बिहान ११:३० बजे
इच्छाकामना गा.पा.	३, ४			
गन्डकी गा.पा.	१, २, ६, ७, ८	फिस्लीङ्ग, भो.पु. पारी कृषीभवन, गण्डकी गाउँपालिका	२०७४/१२/२९	बिहान ११:३० बजे



१२/१३
(रोहीत कुमार विसुराल)

सिनीयर डिभिजनल ईन्जिनियर

Contact list of Municipality Mayors and List of Participants; copy of public hearing minutes

Contact list of Municipality Mayors

Municipality/Rural Municipality	Mayor	Contact number
Dhunibeshi	Balkrishna Acharya	9851044657
Galchhi	Krishnahari Shrestha	9801057287
Benighat Rorang	Hari Dallakoti	9851229220
Gandaki	Hom Bahadur Rana Magar	9856040100

List of Participants

Gandaki Rural Municipality

S.N	Name	Occupation	Address	Mobile no.
1	Hom Bahadur Rana Magar	chairman	Gandaki -6	9856040100
2	Jhabindra Rana Magar	Teacher	Gandaki -8	9840415670
3	Sukamaya Chepang	Farmer	Gandaki-6	
4	Bimal Thapa Magar	Farmer	Gandaki-6	
5	Chepe Chepang	Farmer	Gandaki-6	
6	Tok Narayan	Agriculture	Gandaki-6	
7	Rajkumar Karki	Agriculture	Gandaki-7	
8	Devimaya Praja	Agriculture	Gandaki-6	
9	Shivaraj Sedhai			9851073358
10	Bidur Timalina	Teacher	Gandaki-7	9813369065
11	Chhabilaal Shrestha		Gandaki-6	9846896059
12	Imlaal Sunwar		Gandaki	
13	Puspa Kumar Gurung			9846125091
14	Ker Bahadur Shrestha			9812246153
15	Bell Bahadur Shrestha	Farmer	Gandaki	9846068632
16	Dhaan Narayan Shrestha	Farmer	Gandaki	9843360809
17	Bhim Bahadur Shrestha		Gandaki	
18	Bhanu			9808206344
19	Shreeram Regmi		Gandaki	9813711814
20	Bharat Regmi		Gandaki	9813514036



S.N	Name	Occupation	Address	Mobile no.
21	Mira Regmi katel		Gandaki-6	9808051408
22	Raju Regmi	Teacher	Gandaki-7	9818294541
23	Dhurbaraj Regmi	Agriculture	Gandaki-7	9818387120
24	Gautam Pudasaini	Teacher	Gandaki-7	9823676120
25	Ekraj Dawadi	Agriculture	Gandaki-7	9811261700
26	Arun Acharya	Environmental	Kathmandu-7	9841235400
27	Tulsi Regmi		Gandaki-7	9808413544
28	Rama Shrestha	Sociologist	DoR/GESU	9841293143
29	Mira Joshi	Environmental Expert	DoR/GESU	9741059057
30	Rana Bd. Chepang	Agriculture	Gandaki-7	9846641180
31	Maan Bd. Thapa	Agriculture	Gandaki-6	9812271395
32	Jagat Narayan Shrestha	Agriculture	Gandaki-6	9849354768
33	Keshav Raj Dawadi	Agriculture	Gandaki-6	9818462950
34	Hari Prasad Regmi	Agriculture	Gandaki-6	9823306363
35	Purna Bd. Sunar	Agriculture	Gandaki-6	9841680049
36	Tul Bd. Shrestha	Management	Gandaki	9841606400
37	Baal Kumar Shrestha	Management	Gandaki	9862372693
38	Lalita Adhikari	Vice-chairperson, Gandaki RM	Gandaki	9846090449
39	Salikram Regmi	Agriculture	Gandaki	9813109206
40	Kedarnath Regmi	Agriculture	Gandaki	9803684081
41	Suryanath Regmi	Agriculture	Gandaki	9813270510
42	Dharmaraj Regmi	Agriculture	Gandaki	9806787712
43	Bhumi Bd. Dallakhoti	Agriculture	Gandaki	9808751348
44	Gajendra Pd. Regmi	Agriculture	Gandaki	9808161935
45	Santosh Chepang	Agriculture	Gandaki	
46	Sita Thapa Magar	Small tea vendor	Bhumlichok, Gandaki RM	9806688788
47	Lekh Bd. Thapa Magar	Small tea vendor	Bhumlichok, Gandaki RM	

Benighat Rorang Rural Municipality

S.No.	Name	Occupation	Address	Mobile No.
1	Basudev Regmi	Social service	Gandaki	9841528409
2	Rishi Nath Tripathi	President, Nepali Congress, Benighat Rorang RM	Malekhu-3	9841716174
3	Balram Bisural	Drinking water supply	Bishaltar-5	
4	Ek Raj Pandey	Service	Rorang-3	9841789862
5	Ram Prasad Tripathi	Business	Benighat-3	9851144524
6	Bishnuhari Bishuraal	Agriculture	Benighat-5	9840094379
7	Amrit Ojha	Business	Benighat-5	9841486804
8	Dilli Prasad	Agriculture	Benighat-6	9843106627
9	Ramkaji Bishuraal	Social Activist	Benighat-5	9841486805
10	Prakash Raj Bishuraal	Social Activist	Benighat-5	
11	Ram Kumar Bishuraal	Social Activist	Benighat-5	9841253430
12	Rajendra Basnet	Field Officer		9851199285
13	Bhola Bishuraal	Agriculture	Benighat-5	9841705596
14	Krishna Ram Kadel	Business	Benighat	9851163908
15	Subba Kumar Shrestha	Business	Benighat-5	9841705562
16	Bashudev Kadel	Business	Benighat-5	9841684974
17	Sudip Kumar Poudel	Business	Benighat-3	9860563530
18	Ramhari Kadel	Office		9841705972
19	Fadiraj Dallakoti	Agriculture	Benighat-5	9841850754
20			Benighat	9841835071
21	Lila Bd. Thapaliya	Farming	Benighat-7	9808191169
22	Pawan Thapaliya		Benighat-7	9818001372
23	Mohit Pd. Kadel	Agriculture	Benighat-5	9849639027
24	Sanokaji Shrestha	Agriculture	Benighat-5	9813478411
25	Tilaram Karki	Agriculture	Benighat-5	9841717727
26	Bhupendra Babu Regmi	Health professional	Gandaki -5	9807217043



S.No.	Name	Occupation	Address	Mobile No.
27	Ganesh Kumar Shrestha	Business	Benighar-5	9808744575
28	Buttiraj Kadel	Agriculture	Benighat-5	9813328022
29	Pashupati Shedain	Agriculture	Mahadevthan	
30	Rudra Gauli		Mahadevthan -2	
31	BalKrishna Kadel			
32	Ganeshman Shrestha	Agriculture		
33	Arjun Basnet	Business	Benighat-7	9810363813
34	Prakash Basnet	Business	Benighat-7	9818756381
35	Kumar Bahadur Basnet	Labour	Benighat-7	
36	Raj Kumar Thapaliya	Business	Benighat-5	9803697775
37	Madhu Radhan Bishural	Business	Benighat-5	9851191885
38	Dhannath Kadel	Student	Benighat-5	9813125044
39	Pradip Gauli	Farmer	Bishaltar	9860401549
40	Bishnu Bishuraal	Agriculture	Bishaltar	9841943367
41	Sudip Gauli	Student	Bishaltar	9849888374
42	Santosh Basnet	Business		9808613069
43		Farming	Bishaltar	9840129663
44	Keshav Raj	Farming	Bishaltar	9841813160
45	Navaraj Thapaliya	Teacher		9849321378
46	Arjun Bishural	Business	Rorang-5	9860510476
47	Tularam Kadel	Business		9841283045
48	Ramkumar Duwadi	Business	Rorang-7	9813233036
49	Rajkumar Bishural	Farming	Rorang-7 Bishaltar	9841001579
50	Dip Pd. Kadel	Farming	Rorang-5 Benighat	9849185533
51	Ram Pd.		Rorang-5 Benighat	1041605
52	Rammani Thapaliya	Teacher	Rorang-7 Benighat	

S.No.	Name	Occupation	Address	Mobile No.
53	Ramhari Bisural	Teacher	Rorang-5 Benighat	9841525972
54	Sahdev Silwal	Farming	Rorang-5 Benighat	9808132139
55	Chandra Bahadur Basnet	Service	Rorang-5 Benighat	9808016952
56	Santosh Berakoti	Service		9818597775
57	Kedar Bisural	Service	Bishaltar	9810066840
58	Premnath Bisural	Farming	Bishaltar	9841732253
59	Lila Bisural	Farming	Bishaltar	9842051531
60	Rupak Bisural	Farming	Bishaltar	9860844280
61	Umesh Bisural	Farming	Bishaltar	
62	Madan Bisural	Farming	Bishaltar	
63	Premnath Kadel	Farming	Benighat Bazar	9841036639
64	Chhand Raj	Farming	Benighat Bazar	9860873524
65	Rajan Kadel	Farming	Benighat	
66	Chhanda Lal	Farming	Benighat	9808238056
67	Sharan Kadel	Farming		9810086591
68	Lek Bahadur Pande			
69	Ramit Ghale			
70	Prakash Ghale			9840488832
71	Gyan B. Thapa	Businessman		9812916012
72	Amrit Narayan Shrestha	Farming		
73	Saroj Bohara	Farming		9812871890
74	Kapil Pd. Adhikari	Teacher	Bishaltar	9841727902
75	Yogendra Pd. Silwal	Teacher	Bishaltar	9841727902
76	Uddab Raj Dallakoti	Teacher	Bishaltar	9841709768
77	Purna Pd. Dallakoti	Teacher	Bishaltar	9841678701
78	Uddab Raj Dallakoti	Teacher		
79	Ram Hari Silwal	Sociologist	Benighat Bazar	9841768734

S.No.	Name	Occupation	Address	Mobile No.
80	Min B. Ghale		Benighat	
81	Lilanath Tripathi	Teacher	Rorang-3 Benighat	9841705594
82	Mayaram		Rorang-5 Benighat	9741022774
83	Tika Prasad	Farming	Benighat-5	9808406305
84	Ashok Rijal	Driver	Benighat-5	9823169609
85	Lila Nath Bisural	Farming	Benighat-5	9841617422
86	Najar Bisural	Driver	Benighat-5	9841910518
87	Shivraj Sedhai	Social Expert	Kathmandu	9851073358
88	Ramkaji Bisural	Social activist	Benighat-5	9841486805
89	Rajendra Pande	Teacher		9841683460
90	Sharan Gurung			9813369203
91	Puroshattam Khatiwada	Businessman		9847836564
92	Sudhir Karki		Gandaki-7	9801002179
93	Ram Pd. Ari			
94	Krishna Ram Kadel	Business	Benighat-5	
95	Ram Prasad			
96	Krishna Kadel	Benighat - 8		
97	Roshan Kumar Silwal	Benighat- 5		

Dhunibeshi Municipality

S.No.	Name	Occupation	Address	Mobile No.
1	Arun Khatri	Service	Dhunibeshi	9801057402
2	Govinda Lama		Dhunibeshi-9	9841281766
3	Keshav Raj Kunwar	Farming	Dhunibeshi-9	9841679261
4	Prabal Pande	Office	Dhunibeshi-9	9851001185
5	Nil B. Pande	Office	Dhunibeshi-9	9861938117
6	Ramkumar Giri	Nepali congress district committee member	Dhunibeshi-8	9841899325



S.No.	Name	Occupation	Address	Mobile No.
7	Sunita Lama		Dhunibeshi-8	9814292676
8	Mina Lama		Dhunibeshi-8	
9	Pholmainya Lama			9849335656
10	Shyamchandra Dhakal	Business	Dhunibeshi-5	9841608376
11	Harichandra Thapa	Farmer	Dhunibeshi-9	9841561707
12	Krishna B. Bhandari	Farmer	Dhunibeshi-5	9841667842
13	Krishna Kumar Regmi	Chairman, Dhunibeshi -5	Dhunibeshi-5	9851126942
14	Puroshattam Arjel	Business	Dhunibeshi-5	9851079162
15	Ram Raja Pande		Dhunibeshi-9	9841243315
16	Dipak Lamichhane	CPN-M, District committee member	Dhunibeshi-5	9841221211
17	Meena		Dhunibeshi-9	
18	Dinesh Lama	Driving	Dhunibeshi-9	9843065668
19	Sagar Upreti	Business	Dhunibeshi-9	9841285359
20	Shivraj Sedhai	Social Expert, Fullbright	Kathmandu	9851073358
21	Mangal Kumar Blon	Vice-chair, New activities youth club	Dhunibeshi-9	9841486682
22	Ganga Lama	Treasurer, Municipal Level Women's Network	Dhunibeshi-9	9861997626
23	Manju Tamang	Farming	Dhunibeshi-9	9813411689
24	Pholmaya Tamang	Business	Dhunibeshi-9	9849553350
25	Dipak Rana	Driver	Dhunibeshi-9	9841032271
26	Pramila Thapa	Farming	Dhunibeshi-9	9849020080
27	Pamfa Tamang	Farming	Dhunibeshi-9	
28	Bidur Pd. Upreti	Farming	Dhunibeshi-6	9841714128
29	Keshav Regmi	Farming	Dhunibeshi-8	9841911780
30	Rajeev Bhattra	Farming	Dhunibeshi-9	9851089584
31	Prem Rai		Dhunibeshi-9	
32	Shyam Kaji Thapa	Farming	Dhunibeshi-9	
33	Bishal Bhattra	Farming	Dhunibeshi-5	9851095874

S.No.	Name	Occupation	Address	Mobile No.
34	Rambabu Regmi	Business	Dhunibeshi-5	9851064026
35	Hem Bikram Kunwar	Farming	Dhunibeshi-9	9846343765
36	Shivraj Acharya	Journalist	Dhunibeshi-6	9843420116
37	Maheshwor Subedi		Dhunibeshi-4	9841713938
38	Sujan Ghale		Dhunibeshi-5	
39	Dinesh Ghale		Dhunibeshi-5	
40	Ram Bahadur Tamang			
41	Misi Gurung			
42	Kanchhi Lama			
43	Kumari Tamang			
44	Balkrishna Acharya	Mayor	Dhunibeshi	9851044657
45	Rajendra Aryal		Dhunibeshi	
46	Basudev Baskota	Business	Dhunibeshi-5	9841774210
47	Arun Acharya	Environmental	Kathmandu-7	9841235404
48	Akhanda Raj Upreti	Environmental	Tarkeshwor-8	9841684413
49	Manoj Aryal	Environmental Inspector	Kathmandu	9851177117
50	Mukund Pd. Aryal	Farming	Dhunibeshi-5	9843375015
51	Krishna Pd. Lamichhane	Business		9841249400
52	Basudev Kunwar	Farming	Dhunibeshi-9	9841023413
53	Saila Rai	Ward Chairperson, Ward 9	Dhunibeshi -9	9841293547

Galchhi Municipality

S.No.	Name	Occupation/Post	Address	Mobile No.
1	Bharat Shrestha	Health assistant	Baireni Health Post	9841669461
2	Ram Pd. Gyawari	Health Post Incharge	Baireni Health Post	9851035872
3	Navaraj Ramtel	Student	Baireni -6	9849505885
4	Rajan Pd. Adhikari		af=df=la=	9843437300



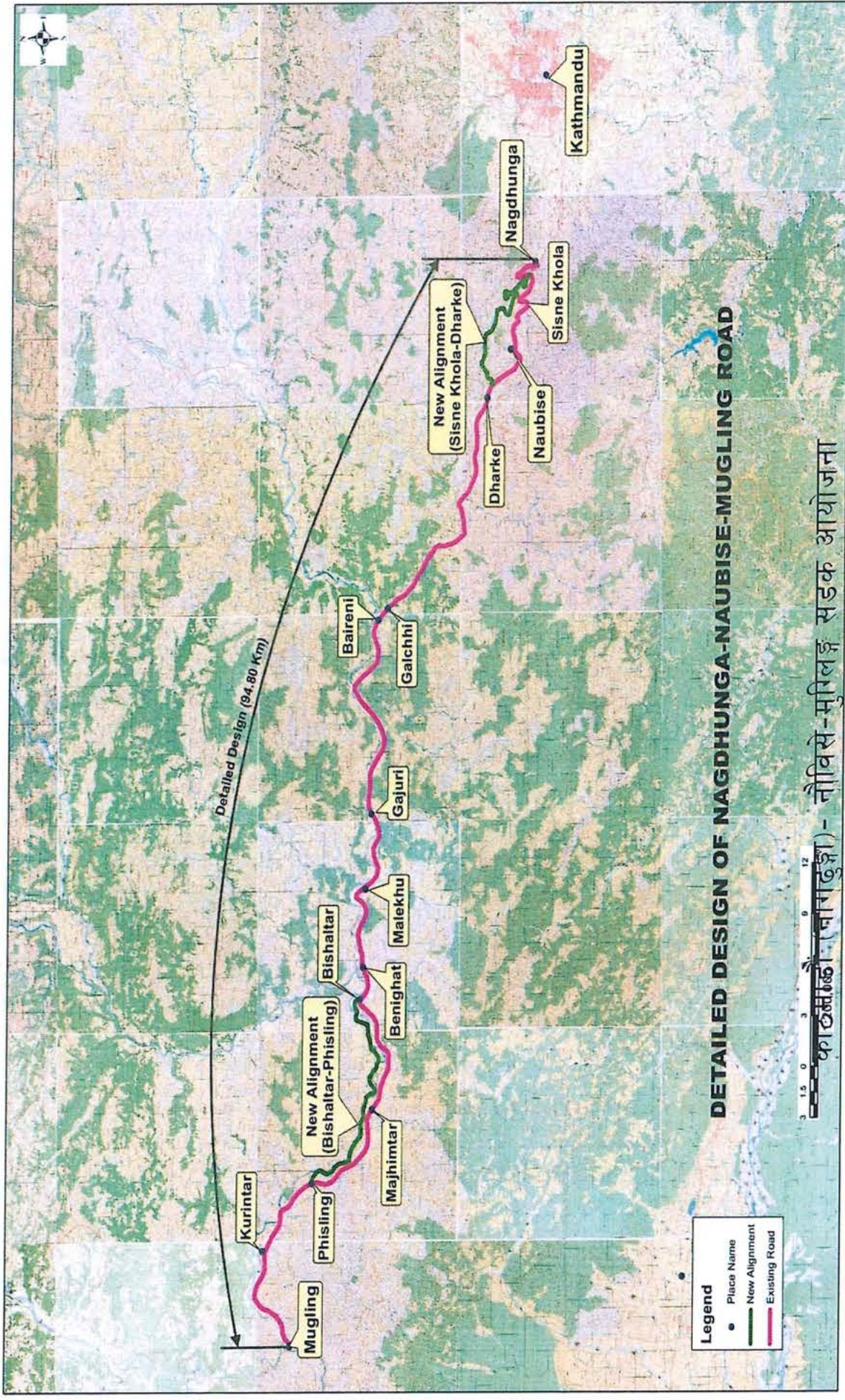
S.No.	Name	Occupation/Post	Address	Mobile No.
5	Ramsharan Adhikari		Galchhi-6	9861087291
6	Ram Pd. Adhikari	Teacher	Galchhi-6	9841609006
7	Ramchandra Khatiwada	Teacher	Galchhi-6	9841786146
8				
9	Madhab Adhikari		Galchhi	9851186722
10	Bed Pd. Dhakal	Teacher	Galchhi	9849778085
11	Bhimsen Adhikari	Teacher	Galchhi	9818622186
12	Kedar Khatiwada		Galchhi-6	9841645119
13	Modnath Khatiwada		Galchhi-7	9806550077
14	Ram Bahadur Adhikari	Businessman	Galchhi-6	9851192310
15	Shadanand Khanal	Chairman	Galchhi -2	9841051087
16	Krishna Hari Shrestha			9801057287
17	Purna Pd. Khatiwada			9803372744
18	Madhab Pd. Khatiwada	Social Service	Galchhi-2	9802065275
19	Radha Timlsina	Vice-Chairman	Galchhi -1	9841686488
20	Resham Raj Khatiwada		Galchhi-7	
21	Shivhari Adhikari		Galchhi-6	
22	Raju Adhikari	Chairman	Galchhi-4	9841267626
23	Ram Krishana Rimal		Galchhi-6	9851086891
24	Hari Pd. Khatiwada	Chairman	Galchhi-7	9851237861
25	Rajkumar Rimal			9851121824
26	Arun Acharya	Environmentalist	Kathmandu-7	9841235404
27	Buddhi Pd.	Sociologist		9849078507
28	Arjun B. Bhujel	Chairman		9851180223
29			Galchhi-6	9813012866
30	Hemant Bhandari	Businessman	Galchhi-6	9818332777
31	Ramesh Rimal	Teacher	Galchhi-6	9808841088
32	Suraj Dhungana	Businessman	Galchhi-6	9849790065
33	Chandra Bahadur Adhikari		Galchhi-6	9851155832

S.No.	Name	Occupation/Post	Address	Mobile No.
34	Keshav Rimal	Farming	Galchhi-7	9851101071
35	Shivhari Adhikari	Businessman	Galchhi-7	9851142994
36	Dilip Shrestha	Businessman	Galchhi-6	9841717718
37	Andaz Khatiwada		Galchhi-6	9801156485
38	Sangeeta Adhikari		Galchhi-6	9818624322
39	Prem Bahadur Sapkota	Business	Galchhi-6	9813275827
40	Hari Pd. Adhikari	Service	Galchhi-6	9849102709
41	Jhamak Khadka	RIMS Nepal	Galchhi	9851110385
42	Rajan Shrestha	Chairman	Galchhi-6	9802072260
43	Shiv Raj Sedhai	Social Expert	Kathmandu	9851073358
44	Meera Joshi	Environmentalism, DoR	Kathmandu	
45	Rama Shrestha	Sociologist, DoR	Kathmandu	9841293143



Leaflet distributed in Public hearing

काठमाडौं (नागढुङ्गा)- नौविसे-मुग्लिङ्ग सडक आयोजनाको
वातावरणीय प्रभाव मूल्याङ्कन (EIA) सम्बन्धी
सार्वजनिक सुनवाईको लागि तयार पारिएको पुस्तिका



प्रस्तावकको नाम र ठेगाना

सडक विभाग
वैदेशिक समन्वय महाशाखा,
नेपाल भारत क्षेत्रिय व्यापार
तथा यातायात आयोजना
ज्वागल, ललितपुर ।

परामर्शदाताको नाम र ठेगाना

ई.आर.एम.सी./जि.ई.सि./यु.सी.(प्रा.) ली.
नयाँ बानेश्वर, काठमाडौं



परिचय

नेपाल एक सानो भूपरिवेष्ठित राष्ट्र हो जुन भारत र चीन जस्तो ठुला मुलुकहरुका बिचमा अवस्थित छ। विरगंज देखि काठमाण्डौ सम्मको मुख्य राजमार्गले राजधानी काठमाण्डौलाई भारतको सिमा संग जोडदछ। यस विरगंज देखि काठमाण्डौ सम्म जोडने मुख्य राजमार्गको सुधार एवम् स्तरोन्नोती गर्दै नेपाल - भारत बिच हुने व्यापार अफ सुधार हुने देखिन्छ। विरगंज देखि काठमाण्डौ सम्म २७६ कि.मि. लामो दुरीको एशियाली हाईवे १७३६० को एउटा महत्वपूर्ण खण्ड हो। काठमाण्डौ देखि विरगंज हुदै भारत संग राम्रो यातायात प्रणाली कायम गर्न, सडक सुरक्षा बढाउन, मालवाहक ढुवानी सेवाको सुधार गर्न, कम समय र खर्चमा यातायात संचालन गर्न सडक सुधार तथा नयाँ संरचनाहरुको निर्माण अपरिहार्य भएको छ। काठमाण्डौ देखि मुग्लीन सम्मको राजमार्ग प्रमुख रणनितिक राजमार्ग मध्ये एक हो जसको सुधार तथा स्तरोन्नतीले मुलुकका सम्पूर्ण सडक संज्जालको दक्षतालाई सुनिश्चित गर्दछ र जसले राष्ट्रिय अर्थ व्यवस्थाको लागि पनि ठुलो मुल्य राख्दछ। यस सडकको काठमाण्डौ(नागदुङ्गा)-नौबिसे-मुग्लिन खण्डले केवल काठमाण्डौ र तराई क्षेत्रलाई मात्र भारतीय सीमानाका सम्मको मार्ग प्रदान गर्नुका साथै पोखरा र अन्तर्पूर्ण संरक्षण क्षेत्र जस्ता पर्यटकिय स्थलहरुलाई पनि जोडने काम गरेको छ। यस राजमार्गको सुधार तथा स्तरोन्नती पश्चात आन्तरीक तथा बाह्य पर्यटकहरुको आगमनमा पनि वृद्धि हुने सम्भावना रहन्छ। साथै काठमाण्डौ(नागदुङ्गा)-नौबिसे-मुग्लिन खण्डको सुधारले स्थानिय र क्षेत्रिय विकासलाई टेवा पुर्‍याउन सहयोग गर्नेछ र स्थानिय वासिन्दाहरुको जिवनस्तर सुधारमा महत्वपूर्ण योगदान पुर्‍याउने छ।

परियोजनाको प्रस्तावक

यस आयोजनाको प्रस्तावक नेपाल सरकारको भौतिक पुर्वाधार तथा यातायात मन्त्रालय, सडक विभाग अन्तरगतको वैदेशिक समन्वय महाशाखा रहेको छ।

प्रस्तावकको नाम र ठेगाना

नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना

सडक विभाग, वैदेशिक महाशाखा,

ज्वगल, ललितपुर, काठमाण्डौ नेपाल

फ्याक्स :- ९७७-१-५५४२५३२

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परियोजनाको विवरण

यो काठमाण्डौ(नागदुङ्गा)-नौबिसे-मुग्लिन सडकको वातावरणीय प्रभाव मूल्याङ्कन अध्ययनको प्रतिवेदन हो। यस सडक आयोजना अन्तरगत नेपाल भारत क्षेत्रिय व्यापार तथा यातायात आयोजना अन्तरगत पर्दछ। काठमाण्डौ(नागदुङ्गा)-नौबिसे देखि मुग्लिन सम्मको पृथ्वी राजमार्गलाई सुधार तथा स्तरोन्नती गर्ने र साथै नयाँ संरक्षणहरु निर्माण गर्न प्रस्ताव गरिएको छ। यसले काठमाण्डौ, धादिङ्ग, चितवन, र गोर्खा जिल्लालाई प्रत्यक्ष प्रभावित पार्नेछ।

प्रस्तावित आयोजना काठमाण्डौ(नागदुङ्गा)वाट सुरु भई मुग्लिनमा गई अन्त्य हुन्छ भने जसको दुरी नागदुङ्गा देखि मुग्लिन सम्म ९६ कि.मि रहेको छ। यस साविक पृथ्वी राजमार्ग खण्ड अन्तरगत नागदुङ्गा, नौबिसे, खानीखोला, महादेववेशी, गल्छी, वैरेनी, मलेखु, वेनीघाट, कुरिनटार हुदै मुग्लीन सम्म रहेको छ।

साथै सिस्नेखोला-धार्के सडक करिब ११.२ कि.मि.को नयाँ राजमार्ग सिस्नेखोलावाट सुरु भई महेशखोलाको दाहिने किनार हुदै धार्के छिचोलिने र विशालटार देखि फिस्लिङ्ग सम्म करिब १५.३ कि.मि.त्रिशुली नदिको दायाँ किनार गोरखा जिल्लामा) नयाँ राजमार्गको निर्माण गर्ने प्रस्ताव गरिएको छ। साविक पृथ्वी राजमार्गलाई सुधार तथा स्तरोन्नती गरि (दुई लेनको राजमार्ग स्तरमा)पूर्णता दिईने छ। साथै नयाँ निर्माण हुने सडक खण्डहरु पनि दुई लेनको हुनेछ। साथै, साविकको पृथ्वी राजमार्ग अन्तर्गत

संचालनमा भएका चारवटा पुलहरु जस्तै: खहरे खोला पुल, हुग्दीखोला पुल, गोमती खोला पुल, र चरौदी खोला पुल संगै थप नयाँ पुल निर्माण गरि संचालनमा ल्याउने प्रस्ताव गरिएको छ ।

साविक काठमाडौं(नागढुङ्गा)-नौबिसे-मुग्लिङ सडक खण्डमा पर्ने जिल्ला, नगरपालिका, गाविस र वडाहरुको विवरण

क्र.सं	जिल्ला	न.पा./गा.वि.स.	वडा नं		गाउँपालिका	नयाँ वडा
			सडक खण्डले छिचोल्ने	अप्रत्यक्ष प्रभावित		
१	काठमाडौं	चन्द्रागिरी न.पा.	३		चन्द्रागिरी न.पा.	२
२	धादिङ्ग	छत्रेदेउराली	१		धुनिवेशी न.पा.	२
		नौबिसे	३, ५, ६, ४, २, ७, ८, १		धुनिवेशी न.पा.	६, ७, ८, ९
		थाके	२, ८, ५, ४, ३	६	थाके गा.पा.	६, ७, ८
		भूमिस्थान	४, ६, ७, ८, ९		थाके गा.पा.	१, २
		वैरेनी	८, ९, ७		गल्छी गा.पा.	४, ६, ७
		पिडा	१, ३, २		गजुरी गा.पा.	५, ६
		गजुरी	१, २		गजुरी गा.पा.	१, २
		वेनिघाट	१, ९, ८, ७	२	वेनिघाट रोराङ्ग गा.पा.	३, ५
		धुसा	१, ३		वेनिघाट रोराङ्ग गा.पा.	७, ८
		जोगिमारा	८, ९, १, २		वेनिघाट रोराङ्ग गा.पा.	९, १०
३	चितवन	दारेचोक	९, १, २, ७, ३, ४	५	ईच्छाकामना गा.पा.	३, ५

प्रस्तावित सिस्नेखोला देखि धार्के खण्डमा पर्ने जिल्ला, नगरपालिका, गाविस र वडाहरुको विवरण

क्र.सं	जिल्ला	न.पा./गा.वि.स.	वडा नं		गाउँपालिका	नयाँ वडा
			सडक खण्डले छिचोल्ने	अप्रत्यक्ष प्रभावित		
१	काठमाडौं	चन्द्रागिरी न.पा.	३		चन्द्रागिरी न.पा.	२
२	धादिङ्ग	नौबिस	३, ४, २, १		धुनिवेशी न.पा.	६, ८, ९
		छत्रेदेउराली		१, ३	धुनिवेशी न.पा.	२
		जीवनपुर	९		धुनिवेशी न.पा.	५

प्रस्तावित विशालटार देखि फिस्लिङ्ग खण्डमा पर्ने जिल्ला, गाविस र वडाहरुको विवरण

क्र.सं	जिल्ला	न.पा./गा.वि.स.	वडा नं		गाउँपालिका	नयाँ वडा
			सडक खण्डले छिचोल्ने	अप्रत्यक्ष प्रभावित		
१	धादिङ्ग	वेनिघाट	८		वेनिघाट रोराङ्ग गा.पा.	५
२	गोरखा	घ्यालचोक	९, ५, ६	३	गण्डकी गा.पा.	७, ८
		भुम्लिचोक	८, ९, २, ४		गण्डकी गा.पा.	६
		ताङ्गिलचोक	९		गण्डकी गा.पा.	२
		दारेचोक	७		ईच्छाकामना गा.पा.	३

आयोजनाका प्रमुख विशेषताहरु

आयोजना	काठमाडौं (नागढुङ्गा)- नौबिसे-मुग्लिङ्ग
स्थान	
प्रदेश	प्रदेश ३



अंचल	वगमती, नारयणी र गोरखा
जिल्ला	काठमाण्डौ, धादिङ्ग, चितवन, र गोर्खा
सडक वर्गिकरण	
वर्ग	राजमार्ग
सडक लम्वाई	काठमाण्डौ-नौविसे-मुग्लीन सडक ९६ कि. मि. सिस्नेखोला-धाके सडक ११.२ कि. मि. वेनीघाट-फिसलिङ्ग सडक १५.३ कि. मि.
डिजाइन	
डिजाइन स्पिड(प्रति कि.मि.)	४० देखि १०० कि. मि. प्रति घण्टा
मध्यम चडाव	६ ५
उच्च चडाव	१० ५
सडकको चौडाई (मिटर)	७ मि.
सडकको कुल चौडाई(मिटर)	१२ मि.
सोल्डर (क्वयगमिभच)	२.५ मि.
माटो उत्खनन्	
उत्खनन्	५४१,७७० घन मि.
फिलिङ्ग	६८,४९४ घन मि.
फाल्ने माटो ढुङ्गा	३५४,९५७ घन मि.
आयोजनाको लागत	
कुल लागत नेरु.	२२,५१४,३६१,५२६.८७

विद्यमान वातावरणीय अवस्था

प्रस्तावित काठमाण्डौ(नागदुङ्गा)-नौविसे-मुग्लीन सडक र त्यसका अन्य नयाँ प्रस्ताव गरिएका सरेखणहरु काठमाण्डौ, धादिङ्ग, चितवन, र गोर्खा जिल्लाहरु छिचोल्दै अगाडी बढेको छ । यो नयाँ संरचना अन्तरगत प्रदेश नं ३ भित्र रहेको छ । भौगोलीकता अनुसार प्रस्तावित सबै सरेखणहरु मध्य पहाडी क्षेत्र अन्तरगतको भु-भागमा पर्दछ । समुन्द्र सतहवाट करिब १५०० मिटरको उचाईमा अवस्थित काठमाण्डौको नागदुङ्गावाट आयोजना सुरु भई करिब २६५ मिटरमा अवस्थित मुग्लिङमा आयोजनाको अन्त्य हुन्छ । यस आयोजना नागदुङ्गावाट कमस नौविसे हुँदै महेशखोला किनार र त्रिशुली नदीको किनार तय गर्दै अघि बढेको छ । साविकको राजमार्गको शुरुको खण्ड महेशखोलाको किनारा हुँदै गल्छि सम्म पुगे पछि त्रिशुली नदी किनारलाई पछ्याउँदै अघि बढेको छ । यसैगरि प्रस्तावितनयाँ सिस्नेखोला-धाके सडक खण्ड सिस्नेखोलाको किनारवाट सुरु भई धुनिखोला किनार हुँदै महेशखोलाको शुरुको खण्डमा यसको बायाँ किनार हुँदै अन्तिम खण्डतिर दाहिने किनार हुँदै धाकेमा पुगि पुनः साविककै पृथ्वि राजमार्ग संग जोडिन पुग्छ ।

आयोजना क्षेत्र र त्यसको १५० मीटर वरीपरीको भू- उपयोग

भू- उपयोग किसिम	काठमाण्डौ(नागदुङ्गा) मुग्लिन सडक खण्ड		सिस्ने खोला-धाके		विशालटार-फिस्लीङ्ग	
	हे.	%	हे.	%	हे.	%
कृषी जग्गा	१२२५.८५	४४.१	६७.२८	२०.९	७३.९६	१३.४
जंगल	१३०९.९	४७.२	११२.१५	३४.९	८१.२७	१४.७
भाँडी	२२.८१	०.८	३९.२७	१२.२	१४५.०३	२६.३
घाँसे जमिन	१२.८१	०.५	३१.२९	९.७	४१.६१	७.६
वस्ति क्षेत्र	१४०.०३	५.०	५७.२८	१७.८	६५.७४	११.९

वांझो जमिन	१४.६३	०.५	१४.१८	४.४	३२.०४	५.८
पानीका श्रोत	५२.०१	१.९	०	०	१११.३९	२०.२
जम्मा	२७७८.०४		३२९.४५		५५१.०४	

प्रस्तावित सडक आयोजना भित्र करिव ३६ वटा सामुदायिक वन, ८ वटा सरकारी वन तथा ८ वटा कवुलियती वनहरु पर्दछन् ।

हालको राजमार्गको अवस्थामा सुधार अत्यन्त आवश्यक रहेको छ । काठमाण्डौ देखि मुग्लीन सम्मको सडक अवस्था पनि एकैनासको पाईदैन । साविक राजमार्ग २ लेन स्तरको सडक हो जसमा उच्च चडावका साथै साँघुरा चोकहरु प्रशस्तै रहेका पाईन्छ । यस राजमार्गको सम्पूर्ण भाग कालोपत्र गरीएको छ । साविकको पृथ्वी राजमार्गमा ट्राफिक संकेत बत्तिहरुको प्रयाप्त व्यवस्था गरिएको पाईदैन । प्रमुख तथा मुख्य चोक तथा बजार क्षेत्रहरुमा समेत स्पष्ट ट्राफिक संकेत वा चिन्हहरुको व्यवस्था भएको पाईदैन । पदयात्रीहरुलाई वाटो/सडक पारगर्न कुनै किसिमको सरल माध्यमको व्यवस्था गरिएको पाईदैन । अधिकांश सडक खण्डमा सवारी गति-सीमालाई नियमित एवम् कडाई साथ लागू गरिएका विरलै भेटिन्छन् । केहि स्थानहरुमा छिटफुट सवारी संकेतहरु देख्न पाईन्छ । धेरै स्थानहरुमा सडकको उच्च चडाईलाई न्यून गर्नु पर्ने र कठिन सडक घुम्तिहरुको सुधार र शहरी क्षेत्रहरुमा उल्लेख्य सुधार गर्नु पर्ने देखिन्छ । कठिन सडक घुम्तिहरु एंव कम चौडा सडकका कारण साविक राजमार्ग खण्डमा सवारी दुर्घटनाको संख्यामा पनि उच्च नै रहेको पाईन्छ ।

आयोजना क्षेत्रको जनसंख्या अवस्था

- ४ जिल्लाहरु: काठमाण्डौ, धादिङ्ग, गोरखा र चितवन
- आयोजना जिल्लाको जनसंख्याको कुल जनसंख्या २,९३१,३५२ (७०९,१६३ घरहरु) केन्द्रीय तथ्याङ्क विभाग, २०६८
- जात/जनजाती वनोट: ब्राम्हण, क्षेत्री, दलित र अन्य आदिवासी समुहहरु (जनजाती) चेपाङ्ग/प्रजा, मगर, नेवार, तामाङ्ग, गुरुङ्ग, भुजेल/घर्ति
- धर्महरु: हिन्दु, बौद्ध, ईस्लाम, क्रिश्चियन, र किराँत
- आयोजना क्षेत्रको आधारभूत सर्भेक्षण सन् २०१७ अनुसार कुल घरसंख्या मध्ये अधिक ५९.७% (२३८७) घर ब्राम्हण/क्षेत्रीको रहेको, त्यसपछि कमस: जनजातीको ३१.१%(१२४२), दलितको २.७%(१०७), अन्य जातजातीको २.७%(१०६), चेपाङ्ग/प्रजाको २.१%(८३), मुस्लीमको ०.९%(३४), सन्यासीको ०.८%(३३), र मधेशीको ०.२%(६) घर रहेको देखिन्छ
- मुख्य पेशाहरु: ३५% कृषी, पशुपालन(वाखा,गाई,भौसी आदी), १८ % साना व्यापार, सेवा/विक्री र घरेलु उद्योग जन्य कार्य, १३ % कला संग सम्बन्धित, ७.३% व्यवसायिक, ०.८% श्रुक्षा दस्ता

दाङ्ग

सामाजिक तथा वातावरणीय प्रभाव :

सकारात्मक असर तथा प्रभावहरु

प्रस्तावको कार्यान्वयन तथा स्तरोन्नतिबाट ९६ कि.मि. लम्वाई रहेको यस काठमाडौं-तागढुङ्गा-नौबिसे-मुग्लिङ्ग सडककले सर्वसाधारणहरुको पहुँचमा सरलता, समयको बचत तथा सुरक्षित यात्रा प्रदान गर्दछ । आयोजनाले सामुदायिक वन तथा आयोजना क्षेत्र भित्र वृक्षारोपणका कार्यक्रमहरु पनि सञ्चालन गर्नेछन्; जसबाट हरियाली र प्राकृतिक सम्पदाको संरक्षणमा टेवा पुग्ने छ । आयोजना निर्माण अवधि भर दक्ष कामदार तथा अर्धदक्ष कामदारहरु यस आयोजनालाई समयमै निर्माण सम्पन्न गर्न आवश्यक पर्ने हुनाले प्रसस्त सडक निर्माण कामदारहरुको आवश्यकता पर्नेछ ।

त्यस्तै, पुर्वाधार विकास संगै यस क्षेत्रमा आन्तरिक तथा अन्तराष्ट्रिय पर्यटन वृद्धि हुने छ । साना तथा ठुला यातायातका साधनहरु पनि आवत जावतमा सुचारु हुनुका साथै छोटो समयमा धेरै आन्तरिक र बाह्य पर्यटकहरु यस क्षेत्रमा वृद्धिहुने छन् । नयाँ सडक खण्डको निर्माण र साविक खण्डको स्तरोन्नती कार्यले सुरक्षित यातायात सेवा संचालनका दृष्टिले पनि निकै सुधार आउने छन् । पुर्वाधार विकास संगै यस क्षेत्रको मात्र नभई अन्य वरपरका गा.पा तथा जिल्लाहरुको पनि विकासमा सहयोगी भुमिका पुग्ने देखिन्छ । पुर्वाधार विकास तथा वाटोको निर्माणले यस क्षेत्र हुदै आवत जावत गर्ने यात्री, पर्यटक, भक्तजनहरु पनि बड्नुका साथै

यस क्षेत्रको आर्थिक विकासमा पनि राम्रो टेवा पुग्ने देखिन्छ। साथै, पहिरो नियन्त्रण, नाली निर्माण, बाटोछेउ अवस्थित पुर्वाधारहरूको स्थानान्तरण जस्ता कार्यहरू पनि यस आयोजनाबाट हुने हुँदा वातावरण संरक्षणमा राम्रो टेवा पुग्दछ।

नकारात्मक असर तथा प्रभावहरू

प्रस्तावित परियोजनाको सुधार, स्तरोन्नति तथा कार्यन्वयनबाट वन क्षेत्रको क्षति, पहिरो र प्राकृतिक खोल्सी तथा खहरेहरूमा प्रत्यक्ष असर पर्ने देखिन्छ। सडक खन्ने कार्यबाट पहाडको भिरालो पट्टी बढी उत्खनन् गरेका माटोहरू तह लगाउने सम्भावना रहेको देखिन्छ भने त्यसो गर्नाले सडक निर्माण वा सञ्चालनको क्रममा जमिनको स्थिरतामा असर पर्न गई प्रस्तावित अन्य नयाँ राजमार्गहरूमा पहिरो जाने वा भू-क्षय हुने प्रबल सम्भावना देखिन्छ। जस्तै: सिस्नेखोला धार्के खण्ड अन्तर्गत निसाकोट सा. व. क्षेत्रमा निर्माणको समयमा पहिरोको जोखिमको सम्भावना रहन्छ। त्यस्तै: विशालटार-फिस्लीङ्ग खण्ड अन्तर्गत अन्तिम साढे पाँच कि. मी. प्रस्तावित राजमार्ग निर्माणको समयमा पहिरोको जोखिमको सम्भावना रहन्छ।

सडक खन्ने क्रममा सडक रेखाभित्र अथवा क्षेत्राधिकार भित्र सिस्नेखोला धार्के खण्डमा पर्ने करिब ४.२ हे. वन क्षेत्र असर हुने देखिन्छ भने विशालटार-फिसलिङ्ग नयाँ खण्डमा १५.६६ हे. वन प्रत्यक्ष रूपमा पर्दछन्। यस आयोजनाका सामुदायीक वन तथा अन्य वनका करिब ४६,०३४ वटा रुखहरू असर पर्ने देखिन्छ। रुखका मुख्य प्रजातिहरू मध्ये साल, खोटे सल्ला, खयर, सिसौ, चिलाउने, बोधधैर्यो, उत्तिस, साज, अस्ना, वकाइनो, खनायो, लप्सी आदीका रुखहरू आयोजना क्षेत्रमा पाइन्छ। आयोजना क्षेत्र भित्र कुनै प्रकारका संरक्षित क्षेत्र पर्दैनन् त्यसैले वन्यजन्तुमा यस आयोजनाले उल्लेख्यरूपमा कुनै असर पर्ने देखिदैन।

२५ मि. सडक अधिकार क्षेत्र भित्रको जग्गाको किसिम र यसको क्षेत्रफल

जग्गाको किसिम जग्गाका क्षेत्रफल (हेक्टरमा)	स्थायी अधिग्रहण			अस्थायी अधिग्रहण
	नयाँ सडक रेखा		हालको काठमाण्डौ (नागदुङ्गा) मुग्लिन सडक खण्ड अवस्था	
	सिस्ने खोला -धार्के	वेनीघाट- फिस्लीङ्ग		
निजी जग्गा				
	बस्ती	०	०.४१	२.२७
	कृषी जग्गा	४९.८९	३२.२४	१५६.७४
सरकारी जग्गा				
	जंगल क्षेत्र	१९.५९	२४.०७	५७.४३
	बाँझो जग्गा	०.०२	०.१	१४.१९
	घाँसे मैदान	०.९६	१३.८	४.५१
	भाडी जग्गा	०.०१	२.७२	०.६२
जम्मा जग्गा		७०.४७	७४.९४	२८६.७४
				१२ हे.

हालको काठमाण्डौ-नौविसे-मुग्लीन सडक खण्डको ५० मि. सडक अधिकार क्षेत्र (आर.वो.डब्लु) भित्र पर्ने संमरचना संख्या :

- सिस्नेखोला-धाके सडक खण्डको ५० मि. सडक अधिकार क्षेत्र (आर.वो.डब्लु) भित्र पर्ने निजि संरचनाहरूको संख्या : १३७
- वेनीघाट-फिसलिङ्ग सडक खण्डको ५० मि. सडक अधिकार क्षेत्र (आर.वो.डब्लु) भित्र पर्ने निजि संरचनाहरूको संख्या : ८२
- हालको काठमाण्डौ-नौविसे-मुग्लीन सडक खण्डका साथै पुलहरूको स्तरोन्नोती गर्दा सम्भावित असर पर्न सक्ने संरचनाहरूको संख्या: २३७
- सिस्नेखोला-धाके सडक खण्डको ५० मि. सडक अधिकार क्षेत्र (आर.वो.डब्लु) भित्र पर्ने सार्वजनिक संमरचनाहरूको संख्या : ४
- हालको काठमाण्डौ-नौविसे-मुग्लीन सडक खण्डका साथै पुलहरूको स्तरोन्नोती गर्दा सम्भावित असर पर्न सक्ने सार्वजनिक संरचनाहरूको संख्या: ६६

- सिस्नेखोला-धाके सडक खण्डमा ७४६ किता (४७ हे.) जग्गा प्रभावित हुने र
- बेनीघाट-फिसलिङ्ग सडक खण्डमा ५१८ किता (३२ हे.) जग्गा प्रभावित हुने
- हालको काठमाण्डौ-नौविसे-मुग्लीन सडक खण्डमा अवस्थित गोमती खोलामा नयाँ पुलका लागी १३ किता (०.३२ हे.) जग्गा प्रभावित हुने

प्रभाव न्यूनीकरणका उपायहरु :

प्रस्तावित काठमाण्डौ(नागदुङ्गा)-नौविसे-मुग्लीन सडकको सुधार, स्तरोन्नती तथा सञ्चालन गर्ने साथै प्रस्तावित अन्य नयाँ राजमार्गको निर्माणकार्यबाट आयोजना क्षेत्रको भौतिक, जैविक, सामाजिक तथा सांस्कृतिक वातावरणमा केही सकारात्मक तथा नकारात्मक असर पर्नुका साथै विद्यमान अवस्थामा केहि परिवर्तन हुने हुँदा त्यस्ता नकारात्मक असरहरुको पहिचान गरि तिनको प्रभाव न्यूनीकरण गर्नका लागि विभिन्न उपायहरु प्रस्तावित गरिएका छन् भने सकारात्मक प्रभावलाई हौसला प्रदान गरिने छ ।

सकारात्मक प्रभाव न्यूनीकरण

गरीब, अशिक्षित, महिला तथा निम्न वर्गलाई आयोजनामा सहभागी हुन हौसला तथा प्रोत्साहन गरिने छ । यस आयोजनाले उक्त क्षेत्रको वातावरणमा टेवा पुर्याउन वृक्षारोपणका कार्यक्रमहरु पनि गर्ने छन् । सडकको निर्माणको क्रममा सृजना हुने रोजगारीको अवसरहरु दक्ष तथा अदक्ष कामदारका लागी अवसर तथा सीप र साधनको प्रयोगबाट लाभ दिइने छ ।

नकारात्मक प्रभाव न्यूनीकरण

सडक खन्ने वा पुर्ने कार्यगर्दा सकेसम्म सन्तुलन राखी खनिएको माटो वा ढुङ्गाको अधिकतम प्रयोग गरि उन्निएका माटो ढुङ्गालाई उचित स्थानमा लगी विसर्जन गर्ने रणनीति अपनाइने छ । यस्ता ढुङ्गा माटो विसर्जनका लागि उचित स्थानहरुको चयन गरिएको छ र विसर्जन पछि उक्त क्षेत्र पुनः उपयोगमा आउने किसिमले अथवा रुख विरुवा र घाँस रोप्ने कार्य गरिने छ । आयोजनाको प्रयोगका लागि बनाईएका क्याम्पहरु आयोजनाको समाप्ती पश्चात पुनः सरसफाई गरी पहिलेकै हालतमा छाडिने छन् । प्रभावित रुखहरुको हकमा वन सम्बन्धी सरोकार कार्यालयबाट स्वीकृति लिई काटिने छन् भने काटिएका रुखहरु सोधभर्ना स्वरुप एक रुख बराबर पच्चीस बटा रुखका विरुवाहरु रोपिने प्रस्ताव गरिएको छ । नेपाल सरकारको प्रचलित नियम बमोजिम र स्थानीय निकाय, सामुदायिक वन उपभोक्ता समितिहरु र अन्य सरोकारवालाहरुको सहमतिमा वृक्षारोपण कार्य गरिने छ । भू-क्षय तथा पहिरो नियन्त्रणका उपायहरु अपनाई वृक्षारोपण तथा भीर पहरामा बायो-इन्जिनियरिङ्ग गरिने छ । निर्माण व्यवसायीले कामादार क्याम्पमा सफा तथा सुरक्षित पानीको व्यवस्था गरिने छ । निर्माण व्यवसायीले क्याम्पका सबै खाले सुरक्षा जस्तै; आगोलागि नियन्त्रणका उपायहरु, संचार साधन, विजुली तथा प्रारम्भीक उपचारका उपायहरु उपलब्ध गरिने छन् । सडक क्षेत्राधिकार भित्र रहेका प्रभावित अस्थायी घर-टहराहरु जग्गा प्राप्ती ऐन, २०३४ अन्तर्गत रही अधिकरण गर्ने कार्यगरिने छ ।

वातावरण व्यवस्थापन योजना :

यस वातावरणीय अध्ययनमा उल्लेखित सबै प्रभाव न्यूनीकरणका उपायहरु आयोजनाका विभिन्न चरणहरुमा कार्यान्वयन गरिने छन् । सडक निर्माण तथा सञ्चालनबाट पर्ने नकारात्मक असर तथा वातावरण व्यवस्थापन गर्न नेपाल सरकार तथा सडक विभागबाट प्रकाशित विभिन्न निर्देशिकाहरु समेत पालना गर्नेछन् । साथै, आयोजनाको विभिन्न चरणहरुमा चुस्त तथा प्रभावकारी अनुगमन भएमा उक्त सडक दिगो हुनका साथै स्थानीय सर्वसाधारणको राम्रो आर्थिक वृद्धि हुनेछन् । न्यूनीकरणका उपायहरु आयोजनाको टेन्डर डकुमेन्ट तथा अनुगमन कार्यहरुमा समावेश गरिनेछन् । निर्माण व्यवसायीले वातावरण मैत्री निर्माण गर्न यस वातावरण प्रभाव मुल्याङ्कन प्रतिवेदनमा उल्लेखित विभिन्न योजनाहरु बनाई कार्यान्वयनमा ल्याउनेछन् ।

पूररवास कार्य योजना

आयोजना प्रभावित क्षेत्र भित्र घरधुरी सर्भेक्षण मार्फत कमजोर पूररवास कार्य योजना र समुदाय विकास योजना तयार पारिएको छ ।



संकटाभिमूख समुदाय विकास योजना

- आयोजना प्रभावित क्षेत्र भित्र घरधुरी सर्भेक्षण मार्फत संकटाभिमूख समुदाय विकास योजना तयार पारिने
- प्रारम्भिक सर्भेक्षण अनुसार चेपाङ समुदाय संकटाभिमूख समुदायका रूपमा पहिचान गरिएको छ ।

आयोजना प्रभावित संकटाभिमूख घरपरिवारहरु

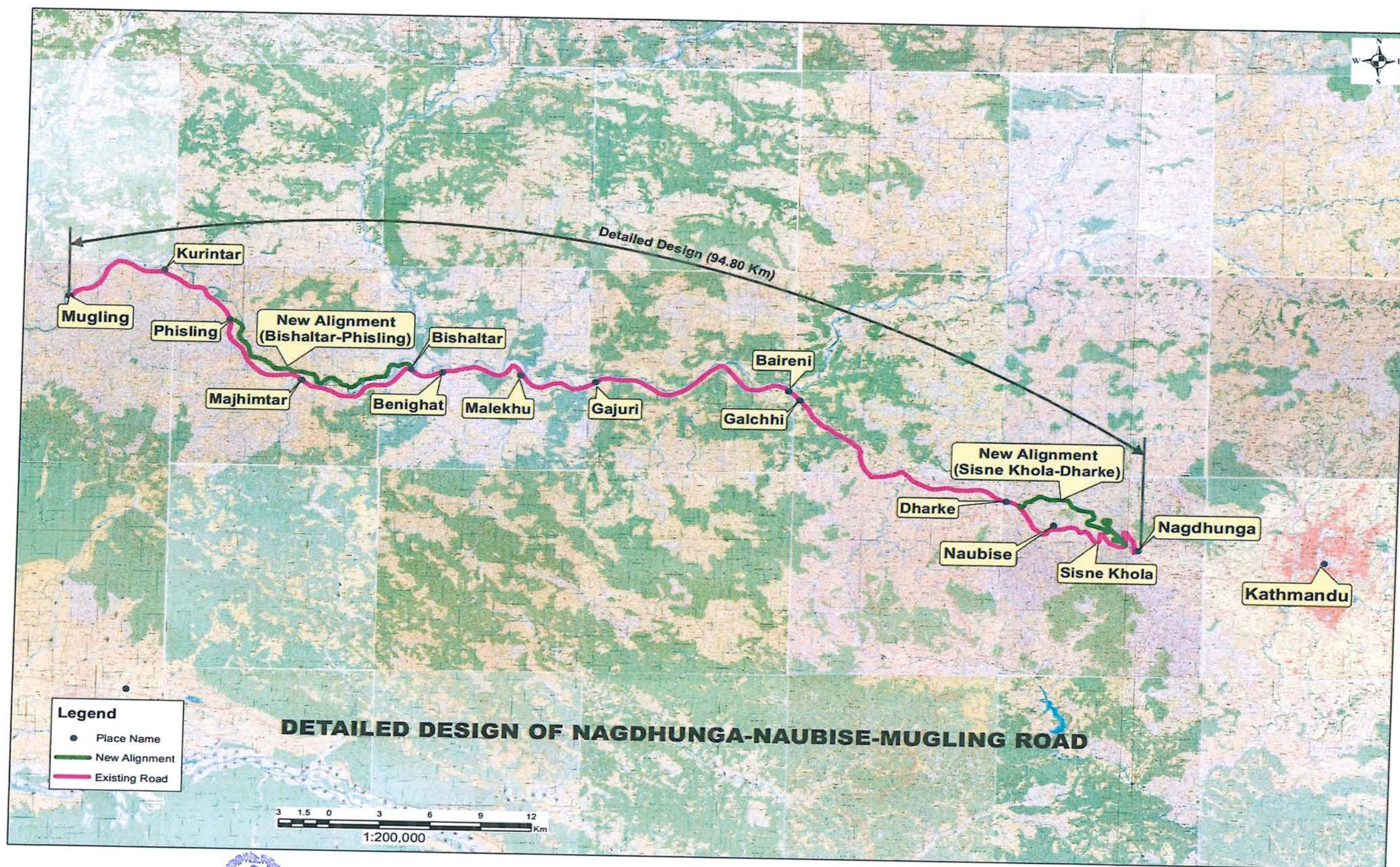
सडक खण्ड	दनुवार राई	चेपाङ	महिला मुल घरधुरी	जेष्ठ नागरिक सदस्य	दलित	जम्मा
नागदुङ्गा-नौविसे	०	०	२	०	०	२
नौविसे-मुग्लीङ्ग	०	६	१०	२	५	२३
सिस्ने-धाके	३६	०	५	६	७	५४
विसालटार-फिस्लीङ्ग	०	३१	१	४	२०	५६
जम्मा	३६	३७	१८	१२	३२	१३५

श्रोत: स्थलगत सर्भेक्षण, २०१७/२०१८

निष्कर्ष :

काठमाण्डौ(नागदुङ्गा)-नौविसे-मुग्लीङ्ग सडक राष्ट्रको आर्थिक विकासका साथै व्यापार तथा पारवहन क्षेत्रमा उल्लेख्य टेवा पुर्‍याउने विशिष्ट महत्व बोकेका एक मात्र राजमार्ग हो । यसको निर्माण र सञ्चालनबाट वातावरणमा पर्न सक्ने सबै खालका नकरात्मक असरहरुलाई न्यूनिकरण गर्दै सकारात्मक असरहरुलाई बढावा दिने प्रावधानहरु यस प्रतिवेदनमा उल्लेख गरिएको छ । यस सडकको सञ्चालनले यस क्षेत्रका बासिन्दा लगायत सबैलाई आवतजावत गर्न, मालसामान ढुवानी तथा निकासी पैठारी गर्न कम समय र खर्च लाग्ने साथै राष्ट्रकै आर्थिक, सामाजिक, सांस्कृतिक तथा पर्यटन विकासमा टेवा पुग्ने देखिन्छ ।





Annex 12: Supplementary Public Consultation



Nagdhunga-Mugling Road Section

आज मिति २०७५/०३/१२ मा धादिङ्ग जिल्ला धुलिखेली नगरपालिका वडा नं. ५ - चाले बथौवाली (७+३५०) मा नेपाल मातृ जेजिय ठपाया तथा चालायात आयोजना अन्तर्गत निर्माण हुने गडरुटको हावीजनिक शौचालयको पुर्भाव तथा उपयोचितता सम्बन्धि जानकारी सम्बन्धीन विशेषज्ञबाट अवगत गरि आ.डा. - नागधुङ्गा - चाले बथौवाली प्रस्तावित शौचालय निर्माणमा पुर्वाङ्कन सहयोग पुर्याउने इच्छापूर्वक हामी निम्न खरोक्कावेला व्याक्तिहरुको उपस्थितिमा लभमान वसोडोको हलफल र निर्णयहरु गरेका हौं ।

उपस्थिति :

क्र.सं.	नाम	हेजाना	हस्ताक्षर
१.	श्री साईला राई	डा. अध्यक्ष धुलिखेली-५	
२.	राम चन्द के.सी.	होम चन्द	
३.	रमेश कुमार के.सी.	अध्यक्ष (कोषी)	
४.	विमल बहादुर थापा	विमल थापा	
५.	हव. वा. रक्सी	हव. वा. २९३	
६.	सुन्दरीका पाण्डे	सुन्दरीका पाण्डे	
७.	जोवन के.सी.	जोवन	
८.	दिल्ली बा. रक्सी	दिल्ली बा.	
९.	सुमन के.सी.	सुमन के.सी.	
१०.			

निर्णयहरु :

- प्रस्तावित शौचालयको ठक्काको खर्चा स्थानिय समुदाय समक्ष प्रस्तुत तथा हलफल गरियो ।
- प्रस्तावित शौचालय यस स्थानमा निर्माण गर्ने उपयुक्त हुने राम स्थितिको निर्णय गरियो ।
- प्रस्तावित शौचालय लौकिक, आपाङ्ग, चाले मागे दुनुपरे
- शौचालय निर्माणमा स्थानियको पुर्ण सहयोग रहने छ ।

५) शौचालय निर्माण सम्पन्न भएपछि स्थानिय समुदायले
प्याक्ल्यापन तथा सञ्चालनको जिम्मेवारी कहन गर्ने निर्णय
गरियो ।

६) शौचालय निर्माण सँगै एउटा प्रतिस्नानशालाको पनि सम्पन्न
गरेर आवश्यकता भएकोले प्रतिस्नानशाला निर्माणको लागि
प्रस्ताव सहित माग गर्ने निर्णय गरियो ।

१. कृष्ण. बा. राई -
२. जिवन खत्री -
३. शर्मा सुनुवा -
४. कमला खत्री -
५. शिव उमा सुनुवा -
६. गीता खत्री -
७. जयराज थापा
८. आनन्दादा राय
१०. सार्वला तमङ -
११. नारायण बज्रा थापा -
१२. कान्छी लोहरी -
१३. प्रतिष्ठा पौडेल

संस्थापक
जिवन
शर्मा
कमला
शिव
गीता
जयराज
आनन्दादा
सार्वला
नारायण
कान्छी
प्रतिष्ठा

संस्थापक



आज्ञा मिति २०७२/०३/१२ गते धादिङ्ग जिल्ला धुनिवेशी तथा वडा नं. ८ खानिखोला मा नेपाल मातृ सैनिक व्यापार तथा मातायात आयोजना अन्तर्गत निर्माण हुने गडरहेको कठमाडौं, लोबिहरे-मुग्लिङ्ग, सडक निर्माणको खोलखिला मा सडक आयोजनाले सडक निर्माणको सम्बन्धमा ह्यान्डिय लभु हाथ तथा सडक प्रयोगकर्ताहरूको आवेदनलाई ह्यान्ड राखि पैदलयात्री आवासीय पुल निर्माण गरिने सम्बन्धित निरीक्षणका लागि जानकारी अद्यावत भई प्रस्तावित पैदलयात्री आवासीय पुल निर्माणमा सहयोग पुर्याउने उद्देश्यले हामी निम्न श्रेणीका वाला व्यक्तिहरूको उपस्थितिमा तपोरिण वसतिगृहको सफल र निर्माण हुने गरिनेछ।

उपस्थितः

क्र.सं.	नाम	ठेगाना	पेशा	कक्ष/वत
१.	सुरेश आचार्य	धुलिखेल		
२.	प्रकाश राज रिमाल	धु.न.पा. ८	डा.प्रकाश	
३.	शम्भु रिमाल	धु.न.पा. ८	कुषी	
४.	केशव प्र. पाण्डे	" "	८	कुषी
५.	प्रबोध कार्की	" "	८	समाजसेवी
६.	राम कुमार गिरी	" "	८	समाजसेवी
७.	राज कुमार कार्की	" "	८	"
८.	राम कुमार कुँवर	" "	८	कुषी राम कुमार
९.	रामेश्वर खपाखेती	" "	८	समाजसेवी
१०.	राज कुमार पाठक	" "	८	"
११.	रामचन्द्र कार्की	" "	८	" रामचन्द्र
१२.	प्रदीप कुँवर पाँखरेल	३-९-६, खानिखोला		
१३.	अनिला पाण्डे	धुलिखेल नं. ८-८ कर्मचारी		
१४.	अनिला भण्डारी	"		
१५.	बाबु प्रसाद कुँशी	"	वडा हाम्रो	
१६.	विमल पाण्डे			

निर्णयहरू :-

- १) प्रस्तावित पैदलयात्री आकाश पुलको लम्बाइको रवाको सम्बन्धमा स्थानिय समुदाय समक्ष प्रस्तुत तथा कलकल गरियो ।
- २) प्रस्तावित पैदलयात्री आकाश पुलको अपाङ्ग मैत्रि समेत भएको जातकारो फालत भयो ।
- ३) प्रस्तावित पैदलयात्री आकाश पुल यस स्थानमा निर्माण गर्न उपयुक्त हुने राय सहितको निर्णय गरियो ।
- ४) पैदलयात्री आकाश पुल निर्माणमा स्थानिय वासिन्दा तथा सहोकावानाहरुको पूर्ण सहयोग तथा समर्थन रहने निर्णय गरियो ।
- ५) कजालेको विस्तार अध्ययनत्व बढ्दै गएको हुँदा विद्यार्थीको पढाईमा गीको साथै कजालेको अनुसन्धान दिन बढ्दै गएकोले सम्मत भएर सम्म ५२०२१ पुल निर्माण गर्न प्रस्ताव सहित अनुसन्धको लागि निर्णय गरियो ।

(Handwritten signatures and marks)

आज प्रति वर्ष लाख २ मलिन १२ गते धुतिवेसी
 लगाएलाकि। वडा नं. ६ धर्ति वडाको कछमाडा लगाइने
 मुजिन सडक खण्ड अन्तर्गत नेपाल भात नैमिय व्यापा
 तथा ३ मातापत आयोजनाले स्थानिय वासिन्दा तथा
 हरोडावाला समक्ष सामाजिक विज्ञको उपस्थितिमा पैदल
 यात्रुको समस्यालाई कुनै सडक आयोजनाले भए स्थान
 आकाश पुल निर्माण गरिने सम्बन्धमा स्थानिय वासिन्दा
 रैग सम्बन्धित विज्ञान जानका तथा हलफलका प्रस्ताव
 एवं निर्माणमा सहभागिहु तपश्चल कमजिम रहयो।

कमजिमः -

क्र.सं.	नाम	पद	ठेगाना	हस्ताक्षर
१.	राजु प्रो रेग्मी		धु.नं. ६	रेग्मी
२.	सिद्ध ज्ञान कोराला	का.उ.ना.सं. ५		सिद्ध
३.	कृष्ण भुजेल	धु.नं. ४		कृष्ण
४.	सुशान्त रेग्मी	"		सुशान्त
५.	मिश्रले ओठ	"		मिश्रले
६.	प्रमोद नेपाल	"		प्रमोद
७.	सुबोध रेग्मी	"		सुबोध
८.	हरिप्रसाद आचार्य	विज्ञक थपु - ९		हरिप्रसाद
९.	नन्दु प्रकाश के.सि.	विज्ञक थपु, ८		नन्दुप्रकाश
१०.	राजेश्वर शर्मा	धु.नं. - ९		राजेश्वर
११.	मदन भुजेल	धु.नं. ९		मदन
१२.	कृष्ण सुमन हमाल	सा.सं. ८		कृष्ण
१३.	अणवत नेपाल	धु.नं.पा. ६		अणवत
१४.	रजराज रेग्मी	धु.नं.पा. ६		रजराज

निर्माणः -

- १) प्रस्तावित पैदलयात्रि आकाश पुलको लम्बाईको हाना स्थानिय समक्ष प्रस्तुत तथा हलफल गरियो।
- २) निर्माण हुने आकाश पुल अगाडू मैत्रि हुने जानकारे प्राप्त भयो।
- ३) आकाश पुल निर्माणमा स्थानियको पुर्ण समर्थन रहने छ।
- ४) यल समानमा पैदलयात्री आकाश पुल कार्यमा आवश्यकता रहेको राय प्रस्तुत गरियो।

सिद्ध

सुशान्त

आजमिति २०७२/०५/०९ गते ० थाके गाउँपालिका वडा नं. ६
महादेववैसी (१०+६८०) मा नेपालभात नैजिय व्यापार तथा बसयात
आयोजना अन्तर्गत काठमाडौं - नारायणी बसिने मुग्लिन लडकबन्ड
अन्तर्गत प्रस्तावित, पैदलयात्री आकाश पुल (Foot-over
Bride) लडक निर्माणको सम्पन्मा निर्माण हुने विषयमा
सामाजिक विशेषज्ञबाट अकाल गरी तयारीले वसतिमन्त्र,
लल्लाह, सुभाष, निर्णय (उपाधित) रद्दमा ।

उपस्थितः:-

क्र.सं.	नाम	पद	स्थान	हस्ताक्षर
१.	पूर्व महादु (काँकी)	वडा अध्यक्ष	थाके गा. पा. महादेववैसी	५/५
२.	रामचन्द्र उपाले	शिफ्ट एड-ए.अ.	जबजागृति मा.वि.	
३.	इन्द्र व. थापा	लल्लाहाका मन्त्री	व्यावसायिक महादेववैसी	
४.	मोहन लामा	व्यावसायी	थाके-६	
५.	दिपक लामा लामा	सहायक एड-ए.अ.	धुवन्तव	
६.	राम कुमार लामा	व्यावसायी		
७.	अरुण लामा	विद्यार्थी	महादेववैसी	
८.	देव वि. लामा		महादेववैसी	
९.	डीन लामा		थाके-६ महादेववैसी	
१०.	दिपिका मोक्तान			दिपिका
११.	कुमार विष्णु	सहायक, थाके	गाउँ कार्यपालिका	
१२.	सुभाष लामा			
१३.	बिलाद लामा	व्यावसायी	थाके गा. पा.	

निर्णयः:-

- १) प्रस्तावित पैदलयात्री आकाश पुलको खाका सम्बन्धमा स्थापित
समुदाय समित प्रस्तुत तथा हुनहुन गरियो ।
- २) प्रस्तावित पैदलयात्री आकाश पुलको अपाङ्गता भएका जानकारी प्राप्त भयो
- ३) प्रस्तावित पैदलयात्री आकाश पुल चलस्थानमा निर्माण गर्ने उपयुक्त
हुने (यस सहितको निर्माण गरियो ।
- ४) पैदलयात्री आकाश पुल निर्माणमा स्थापित कानिन्दा तथा सरोकार-
वालाहरूको पूर्ण सहयोग तथा सहर्त रहेको निर्णय गरियो ।

५/५ ५/५ ५/५ ५/५

आज मिति २०७२।१२।१९ गते धादिङ्ग जिल्ला थाक् गाउँपालिका वडा नं. २ स्थिते बजारमा नेपाल भारत मैत्रीय व्यापार तथा यातायात आयोजना अन्तर्गत काठमाडौं-नेपालगन्ज रूटमा मुक्ति लड्कु खण्ड अन्तर्गत पेंदलघाटको हास्रघातलाई स्थानीय आयोजनाले सामाजिक विरोधको उपस्थितिमा स्थानिय समुदायलाई प्रस्तावित आकाश पुलको उपयोगिता प्रत्येक तथा लाका लागू गर्न जानकारी गराई नपुगिन वमोजिम, सन्तुष्ट सुभाव, निर्माण र उपस्थिति गरियो।

उपस्थिति :-

क्र.सं.	नाम	पद	ठेगाना	हस्ताक्षर
१.	बिवेक शर्म	व्यवसाय	थाक्-२	<i>[Signature]</i>
२.	दिपेश लामा	व्यवसाय	थाक्-२	<i>[Signature]</i>
३.	प्रकाश नेपाल	स्थानीय	थाक्-२	<i>[Signature]</i>
४.	कान्छा लामा	स्थानीय	थाक्-२	<i>[Signature]</i>
५.	हरिचन्द्र शर्मा	व्यवसाय	थाक्-२	<i>[Signature]</i>
६.	नारायण थापा	"	" - २	<i>[Signature]</i>
७.	शत्रु थापा	"	- २	<i>[Signature]</i>
८.	लक्ष्मी धर्मा	-	- १	लक्ष्मी
९.	गुणराज शर्मा	"	- २	गुणराज
१०.	राज शर्मा	स्थानीय	थाक्-२	<i>[Signature]</i>
११.	बलराम लामा	स्थानीय	- २	बलराम
१२.	साईली थापा	"	- १	साईली

निर्णयः

- १) प्रस्तावित पेंदलघाट आकाश पुलको लाका तथा जानकारी सामाजिक विरोधबाट जानकारी प्राप्त गर्नु।
- २) प्रस्तावित आकाश पुल अपाङ्ग मैत्रीपूर्ण भन्ने जानकारी प्राप्त गर्नु।
- ३) प्रस्तावित आकाश पुल निर्माण गर्ने पक्ष स्थानीय उपयुक्त हुनेछ।
- ४) प्रस्तावित आकाश पुल निर्माण भएपश्चात् रैचाह तथा व्यवस्थापन स्थानिय समुदायले गर्ने निर्णय गरियो।
- ५) आकाश पुल निर्माणमा स्थानिय बाहिरको पूरन सहयोग रहनेछ।

[Signature] *[Signature]* *[Signature]*

आज मिति २०७५/११/१३ गते धादिङ्ग जिल्ला बाजे गाउँपालिका वडा नं. १ एम्लेफाँटमा (१५+८७५) त्रैपाल भ्रातृ नेत्रिय व्यापार तथा घालघात आयोजना अन्तर्गत निर्माण हुत गइरहेको काठमाडौं-नेर्किले-मुग्लिङ सडक निर्माणको शिलशिलामा सडक आयोजनाले सडक निर्माणको समयमा स्थानिय समुदाय तथा सडक प्रयोगकर्ताहरुको सुविधाका लागि स्थानिय होटल तथा निम्न गुणवत्ती सम्पन्न विभिन्न वाट जानकारी प्राप्त भई प्रस्तावित योजनाय निर्माणमा सहयोग पुर्याउने उद्देश्यले हामी निम्न लक्ष्यका लागि उद्घोषित गरिने तपश्चिन्त कम्पोजिगका कलफल र निर्णयहरु गरेका हौं।

उपस्थिति :

क्र.सं.	नाम	पद	ठेगाना	हस्ताक्षर
१.	गोत्रा सुवेदी	सदस्य डिप्टी चैतन्य	एम्लेफाँट	गोत्रा
२.	वैदव थापा	स्थानिय	थाके-१ एम्लेफाँट	वैदव
३.	शिव व. खत्री	चान्दु	"	"
४.	वचन थापा	स्थानिय	"	"
५.	सुवेदी	होटल व्यावसायी	"	"
६.	पवित्रा थापा	सुवेदी	"	"
७.	लक्ष्मी खत्री	व्यावसायी	"	"
८.	इली मेया थापा	गृहणी	"	"
९.	शान्ति थापा	"	"	"
१०.	शिव व. थापा	स्थानिय	"	"
११.	गोविन्द प्रसाद सुवेदी	"	थाके-१ एम्लेफाँट	गोविन्द
१२.	दिनेश खत्री	व्यावसायी	"	"
१३.	निर्गमण सुवेदी	स्थानिय	"	"

- प्रस्तावित योजनाय समन्धि खाका, मापिङ मिति तथा उपस्थित वारै सामाजिक विमोक्षवाट जानकारी प्राप्त भयो।
- प्रस्तावित योजनाय यस स्थानमा निर्माण गर्न यस स्थानमा उपयुक्त हुने रण्य सहितको निर्णय गरियो।
- योजनाय निर्माणमा स्थानियको एन सहचर रहने र निर्माण पश्चात सम्पूर्ण व्यावस्थापन स्थानियले गर्ने र निर्णय गरियो।

गोत्रा सुवेदी, वैदव थापा, शिव व. खत्री, वचन थापा, सुवेदी, पवित्रा थापा, लक्ष्मी खत्री, इली मेया थापा, शान्ति थापा, शिव व. थापा, गोविन्द प्रसाद सुवेदी, दिनेश खत्री, निर्गमण सुवेदी

अज्ञाति २०७५/७६ जति धादिङ्ग जिल्ला गल्दी गाउँपालिका
 वडा नं. ६ कैटनी वडा (२३+६५०) मा नेपाल मातृ सन्धि
 व्यापार तथा घातघात आपाजनी अन्तगत काठमाडौं-नेपाल
 नाविकी मुलिन सडक सडक निर्माणको शिलशिलामा स्थानिय
 सरकावाला तथा पदल पाकिडो हाविथालाई ध्यानमा
 राखि पदल घाति आकाश पुन निर्माण सडक निर्माण को
 निर्माण हुने कुरा सामाजिक विरोधक जालडारी अन्तगत
 गराई तथा शिल बमोडिमका राय लुकाव सल्लाह ललिका
 निर्माण ए उपस्थिति रहेथो ।

उपस्थिति :

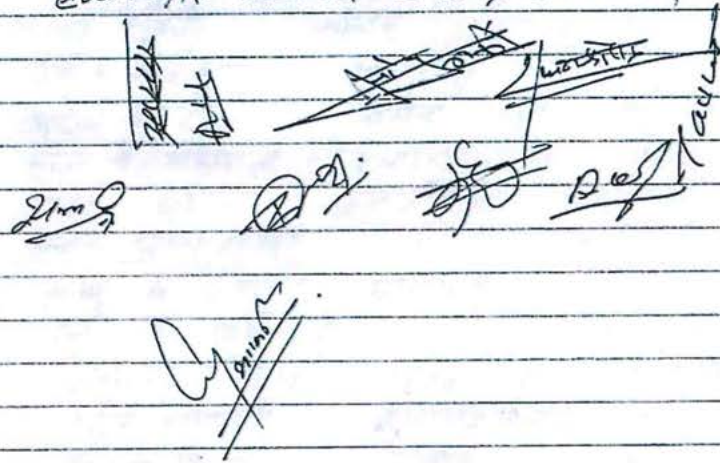
क्र.सं.	नाम	पद	ठेगाना	हस्ताक्षर
१.	राजमोह	गल्दी गाउँपालिका	गल्दी गा.पा. ६	राजमोह
२.	सुभाष (आधिकारी)	वडा अध्यक्ष	" "	सुभाष
३.	महोदय लामा	वडा सदस्य	" "	महोदय
४.	नवलपन रिमाल		" "	नवलपन
५.	श्री कृष्ण रिमाल		" "	श्री कृष्ण
६.	दिपक कुमार कार्की		गल्दी-६ कैटनी	दिपक
७.	शम्भु प्र. खतिवडा		" "	शम्भु
८.	सुरज लामा		" "	सुरज
९.	३१९ लामा		" "	३१९
१०.	बिना खेड		" "	बिना
११.	लक्ष्मी गण्डारी		" "	लक्ष्मी
१२.	सोमेश्वर अम्बर		" "	सोमेश्वर
१३.	बैजु कु. पाण्डे		" "	बैजु
१४.	बिना लामा		" "	बिना
१५.	प्रतिमा गण्डारी		" "	प्रतिमा
१६.	सुमित्रा भण्डारी		" "	सुमित्रा
१७.	कल्पना रिमाल		" "	कल्पना
१८.	अक्षिता गिरी		" "	अक्षिता
१९.	सारदा विडारी		" "	सारदा
२०.	अम्बरिका खिल्ली		" "	अम्बरिका
२१.	मुना काडी		" "	मुना

२१. अपरा घाट
२३. राममा पाण्डे
२४. अष्टा के.ली.
२२. अमली कारावती
२६. कमला मोडारी

~~अष्टा~~
अ.म.
अ.
~~अमली~~
कमला मोडारी

निर्णयः :-

- १) प्रस्तावित आकाशे पुल सम्बन्धित नक्साको खाका तथा प्रस्तावित कार्यमा सम्बन्धित विरोधकर्ता ज्ञातको प्राप्त भयो।
- २) यस स्थानमा आकाशे पुलको निर्माण अत्यावश्यक भएको राय सहितको निर्णय गरियो।
- ३) प्रस्तावित आकाशे पुल निर्माणमा स्वास्थ्यिय लभु दासको समेत सहयोग रहने छ।
- ४) परियोजना-निर्माण गर्ने गठबन्धनको खाका जति प्रस्तुत भएतापनि तथा लोकालाई ध्यातमा राखी थप एक आकाशे पुलको आवश्यकतालाई पूर्वाग्रह जोडेर भन्दा रहने निर्णय गरियो।
- ५) प्रस्तावित आकाशे पुल अपाङ्ग प्रैङ्ग हुने ज्ञातको सम्बन्धित विरोधकर्ता छ प्राप्त भयो।



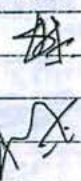
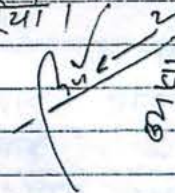
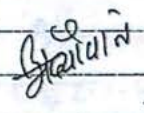
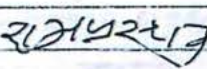
आज मिति २०७५/११/१४ गते गजुरी गाउँपालिका वडा नं. ५
 धार्चुलेली (३५५०००) नेपाल भारत क्षेत्रिय व्यापार तथा यातायात
 आयोजना अन्तर्गत काठमाडौं नगरपालिका मुलिन नगरक खण्ड निर्माण
 को शिलशिलामा-स्थानिय समुदाय तथा लोडा (वातावरण केही)
 सहिष्णु उपलब्ध गराउने विषयमा सार्कजनिय बर्गीयलय निर्माण
 गर्ने प्रस्ताव तथा जानकारी सम्बन्धित विशेषज्ञबाट समीक्षा
 अन्तर्गत गराई तयारिल योजनिका शय सुझाव सम्बन्धित निर्णय
 (उपस्थिति रहेको)

उपस्थिति:-

क्र.सं.	नाम	पद	हेतु	हस्ताक्षर
१.	राम प्र. सुवेदी	अध्यक्ष वडा उपमहोत्ता	गजुरी गा.पा. ५ धार्चुलेली	
२.	पुष्पा सुवेदी	स्थानिय	"	२०७५/११/१४
३.	प्रदीप राइला	चलक	"	
४.	सुजता ठकाल	अध्यक्ष आमा समुह	"	
५.	निर्देशा ध्यापान	व्यावसाय	"	
६.	सुज आले ग्या	विद्यार्थी	"	
७.	अनिल भण्डारी	व्यावसाय	"	
८.	विमल अधिकारी	व्यावसाय	"	
९.	गोबिन्दी प्र. ध्यापान	स्थानिय	"	
१०.	माधव सुवेदी	चलक	"	२०७५
११.	अनिल अधिकारी	व्यावसाय	"	
१२.	अनिल गिरी	चलक	"	
१३.	हस्त व. पडुवाल	स्थानिय	"	
१४.	राजत खलिकडा	समाजसेवी	"	
१५.	जनक कुमार सुवेदी	"	"	
१६.	कुशी व. भण्डारी	स्थानिय	"	
१७.	कुशी व. अधिकारी	"	"	
१८.	रामचन्द्र मिजार	अध्यक्ष वडा नं. ५ गजुरी गा.पा.		
१९.	अर्जुन ध्यापान	स्थानिय चलक	"	
२०.	लाल क. वि. उ.	चलक	"	
२१.	श्वानी प्र. अधिकारी	स्थानिय	"	
२२.	पुजा अधिकारी	विद्यार्थी	"	
२३.	रमेश आले	स्थानिय	"	

निर्णयहरू :-

- १) प्रस्तावित सार्वजनिक सौचालयको तक्ताको खाँडा र प्रकृति को विरोधबाट स्थानियलाई अवगत गराइयो ।
- २) यस स्थानमा सार्वजनिक सौचालय अत्यावश्यक रहेको कुरा अवगत भई निर्माणका लागि जोडदा प्रयास गर्ने गरियो निर्णय गरियो ।
- ३) प्रस्तावित सार्वजनिक सौचालय निर्माण तथा व्यावसायिक पत्रमा स्थानिय समुदायका पुरुष सहयोग रहने छ ।
- ४) प्रस्तावित सौचालय अपाङ्ग, मडिङ्ग, बालमैत्रि हुनुपर्ने निर्णय गरियो ।

उपस्थिति:

निर्णय है :-

- प्रवर्तनी काशी सादर शर्म

आज्ञा मिति २०७२।३।१४ गते धादिङ्ग जिल्ला गजुरी गाउँपालिका वडा नं. १ गजुरी माथिल्लो बजार रोड (३७+६००) मा बिपन्न मातृ हेतुमि व्यापार तथा सडक आयोजना अन्तर्गत काठमाडौं बागडुंगा मौकिले मुग्लिन सडक बन्ने निर्माणको शिलान्यास गर्ने कार्यक्रम कार्यान्वयन गर्दै पुर्वोक्त पुन्यउत्ते पुर्वोक्त आकस्मिक रेलनिर्माण गर्न गैरहेको कुरा सामाजिक जिम्मेवारीबाट अवगत गराई तपस्विता उपस्थिति, धुमधाम, सल्लाह र निर्णय गरियो ।

उपस्थिति :-

क्र.सं.	नाम	पद	हेताता	हस्ताक्षर
१)	राजकुमार पण्डित	वडाध्यक्ष गजुरी	उपस्थित	
२)	द्विप खरेल	"	"	
३)	प्रकाशकुमार खरेल	"	"	
४)	राजु अधिकारी	"	"	
५)	द्विप खरेल	"	"	
६)	इन्द्रजी थापा	वडाध्यक्ष	"	
७)	दुर्दिना प्रसाद खरेल	"	"	
८)	सुधित खरेल	"	"	
९)	सुन्दरी रिजाल	"	"	
१०)	मालिका खरेल	"	"	
११)	गोपबन्धु भण्डारी	"	"	
१२)	रजिन्द्र प्र. भण्डारी	"	"	
१३)	रामचन्द्र खरेल	"	"	
१४)	चेलना प्रसाद अधिकारी	"	"	
१५)	डा. विपिन पाण्डे	विद्यार्थी	"	
१६)	अमन आचार्य	"	"	
१७)	प्राकाश भुजेल	"	"	
१८)	जिवन खरेल	"	"	
१९)	केशव राय न्यौपाने	स्थानीय	"	
२०)	हर्नाल उग्र	"	"	
२१)	विष्णुमान पाण्डे	"	"	
२२)	विष्णु राना भण्डारी	"	"	
२३)	डार्जिल प्रसाद	स्थानीय	"	
२४)	सुशिल सुब्बा	"	"	

२५/	नरेश	दिमि	नरेश
२६	उदय श्रेष्ठ		सुपुर्वा
२७	दिगम्बर श्रेष्ठ		BRB
२८	मिन लाल श्रेष्ठ		BRB
२९	सुमित कंठ		BRB
३०	मल कुमारी अधिकारी		BRB
३१	मल कुमारी अधिकारी		BRB

निर्माण :

- १) प्रस्तावित आकारको पुलको लम्बाईको लाका तथा अपाङ्ग मैजिङ्गको विषयमा सम्बन्धित विशेषज्ञबाट जानकारी प्राप्त भयो।
- २) यस योजनाको आकारको पुल निर्माण अत्यावश्यक रहेको, त्यसैसँग निर्माण गरियो।
- ३) प्रस्तावित आकारको पुल निर्माणमा स्थानीयको पूर्ण उपमा लागेको तथा सहयोग गर्ने निर्माण गरियो।

सुपुर्वा
BRB
BRB
BRB

BRB

अज्ञाति २०७५/३१५ गते धादिङ्ग जिल्ला गजुरी गाउँपालिका वडा नं. १ (३७+५०) इन्फ्रस्ट्रक्चर नजिक नेपाल भारत सीमा पार तथा यातायात आयोजना अन्तर्गत काठमाडौं-लुम्बिनी भूजल सडक खण्ड छ पुर्वा गते क्रममा स्थानिय तथा पैदल यात्रिका सुविधाका लागि हयलमा एखि पैदल यात्रि आबारी पुल निर्माण गर्ने प्रस्ताव सम्बन्धमा सामाजिक विशेषज्ञबाट अज्ञात गाउँ लक्षित वडा निर्माता उपस्थित हुनफल, पुर्वा निर्माण गरियो ।

उपस्थिति :-

क्र.सं.	नाम	पद	हेगाबा	हस्ताक्षर
१.	आमिष लाम	व्यावसायी	गजुरी - १ तहसीला	
२.	दिनेश डहलकुटी	"	"	
३.	योग प्र. न्योपान	"	"	
४.	सन्जय शीठ	"	"	
५.	अमर शीठ	"	"	
६.	रिक्तामाया खिलवाल	"	"	रिक्तामाया
७.	सुन वहादुर तामाङ	"	"	
८.	सन्तोष रिजाल	वडा सदस्य	"	
९.	शुभ उद्रेति	वडा सदस्य	"	
१०.	गोपिका शीठ	गजुरी गाउँपालिका निर्माता		
११.	राजेश विक्रम बस्नेत	प्रमुख गजुरी गाउँपालिका	गजुरी	
१२.	मोहन न्योपान	व्यावसायी	गजुरी गा.पा. वडा नं. १	
१३.	गोमा पण्डित	"	"	गोमा
१४.	सन्तोष खतिवडा	"	"	सन्तोष
१५.	काजी मिया	"	"	

निर्माण :-

- १) प्रस्तावित आ पैदलयात्रि आबारी पुलको लम्बाई, खाका तथा आयुक्तले निर्माण विधि प्रकृति, वरिमा सम्बन्धित विशेषज्ञबाट जानकारी प्राप्त गर्दा ।
- २) आबारी पुल निर्माण अवस्थामा रहेको निर्माणमा स्थानियको र्शनी सहयोग हुनेछ ।
- ३) आवश्यक पर्ने आवश्यकतापनमा पनि र्शनी सहयोग रहेनेछ ।

(Signatures)

उज्ज्वलचरित्र :-

निर्णयः :-

- 1) प्रस्तावित आकाश पुनर्गठन तथा अपाङ्ग मैत्रिजाल प्रकृति के
वर्तमान समन्वित विश्व जगत् जानकारी प्राप्त प्रयोग।
2) यह ध्यानमा आकाश पुनर्गठन उत्प्राप्ति के रहस्योद्घाटन एवं
समर्थन है जो जानकारी सहित निर्माण है।
3) व्यावहारिक तथा हस्तोन्मुखता, पूर्ण सहयोग रहने है।

अजमिति २०७२/७३/१५ जते धादि, जिल्ला वैनिबाट रीराङ्ग गाउँपालिका वडा नं. ३ मलेखु-३ (४४+३२०) मा नेपाल भारत मैत्रीय-छापा तथा यातायात आयोजना अन्तर्गत काठमाडौं नगरपालिका मुख्यालय मुग्लिङ हाइवे ६०९ विमोचन स्थित स्थितिमा स्थापित काठमाडौं नगरपालिका मुख्यालय मुग्लिङ हाइवे ६०९ विमोचन स्थित स्थितिमा स्थापित आयोजनाले निर्माण गर्ने गरेको रहेको कुरा अमोजिड विशेषज्ञबाट प्रकृत गराई हामी उपजिल्ला नगरपालिका व्यापार विकास उपविभाग, राप्ती, लुम्बिनी, सल्यान र तिर्था गरी ।

उपस्थिति :-

क्र.सं.	नाम	पद	हेतुना	स्थिति
१.	तन्त्राजि त्रिपाठी	प्रमुख	मलेखु	न-५२५
२.	अमर त्रिपाठी	आवसायी	"	"
३.	विष्णु त्रिपाठी	"	"	"
४.	निराज चन्द रावल	हस्ताक्षर	९८५१०२५८०२	मलेखु
५.	कृष्ण पाल	"	मलेखु	"
६.	प्रदीप पन्त	निर्माण आवसायी	वेतिहा-३ मलेखु	"
७.	सुमित्रा खिलवाल	आवसायी	"	"
८.	दिनेश पन्त	"	"	"
९.	धन बाल	"	"	"
१०.	देवराज त्रिपाठी	"	"	"
११.	सविता खिलवाल	"	"	"
१२.	ज्योतिराया बज्रा	"	"	"
१३.	ब्रजराया थापा बज्रा	"	"	"
१४.	इन्द्र ज्ञानवाल	"	"	"
१५.	गणेश बज्रा	"	"	"

निर्णयः :-

- १) प्रस्तावित आकार, मूल्य, तस्मा तथा प्रकृतिवारे विशेषज्ञबाट स्वीकृत गरी जाँच गरी ।
- २) मलेखु-३ अन्तर्गत वडा नं. ३ को क्षेत्रमा रहेको आकारको क्षेत्रमा आवश्यकता पर्ने स्थानमा राखि निर्माण गर्न जाँच गरी ।
- ३) प्रस्तावित मूल्य निर्माणमा स्वीकृत गर्ने साथ र सहयोग गर्ने ।

ज्योती

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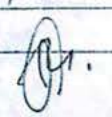
आज मिति २०७२/११/१५ गते धादिङ्ग जिल्ला चैतीछाट रोड, गाउँपालिका वडा नं. ३ मलेखु पेट्रोलपम्प (४४+६००) मानेपार भएर दक्षिण व्यापार तथा यातायात आयोजनाले काठमाडौं नागदुङ्गा लौकिले मुग्लिन एड्ड एण्डेडो निर्माण तथा लुट्याको काममा एथानिय बालिगदा तथा चैत्यथाउँको लुट्यालई व्यातमा राखि सामाजिक बिशेषज्ञबाट बिषयवस्तुको जानकारी गराई तपश्चिल नमोजिमका उपस्थितिमा मुख्य एड्डेड र निर्माण गरियो।

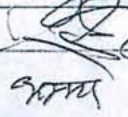
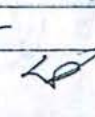
उपस्थिति :-

क्र. सं.	नाम	पद/पेशा	ठेगाना	हस्ताक्षर
१	मान व. मगा	किलान	चैतीछाट रोड, ३ मलेखु	
२	एक राज त्रिपाठी	आवसायी	" "	
३	ओम प्रसाद खिमरे	"	" "	
४	शिव प्र. पाण्डे	लामाजलेवी	" "	
५	कुमार राज खिलवाल	किलान	" "	
६	देवान त्रिपाठी	लामाजलेवी	" "	
७	मक प्रसाद त्रिपाठी	आवसायी	" "	
८	कुमार राज खिलवाल	"	" "	
९	विमला खिमरे	आवसायी	" "	
१०	अशोक खिलवाल	आवसायी	" "	
११	राज कुमार पाण्डे	आपा (काठमाण्डौ)	हाकिम वडापा	
१२	फणिन्द्र व. क्षेत्र	आपा	" "	
१३	मगावती कुँडेल	आवसायी	" "	
१४	प्रमोद राज खिलवाल	वडा सदस्य	आपा	

- प्रस्तावित आकारो पूरको तथा प्रस्तावित कोमा सम्बन्धित बिशेषज्ञबाट जानकारी प्राप्त भयो।
- प्रस्तावित पूर अपाङ्ग क्षेत्र हुने जानकारी प्राप्त भयो।
- मलेखु व्यातमा एथानिय तथा चैत्यथाउँको व्यात अन्तर्गत वदी खरेको पूर निर्माण उपबाधक हुने हुँदा निर्माणमा लागि जोडदा गण गरियो।
- पूर निर्माणमा एथानियको पूर साथ सहयोग एड्डेड र निर्माण गरियो।

कैयस्थ



आज मिति २०७२/१२/१६ गते बैलघाट रोड, गाउँपालिका वडा नं. ५, बैलघाट बजार (छात्राङ्ग) (२०+५९५) मा नेपालमात्र मैथिली भाषा तथा पाठ्यक्रम आधारित कक्षाकोठो नभएकोले मागित सडक सडक निर्माणको शिल्लोमा आधारित तथा चैदल यात्रीको सुविधाका लागि स्थानमा राखि पैदल यात्रा आकर्षण गर्न निर्माण गरिने सम्बन्धित विधेयको अन्तर्गतमा प्रस्तावित आकारो पुनः निर्माणमा सहयोग पुऱ्याउने उद्देश्यले हामी निम्न कार्यका लागि व्याति हुने उपाधिका तथा तपशिल समीक्षाको फलफल निर्णय गरियो।

उपाधिका :-

क्र.सं.	नाम	पदापेक्षा	ठेगाना	हस्ताक्षर
१.	शैलन कुमार सिंहवाल			
२.	मान बहादुर धर्ले	कडा सदस्य	बैलघाट रोड	
३.	राम बहादुर गौली	" "	" " रा.म.प. गा.प.	
४.	जीता नेपाली	द.म.स.	" "	
५.	इन्दोरा डडेन	म.स.	" "	
६.	छैरा बहादुर पुजेल	उ.अपेक्ष	" "	
७.	रा.म.प. - कडा - स.प. - बैलघाट - ५ वडा			
८.	सुभाष के.सि. बस्नेत			
९.	सुभाष के.सि. बस्नेत			
१०.	कु.म.प. - कडा - बैलघाट - ५			
११.	प्रमनाथ के.सि. बैलघाट रोड - ५ वडा			
१२.	प्रभास. सी.सि. सामाजिक सेवा			

निर्णय :-

- १) प्रस्तावित आकारो पुनः सम्बन्धमा सम्बन्धित विधेयको फलफल प्रकृति, उचाई, नक्सा, अपाङ्ग, मैजि जस्ता विषयमा जानकारी भयो।
- २) यल स्थानमा विद्यालयको रहेको र विद्यार्थी तथा चैदल यात्रीको सुविधाका लागि रहेको जानकारी गराउँदै निर्माणको लागि जोडदार माग गरियो।
- ३) प्रस्तावित पुल निर्माणमा स्थानियको पुनः लाभ सहयोग र समर्थन रहेको निर्णय गरियो।

(Signatures)

उपस्थितिः .

क्र.सं.	नाम	पद/पेशा	ठेगाना	हस्ताक्षर
१.	सुमित्रा शाह	छात्र	वेल्डिंग-५ विद्यालय	अमरशर्मा
२.	हरी विष्णुएल	छात्र	" " "	विमल
३.	अभिषेक पांडे	"	" " "	विमल
४.	पुष्प विष्णुएल	"	" " "	विमल
५.	लक्ष्मी विष्णुएल	"	" " "	विमल
६.	सानुका विष्णुएल	"	" " "	विमल
७.	शर्मिला गौली	शिक्क	" " "	विमल
८.	अर्जुन विष्णुएल	व्यापा	" " "	विमल
९.	विष्णुका विष्णुएल	"	" " "	विमल
१०.	लक्ष्मी गौली	छात्र	" " "	विमल
११.	जिवन गौली	व्यापा	" " "	विमल
१२.	रामकृष्ण गौली	चालक	" " "	विमल
१३.	प्रदिय गौली	व्यापा	" " "	विमल
१४.	प्रहल विष्णुएल	छात्र	" " "	विमल
१५.	रमिला गौली	व्यापा	" " "	विमल
१६.	सुवास विष्णुएल	कर्मचारी	" " "	विमल

निर्देशक :-

निर्णय :-

- 1) प्रस्तावित आकारों पूर्णतः सम्बन्धों द्वारा, अप्रत्यक्ष, सम्बन्धों द्वारा आदि प्रकृतिको सम्बन्धीत विशेषताओं को प्राप्त किया।
- 2) मनुष्यता पूर्ण निर्माण उर्ध्व स्थिति में रही सहयोग एवं साथ रहने के।
- 3) पूर्ण निर्माण अति आकर्षक रहने का जानकारी दहिन के, अन्य प्रकृतिक गति को।

प्रकृत गति ॥
 ०६/०८/२०२०
 २२
 ०६/०८/२०२०
 २२
 ०६/०८/२०२०

आज मिति २०७२/३/१६ गते धादिङ्ग जिल्ला बेनिघाट रोड
गाउँपालिका वडा नं. ७ चरौंदी आसपास (५६+१५०) मा नेपाल -
भारत नैजिम् आधारित तथा यस्ताबाट आयोजनाले काठमाडौं
ताराकुडा - लोबिहो - मुग्लिङ्ग - सडक सडक निर्माणले स्थिति
मा स्थानिय तथा यात्रुलाई सुविधा प्रदान गर्ने उद्देश्यले
सार्वजनिक सौचालय निर्माण गरिदिए सम्बन्धमा सामाजिक
विज्ञानले अन्तर्गत गराई स्थानियको साथ सहयोग र सहकार्य
गुण्डाउने उद्देश्यले तयारिल बमोजिमका हामी उपस्थित भई
राय, सुझाव, सुझाव र निर्णय गरियो।

उपस्थिति :-

क्र.सं.	नाम	पद/पेशा	स्थान	विवरण
१.	होत्रराज थपलिया	स्थानिय	चरौंदी	होत्रराज
२.	विष्णु प्रसाद थपलिया	वडा सदस्य	बेनिघाट रोड	५६+१५०
३.	लोचाराज त्रिपाठी	समाजसेवी	"	लोचाराज
४.	शिव प्रसाद कुडुवान	स्थानिय	"	शिवप्रसाद
५.	मन्जुनाथ उप्रेती	व्यावसाय	"	मन्जुनाथ
६.	हेम्मत थपलिया	अध्यक्ष वि.प्रा.सं.	"	हेम्मत
७.	सुजिता श्रेष्ठ	निर्वाची	"	सुजिता
८.	सुरज श्रेष्ठ	"	"	सुरज
९.	विष्णु माथे थपलिया	स्थानिय	"	विष्णु माथे
१०.	हिरा उप्रेती	व्यावसाय	"	हिरा
११.	लक्ष्मी श्रेष्ठ	व्यापार	"	लक्ष्मी
१२.	दिल पहाड श्रेष्ठ	व्यापार	"	दिल पहाड
१३.	देवराज कुडुवान	स्थानिय	"	देवराज
१४.	जालि त्रिपाठी	व्यापार	"	जालि
१५.	रविम प्रसाद दाहाल	स्थानिय	"	रविम प्रसाद

निर्णय :-

- १) प्रस्तावित सार्वजनिक सौचालयको बन्धन तथा साधन सम्बन्धित
विशेषज्ञको जानकारी प्राप्त गर्नु।
- २) निर्माण हुने सौचालय अपाङ्ग, बेसि, बालबैठि हुनुपर्ने
निर्णय गरियो।
- ३) सौचालय निर्माण तथा व्यावस्थापनमा स्थानियको पूर्ण सहयोग
गर्नु र निर्माणको लागि आवश्यक साधनहरूको व्यवस्थापन गर्नु र निर्माण
गर्नु।

उपास्थितिः

क्र.सं.	नाम	पद/पिठा	ठेगाना	हस्ताक्षर
9.	रंक पहाड़ मल्ल	पूर्व अध्यक्ष	ज.पा. वी.री. 3	रंक
1.	गोठरी खोद	शिक्षक	समिति मल	ज.पा. वी.री. 3
2.	दिपक पोखरेल	"	"	दिपक
3.	मुकेश चौधरी	"	"	मुकेश
4.	कुल व. पापा मल	ह्यानिम	"	कुल
5.	कृष्ण पुरी	"	"	कृष्ण
6.	जय व. आल	"	"	जय
7.	देवी मल्ल	"	"	देवी
8.	वृन्दा मल्ल	"	"	वृन्दा
90.	रिता मल	"	"	रिता
99.	कुलमाया मल	"	"	कुलमाया
92.	रजु पापा	"	"	रजु
93.	होम व. आल मल	"	"	होम

निर्णयः :-

- 1) प्रस्तावित सांख्यिक शी चालयको व्यवस्थाको तथ्यांक तथा प्रकृतिगो सम्बन्धित विशेषज्ञको जानकारी प्राप्त भयो ।
- 2) प्रस्तावित शी चालय नैतिक नैतिकता जानकारी प्राप्त हो ।
- 3) यस द्वातामा शी चालय उत्पादनको स्थिति, रायसहितको निर्माण गर्नुमा । यसका साथ आकाशको पुन उत्पादनको रकम को
- 4) निर्माण पश्चात सम्पूर्ण आवश्यकता तथा निर्माणमा पुग्न सहयोग स्थानिकी रहने निर्माण गर्नुमा ।

आज मिति २०७४/०२/१७ गते चितवन जिल्ला इच्छाकामना गाउँपालिका वडा नं. ४ (७४+८००) कुरिनटारमा नेपाल भारत द्वैगिय व्यापार तथा यातायात आयोजना अन्तर्गत काठमाडौं नागदुङ्गा मुग्ली मुग्ली सडक-खण्ड निर्माण गर्ने क्रममा स्थानिय समुदाय तथा पैदलयात्रिको धुनिधालाई ध्यानमा राखि पैदलयात्रि आकाशो पुल निर्माण गर्ने कुराको जानकारी सम्बन्धित विरोधजवाह अवगत गराई हामी स्थानिय वसिन्दाको उपस्थितिमा वपछिल वमोजिमका राय सुझाव सम्बन्ध निर्णय गरियो ।

उपस्थित :

क्र.स.	नाम	पद/पेशा	ठेगाना	हस्ताक्षर
१.	शम्भु व. खलवाल	वडा अध्यक्ष	कुरिनटार	
२.	जोदन खलवाल	पु.म. सदस्य	"	
३.	पाथु खलवाल	"	"	
४.	रेशम खलवाल	वि. वर.स. सर्वशान्ति मा.वि.	"	
५.	होम प्रसाद खलवाल			
६.	निवन खलवाल			
७.	निर्मलजंग खलवाल			
८.	निवप्रसाद खलवाल	निवप्रसाद खलवाल		
९.	रेशम खलवाल	"	"	
१०.	शान्ता खलवाल	स्थानिय शिक्षिका		
११.	नारायण खलवाल	स्थानिय व्यवसायी		

निर्णयहरू :

- १) प्रस्तावित पैदलयात्रि आकाशो पुलको तक्ताको खण्ड, यसको प्रकृति, उचाई, लम्बाई आण्डा, जेति जस्ता विषयमा जानकारी गराइने
- २) प्रस्तावित आकाशो पुल यस स्थानमा अवरोधक रहेको राय सहितको निर्णय गरियो ।
- ३) आकाशो पुल निर्माणमा स्थानियको पूर्ण साथ समर्थन र सहयोग रहनेछ ।
- ४) निर्माण पछ्याउने तर्फको हेरचाह तथा व्यावस्थापन स्थानिय गर्नेछ ।

२०७४/०२/१७

आज मिति २०७२/११/१७ गते चितवन जिल्ला इच्छाश्रमता गाउँपालिका वडा नं. ४ रसाइली डाँडा (७७+२८०) मा नेपाल भारत मैत्रीय व्यापार तथा यातायात आयोजनाले काठमाडौं, नागदुर्गा, लौचिरे मुल्लिङ्ग सडक एरुड निर्माणको शिलसिलामा विभिन्न स्थानमा स्थानिय तथा पैदलयात्रिको सुविधाका लागि हथानमा राखि पैदल यात्रा आकाश पुलको आवश्यकता जस्ता विषयमा स्थानियको पाला १ शुक्रबार जस्ता विषयमा जानकारी सम्बन्धित विशेषज्ञबाट जानकारी गराई विभिन्न राय सुझाव सम्बन्ध १ उपस्थिति सहित निर्णय गरियो ।

उपस्थिति :

क्र.सं.	नाम	पद/पेशा	ठेगाना	हस्ताक्षर
१.	अपरिवर पाठे	होचल व्यवसाय	रसाइली डाँडा	
२.	प्रेम श्रेष्ठ	"	"	
३.	पिक्का तुलायन	"	"	
४.	राजु थापा मगर	"	"	
५.	सरस्वती थापा	"	"	
६.	लेख ब. थापा	"	"	
७.	भाई १० विष्णु	शिक्षक	"	
८.	अनिता सिलवाल	प्रशिक्षिका	"	
९.	निशा तुलायन	प्रवक्ता	"	
१०.	सिता श्रेष्ठ	"	"	
११.	रेजिना श्रेष्ठ	"	"	
१२.	संगिता श्रेष्ठ (उंगोल)	"	"	
१३.	रमण श्रेष्ठ	"	"	

- प्रस्तावित पैदलयात्रि आकाश पुलको सम्बन्धमा खाका तथा प्रकृतिवारे सम्बन्धित विशेषज्ञबाट जानकारी प्राप्त गर्नु ।
- उपस्थित स्थानियको राय अनुसार स्थानिय वास्तविक जनसङ्ख्या तथा विद्यालय क्षेत्रको पनि सम्बन्धमा पैदल यात्रु आकाश पुलको आवश्यकता नरहेको निर्णय गरियो साथै सम्बन्धित सम्बन्धित क्षेत्र रहेको लेवाहामा निर्माण गर्ने उपयुक्त हुने राय पेश गरियो ।

आज मिति २०७२/२/१६ गते चितवन जिल्ला इच्छाकात्रना गाउँपालिका वडा नं. ५ मुग्लिङ्ग बजार (८२+३००) मा नेपाल भारत द्वैधिय व्यापार तथा यातायात आयोजनाले काठमाडौं नपाङ्गुना लोकार्पण मुग्लिङ्ग सडक खण्ड अन्तर्गत ह्यान्डिय तथा पैदल यात्रुको सुविधालाई ब्यानमा राखि पैदल यात्रि आकाश पुल निर्माण गर्ने बारे सामाजिक विशेषज्ञबाट जानकारी गराई ह्यान्डिय समुदायको सहर्षत तथा सहयोग पुर्याउने उद्देश्यले तयारित प्रोजेक्टमा उपस्थित भएर निम्न राय, सुझाव, सल्लाह सहितको निर्णय गरियो।

उपस्थिति:

क्र.सं.	नाम	पद/पेशा	हेगा ना	हस्ताक्षर
१.	शेरराज सिलवाल	वडा अध्यक्ष	इच्छाकात्रना	
२.	हरि वं. सेपल	समाजसेवी	इच्छाकात्रना	
३.	जुनु राज मण्डारी	ने. क. पा. कमि. ॥	- ५	
४.	शिव सिलवाल	व्यावसाय	" "	
५.	रमण मण्डल सिलवाल	स्व. ज. प्र. मिति	" "	
६.	रामेन्द्र त्रिपाठी	सहकारी व्यावसाय	" "	
७.	केशव सिलवाल	समाजसेवी	" "	
८.	रमण मण्डल (वडा अध्यक्ष)	व्यावसाय	" "	
९.	विष्णु कुमार कुवर	ने. का. म. योजना	" "	
१०.	जित बराकुव थापा	समाजसेवी		
११.	श्रुतना देवडोरा	अध्यक्ष महिला समिति	समाज	
१२.	निर्मला शर्मा	वडा नं. ५ वडा सदस्य		

निर्णयः

- प्रस्तावित आकाश पुलको लम्बाई खाका तथा प्रकृतिचित्र सहित विशेषज्ञबाट जानकारी गराइयो।
- प्रस्तावित आकाश पुल अगाडि भन्जि हुने जानकारी गराइयो।
- यस स्थानमा प्रस्तावित पैदल यात्रि आकाश पुल आवश्यक रहेको राय सहितको निर्णय पेश गरियो।
- आकाश पुल निर्माणमा समूहले ध्यानिवादिता साथ सहयोग रहने निर्णय गरियो।

(Signatures)

Sisnekhola-Dharke Road Section

आज मिति २०७२/०३/०२ गते धुनिवेशी न्यायाधिकार वडा नं. २ वाहविरुद्ध मा. न्यायाधीश गणित सडक अन्तर्गत खिलेखोला-धार्के सडक खण्ड अन्तर्गत नेपाल भारत व्यापार तथा वृथातायात अभियोग ले विभिन्न ठाउँमा सार्वजनिक सौचालय निर्माण गर्ने प्रस्ताव सम्बन्धित सामाजिक विशेषज्ञबाट जानकारी प्राप्त गर्दै आएका सुझाव, निर्णय तथा उपस्थिति तपसिला वमोजिमका छन् ।

उपस्थिति :-

क्र.सं.	नाम	पद	हेगना	हस्ताक्षर
१.	जन्क राजा लामा	पद	धुनिवेशी-२	
२.	रोहित भुजेल	"	"	
३.	मिश्र राई	"	"	
४.	कृष्ण कृष्ण राई वडा अध्यक्ष	"	"	
५.	लक्ष्मण गजुरेल	धुनिवेशी-२		
६.	सुभाष चन्द गजुरेल	"		
७.	सुजित भुजेल	"		
८.	भरत भट्ट	"		
९.	सुबोधक अर्जुन	"		
१०.	अर्जुन रिजाल	"		
११.	विष्णु सुहाद सुवाखेती	"		
१२.	बाबुरेव बाँद्रे	"		
१३.	सुबोधक अर्जुन	"		
१४.	मातृका अर्जुन	"		
१५.	सुबोधक अर्जुन	"		
१६.	सुबोधक अर्जुन	"		
१७.	सुबोधक अर्जुन	"		

निर्णयहरू :-

- १) प्रस्तावित सार्वजनिक सौचालयको लक्ष्य तथा विषयवस्तुको सम्बन्धित निर्माणको स्थापित समुदाय समक्ष प्रस्तुत तथा छलफल गरियो ।
- २) प्रस्तावित सौचालय वाहविरुद्ध (३५+०००) आसपासमा निर्माण गर्ने उपयुक्त ठाउँ निर्णय गरियो ।
- ३) स्थापित समुदायको सौचालयमा पूर्ण उपमा सहयोग रहेको छ ।
- ४) निर्माण सम्पन्न भएपछि सौचालयको रेकर्ड स्थापित गर्ने छ ।

Bishaltar-Phisling Road Section

आज मिति २०७२।२।१६ गते गोरखा जिल्ला गाउँपालिका वडा नं. ७ ज्वागरेवाट (७+०००) मा नेपाल भारत मैत्रीय व्यापार तथा यातायात आयोजना अन्तर्गत काठमाडौं नगरपालिका बागमती नगरपालिका अन्तर्गत विशालटा (फिल्मोड) खण्डमा रूखानिमा बाहिरीमाई लेवा खुल्बिमा प्रदान गर्ने उद्देश्यले रूखानिमा तथा चैदुनघाटी लाई एक साविकतकै रूखानिमा निर्माण गर्ने जानकारी सम्बन्धित विशेषज्ञले अवगत गराई रूखानिमाको पूर्ण लक्ष्योपार्थ (समर्थन) जुटाउने उद्देश्यले ल्याबिल कर्मजिम्मा सुम्पेर खल्लाह (निर्माणाधीन) खल्लाह निर्माण गरियो ।

निर्माणकर्ता :

क्र.सं.	नाम	पद/पेशा	ठेगाना	हस्ताक्षर
१.	मानु भक्त अग्रवाल	कषक	गठनी-७	
२.	गजेन्द्र प. रेग्मी	"	" "	
३.	रविन्द्र खनाल	कषक	" "	
४.	डेबरा बाबु रेग्मी	कषक	" "	
५.	श्रीराम रेग्मी	कषक	" "	
६.	दिपेन्द्र रेग्मी	कषक	" "	
७.	धुनराज रेग्मी	"	" "	
८.	आनन्दराम रेग्मी	"	" "	
९.	नवरज रेग्मी	"	" "	
१०.	राजु रेग्मी	कषक	" "	
११.	राजु प्यमिरे	कषक	" "	
१२.	रामचन्द्र रेग्मी	"	" "	
१३.	बुरज रेग्मी	"	" "	
१४.	राजराज रेग्मी पुवाडी	"	"	
१५.	मेन प्रसाद खनाल	"	"	
१६.	राम तथ रेग्मी	"	" "	
१७.	गोशिशंकर रेग्मी	"	" "	
१८.	रमेश रेग्मी	"	" "	
१९.	शुद्धराम रेग्मी	"	" "	
२०.	राजकुमार ख.क.	"	" "	

२०	मदन रंगमी	कृष्ण	गण्डकी-७	म
२१	सुन्दर रंगमी	"	"	म
२२	गोतम झाँसी	"	गण्डकी ५	म
२३	बाबुराम रंगमी	"	गण्डकी ७	म
२४	मिम व. मगर	"	"	म
२५	इन्द्र व. मगर	"	"	म
२६	प्रकाश बाबु रंगमी	"	"	म
२७	राजेश्वर तिमल्सिना	"	"	म
२८	रामचन्द्र खनाल	"	"	म
२९	सुजन कुवाडी	"	"	म
३०	तुलसी रंगमी	वडा अध्यक्ष	"	म
३१	विनायक रंगमी	कृष्ण	"	म
३२	देवराज रंगमी	शिमल	"	म
३३	विपिन खर	JTA	"	म
३४	हरि प्रसाद रंगमी	कृष्ण	"	म
३५	मिम व. दिङ	"	"	मिम
३६	प्रेम व. दिङ	शिमल	"	मिम
३७	नर व. दिङ	कृष्ण	"	मिम

निर्णयः :-

- १) प्रस्तावित सर्वजति सौचालयको नक्साको ४ बाडा तथा प्रकृति को सन्वन्धित विज्ञान तथा स्थिति सम्बन्धित जानकारी ग्राह्यो
- २) प्रस्तावित सौचालय मल-समानता निर्माण गर्ने हानिपूर्वक सहमति दिने यस सहितको निर्माण गरियो।
- ३) निर्माण हुने सौचालय लैङ्गिक तथा अपाङ्गमैत्री हुनेपनि निर्माण गरियो।
- ४) निर्माण समयमा तथा निर्माण पश्चात सौचालयको पूर्ण व्यावस्थापन तथा स्थापना गर्ने पूर्ण सहयोग तथा आवश्यकता गर्ने निर्माण गरियो।

(Signatures)

Annex 13: Air, Water, and Noise Test Report



ABBREVIATIONS AND ACRONYMS

°C	:	Degree Celsius
CFU	:	Colony forming unit
CO	:	Carbon Monoxide
dB	:	Decibel
L ₅	:	5 Percentile Sound Level
ISO	:	International Standard Organization
L _{eq}	:	Equivalent Sound Level
L _{max}	:	Maximum Sound Level
L _{min}	:	Minimum Sound Level
L ₅	:	5 Percentile Sound Level
L ₁₀	:	10 Percentile Sound Level
L ₅₀	:	50 Percentile Sound Level
L ₉₀	:	90 Percentile Sound Level
L ₉₅	:	95 Percentile Sound Level
mg/l	:	Milligram per Liter
μg/m ³	:	Microgram per meter cube
μS/cm	:	Micro Siemens per Centimeter
ml	:	Milliliter
NBSM	:	Nepal Bureau of Standards and Metrology
NDWQS	:	Nepal Drinking Water Quality Standard
NO _x	:	Oxide of Nitrogen (NO ₂)
NTU	:	Nephelometric Turbidity Meter Unit
OSHA TLV	:	Occupational Safety and Health Administration Thresh hold Limit Value
PM ₁₀	:	Particulate Matter Less than 10 Micron Size
POU	:	Point of Use
PVC	:	Poly Vinyl Chloride
SO _x	:	Oxide of Sulphur (SO ₂)
TOR	:	Terms of Reference
TSP	:	Total Suspended Particulate (Maters)
VDC	:	Village Development Committee
WETC	:	Water Engineering & Training Centre (P) Ltd
WHO	:	World Health Organization
WSP	:	Water Safety Plan



Executive Summary

Current assignment was executed by Water Engineering & Training Centre Pvt. Ltd. awarded by Environment and Resource Management Consultants (P) Ltd. in October 2016. Main objective of the assignment was to ensure the status of existing air, noise and water quality of the various 22 sampling points (river) on the course proposed road construction area for the following stipulated locations: **1. Sisne Khola, 2. Sikre Khola, 3. Khani Khola, 4. Naubise Khola, 5. 100 m downstream of Dhuni Khola & Reupse Khola, 6. Mahesh Khola, 7. Agra Khola, 8. Kheste Khola, 9. Belkhu Khola, 10. Galaudi Khola, 11. Barban Khola, 12. Mauwa Khola, 13. Hugdi Khola, 14. Charaudi Khola, 15. Malekhu Khola, 16. Majhimtar Cross at Trisuli River, 17. Pang Khola, 18. Pashupati Khola, 19. Kaudi Khola, 20. Dhaubadi Khola, 21. Lamu Khola, 22. Near Shree Chandrodaya H. S. School at Trisuli River** for the pre - specified test parameters: pH, Temperature, Total Dissolved Solids, Ammonia, Nitrate, Phosphate, Sulphate, Sulphide, Dissolved \oxygen, BOD, Total Hardness, Calcium, Magnesium, Chloride, Iron, Fluoride, Chromium, Sodium, Potassium, Cadmium, Copper, Lead, Mercury, Oil & Grease and Total Coliforms. The test methods were conducted as per the approved methods mentioned in test methodologies.

Noise quality was recorded at **Mungling, Fisling, Malekhu, Galchi and Nagdhunga Checkpost** points for L_{max} , L_{min} , L_{eq} , L_5 , L_{10} , L_{50} , L_{90} , L_{95} parameters where air quality sampling and measurements was conducted at **Mungling, Malekhu and Nagdhung Chekpost** points.

Ambient air quality sampling was conducted at Mungling, malekhu and Nagdhunga Checkpost.

Overall Water, Noise and Ambient Air Quality Scenario of the Study Locations

Water Quality

In overall, fluoride level is lower than the NDWQS limit in all water samples. Iron is high is the water sample of Agra Khola, **Majhimtar Across at Trisuli River and Near Shree Chandrodaya H. S. School at Trisuli River**. Biologically, water is contaminated with Total Coliforms in all samples.



Noise Quality

In overall, observed equivalent noise pressure level data were found above the **National Noise Quality Standard Limit**. The observed noise pressure levels were found still higher than **OSHA TLV guideline**.

Ambient Air Quality

During the monitoring time, observed particulate matters of less and more than 10 micron size ambient air quality data were found above the **National Noise Quality Standard Limit at Nagdhunga checkpoint Point**. Other parameters are within the normal range as per National Ambient Air Quality Standard.

Conclusions:

In majority, presence of Total coliform contamination is major problem in water in association with presence of iron and sediments in few cases indicated associated turbidity problems in water during rainy condition. Noise level was found above the NNQS limit in all locations in existing study also. Particulate matters: TSP and PM₁₀ were found higher than NAAQS limit at Nagdhunga Checkpost during the study.

No adverse impacts and problems were reported due to lower pH and fluoride concentration during the study.

Recommendations:

Microbial contamination was still detected in many of the samples. Therefore, following activities are suggested:

- Point of Use (PoU): boiling, sodis, chlorination and filtration like activities are recommended along with implantation of water safety plan is recommended for water quality management.
- *Suitable Environment Management Action Plan (EMAP) steps shall be advised and implemented during and after the road construction period to protect the air and noise quality environment.*
- Regularity monitoring of air, noise and water quality shall be done as or when necessary.



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Annexes

1. *Annex 1: Water Quality Test Report*
2. *Annex 2: Noise Quality Test Report*
3. *Annex 3: Ambient Air Quality Test Report*



4. Annex 4: Photographs



Background

Environment Resource Consultancy (P) Ltd has awarded the assignment of water sampling, testing and monitoring in different river and tributaries along the proposed construction path of Kathmandu-Naubise-Mungling Alternate Road Area for air, noise, and water quality analysis and measurements. As the outcome of the assigned ToR, Water Engineering & Training Centre (WETC) is going to submit this **Report**.

Objectives and scope of the study

The main activities are field sampling, *in situ* analysis and laboratory test of the collected water samples from various 22 points along the route: **Sisne Khola, Sikre Khola, Khani Khola, Naubise Khola, 100 m downstream of Dhuni Khola & Reupse Khola, Mahesh Khola, Agra Khola, Kheste Khola, Belkhu Khola, Galaudi Khola, Barban Khola, Mauwa Khola, Hugdi Khola, Charaudi Khola, Malekhu Khola, Majhimtar Cross at Trisuli River, Pang Khola, Pashupati Khola, Kaudi Khola, Dhaubadi Khola, Lamu Khola and Near Shree Chandrodaya H. S. School at Trisuli River**. Similarly, noise measurements were carried out at 5 locations: **Mungling, Fisling, Malekhu, Galchhi and Nagdhunga Checkpost** whereas air quality monitoring was conducted at 3 locations: **Mungling, Malekhu and Nagdhunga Checkpost**. The finding data of the study and measurements were assessed to make necessary conclusions and recommendations for suitable mitigation measures for improvement if necessary in comparison with reference to the prevailing national drinking water, noise and ambient air quality standard.

Scope of Work

WETC laboratory had to execute the field sampling, *in situ* and laboratory test activities with adopting following activities:

- ✓ Sample collection at field & laboratory testing of water samples
- ✓ Field recording of noise data and assessment
- ✓ Field sampling, laboratory analysis and assessment of air quality data
- ✓ Preparation of report

Study Locations for Water, Noise, and Air Quality Sampling

The study area was across the Kathmandu-Naubise-Mugling road at following locations:

Water Quality

1. Barban Khola
2. Pang Khola
3. Pashupati Khola
4. Hugdi Khola
5. Kaudi Khola
6. Mauwa Khola



7. Majhimtar Across Trishuli River
8. Charaudii Khola
9. Galaudi Khola
10. Malekhu Khola
11. Dhaubadi Khola
12. Lamu Khola
13. Near Shree Chandrodaya H. S. School at Trisuli River
14. Belkhu Khola
15. Kheste Khola
16. Agra Khola
17. Mahesh Khola
18. 100 m downstream of Dhuni Khola & Reupse Khola
19. Naubise Khola
20. Khani Khola
21. Sikre Khola
22. Sisne Khola

Noise Quality

Mungling (Longitude: 27.857957, Latitude: 84.561587)

Fisling (Longitude: 27.8698230, Latitude: 84.630718)

Malekhu (Longitude: 27.8138017, Latitude: 84.827331)

Galchhi (Longitude: 27.796052, Latitude: 85.000279)

Nagdhunga Checkpost (Longitude: 27.699046, Latitude: 84.209573)

Air Quality

Mugling (Near 3 Sister Restaurants)

Malekhu (At Temple – Near Ambe Petrol Pump)

Nagdhung Checkpost (At Chandragiri Ward Office)

Methodology

Following methodologies were adopted to execute the assigned task:

1. A team of experienced personnel was mobilized with their specified assignment after pre - orientation.
2. The team took adequate and other relevant field format, district & route maps, field test kits, sampling bottles and necessary carriage, other information etc. for sampling at transportation at and from field.
3. Execution and submission of the findings report within time frame with all compilations as per the provided ToR.

Study Team

A team of competent professionals (comprising chemist, assistant chemist, field assistant was mobilized as submitted inception report.



Team Mobilization and Sampling points Identification

As per the received field information and field study points, the monitoring team was oriented for work activities initiation. The field team was mobilized in September, 2016.

Collection of Samples, Field Testing, its Preservation & Transportation for Laboratory Testing

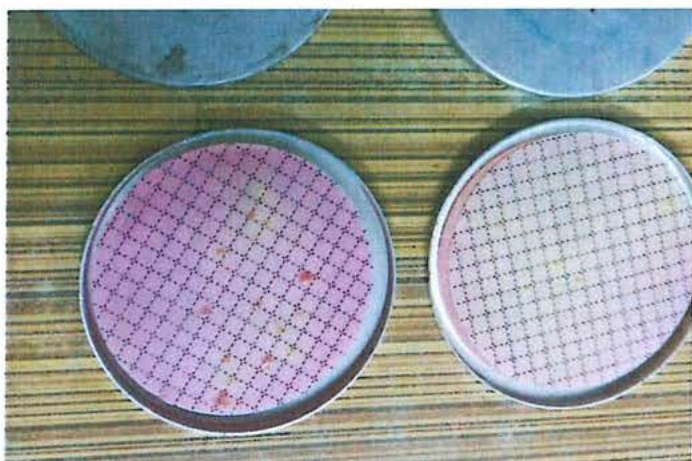
- For Water Quality Sampling and Testing:

From the sampling points, 1000 ml was taken for general tests and another 1000 ml with preservatives in clean bottles. Some parameters were tested out at field and documented in field format. The bottle was filled with sample water after rinsing it at least three times.

Based on the field visit assessment, grab sampling was incorporated. Preservation was carried out as mentioned in the "Standard Methods for the examination of water and waste water, 21st Edition, 2005" and samples were immediately transferred to the laboratory for detailed quality analysis keeping in storage box. The analytical procedures were adopted as mentioned in the "Standard Methods for the examination of water and waste water, 21st Edition, 2005".

Field Measurement:

Necessary field evidences were recorded in situ while testing parameters such as Turbidity, Conductivity, pH, Colour, Conductivity and Total Coliforms with the help of portable kits. Following proceedings were adopted during the sampling.



Onsite bacterial Culture in Del Agua Kit (left) and Onsite measurement of pH, conductivity and temperature (right)

Laboratory Test:

Laboratory test were followed for Total Hardness, Calcium, Ammonia, Nitrate, Fluoride, Iron, Manganese and Chromium.



Picture: Record Keeping and Analysis of the Sampled Water in the Laboratory

Water parameters, measurement techniques, and methods



S.N.	Parameters	Technique	Methods	Procedure summary (Methodology)
1.	pH	Probe immersion	4500-H ⁺ B, APHA, 21 ST EDITION	Calibrated portable pH meter was used with buffer solutions of 4, 7 and 10. Probe of the meter were immersed into the sample water until it gives the stabilized value.
2.	Temperature	Probe Immersion	2550 B, APHA, 21 ST EDITION	Calibrated probe immersion
3.	Conductivity (μS/cm)	Digital Conductivity Meter	2510 B, APHA, 21 ST EDITION	Conductivity of the water sample was determined by immersing the probe of the Calibrated Portable Conductivity Meter until giving the fixed value.
4.	Turbidity	Nephelometer	2130 B, APHA, 21 ST EDITION	Fixed volume of the plain preserved sample was measured through turbidity meter tube
5.	Total Dissolved solids	gravimetric	2540 C., APHA, 21 ST EDITION	Gravimetric weighing of residue after drying of fixed volume of water
6.	Total Hardness	EDTA titration	2340 C, APHA, 21 ST EDITION	Total hardness was measured by titrating fixed volume of the water sample by using indicator: Erichrome black T, Buffer: Ammonium hydroxide with standard EDTA
7.	Ammonia (mg/l)	Nesslerization	4500-NH ₃ C., APHA, 17 TH EDITION	Ammonia was measured by spectrophotometrically using Nesslerization method
8.	Nitrate (mg/l)	UV Scanning	4500-NO ₃ - B., APHA, 21 ST EDITION	Nitrate was measured spectrophotometrically by using wavelength 220 nm and 275 nm estimating the absorbance due to nitrate by correcting the absorbance due to organic matter
9.	Phosphate (mg/l)	UV Visible Spectrophotometric	4500-P E. APHA, 21 ST EDITION	Spectrophotometric measurement at 880 nm after colour development with 4 aminoantipyrine and molybdate reagents

10.	Sulphate (mg/l)	Gravimetric	4500-SO ₄ . APHA, 21 ST EDITION	Gravimetric weighing of residue after drying the precipitate using barium chloride by precipitating fixed volume of water
11.	Sulphide (mg/l)	Titration	4500-S ²⁻ F., APHA, 21 ST EDITION	Iodometric titration with fixed volume of water adopting preservation
12.	Dissolved Oxygen (mg/l)	Probe Immersion	4500-O A, APHA, 21 ST EDITION	Direct probe immersion technique
13.	Biochemical Oxygen Demand (BOD – mg/l)	5 Days Incubation	5210 B., APHA, 21 ST EDITION	Winkler's iodometric method after azide modification
14.	Calcium	EDTA titration and calculation	3500 - Ca B. APHA, 21 ST EDITION	Calcium was measured by titrating fixed volume of the water sample using indicator: Ammonium Perpurette (Murexide), Buffer: Sodium hydroxide with standard EDTA
15.	Magnesium	EDTA titration and calculation	3500-Mg B. APHA, 21 ST EDITION	Magnesium was measured by titrating fixed volume of the water sample using indicator: Ammonium Perpurette (Murexide), Buffer: Sodium hydroxide with standard EDTA deducting after total hardness measurement value
16.	Chloride (mg/l)	Argentometric titration	4500-Cl G. APHA, 21 ST EDITION	Titration against standard silver nitrate solution with fixed volume of water using potassium chromate as indicator
17.	Fluoride (mg/l)	SPADNS	4500F- D. APHA, 21 ST EDITION	Spectrophotometric measurement with SPADNS dye colour absorbance in reaction with acid zirconyl chloride

18, 19, 20, 21, 22	Iron (mg/l), Chromium (mg/l), Cadmium (mg/l), Copper (mg/l), Lead (mg/l)	Atomic Absorption Spectrophotometric	3112 B., APHA, 21 ST EDITION, 3111 B., APHA, 21 ST EDITION	Fixed volume of the water samples was digested in acidic medium and aspirated into the atomic absorption spectrophotometer with respective hollow cathode lamp to determine the concentration of the metal content in the water samples
23, 24	Sodium (mg/l), Potassium (mg/l)	Atomic Absorption Spectrophotometric using flame emission mode	3111 B. APHA, 21 ST EDITION	Fixed volume of the water samples was digested in acidic medium and aspirated into the atomic absorption spectrophotometer with respective flame emission technique
25	Mercury (mg/l)	Atomic Absorption Spectrophotometric using hydride generator	3112 B., APHA, 21 ST EDITION	Fixed volume of the water samples was digested in acidic medium and aspirated into the atomic absorption spectrophotometer with respective hollow cathode lamp and hydride cold vapour generation mode to determine the concentration of the metal content in the water samples

- For Noise Quality:

2.2 Field Monitoring: Running of monitoring instruments for the specified time frame as per manufacturer instructions. Data collection, assessment and interpretation were done for L_{max} , L_{min} , L_{eq} , L_5 , L_{10} , L_{50} , L_{90} and L_{95} parameters as mentioned below.

2.3 Laboratory Assessment : The noise level instrument (Lutron SL – 4023 SD) with SD card data logger were used for recording the noise levels and assessed at the WETC laboratory.

2.4 Data Assessment: The data obtained from the laboratory were assessed with available standards and acceptable limits.

2.5 Report Preparation: A detailed report has been prepared including all the activities during the field monitoring, laboratory analysis and data assessment.

- **For Ambient Air Quality:**

For the determination of TSPM, PM₁₀, PM_{2.5} and Lead sampling were done with help of high volume sampler (HVS). Pre-weighted fiber glass filter paper were used for the collection of PM₁₀, PM_{2.5} and pre weighted cup were used for larger particles than PM₁₀, PM_{2.5}. After sampling safely transported to laboratory and taken the weight of exposed filter paper and cup and finally determine the PM₁₀ and TSPM against the drawn volume of air.

For determination of lead exposed filter paper digested in Nitric Acid and determine the lead concentration in AAS (Atomic Absorption Spectrophotometer).

SO_x and NO_x were sampled simultaneously by the same instrument through the attached gas sampling gadget. Sodium Hydroxide and Tetra ChloroMercurate (TCM) solutions absorbing reagents were used for NO_x and SO_x respectively. The collection tubes were kept chilled with ice water to prevent evaporation and to provide greater absorption. Samples were instantly stored in refrigerator and safety transported to the laboratory under cold condition with ice in an ice box and kept at low temperature till analysis to determine the values of the parameters.

For the sampling of Benzene Organic Vapour Sampling equipment and activated charcoal tubes were used. After sampling safely transported in the laboratory and determine the concentration in GC (Gas Chromatography).

For the monitoring of Carbon monoxide in premises were used a dragger pump with low concentration CO detector tube.

HVS were calibrated in air tunnel in manufacturer, Envirotech, India. This type of calibration were done yearly basis.

Health Significance of Quality Test Parameters

SN	Parameters	Health significance
Health Significance of Major Water Quality Test Parameters		
1	Turbidity	Turbidity in water arises from the presence of very finely divided solids. The turbidity interfere the disinfection process the consequences could be in-effective. When, turbidity caused by sewage matter in water, there is the risk of pathogenic organisms which could be by shielding due to the turbidity particles. Ultimately, the action of the disinfectant may be in-effective
2	Electrical conductivity	Electrical conductivity of water is an expression of its ability to conduct an electric current. Though it does not indicate the direct health impact, to some extent it is one of indicator of chemical contamination of chloride, fluoride based ionic substances mainly.

3	pH	pH doesn't have direct health impact except that extreme values will show the excessive acidity /alkalinity giving ions, with organoleptic consequences. It also indicates the efficiency or persistent quality of disinfectant (such as chlorine) in excessive lower or higher level due to its functional group. Low pH is indication for metallic pipe corrosion possible.
4	Total hardness	Hardness is a natural characteristic of water which can enhance its palatability and consumer acceptability for drinking purposes. Health studies in several countries in recent years indicate that mortality rates from heart diseases are lower in areas with hard water. Excessive hardness arouses the problems of encrustation in pipelines.
5	Calcium	Calcium is the essential supplement from water consumer acceptability for drinking purposes. Similar contributors of total hardness
6	Ammonia	From the viewpoint of human health, the significance of ammonia is marked because it indicates the possibility of sewage pollution as well as being the nutrient for microorganisms and the consequent possible presence of pathogenic micro-organisms. Possibility of the formation of nitrite and nitrate due to microbial degradation of ammonia. Rapid neutralization of chlorine (disinfectants)
7	Nitrate	Hazard to infants causing methaemoglobinaemia causing agent and indicators of post degradation contaminant.
8	Sulphide, Sulphate	Ultimately acidic characteristic and indicator of industrial contaminants as well
9	BOD	High BOD is indicator of biological / industrial or both waste presence
10	Iron	The objections to iron are primarily organoleptic, but there has been recent medical concern about high levels in drinking water due to its floc forming characteristic ultimately increasing the turbidity posing various negative sanitary impacts after oxidation. Besides, iron increases the clogging in pipeline, the yellowish to reddish brown staining in cloths and utensils and aggravates the loss of disinfection rate.
11	Manganese	Gastrointestinal irritation when uptake in higher concentration. The objections to iron are primarily organoleptic, high levels in drinking water induce floc forming characteristic ultimately increasing the turbidity posing various negative sanitary impacts after oxidation. Besides, manganese increases the clogging pipeline, black staining in cloths and utensils and aggravates the loss of disinfection rate.

12	Chromium, Cadmium, Lead	High concentration of hexavalent state is carcinogenic in nature and damages blood cells by oxidation reactions in bloodstream. Hemolysis , and subsequently kidney and liver failure, are the results of this damage. Lead and cadmium have acute toxicity in blood vascular and neurological state
13	Mercury	High mercury have acute toxicity in blood vascular and neurological state as well as reproductive capacity damage
14	Coliforms	Indicators of pollutant organisms with faecal or high in numbers posing various diarrheal / vomiting related illness
15	Health Significance of Noise Quality Test Parameters: Exposure to high levels of noise can cause permanent hearing loss. Neither surgery nor a hearing aid can help correct this type of hearing loss. Short term exposure to loud noise can also cause a temporary change in hearing or a ringing in your ears (tinnitus). These short-term problems may go away within a few minutes or hours after leaving the noise. However, repeated exposures to loud noise can lead to permanent tinnitus and/or hearing loss. Loud noise can create physical and psychological stress, reduce productivity, interfere with communication and concentration, and contribute to workplace accidents and injuries by making it difficult to hear warning signals. The effects of noise induced hearing loss can be profound, limiting your ability to hear high frequency sounds, understand speech, and seriously impairing your ability to communicate. Sound Intensity above 130 dB(A) may cause severe damage to the whole body such as loss of hearing of both ears, dizziness, nausea, disturbance of speech, confusion or psychosis. Above 90 dB(A) headache, dizziness, tinnitus, insomnia, deafness, heart diseases, blood hypertension, gastric, ulcer, neurosis, temporary hearing threshold shift. 50 - 90 dB(A) may cause various degrees of effects in sleeping, studying, working and talking.	
16	Health Significance of Air Quality Test Parameters: Air pollution is the presence of unwanted adverse parameters exceeding the guideline level in specific time which arouses the adverse impact to human, plant or animal life, or ultimately threaten to healthy environment. Pollution parameters may be resulted due to anthropogenic to natural extent however major concerns are the developmental activities, fuel combustions and other various industrial operations. Mainly, the pollutants are particulate matters related: particulate matters (TSP, PM₁₀, PM_{2.5}), flue gases (SO_x, NO_x, CO), toxicant / bi-product related or others (Lead, Benzene, Hydrocarbons, Ozone), etc. In general, particles of size 0.1 to 500 micron (0.1 µm to 500 µm) are referred to the suspended particulate matters in which the particles of 0.1 µm to 10 µm are important from	

health viewpoint. Total suspended particulate matter (TSPM), particles of less than 10 micron size ($<10\ \mu\text{m}$) and particles less than 2.5 micron ($<2.5\ \mu\text{m}$) are categorized in the National Ambient Air Quality Standard (NAAQS).

Particulate matters off between $10\ \mu\text{m}$ to $2.5\ \mu\text{m}$ are having the characteristics being deposit in throatic zone to lung area, $2.5\ \mu\text{m}$ to $1\ \mu\text{m}$ are having penetration to bronchioles and less than $1\ \mu\text{m}$ into blood stream level.

CO, NO / SO₂ developed during the combustions are converted into CO₂, SO₃, NO₃ ultimately into acid compound (H₂CO₃, H₂SO₄ and HNO₃). When SO₃ is inhaled it is likely to be absorbed in moist passages of respiratory tract. It is entrained in an aerosol when in contact; it may reach far deeper into the lungs. Sulphur dioxide can damage vegetation and cause corrosion. Airborne sulfates reduce visibility. It is also the cause of acid rain in excess of corrosion from the top of the chimney due to condensation.

Oxides of sulphur have been linked to respiratory infections, bronchitis, asthma, pneumonia and the like. Many carbonaceous particles, especially those containing polycyclic aromatic hydrocarbons (PAH) are suspected carcinogens.

When presence of lead in air, it has the adverse impact on animal health: the toxicity to brain as well as central nervous system.

Exposure to carbon monoxide can cause non-specific symptoms such as severe headache, nausea, vomiting, dizziness and drowsiness. Carbon monoxide interferes with blood's ability to carry oxygen. With the blood stream carrying less oxygen, brain function is affected and heart rate increases in an attempt to offset the oxygen deficit. Breathing between 20 to 35 ppm CO in air for 4 h results in impairment of time related response. Individuals with heart condition may experience chest pain. Exposure to 100 ppm concentration would result in dizziness.



Water, Noise & Ambient Air Quality Test Results

Water Quality

Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below				
Sample No: 1232-1236			Analyzed date: 30/09/2016- 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Sisne Khola (1232)	Sikrey Khola (1233)	Khani Khola (1234)	Naubise Khola (1235)	100m Downstream of Dhunikhola and Rupsekhola (1236)
PHYSICAL							
pH	-	6.5-8.5*	6.8	6.5	6.6	7.0	6.8
Temperature	°C	-	24.7	24.5	24.4	24.4	24.5
Total	mg/l	1000	81.0	78.0	106.0	148.0	155.0
CHEMICAL							
Ammonia	mg/l	1.5	0.03	<0.02	0.16	0.05	<0.02
Nitrate	mg/l as NO ₃	50	2.17	4.0	4.2	2.1	1.9
Phosphate	mg/l	-	0.22	0.37	0.20	0.09	0.19
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l		1.5	1.5	0.75	1.5	1.8
Dissolved	mg/l	-	7.1	7.4	7.2	7.5	7.2
BOD	mg/l	-	2.5	3.0	3.3	3.4	1.7
Total	mg/l as	500	68.0	100	126.0	136.0	136.0
Calcium	mg/l as Ca ²⁺	200	17.6	27.2	35.2	36.8	38.4
Magnesium	mg/l	-	5.8	7.8	9.2	10.7	9.7
Chloride	mg/l	250	1.0	<1.0	1.0	3.0	2.0
Iron	mg/l	0.3 (3)	0.13	0.21	1.5	0.4	0.5
Fluoride	mg/l	0.5-1.5*	0.29	0.23	0.16	0.18	0.17
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.8	3.3	3.1	2.1	2.2
Potassium	mg/l	-	1.6	1.0	1.1	1.2	1.33
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	<0.01	0.05	0.02	0.08	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total	CFU/100ml	Nil	300	600	550	300	500

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal)

Remark: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.



Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below				
Sample No: 1237-1241			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Mahesh Khola	Agra Khola (1238)	Kheste Khola	Belkhu Khola	Galaudi Khola (1241)
PHYSICAL							
pH	-	6.5-8.5*	7.3	7.4	7.5	7.1	6.7
Temperature	°C	-	24.7	24.9	24.7	24.6	24.0
Total Dissolved	mg/l	1000	154.0	128.0	116.0	35.0	127.0
CHEMICAL							
Ammonia	mg/l	1.5	0.06	0.25	0.03	0.11	0.03
Nitrate	mg/l as NO ₃	50	1.2	1.6	<0.02	0.12	0.20
Phosphate	mg/l	-	0.15	0.40	0.19	1.7	0.27
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l	-	1.1	1.8	1.8	2.6	1.1
Dissolved Oxygen	mg/l	-	7.3	7.6	7.1	7.1	7.3
BOD	mg/l	-	1.8	5.8	1.6	0.83	1.2
Total Hardness	mg/l as CaCO ₃	500	130.0	102.0	100.0	30.0	102.0
Calcium	mg/l as Ca ²⁺	200	33.6	22.4	32.0	8.0	28.0
Magnesium	mg/l	-	11.2	11.2	4.8	2.4	7.8
Chloride	mg/l	250	3.0	2.0	<1.0	<1.0	<1.0
Iron	mg/l	0.3 (3)	0.8	31.9	0.03	0.27	0.62
Fluoride	mg/l	0.5-1.5*	0.30	0.21	0.24	0.20	0.35
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	6.7	5.8	6.8	4.5	8.7
Potassium	mg/l	-	2.8	4.5	2.7	1.6	2.7
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.3	0.08	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	400	1000	1000	300	800

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,
 WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality
 Standard, 2062 (Nepal)

Remarks: Fluoride is lower than the NDWQS limit. Iron is high in sample of Agra Khola. Biologically, unsatisfactory.



Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below				
Sample No: 1242-1246			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Malekhu Khola	Charaudi Khola	Hugdi Khola	Mauwa Khola	Barban Khola (1246)
PHYSICAL							
pH	-	6.5-8.5*	7.0	7.1	7.1	7.0	6.5
Temperature	°C	-	24.7	24.8	25.2	25.3	25.0
Total Dissolved Solids	mg/l	1000	176.0	193.0	160.0	258.0	65.0
CHEMICAL							
Ammonia	mg/l	1.5	0.11	0.09	0.02	0.14	<0.02
Nitrate	mg/l as NO ₃	50	0.10	0.49	0.44	1.4	0.46
Phosphate	mg/l	-	0.16	0.32	0.15	0.10	0.35
Sulphate	mg/l	250	<5.0	<5.0	<5.0	60.97	<5.0
Sulphide	mg/l		2.6	3.0	1.5	2.2	1.5
Dissolved Oxygen	mg/l	-	7.1	7.3	7.2	7.1	7.4
BOD	mg/l	-	0.87	3.0	4.7	2.2	1.9
Total Hardness	mg/l as Ca ²⁺	500	154.0	182.0	152.0	250.0	50.0
Calcium	mg/l as Ca ²⁺	200	36.0	36.8	31.4	51.2	12.0
Magnesium	mg/l	-	15.5	21.8	18.4	29.6	4.8
Chloride	mg/l	250	<1.0	1.98	0.9	1.9	<1.0
Iron	mg/l	0.3 (3)	0.91	0.12	0.08	0.12	0.07
Fluoride	mg/l	0.5-1.5*	0.33	0.25	0.31	0.31	0.41
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.9	3.3	2.2	3.0	8.6
Potassium	mg/l	-	3.5	3.06	1.7	3.7	1.6
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.02	<0.01	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	600	400	500	350	650

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal)

Remarks: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.



Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below				
Sample No: 1247-1251			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Majhimtar Across at Trisuli River	Pang Khola	Pasupati Khola	Kaudi Khola	Dhaubadi Khola
PHYSICAL							
pH	-	6.5-8.5*	6.5	6.5	6.2	6.7	7.0
Temperature	°C	-	25.0	25.0	24.9	25.0	24.9
Total Dissolved	mg/l	1000	72.0	65.0	57.0	184.0	223.0
CHEMICAL							
Ammonia	mg/l	1.5	0.39	<0.02	0.02	0.09	0.18
Nitrate	mg/l as NO ₃	50	2.8	0.46	3.4	0.46	2.0
Phosphate	mg/l	-	0.25	0.35	1.3	0.15	0.15
Sulphate	mg/l	250	74.2	<5.0	28.02	57.7	57.7
Sulphide	mg/l		1.8	1.5	2.2	1.8	1.8
Dissolved	mg/l	-	7.2	7.1	7.0	7.4	7.1
BOD	mg/l	-	0.70	1.9	2.8	3.0	3.6
Total Hardness	mg/l as	500	70.0	50.0	44.0	180.0	208.0
Calcium	mg/l as Ca ²⁺	200	16.0	12.0	10.4	40.8	43.2
Magnesium	mg/l	-	7.3	4.8	4.4	18.9	24.3
Chloride	mg/l	250	<1.0	<1.0	1.0	1.98	2.9
Iron	mg/l	0.3 (3)	8.9	0.07	0.05	0.07	0.74
Fluoride	mg/l	0.5-1.5*	0.20	0.41	0.26	0.27	0.42
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.0	8.6	7.3	3.4	5.5
Potassium	mg/l	-	6.0	1.6	1.0	1.7	2.0
Cadmium	mg/l	0.003	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	mg/l	1	0.03	<0.01	<0.01	<0.01	0.02
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.01	<0.01	<0.01	<0.01	<0.01
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	1000	650	500	Nil	450

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,
 WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality
 Standard, 2062 (Nepal)

Remark: Fluoride is lower than the NDWQS limit. Iron is high at Majhimtar Across at Trisuli River. Biologically, unsatisfactory.



Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below	
Sample No: 1252-1253			Analyzed date: 30/09/2016 - 7/10/2016	
Date of Receipt: 30/09/2016			No. of Samples: 02	
Sampled by: WETC			Location: As mentioned below	
Parameters	Units	NDWQS	Result	
			Lamu Khola (1252)	Near Shree Chandrodya H. S School at Trisuli River (1253)
PHYSICAL				
pH	-	6.5-8.5*	7.0	6.7
Temperature	°C	-	24.9	24.9
Total Dissolved	mg/l	1000	221.0	74.0
CHEMICAL				
Ammonia	mg/l	1.5	0.06	0.34
Nitrate	mg/l as NO ₃	50	1.3	1.8
Phosphate	mg/l	-	0.18	0.16
Sulphate	mg/l	250	63.5	<5.0
Sulphide	mg/l		1.1	2.6
Dissolved Oxygen	mg/l	-	7.0	7.2
BOD	mg/l	-	4.1	3.8
Total Hardness	mg/l as	500	200.0	70.0
Calcium	mg/l as Ca ²⁺	200	40.8	20.8
Magnesium	mg/l	-	23.8	4.4
Chloride	mg/l	250	4.9	2.0
Iron	mg/l	0.3 (3)	0.25	4.3
Fluoride	mg/l	0.5-1.5*	0.26	0.20
Chromium	mg/l	0.05	<0.05	<0.05
Sodium	mg/l	-	3.7	3.0
Potassium	mg/l	-	1.6	4.1
Cadmium	mg/l	0.003	<0.003	<0.003
Copper	mg/l	1	0.03	0.02
Lead	mg/l	0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS				
Total Coliform	CFU/100ml	Nil	500	550

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,
WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality
Standard, 2062 (Nepal)

Remarks: Fluoride is lower than the NDWQS limit. Iron is high at Near Shree Chandrodya H. S. School at Trisuli River. Biologically, unsatisfactory.

Noise Quality



Name of Sender: Environment Resource Consultancy (P) Ltd.					Source: Location as Listed					
Sample No: 1253 - NM/01-5/073/074					Analyzed date : 27/09/2016 - 07/09/2016					
Date of Monitoring: 27-30/09/2016					No. of Samples: 5					
Sampled by: WETC					Location : Malekhu, Kuringhat, Malekhu, Galchhi and Nagdhunga Checkpost					
					Duration: 8 hours Continuous Monitoring Data					
S. N.	Location Spots	Test Parameters								Range
		L _{max}	L _{min}	L _{eq}	L ₅	L ₁₀	L ₅₀	L ₉₀	L ₉₅	
1	Mungling (1253 - NM - 1)**	99.6	58.4	80.6	86.0	84.1	81.9	75.2	73.9	
2	Kuringhat (1253 - NM - 2) **	98.1	53.9	78.8	89.3	88.1	85.3	80.5	74.1	
3	Malekhu (1253 - NM - 3) **	109.3	53.9	90.1	91.4	89.8	84.1	70.8	64.8	*
4	Galchhi (1253 - NM - 4) **	104.4	54.8	85.4	89.3	88.5	82.5	64.6	61.8	*
5	Nagdhunga Checkpost (at VDC Ward Office - (1253 - NM - 5) **	105.6	59.5	86.5	96.8	96.2	82.8	60.0	59.9	*
NNQS for Industrial Area**				70						
Note: OSHA TLV Range acceptable at industrial workplace area for 8 working hours*				85						



Air Quality**Name of Client:** ERM C Pvt. Ltd.**Work:** 24 hours Ambient Air Quality Monitoring**Locations:** As Listed Below

Location	Monitoring Date	Code
1. Mungling (Near 3 sister restaurant)	27 - 28 September, 2016	1253 - AA - 1
2. Malekhu (At Temple – Near Ambe petrol Pump)	28 - 29 September, 2016	1253 - AA - 2
3. Nagdhunga Checkpost (At Chndragiri Ward Office)	30 - 31 September, 2016	1253 - AA - 3

Location	PM ₁₀	*PM _{2.5}	TSP	*Lead	SO ₂	NO _x	*Benzene	CO (%)
	(ug/Nm ³)							
Mungling (Near 3 sister restaurants - 1253 - AA - 1)	122.0	28.0	150.0	<0.002	<0.01	2.4	<2.0	**ND (<1.0)
Malekhu (At Temple – Near Ambe petrol Pump - 1253 - AA - 2)	132.0	31.0	163.0	<0.002	<0.01	4.7	<2.0	**ND (<1.0)
Nagdhunga Checkpost (At Chndragiri Ward Office - 1253 - AA - 3)	326.0	38.0	364.0	<0.002	<0.01	3.3	<2.0	**ND (<1.0)
NAAQS	120.0	40.0	230.0	<0.5	70.0	80.0	5.0	1.0

** ND - Not Detected

** Not Accredited Test Parameters

Assessments & Discussions

Altogether 22 numbers of water, 5 numbers noise and 3 numbers sampling was conducted for existing base line situation analysis as base line data assessment.

Water Quality Test Results

In overall, fluoride level is lower than the NDWQS limit in all water samples. Iron is high is the water sample of Agra Khola, **Majhimtar Across at Trisuli River and Near Shree Chandrodaya H. S. School at Trisuli River. Biologically, water is contaminated with Total Coliforms in all samples.**



Noise Quality Test Results

In overall, observed equivalent noise pressure level data were found above the **National Noise Quality Standard Limit**. The observed noise pressure levels were found still higher than **OSHA TLV guideline**.

Ambient Air Quality Test Results

During the monitoring time, observed particulate matters of less and more than 10-micron size ambient air quality data were found above the **National Noise Quality Standard Limit at Nagdhunga Checpost Point**. Other parameters are within the normal range as per National Ambient Air Quality Standard.

Conclusions and Discussions:

During the study, major contamination indicator is reported as *Total Coliforms*. *Iron and sediment* content were found high at *Agra Khola and Trishuli river water*. *Fluoride* content was found lower than NDWQS recommended limit in all of the samples. Aggregate (sand, etc) washing activities were found in few of the river such as Agra, Belkhu Khola as well as at the Baireni to Belkhu river zone mainly.

Based on the findings from the field survey and the laboratory analysis report, following recommendations have been made for the effective management of the water sources with below listed activities and efforts for the possible mitigation measures, source protection, etc and better health and hygiene purpose:

Water Quality Management Sector

1. Short term:

Awareness shall be given to community about personal hygiene and sanitation behavior, proper source protection features around the intake area, possible disinfection option safe water storage practices along with 4 suitable mode of POU (point of use) practices:

- Boiling,
- Chlorination,
- Sodis and
- Filtration before drinking

2. Long Term:

Implementation of Water Safety Plan and Water Management Plan for Water Supply



To keep always safe drinking water, ***Water Safety Plan shall be implemented in each scheme level*** mobilizing concerned users community to ensure the water quality from catchment to users level by awaring and motivating the community on following steps:

- The hazards identification, remedial action of identified mitigation measures (short & long term plan, maintenance, etc), implementation and follow up of monitoring plan.
- Due to enhancement of transportation facility in the road development zone, settlement will increase after road construction. Therefore, suitable action shall be advised in environment Action Plant (EMAP) during EIA study.

Noise Quality Management Sector

Due to enhancement of transportation facility in the road development zone, settlement and vehicle movement will increase after road construction. Therefore, suitable action shall be advised in environment Action Plant (EMAP) during EIA study.

Ambient Air Quality Management Sector

Due to enhancement of transportation facility in the road construction zone, settlement, construction aggregate excavation as well as vehicle movement will increase tremendously during and road construction. Suitable management plan and action shall be advised in environment Action Plant (EMAP) during EIA study.

National Ambient Air Quality Standards, Nepal, 2012

Parameters	Units	Averaging Time	Concentration , maximum	Test Methods
TSP (Total Suspended Particulates)	ug/m ³	Annual	-	High Volume Sampling and Gravimetric
		24-hours	230	
PM ₁₀	ug/m ³	Annual	-	High Volume Sampler and Gravimetric Analysis, TOEM, Beta Attenuation
		24-hours	120	
Sulphur Dioxide	ug/m ³	Annual	50	Ultraviolet Fluorescence, West and Gaeke Method
		24-hours	70	Same as annual
Nitrogen Dioxide	ug/m ³	Annual	40	Diffusive sampling based on weekly averages
		24-hours	80	To be determined before 2005.
Carbon Monoxide	ug/m ³	8 hours	10,000	Non Dispersive Infra-Red Spectrophotometer (NDIR)

Parameters	Units	Averaging Time	Concentration , maximum	Test Methods
Lead	ug/m ³	Annual	0.5	High Volume Sampling Followed by Atomic Absorption Spectrometry
Benzene	ug/m ³	Annual	5	Gas Chromatographic Technique
PM _{2.5}	ug/m ³	24 hours	40	PM _{2.5} sampling gravimetric analysis
Ozone	ug/m ³	8-hours	157	UV spectrophotometer

National Noise Quality Standards, Nepal. 2015

Area	Maximum Sound Pressure Level in dBA (Decibels A-weighted)	
	Day	Night
Industrial area	75	70
Commercial area	65	55
Rural residential area	45	40
Urban residential area	55	50
Mixed residential area	63	55
Peaceful Area	50	40
Maximum Sound Pressure Level from Domestic Equipment in dBA (Decibels A-weighted)		
1	Water Pump	65
2	Diesel Generator	90
3	Entertainment Equipment	70

Noise Pressure Exposure Limit (PEL) of Noise for Workplace as per OSHA TLV (For Reference)

Total time of exposure (continuous or a number of short term Exposures) per day, in hours.	Sound Pressure Level in dBA (decibels A-weighted)
8	85
4	95
2	100

1	105
$\frac{1}{2}$	110
$\frac{1}{4}$	115

Notes:-

- (1) No exposure in excess of 115 dBA is to be permitted.
- (2) Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level in C weighting network.
- (3) Hearing protection shall be mandatory within 85dBA.



List of test results

1. Water quality test report
2. Noise quality test report
3. Ambient air quality test report
4. Photographs



NS Lab Accreditation No.: 08/065-66
VAT/PAN No.: 300124309
Regd. No. 5180/052/053



"Training For Success"

Water

Engineering & Training Centre (P.) Ltd.

Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMV Pvt. Ltd.			Source: As Listed Below				
Sample No: 1232-1236			Analyzed date: 30/09/2016- 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Sisne Khola (1232)	Sikrey Khola (1233)	Khani Khola (1234)	Naubise Khola (1235)	100m Downstream of Dhunikhola and Rupsekhol (1236)
PHYSICAL							
pH	-	6.5-8.5*	6.8	6.5	6.6	7.0	6.8
Temperature	°C	-	24.7	24.5	24.4	24.4	24.5
Total Dissolved Solids	mg/l	1000	81.0	78.0	106.0	148.0	155.0
CHEMICAL							
Ammonia	mg/l	1.5	0.03	<0.02	0.16	0.05	<0.02
Nitrate	mg/l as NO ₃	50	2.17	4.0	4.2	2.1	1.9
Phosphate	mg/l	-	0.22	0.37	0.20	0.09	0.19
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l	-	1.5	1.5	0.75	1.5	1.8
Dissolved Oxygen	mg/l	-	7.1	7.4	7.2	7.5	7.2
BOD	mg/l	-	2.5	3.0	3.3	3.4	1.7
Total Hardness	mg/l as CaCO ₃	500	68.0	100	126.0	136.0	136.0
Calcium	mg/l as Ca ²⁺	200	17.6	27.2	35.2	36.8	38.4
Magnesium	mg/l	-	5.8	7.8	9.2	10.7	9.7
Chloride	mg/l	250	1.0	<1.0	1.0	3.0	2.0
Iron	mg/l	0.3 (3)	0.13	0.21	1.5	0.4	0.5
Fluoride	mg/l	0.5-1.5*	0.29	0.23	0.16	0.18	0.17
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.8	3.3	3.1	2.1	2.2
Potassium	mg/l	-	1.6	1.0	1.1	1.2	1.33
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	<0.01	0.05	0.02	0.08	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	300	600	550	300	500

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal),

Remark: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

Note: 1. The result refer only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implies.

2. Any duplication of this report can not be used as evidence in the court of law and should not be used in any advertising media without prior written permission to us.

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NS Lab Accreditation No. 08/065-66
VAT/PAN No. 300124309
Regd No. 5180/052/053



"Training For Success"

Water
Engineering & Training Centre (P.) Ltd.

Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMV Pvt. Ltd.			Source: As Listed Below				
Sample No: 1237-1241			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Mahesh Khola (1237)	Agra Khola (1238)	Khese Khola (1239)	Belkhu Khola (1240)	Gafaudi Khola (1241)
PHYSICAL							
pH	-	6.5-8.5*	7.3	7.4	7.5	7.1	6.7
Temperature	°C	-	24.7	24.9	24.7	24.6	24.0
Total Dissolved Solids	mg/l	1000	154.0	128.0	116.0	35.0	127.0
CHEMICAL							
Ammonia	mg/l	1.5	0.06	0.25	0.03	0.11	0.03
Nitrate	mg/l as NO ₃	50	1.2	1.6	<0.02	0.12	0.20
Phosphate	mg/l	-	0.15	0.40	0.19	1.7	0.27
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l	-	1.1	1.8	1.8	2.6	1.1
Dissolved Oxygen	mg/l	-	7.3	7.6	7.1	7.1	7.3
BOD	mg/l	-	1.8	5.8	1.6	0.83	1.2
Total Hardness	mg/l as CaCO ₃	500	130.0	102.0	100.0	30.0	102.0
Calcium	mg/l as Ca ⁺⁺	200	33.6	22.4	32.0	8.0	28.0
Magnesium	mg/l	-	11.2	11.2	4.8	2.4	7.8
Chloride	mg/l	250	3.0	2.0	<1.0	<1.0	<1.0
Iron	mg/l	0.3 (3)	0.8	31.9	0.03	0.27	0.62
Fluoride	mg/l	0.5-1.5*	0.30	0.21	0.24	0.20	0.35
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	6.7	5.8	6.8	4.5	8.7
Potassium	mg/l	-	2.8	4.5	2.7	1.6	2.7
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.3	0.08	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	400	1000	1000	300	500

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water.

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal)

Remarks: Fluoride is lower than the NDWQS limit. Iron is high in sample of Agra Khola. Biologically, unsatisfactory.

Analyzed by

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Authorized Signature

Note: 1. The result refers only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implied.

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Regd. No. 5180/052/053



"Training For Success"

Water

Engineering & Training Centre (P.) Ltd.

Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory: R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1242-1246			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Malekhu Khola (1242)	Charaudi Khola (1243)	Hugdi Khola (1244)	Mauwa Khola (1245)	Barban Khola (1246)
PHYSICAL							
pH	-	6.5-8.5*	7.0	7.1	7.1	7.0	6.5
Temperature	°C	-	24.7	24.8	25.2	25.3	25.0
Total Dissolved Solids	mg/l	1000	176.0	193.0	160.0	258.0	65.0
CHEMICAL							
Ammonia	mg/l	1.5	0.11	0.09	0.02	0.14	<0.02
Nitrate	mg/l as NO ₃	50	0.10	0.49	0.44	1.4	0.46
Phosphate	mg/l	-	0.16	0.32	0.15	0.10	0.35
Sulphate	mg/l	250	<5.0	<5.0	<5.0	60.97	<5.0
Sulphide	mg/l	-	2.6	3.0	1.5	2.2	1.5
Dissolved Oxygen	mg/l	-	7.1	7.3	7.2	7.1	7.4
BOD	mg/l	-	0.87	3.0	4.7	2.2	1.9
Total Hardness	mg/l as CaCO ₃	500	154.0	182.0	152.0	250.0	50.0
Calcium	mg/l as Ca ⁺⁺	200	36.0	36.8	31.4	51.2	12.0
Magnesium	mg/l	-	15.5	21.8	18.4	29.6	4.8
Chloride	mg/l	250	<1.0	1.98	0.9	1.9	<1.0
Iron	mg/l	0.3 (3)	0.91	0.12	0.08	0.12	0.07
Fluoride	mg/l	0.5-1.5*	0.33	0.25	0.31	0.31	0.41
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.9	3.3	2.2	3.0	8.6
Potassium	mg/l	-	3.5	3.06	1.7	3.7	1.6
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.02	<0.01	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	600	400	500	350	650

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water.

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal).

Remarks: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

Note: 1. The result refer only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implies.

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NS Lab Accreditation No : 08/065-66
VAT/PAN No : 300124309
Regd. No. 5180/052/053



"Training For Success"

Water

Engineering & Training Centre (P.) Ltd.

Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory: R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1247-1251			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Majhimtar Across at Trisuli River (1247)	Pang Khola (1248)	Pasupati Khola (1249)	Kaudi Khola (1250)	Dhaubadi Khola (1251)
PHYSICAL							
pH	-	6.5-8.5*	6.5	6.5	6.2	6.7	7.0
Temperature	°C	-	25.0	25.0	24.9	25.0	24.9
Total Dissolved Solids	mg/l	1000	72.0	65.0	57.0	184.0	223.0
CHEMICAL							
Ammonia	mg/l	1.5	0.39	<0.02	0.02	0.09	0.18
Nitrate	mg/l as NO ₃	50	2.8	0.46	3.4	0.46	2.0
Phosphate	mg/l	-	0.25	0.35	1.3	0.15	0.15
Sulphate	mg/l	250	74.2	<5.0	28.02	57.7	57.7
Sulphide	mg/l	-	1.8	1.5	2.2	1.8	1.8
Dissolved Oxygen	mg/l	-	7.2	7.1	7.0	7.4	7.1
BOD	mg/l	-	0.70	1.9	2.8	3.0	3.6
Total Hardness	mg/l as CaCO ₃	500	70.0	50.0	44.0	180.0	208.0
Calcium	mg/l as Ca ⁺⁺	200	16.0	12.0	10.4	40.8	43.2
Magnesium	mg/l	-	7.3	4.8	4.4	18.9	24.3
Chloride	mg/l	250	<1.0	<1.0	1.0	1.98	2.9
Iron	mg/l	0.3 (3)	8.9	0.07	0.05	0.07	0.74
Fluoride	mg/l	0.5-1.5*	0.20	0.41	0.26	0.27	0.42
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.0	8.6	7.3	3.4	5.5
Potassium	mg/l	-	6.0	1.6	1.0	1.7	2.0
Cadmium	mg/l	0.003	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	mg/l	1	0.03	<0.01	<0.01	<0.01	0.02
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.01	<0.01	<0.01	<0.01	<0.01
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	1000	650	500	Nil	450

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal),

Remark: Fluoride is lower than the NDWQS limit. Iron is high at Majhimtar Across at Trisuli River. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

Note: 1. The result refer only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implies.

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Fax No: 977-1-4479642



Water

Engineering & Training Centre (P.) Ltd.

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1232-1236			Analyzed date: 30/09/2016- 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Sisne Khola (1232)	Sikrey Khola (1233)	Khani Khola (1234)	Naubise Khola (1235)	100m Downstream of Dhunikhola and Rupsekhol (1236)
PHYSICAL							
pH	-	6.5-8.5*	6.8	6.5	6.6	7.0	6.8
Temperature	°C	-	24.7	24.5	24.4	24.4	24.5
Total Dissolved Solids	mg/l	1000	81.0	78.0	106.0	148.0	155.0
CHEMICAL							
Ammonia	mg/l	1.5	0.03	<0.02	0.16	0.05	<0.02
Nitrate	mg/l as NO ₃	50	2.17	4.0	4.2	2.1	1.9
Phosphate	mg/l	-	0.22	0.37	0.20	0.09	0.19
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l	-	1.5	1.5	0.75	1.5	1.8
Dissolved Oxygen	mg/l	-	7.1	7.4	7.2	7.5	7.2
BOD	mg/l	-	2.5	3.0	3.3	3.4	1.7
Total Hardness	mg/l as CaCO ₃	500	68.0	100	126.0	136.0	136.0
Calcium	mg/l as Ca ⁺⁺	200	17.6	27.2	35.2	36.8	38.4
Magnesium	mg/l	-	5.8	7.8	9.2	10.7	9.7
Chloride	mg/l	250	1.0	<1.0	1.0	3.0	2.0
Iron	mg/l	0.3 (3)	0.13	0.21	1.5	0.4	0.5
Fluoride	mg/l	0.5-1.5*	0.29	0.23	0.16	0.18	0.17
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.8	3.3	3.1	2.1	2.2
Potassium	mg/l	-	1.6	1.0	1.1	1.2	1.33
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	<0.01	0.05	0.02	0.08	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	300	600	550	300	500

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal),

Remark: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

Note: 1. The result refer only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implies.

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"Training For Success"

Water
Engineering & Training Centre (P.) Ltd.

Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1237-1241			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Maresh Khola (1237)	Agra Khola (1238)	Kheshi Khola (1239)	Belkhu Khola (1240)	Galaudi Khola (1241)
PHYSICAL							
pH	-	6.5-8.5*	7.3	7.4	7.5	7.1	6.7
Temperature	°C	-	24.7	24.9	24.7	24.6	24.0
Total Dissolved Solids	mg/l	1000	154.0	128.0	116.0	35.0	127.0
CHEMICAL							
Ammonia	mg/l	1.5	0.06	0.25	0.03	0.11	0.03
Nitrate	mg/l as NO ₃	50	1.2	1.6	<0.02	0.12	0.20
Phosphate	mg/l	-	0.15	0.40	0.19	1.7	0.27
Sulphate	mg/l	250	<5.0	<5.0	<5.0	<5.0	<5.0
Sulphide	mg/l	-	1.1	1.8	1.8	2.6	1.1
Dissolved Oxygen	mg/l	-	7.3	7.6	7.1	7.1	7.3
BOD	mg/l	-	1.8	5.8	1.6	0.83	1.2
Total Hardness	mg/l as CaCO ₃	500	130.0	102.0	100.0	30.0	102.0
Calcium	mg/l as Ca ⁺⁺	200	33.6	22.4	32.0	8.0	28.0
Magnesium	mg/l	-	11.2	11.2	4.8	2.4	7.8
Chloride	mg/l	250	3.0	2.0	<1.0	<1.0	<1.0
Iron	mg/l	0.3 (3)	0.8	31.9	0.03	0.27	0.62
Fluoride	mg/l	0.5-1.5*	0.30	0.21	0.24	0.20	0.35
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	6.7	5.8	6.8	4.5	8.7
Potassium	mg/l	-	2.8	4.5	2.7	1.6	2.7
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.3	0.08	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	400	1000	1000	300	500

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water.

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal)

Remarks: Fluoride is lower than the NDWQS limit. Iron is high in sample of Agra Khola. Biologically, unsatisfactory.

Analyzed by

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Authorized Signature

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Regd. No. 5180/052/053



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Tel : 977-1-4475674
Fax No: 977-1-4479642

Laboratory: R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1242-1246			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Malekhu Khola (1242)	Charaudi Khola (1243)	Hugdi Khola (1244)	Mauwa Khola (1245)	Barban Khola (1246)
PHYSICAL							
pH	-	6.5-8.5*	7.0	7.1	7.1	7.0	6.5
Temperature	°C	-	24.7	24.8	25.2	25.3	25.0
Total Dissolved Solids	mg/l	1000	176.0	193.0	160.0	258.0	65.0
CHEMICAL							
Ammonia	mg/l	1.5	0.11	0.09	0.02	0.14	<0.02
Nitrate	mg/l as NO ₃	50	0.10	0.49	0.44	1.4	0.46
Phosphate	mg/l	-	0.16	0.32	0.15	0.10	0.35
Sulphate	mg/l	250	<5.0	<5.0	<5.0	60.97	<5.0
Sulphide	mg/l	-	2.6	3.0	1.5	2.2	1.5
Dissolved Oxygen	mg/l	-	7.1	7.3	7.2	7.1	7.4
BOD	mg/l	-	0.87	3.0	4.7	2.2	1.9
Total Hardness	mg/l as CaCO ₃	500	154.0	182.0	152.0	250.0	50.0
Calcium	mg/l as Ca ⁺⁺	200	36.0	36.8	31.4	51.2	12.0
Magnesium	mg/l	-	15.5	21.8	18.4	29.6	4.8
Chloride	mg/l	250	<1.0	1.98	0.9	1.9	<1.0
Iron	mg/l	0.3 (3)	0.91	0.12	0.08	0.12	0.07
Fluoride	mg/l	0.5-1.5*	0.33	0.25	0.31	0.31	0.41
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.9	3.3	2.2	3.0	8.6
Potassium	mg/l	-	3.5	3.06	1.7	3.7	1.6
Cadmium	mg/l	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Copper	mg/l	1	0.02	<0.01	<0.01	<0.01	<0.01
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	600	400	500	350	650

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water.

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal).

Remarks: Fluoride is lower than the NDWQS limit. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

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Fax No: 977-1-4479642

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERMIC Pvt. Ltd.			Source: As Listed Below				
Sample No: 1247-1251			Analyzed date: 30/09/2016 - 7/10/2016				
Date of Receipt: 30/09/2016			No. of Samples: 05				
Sampled by: WETC			Location: As mentioned below				
Parameters	Units	NDWQS	Result				
			Majhimtar Across at Trisuli River (1247)	Pang Khola (1248)	Pasupati Khola (1249)	Kaudi Khola (1250)	Dhaubadi Khola (1251)
PHYSICAL							
pH	-	6.5-8.5*	6.5	6.5	6.2	6.7	7.0
Temperature	°C	-	25.0	25.0	24.9	25.0	24.9
Total Dissolved Solids	mg/l	1000	72.0	65.0	57.0	184.0	223.0
CHEMICAL							
Ammonia	mg/l	1.5	0.39	<0.02	0.02	0.09	0.18
Nitrate	mg/l as NO ₃	50	2.8	0.46	3.4	0.46	2.0
Phosphate	mg/l	-	0.25	0.35	1.3	0.15	0.15
Sulphate	mg/l	250	74.2	<5.0	28.02	57.7	57.7
Sulphide	mg/l	-	1.8	1.5	2.2	1.8	1.8
Dissolved Oxygen	mg/l	-	7.2	7.1	7.0	7.4	7.1
BOD	mg/l	-	0.70	1.9	2.8	3.0	3.6
Total Hardness	mg/l as CaCO ₃	500	70.0	50.0	44.0	180.0	208.0
Calcium	mg/l as Ca ⁺⁺	200	16.0	12.0	10.4	40.8	43.2
Magnesium	mg/l	-	7.3	4.8	4.4	18.9	24.3
Chloride	mg/l	250	<1.0	<1.0	1.0	1.98	2.9
Iron	mg/l	0.3 (3)	8.9	0.07	0.05	0.07	0.74
Fluoride	mg/l	0.5-1.5*	0.20	0.41	0.26	0.27	0.42
Chromium	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	mg/l	-	3.0	8.6	7.3	3.4	5.5
Potassium	mg/l	-	6.0	1.6	1.0	1.7	2.0
Cadmium	mg/l	0.003	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	mg/l	1	0.03	<0.01	<0.01	<0.01	0.02
Lead	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.01	<0.01	<0.01	<0.01	<0.01
Oil & Grease	mg/l	-	<1.0	<1.0	<1.0	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS							
Total Coliform	CFU/100ml	Nil	1000	650	500	Nil	450

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal),

Remark: Fluoride is lower than the NDWQS limit. Iron is high at Majhimtar Across at Trisuli River. Biologically, unsatisfactory.

Analyzed by

Checked by

Authorized Signature

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Water

Engineering & Training Centre (P.) Ltd.

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Name of Sender: ERM C Pvt. Ltd.			Source: As Listed Below	
Sample No: 1252-1253			Analyzed date: 30/09/2016 - 7/10/2016	
Date of Receipt: 30/09/2016			No. of Samples: 02	
Sampled by: WETC			Location: As mentioned below	
Parameters	Units	NDWQS	Result	
			Lamu Khola (1252)	Near Shree Chandrodya H. S. School at Trisuli River (1253)
PHYSICAL				
pH	-	6.5-8.5*	7.0	6.7
Temperature	°C	-	24.9	24.9
Total Dissolved Solids	mg/l	1000	221.0	74.0
CHEMICAL				
Ammonia	mg/l	1.5	0.06	0.34
Nitrate	mg/l as NO ₃	50	1.3	1.8
Phosphate	mg/l	-	0.18	0.16
Sulphate	mg/l	250	63.5	<5.0
Sulphide	mg/l	-	1.1	2.6
Dissolved Oxygen	mg/l	-	7.0	7.2
BOD	mg/l	-	4.1	3.8
Total Hardness	mg/l as CaCO ₃	500	200.0	70.0
Calcium	mg/l as Ca ⁺⁺	200	40.8	20.8
Magnesium	mg/l	-	23.8	4.4
Chloride	mg/l	250	4.9	2.0
Iron	mg/l	0.3 (3)	0.25	4.3
Fluoride	mg/l	0.5-1.5*	0.26	0.20
Chromium	mg/l	0.05	<0.05	<0.05
Sodium	mg/l	-	3.7	3.0
Potassium	mg/l	-	1.6	4.1
Cadmium	mg/l	0.003	<0.003	<0.003
Copper	mg/l	1	0.03	0.02
Lead	mg/l	0.01	<0.01	<0.01
Mercury	mg/l	0.001	<0.001	<0.001
Oil & Grease	mg/l	-	<1.0	<1.0
BACTERIOLOGICAL ANALYSIS				
Total Coliform	CFU/100ml	Nil	500	550

APHA: American Public Health Association, Standard Methods for the Examination of Water & Waste Water,

WHO GV: World Health Organization Guideline Value, 2006 Update, NDWQS: National Drinking Water Quality Standard, 2062 (Nepal),

Remarks: Fluoride is lower than the NDWQS limit. Iron is high at Near Shree Chandrodya H. S. School at Trisuli River. Biologically, unsatisfactory.

Analyzed by

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Authorized Signature

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Water
Engineering & Training Centre (P.) Ltd.

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Test Report/Certificate



Name of Sender: Environment Resource Consultancy (P) Ltd.					Source: Location as Listed					
Sample No: 1253 - NM/01-5/073/074					Analyzed date : 27/09/2016 - 07/09/2016					
Date of Monitoring: 27-30/09/2016					No. of Samples: 5					
Sampled by: WETC					Location : Malekhu, Kuringhat, Malekhu, Galchhi and Nagdhunga Checkpost					
					Duration: 8 hours Continuous Monitoring Data					
S.	Location Spots	Test Parameters								Range
N.		L _{max}	L _{min}	L _{eq}	L ₅	L ₁₀	L ₅₀	L ₉₀	L ₉₅	
1	Mungling (1253 - NM - 1)**	99.6	58.4	80.6	86.0	84.1	81.9	75.2	73.9	
2	Kuringhat (1253 - NM - 2) **	98.1	53.9	78.8	89.3	88.1	85.3	80.5	74.1	
3	Malekhu (1253 - NM - 3) **	109.3	53.9	90.1	91.4	89.8	84.1	70.8	64.8	*
4	Galchhi (1253 - NM - 4) **	104.4	54.8	85.4	89.3	88.5	82.5	64.6	61.8	*
5	Nagdhunga Checkpost (at VDC Ward Office - (1253 - NM - 5) **	105.6	59.5	86.5	96.8	96.2	82.8	60.0	59.9	*
NNQS for Industrial Area**				70						
Note: Range acceptable at industrial workplace area for 8 working hours				85						

LS
Analyzed by

CA
Checked by

PL
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Note: 1. The result refer only to the parameters tested of the samples provided to our laboratory or collected by us for analysis as specified. Endorsement of the product is neither inferred nor implied.
2. Any duplication of this report can not be used as evidence in the court of law and should not be used in any advertising media without prior written permission to us.
3. The total liability of our company for the product is limited to the invoiced amount only.
* - High Range But Within OSHA TLV Guideline Value for Industrial Workplace Area

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Water

Engineering & Training Centre (P.) Ltd.

Laboratory, R & D on Total Water Management, Treatment & Consultancy

Test Report/Certificate

Name of Client: ERM C Pvt. Ltd.

Work: 24 hours Ambient Air Quality Monitoring

Locations: As Listed Below

Location	Monitoring Date	Code
1. Mungling (Near 3 sister restaurant)	27 - 28 September, 2016	1253 - AA - 1
2. Malekhu (At Temple – Near Ambe petrol Pump)	28 - 29 September, 2016	1253 - AA - 2
3. Nagdhunga Checkpost (At Chndragiri Ward Office)	30 - 31 September, 2016	1253 - AA - 3

Location	PM ₁₀	*PM _{2.5}	TSP	*Lead	SO ₂	NO _x	*Benzene	CO (%)
	(ug/Nm ³)							
Mungling (Near 3 sister restaurant - 1253 - AA - 1)	122.0	28.0	150.0	<0.002	<0.01	2.4	<2.0	**ND (<1.0)
Malekhu (At Temple – Near Ambe petrol Pump - 1253 - AA - 2)	132.0	31.0	163.0	<0.002	<0.01	4.7	<2.0	**ND (<1.0)
Nagdhunga Checkpost (At Chndragiri Ward Office - 1253 - AA - 3)	326.0	38.0	364.0	<0.002	<0.01	3.3	<2.0	**ND (<1.0)
NAAQS	120.0	40.0	230.0	<0.5	70.0	80.0	5.0	1.0

** ND - Not Detected

** Not Accredited Test Parameters

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CA
Checked by

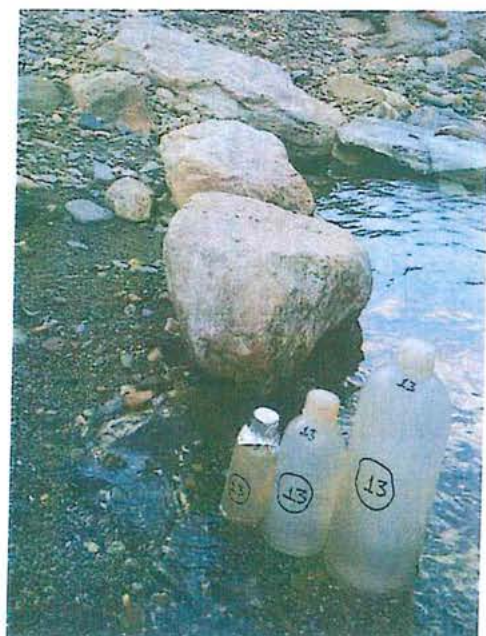
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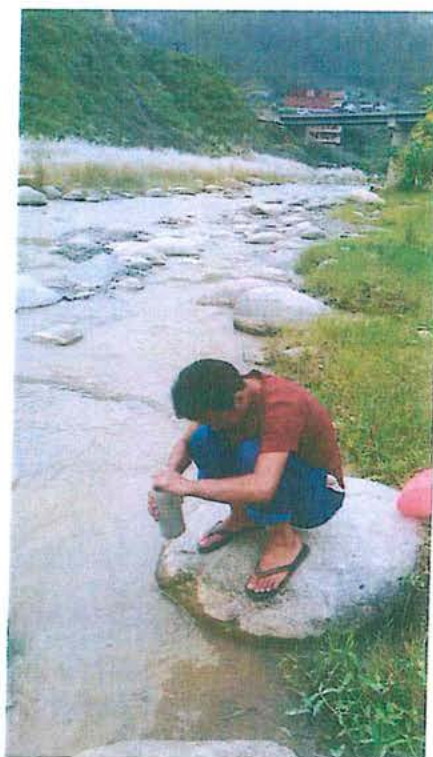
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Photographs of water sampling on the field





Ambient Air Quality Monitoring in the field



Noise Data Recording in the Field



Ministry of Government of Nepal
Department of Physical Infrastructure and Transport
Department of Roads
Development Cooperation Implementation Division
Jwagal, Lalitpur

Annex 14: Biological information details of the project area

Annex 14.1 Potential species found in Forests of the project area

a) *Schima-Castanopsis* Forest type

S.N.	Scientific Name	Local Name	Remarks
Trees and Poles			
1.	<i>Acer oblongum</i>	Phirphire	
2.	<i>Aesandra butyracea</i>	Chyuri	
3.	<i>Albizia julibrissin</i>	Rato siris	
4.	<i>Alnus nepalensis</i>	Utis	
5.	<i>Bauhinia purpurea</i>	Rato koiralo	
6.	<i>Bauhinia variegata</i>	Koiralo	
7.	<i>Brassaiopsis hainla</i>	Chuletro	
8.	<i>Castanopsis indica</i>	Dhale katus	
9.	<i>Castanopsis tribuloides</i>	Musure katus	
10.	<i>Celtis australis</i>	Khari	
11.	<i>Duabanga grandiflora</i>	Lampate	
12.	<i>Engelhardia spicata</i>	Mauwa	
13.	<i>Erythrina suberosa</i>	Phaledo	
14.	<i>Ficus neriifolia</i>	Dudhilo	
15.	<i>Ficus semicordata</i>	Khanyu	
16.	<i>Fraxinus floribunda</i>	Lankuri	
17.	<i>Garuga pinnata</i>	Dabdabe	
18.	<i>Grewia optiva</i>	Bhimal	
19.	<i>Lagerstroemia parviflora</i>	Bot dhayaro	
20.	<i>Ligustrum indicum</i>	Kanike phul	
21.	<i>Lindera pulcherrima</i>	Phusure	
22.	<i>Lithocarpus elegans</i>	Arkhaule	
23.	<i>Litsea cubeba</i>	Siltimur	
24.	<i>Litsea doshia</i>	Panheli	
25.	<i>Lyonia ovalifolia</i>	Angeri	
26.	<i>Macaranga denticulata</i>	Malata	
27.	<i>Macaranga pustulata</i>	Malata	
28.	<i>Maesa macrophylla</i>	Bhogate	
29.	<i>Meliosma simplicifolia</i>	Chiuri	
30.	<i>Michelia champaca</i>	Champ	
31.	<i>Michelia kisopa</i>	Ban champ	
32.	<i>Myrsine capitellata</i>	Seti kath	
33.	<i>Neolitsea cuipala</i>	Phephe	
34.	<i>Pavetta indica</i>	Kangiyo phul	
35.	<i>Persea duthiei</i>	Mahilo kaulo	
36.	<i>Persea odoratissima</i>	Seto kaulo	
37.	<i>Premna barbata</i>	Ginneri	
38.	<i>Pyrus pashia</i>	Mayal	
39.	<i>Quercus glauca</i>	Phalant	
40.	<i>Rhododendron arboretum</i>	Lali gurans	
41.	<i>Rhus javanica</i>	Bhaki amilo	
42.	<i>Rhus wallichii</i>	Bhalayo	
43.	<i>Sapium insigne</i>	Khirro	
44.	<i>Saurauia napaulensis</i>	Gogan	
45.	<i>Schima wallichii</i>	Chilaune	
46.	<i>Semecarpus anacardium</i>	Bhalayo	
47.	<i>Wendlandia puberula</i>	Kainyu	
48.	<i>Zizyphus incurva</i>	Hade bayar	

S.N.	Scientific Name	Local Name	Remarks
Shrubs			
1.	<i>Artemisia indica</i>	Titepati	
2.	<i>Berberis asiatica</i>	Chutro	
3.	<i>Boehmeria macrophylla</i>	Chiple	
4.	<i>Camellia kissi</i>	Hinguwa	
5.	<i>Caryopteris odorata</i>	Nilo dhusure	
6.	<i>Casearia graveolens</i>	Barkula	
7.	<i>Colebrookea oppositifolia</i>	Dhusure	
8.	<i>Colquhounia coccinea</i>	Sano tusare	
9.	<i>Coriaria napalensis</i>	Machhaino	
10.	<i>Duranta repens</i>	Nil kanda	
11.	<i>Eurya acuminata</i>	Jhingane	
12.	<i>Grewia disperma</i>	Bhimal	
13.	<i>Hypericum cordifolium</i>	Areli	
14.	<i>Hypericum uralum</i>	Urilo	
15.	<i>Justicia adhatoda</i>	Asuro	
16.	<i>Lantana camara</i>	Masino kanda	
17.	<i>Mussaenda macrophylla</i>	Dhobini	
18.	<i>Pyracantha crenulata</i>	Ghangaru	
19.	<i>Rubia manjith</i>	Majitho	
20.	<i>Trichilia connaroides</i>	Ankhataruwa	
21.	<i>Vitex negundo</i>	Simali	
22.	<i>Woodfordia fruticosa</i>	Dhanyaro	
23.	<i>Zanthoxylum armatum</i>	Timur	
Climbers			
1.	<i>Actinidia callosa</i>	Tiku phul	
2.	<i>Ceropegia pubescens</i>	Mirke laharo	
3.	<i>Cissampelos pareira</i>	Batulo pate	
4.	<i>Dioscorea bulbifera</i>	Bhyakur	
5.	<i>Dioscorea deltoidea</i>	Bhyakur	
6.	<i>Hedera nepalensis</i>	Dude lahara	
7.	<i>Hedyotis scandens</i>	Bokri lahara	
8.	<i>Marsdenia roylei</i>	Dudhe lahara	
9.	<i>Tetrastigma serrulatum</i>	Pani lahara	
10.	<i>Thunbergia coccinea</i>	Singame lahara	
11.	<i>Trachelospermum lucidum</i>	Dudhe lahara	
12.	<i>Trichosanthes wallichiana</i>	Indreni	
Herbs			
1.	<i>Achyranthes aspera</i>	Apamarga	
2.	<i>Ageratum conyzoides</i>	Ganmane ghans	
3.	<i>Amomum subulatum</i>	Alaichi	
4.	<i>Arisaema speciosum</i>	Bish jharne	
5.	<i>Bidens pilosa</i>	Kurkur	
6.	<i>Blainvillea acmella</i>	Lato ghans	
7.	<i>Bupleurum hamiltonii</i>	Mariche ghans	
8.	<i>Campanula pallida</i>	Nepali bis	
9.	<i>Cannabis sativa</i>	Ganja	
10.	<i>Cassia mimosoides</i>	Amala jhar	
11.	<i>Coelogyne cristata</i>	Chandigava	
12.	<i>Craniotome furcata</i>	Batule silam	
13.	<i>Eupatorium adenophorum</i>	Banmara	
14.	<i>Globba clarkei</i>	Devi saro	
15.	<i>Hedyotis corymbosa</i>	Piringo	
16.	<i>Justicia procumbens</i>	Phulphar	
17.	<i>Lindenbergia grandiflora</i>	Bhendi phul	
18.	<i>Lobelia pyramidalis</i>	Eklebir	
19.	<i>Pogostemon glaber</i>	Rudilo	
20.	<i>Pouzolzia sanguinea</i>	Chiple	
21.	<i>Pouzolzia zeylanica</i>	Barbere	

S.N.	Scientific Name	Local Name	Remarks
22.	<i>Rabdosia lophanthoides</i>	Masino charpate	
23.	<i>Rumex hastatus</i>	Charemala	
24.	<i>Scutellaria discolor</i>	Nilo butte ghans	
25.	<i>Urena lobata</i>	Nalu kuro	
26.	<i>Vernonia cinerea</i>	Jhurjhure	
Grasses			
1.	<i>Heteropogon contortus</i>	Arthunge	
2.	<i>Imperata cylindrica</i>	Siru	



b) Hill Sal (*Shorea robusta*) Forest Type

S.N.	Scientific Name	Local Name	Remarks
Trees and poles			
1.	<i>Acacia catechu</i>	Khair	
2.	<i>Adina cordifolia</i>	Karma	
3.	<i>Aegle marmelos</i>	Bel	
4.	<i>Albizia chinensis</i>	Siran	
5.	<i>Albizia julibrissin</i>	Rato siris	
6.	<i>Albizia lebbeck</i>	Kalo siris	
7.	<i>Albizia lucidior</i>	Tapria siris	
8.	<i>Albizia procera</i>	Seto siris	
9.	<i>Anogeissus latifolius</i>	Banjhi	
10.	<i>Anthocephalus chinensis</i>	Kadam	
11.	<i>Aporosa octandra</i>	Hade	
12.	<i>Bauhinia malabarica</i>	Tanki	
13.	<i>Bauhinia purpurea</i>	Rato koiralo	
14.	<i>Bauhinia variegata</i>	Koiralo	
15.	<i>Bischofia javanica</i>	Kainjal	
16.	<i>Boehmeria rugulosa</i>	Daar	
17.	<i>Bombax ceiba</i>	Simal	
18.	<i>Bridelia retusa</i>	Gayo	
19.	<i>Buchanania latifolia</i>	Chirauji	
20.	<i>Careya arborea</i>	Kumhi	
21.	<i>Cassia fistula</i>	Rajbrikshya	
22.	<i>Castanopsis indica</i>	Dhale katus	
23.	<i>Celtis australis</i>	Khari	
24.	<i>Celtis tetrandra</i>	Khari	
25.	<i>Croton roxburghii</i>	Aule	
26.	<i>Desmodium oojeinense</i>	Sandan	
27.	<i>Dillenia pentagyna</i>	Tantari	
28.	<i>Diospyros Montana</i>	Bistendu	
29.	<i>Duabanga grandiflora</i>	Lampate	
30.	<i>Ehretia laevis</i>	Datingal	
31.	<i>Engelhardia spicata</i>	Mauwa	
32.	<i>Erythrina stricta</i>	Phaledo	
33.	<i>Ficus benjamina</i>	Sami	
34.	<i>Ficus glaberrima</i>	Pakhuri	
35.	<i>Flacourtia indica</i>	Kandai	
36.	<i>Garuga pinnata</i>	Dabdabe	
37.	<i>Glochidion velutinum</i>	Kathmahwa	
38.	<i>Holarrhena pubescens</i>	Indrajau	
39.	<i>Hymenodictyon excelsum</i>	Latikaram	
40.	<i>Kydia calycina</i>	Kubinde	
41.	<i>Lagerstroemia parviflora</i>	Botdhayaro	
42.	<i>Lannea coromandelica</i>	Halonre	
43.	<i>Litsea monopetala</i>	Kutmero	

S.N.	Scientific Name	Local Name	Remarks
44.	<i>Macaranga denticulate</i>	Malata	
45.	<i>Macaranga pustulata</i>	Malata	
46.	<i>Maesa chisia</i>	Bilouni	
47.	<i>Maesa macrophylla</i>	Bhagate	
48.	<i>Maesa Montana</i>	Kirmighna phal	
49.	<i>Mallotus philippensis</i>	Sindhure	
50.	<i>Mallotus tetracoccus</i>	Jogi malata	
51.	<i>Michelia champaca</i>	Champ	
52.	<i>Michelia kisopa</i>	Ban champ	
53.	<i>Oroxylum indicum</i>	Tatelo	
54.	<i>Osyris wightiana</i>	Nundhiki	
55.	<i>Pandanus nepalensis</i>	Ketaki	
56.	<i>Phyllanthus emblica</i>	Amala	
57.	<i>Pinus roxburghii</i>	Khote salla	
58.	<i>Sapium insigne</i>	Khirro	
59.	<i>Schefflera venulosa</i>	Kursimlo	
60.	<i>Schleichera oleosa</i>	Kusum	
61.	<i>Semecarpus anacardium</i>	Bhalayo	
62.	<i>Shorea robusta</i>	Sal	
63.	<i>Sterculia villosa</i>	Odal pat	
64.	<i>Stereospermum chelonoides</i>	Padari	
65.	<i>Streblus asper</i>	Datiwan	
66.	<i>Symplocos racemosa</i>	Lodh	
67.	<i>Syzygium cumini</i>	Jamun	
68.	<i>Terminalia alata</i>	Saj	
69.	<i>Terminalia bellirica</i>	Barro	
70.	<i>Terminalia chebula</i>	Harro	
71.	<i>Toona serrata</i>	Dallo	
72.	<i>Trewia nudiflora</i>	Gutel	
73.	<i>Trichilia connaroides</i>	Ankhataruwa	
74.	<i>Wendlandia exserta</i>	Rato kangiyu	
Shrubs			
1.	<i>Alangium salviifolium</i>	Amphi	
2.	<i>Boehmeria macrophylla</i>	Chiple	
3.	<i>Boehmeria platyphylla</i>	Gargalo	
4.	<i>Bridelia stipularis</i>	Rihk gayo	
5.	<i>Buddleja asiatica</i>	Bhimsen pati	
6.	<i>Caesalpinia decapetala</i>	Lata	
7.	<i>Callicarpa macrophylla</i>	Gwello	
8.	<i>Cascabela thevetia</i>	Karbir	
9.	<i>Casearia graveolens</i>	Barkula	
10.	<i>Clerodendrum japonicum</i>	Dhago phul	
11.	<i>Clerodendrum serratum</i>	Andekhi	
12.	<i>Clerodendrum viscosum</i>	Bhant	
13.	<i>Colebrookea oppositifolia</i>	Dhasure	

S.N.	Scientific Name	Local Name	Remarks
14.	<i>Croton caudatus</i>	Holongre	
15.	<i>Debregeasia longifolia</i>	Tushiari	
16.	<i>Debregeasia salicifolia</i>	Tusare	
17.	<i>Dichroa febrifuga</i>	Aseru	
18.	<i>Dobinea vulgaris</i>	Sangle	
19.	<i>Eranthemum pulchellum</i>	Nil gathe	
20.	<i>Euphorbia royleana</i>	Sihundi	
21.	<i>Flemingia macrophylla</i>	Bhatwasi	
22.	<i>Flemingia strobilifera</i>	Chunetro ghans	
23.	<i>Gochnatia spectabilis</i>	Pandwa	
24.	<i>Grewia disperma</i>	Bhimal	
25.	<i>Holmskioldia sanguinea</i>	Jhule phul	
26.	<i>Indigofera pulchella</i>	Phusre ghans	
27.	<i>Jatropha curcas</i>	Sajiwan	
28.	<i>Justicia adhatoda</i>	Asuro	
29.	<i>Maclura cochinchinensis</i>	Damaru	
30.	<i>Mimosa rubicaulis</i>	Boksi ghans	
31.	<i>Nyctanthes arbor-tristis</i>	Parijat	
32.	<i>Phlogacanthus thyrsiflorus</i>	Chuwa	
33.	<i>Phoenix humilis</i>	Thakal	
34.	<i>Phyllanthus parvifolius</i>	Khareto	
35.	<i>Piper longum</i>	Pipala	
36.	<i>Rhamnus napalensis</i>	Chile kath	
37.	<i>Rhus parviflora</i>	Satibayar	
38.	<i>Tabernaemontana divaricata</i>	Syude laharo	
39.	<i>Woodfordia fruticosa</i>	Dhanyaro	
40.	<i>Zizyphus mauritiana</i>	Bayar	
Climbers			
1.	<i>Acacia intsia</i>	Arkhu	
2.	<i>Acacia pennata</i>	Arfu	
3.	<i>Acacia rugata</i>	Sikakai	
4.	<i>Asparagus racemosus</i>	Satavari	
5.	<i>Bauhinia vahlii</i>	Bhorla	
6.	<i>Cissampelos pareira</i>	Batulo pate	
7.	<i>Dalbergia stipulacea</i>	Tateberi	
8.	<i>Dioscorea bulbifera</i>	Bhyakur	
9.	<i>Dioscorea deltoidea</i>	Bhyakur	
10.	<i>Hiptage benghalensis</i>	Madhabi lata	
11.	<i>Spatholobus parviflorus</i>	Debre lahara	
12.	<i>Tinospora sinensis</i>	Guruj	
Herbs			
1.	<i>Asclepias curassavica</i>	Khursani kose phul	
2.	<i>Boerhavia diffusa</i>	Punarnava	
3.	<i>Elephantopus scaber</i>	Gomukhi	
4.	<i>Houttuynia cordata</i>	Gane	

S.N.	Scientific Name	Local Name	Remarks
5.	<i>Martynia annua</i>	Gridharnki	
Grasses			
1.	<i>Cyperus niveus</i>	Seto mothe	
2.	<i>Neyraudia reynaudiana</i>	Dhonde	
3.	<i>Setaria pallidifusca</i>	Kagune jhar	
4.	<i>Sporobolus diander</i>	Khude ghans	



c) Chir Pine (*Pinus roxburghii*) Forest Type

S.N.	Scientific Name	Local Name	Remarks
Trees and poles			
	<i>Cordia dichotoma</i>	Bohori	
	<i>Erythrina stricta</i>	Phaledo	
	<i>Olea glandulifera</i>	Garrul	
	<i>Phyllanthus emblica</i>	Amala	
	<i>Pinus roxburghii</i>	Khote salla	
	<i>Premna barbata</i>	Ginneri	
	<i>Punica granatum</i>	Anar	
	<i>Schefflera venulosa</i>	Kursimlo	
	<i>Semecarpus anacardium</i>	Bhalayo	
	<i>Stranvaesia nussia</i>	Jure mayal	
	<i>Wendlandia exserta</i>	Rato kangiyu	
	<i>Wendlandia puberula</i>	Kainyu	
Shrubs			
	<i>Buddleja asiatica</i>	Bhimsen pati	
	<i>Casearia graveolens</i>	Barkula	
	<i>Gochnatia spectabilis</i>	Pandwa	
	<i>lnula cappa</i>	Gai tihare	
	<i>Solanum anguivi</i>	Bihin	
	<i>Woodfordia fruticosa</i>	Dhanyaro	
Herbs			
	<i>Cassia mimosoides</i>	Amala jhar	
	<i>Crotalaria albida</i>	Bhendi phul	
	<i>Gentiana pedicellata</i>	Gyanjak	
	<i>Pentanema indicum</i>	Kaile jhar	
	<i>Pogostemon glaber</i>	Rudilo	
Grasses			
	<i>Arundinella nepalensis</i>	Phurke	
	<i>Imperata cylindrica</i>	Siru	
	<i>Paspalum scrobiculatum</i>	Kodi	
	<i>Pogonatherum paniceum</i>	Muse kharuki	
	<i>Sporobolus diander</i>	Khude ghans	



d) Lower Tropical Sal and Mixed Broadleaved Forest

S.N.	Scientific Name	Local Name	Remarks
Trees and poles			
	<i>Acacia catechu</i>	Khair	
	<i>Actinodaphne angusifolia</i>	Jhakri kath	
	<i>Adina cordifolia</i>	Karma	
	<i>Aesandra butyracea</i>	Chyuri	
	<i>Albizia chinensis</i>	Siran	
	<i>Albizia lebbeck</i>	Kalo siris	
	<i>Albizia lucidior</i>	Tapria siris	
	<i>Albizia procera</i>	Seto siris	
	<i>Alstonia scholaris</i>	Chhatiwan	
	<i>Anogeissus latifolius</i>	Banji	
	<i>Anthocephalus chinensis</i>	Kadam	
	<i>Antidesma acidum</i>	Amari	
	<i>Aporosa octandra</i>	Hade	
	<i>Baccaurea ramiflora</i>	Kusum	
	<i>Bauhinia malabarica</i>	Tanki	
	<i>Bauhinia variegata</i>	Koiralo	
	<i>Bischofia javanica</i>	Kainjal	
	<i>Bombax ceiba</i>	Simal	
	<i>Bridelia retusa</i>	Gayo	
	<i>Buchanania latifolia</i>	Chirauji	
	<i>Butea monosperma</i>	Palas	
	<i>Careya arborea</i>	Kumhi	
	<i>Cassia fistula</i>	Rajbrikshya	
	<i>Cassine glauca</i>	Putali kath	
	<i>Castanopsis tribuloides</i>	Musure katus	
	<i>Clausena excavata</i>	Manijale	
	<i>Croton roxburghii</i>	Aule	
	<i>Cryptocarya amygdalina</i>	Patmero	
	<i>Dalbergia sissoo</i>	Sissoo	
	<i>Dillenia pentagyna</i>	Tantari	
	<i>Duabanga grandiflora</i>	Lampate	
	<i>Dysoxylum binectariferum</i>	Lahtune	
	<i>Dysoxylum gobara</i>	Lasune	
	<i>Ehretia laevis</i>	Datingal	
	<i>Eriobotrya elliptica</i>	Maya	
	<i>Ficus hispida</i>	Kharseto	
	<i>Garuga pinnata</i>	Dabdabe	
	<i>Glochidion velutinum</i>	Kathmahwa	
	<i>Heteropanax fragrans</i>	Lal totola	
	<i>Holarrhena pubescens</i>	Indrajau	
	<i>Hymenodictyon excelsum</i>	Latikaram	
	<i>Kydia calycina</i>	Kubinde	
	<i>Lagerstroemia parviflora</i>	Bot dhayaro	
	<i>Lannea coromandelica</i>	Halonre	
	<i>Litsea salicifolia</i>	Pahenli	
	<i>Macaranga denticulata</i>	Malata	
	<i>Macropanax undulatus</i>	Chinde	
	<i>Maesa montana</i>	Kirmighna phal	
	<i>Mallotus philippensis</i>	Sindhure	
	<i>Mallotus tetracoccus</i>	Jogi malata	
	<i>Meliosma simplicifolia</i>	Chiuri	
	<i>Mitragyna parvifolia</i>	Phaldu	
	<i>Oroxylum indicum</i>	Tatelo	
	<i>Phoebe lanceolata</i>	Jhakri kath	
	<i>Phyllanthus emblica</i>	Amala	
	<i>Quercus glauca</i>	Phalant	
	<i>Schleichera oleosa</i>	Kusum	

S.N.	Scientific Name	Local Name	Remarks
	<i>Semecarpus anacardium</i>	Bhalayo	
	<i>Shorea robusta</i>	Sal	
	<i>Sphaerosacme decandra</i>	Lahare lalgedi	
	<i>Sterculia villosa</i>	Odal pat	
	<i>Stereospermum chelonoides</i>	Padari	
	<i>Syzygium cumini</i>	Jamun	
	<i>Syzygium venosum</i>	Dubka	
	<i>Terminalia alata</i>	Saj	
	<i>Terminalia bellirica</i>	Barro	
	<i>Terminalia chebula</i>	Harro	
	<i>Trevesia palmata</i>	Kajpati	
	<i>Trewia nudiflora</i>	Gutel	
	<i>Xylosma longifolium</i>	Dande kanda	
Shrubs			
	<i>Acacia farnesiana</i>	Ganaune khayer	
	<i>Ardisia solanacea</i>	Damai phal	
	<i>Artemisia indica</i>	Titepati	
	<i>Barleria cristata</i>	Bhende kuro	
	<i>Bridelia stipularis</i>	Rihk gayo	
	<i>Butea minor</i>	Bhujetro	
	<i>Callicarpa arborea</i>	Gwello	
	<i>Callicarpa macrophylla</i>	Gwello	
	<i>Calotropis gigantea</i>	Ank	
	<i>Calotropis procera</i>	Barhamase ank	
	<i>Carissa carandas</i>	Karonda	
	<i>Casearia elliptica</i>	Thulo dedri	
	<i>Casearia graveolens</i>	Barkula	
	<i>Cassia occidentalis</i>	Panwar	
	<i>Cassia tora</i>	Chakramandi	
	<i>Celastrus paniculatus</i>	Malkagunu	
	<i>Clerodendrum indicum</i>	Chinde	
	<i>Clerodendrum serratum</i>	Andekhi	
	<i>Clerodendrum viscosum</i>	Bhant	
	<i>Colebrookea oppositifolia</i>	Dhasure	
	<i>Eranthemum pulchellum</i>	Nil gathe	
	<i>Flemingia strobilifera</i>	Chunetro ghans	
	<i>Grewia sclerophylla</i>	Pharso	
	<i>Holmskioldia sanguinea</i>	Jhule phul	
	<i>Jasminum multiflorum</i>	Beli phul	
	<i>Justicia adhatoda</i>	Asuro	
	<i>Leea macrophylla</i>	Galen	
	<i>Lycianthes laevis</i>	Vanvihi	
	<i>Melastoma melabathricum</i>	Angeri	
	<i>Murraya paniculata</i>	Kamini	
	<i>Phlogacanthus thyrsoiflorus</i>	Chuwa	
	<i>Phoenix humilis</i>	Thakal	
	<i>Phyllanthus virgatus</i>	Bhuin amala	
	<i>Piper longum</i>	Pipala	
	<i>Rauwolfia serpentina</i>	Sarpagandha	
	<i>Sida rhombifolia</i>	Sano chilya	
	<i>Smilax ovalifolia</i>	Kukurdaino	
	<i>Solanum anguivi</i>	Bihin	
	<i>Solanum torvum</i>	Thulo bihin	
	<i>Tamarix dioica</i>	Jhauwa	
	<i>Thespesia lampas</i>	Ban kapas	
	<i>Xeromphis spinosa</i>	Mainphal	
	<i>Zizyphus mauritiana</i>	Bayar	
	<i>Zizyphus rugosa</i>	Kanta bayar	
Climbers			

S.N.	Scientific Name	Local Name	Remarks
1.	<i>Acacia pennata</i>	Arfu	
2.	<i>Ampelocissus divaricata</i>	Pureni	
3.	<i>Asparagus racemosus</i>	Satavari	
4.	<i>Dalbergia stipulacea</i>	Tateberi	
5.	<i>Gouania leptostachya</i>	Batwasi	
6.	<i>Hiptage benghalensis</i>	Madhabi lata	
7.	<i>Momordica charantia</i>	Karela	
8.	<i>Spatholobus parviflorus</i>	Debre lahara	
9.	<i>Tetrastigma dubium</i>	Chyarchyare laharo	
10.	<i>Tetrastigma serrulatum</i>	Pani lahara	
11.	<i>Thunbergia grandiflora</i>	Kag chuche	
12.	<i>Trachelospermum lucidum</i>	Dudhe lahara	
13.	<i>Vitis lanata</i>	Van angur	
Herbs			
	<i>Abelmoschus moschatus</i>	Lata kasturi	
	<i>Alternanthera sessilis</i>	Bhiringi jhar	
	<i>Blumea lacera</i>	Kukur ghans	
	<i>Boerhavia diffusa</i>	Punarnava	
	<i>Butomopsis latifolia</i>	Karkalo jhar	
	<i>Centella asiatica</i>	Ghod tapre	
	<i>Cirsium wallichii</i>	Kateli	
	<i>Commelina paludosa</i>	Kane sag	
	<i>Eclipta prostrata</i>	Bhringraj	
	<i>Eupatorium adenophorum</i>	Banmara	
	<i>Eupatorium odoratum</i>	Aule banmara	
	<i>Leea crispa</i>	Galen	
	<i>Leucas indica</i>	Gantephul	
	<i>Mimosa pudica</i>	Lazzabati	
	<i>Monochoria vaginalis</i>	Nilo jaluke	
	<i>Persicaria glabra</i>	Seto pire	
	<i>Scoparia dulcis</i>	Mithajhar	
	<i>Solanum nigrum</i>	Jangali bihin	
	<i>Solanum surattense</i>	Kantkari	
	<i>Tribulus terrestris</i>	Gokhur	
	<i>Uraria lagapodioides</i>	Prishni parni	
Grasses			
	<i>Cynodon dactylon</i>	Dubo	
	<i>Cyperus difformis</i>	Mothe	
	<i>Cyperus distans</i>	Mothe	
	<i>Cyperus iria</i>	Chhatore	
	<i>Desmostachya bipinnata</i>	Kush	
	<i>Mariscus sumatrensis</i>	Karaunte	
	<i>Phragmites karka</i>	Narkat	
	<i>Saccharum spontaneum</i>	Kans	
	<i>Setaria pallidifusca</i>	Kagune jhar	

Source: TISC/GON (2002)



Annex 14.2: Sample plot location and data

Plot No	Plot/Forest Details		Regeneration			Sapling			Pole			Trees		
	GPS location		Sn	Species	No. (2*2)	species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)
1	X	27 42.678												
	Y	85 12.270			120	pani patro	5.5		3 patesalla		14.5	7		
	Forest Type	Mixed			26				chilaune		20	9		
	CF Name	Patleko Ban			25				chilaune		12	6		
	Address	Chandragiri-4			8				patesalla		16	9.5		
	Slope (deg)	55							patesalla		20	9		
	Aspect	SE							patesalla		20	8		
	Alt.	1482							patesalla		16	7		
									patesalla		21.5	11		
									chilaune		22	10		
									mauwa		22	6		
									patle katus		20.5	7.4		
									patesalla		22.2	11		
									patesalla		27	12.5		
									chilaune		29	9		
									patesalla		26	10.2		
2	X	27 42.708												
	Y	85 12.133			3	Siris	6		7 Chilaune		12	9		
	Forest Type	Broad leaved			50				Lapsi		11	10		

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Plot No	Plot/Forest Details		Regeneration			Sapling			Pole			Trees		
	GPS location													
	Naubisey-3, Dhumbesi	4							Khote salla	28	14	Khote salla	34	13
	Slope (deg)	22	5						Khote salla	27	13	Khote salla	31	17
	Aspect	South	6						Khote salla	22	9			
	Alt	1161	7						Khote salla	23	13			
			8						Khote salla	21	12			
			9						Khote salla	22	12			
			10						Khote salla	27	10			
			11						Khote salla	23	7			
			12						Khote salla	20.5	8			
			13						Khote salla	23	8			
			14						Khote salla	26	15			
			15						Khote salla	28	10			
5	X	27 43.009												
	Y	85 11.386	1						Khote Salla	20	7	Khote salla	44	25
	Forest Type	Pine Forest	2						Khote Salla	18	7	Khote salla	33	17
	CF Name	Nisakot CF	3						Khote Salla	18	18	Khote salla	30	18
	Address	Naubise VDC-3 (Dhumbesi_9)	4						Khote Salla	19	12	Khote salla	37	21
	Slope (deg)	25	5						Khote Salla	18	7	Khote salla	33	23
	Aspect	South	6						Khote salla	24	18	Khote salla	32	18



Plot No	Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
	GPS location									
	Alt	1125	7				Khote salla	27	17Khote salla	31 15
			8				Khote salla	25.5	18Khote salla	31 25
			9				Khote salla	26	22Khote salla	43 25
			10				Khote salla	28.5	22	
			11				Khote salla	25	16	
			12				Khote salla	21.5	10	
			13				Khote salla	21	10	
			14				Khote salla	23	7	
			15				Khote salla	29.5	15	
			16				Khote salla	23	8	
6	X	27 42.738								
	Y	85 11.263	1	Chilaune						
	Forest Type	Mixed forest	2	Mahuwa						
	CF Name	Govt forest	3	Katus (Patle)						
	Address	Naubisey-4 (Dhumibesi-9)	4	Khanyu						
	Slope (deg)	25	5	Bhakmilo						
	Aspect	South	6	Kuro						
	Alt	1188	7	Gandejhar						
			8	Bannara						
			9	Utis		Inaccessible				

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Plot No	Forest Details	Regeneration			Sapling			Pole			Trees		
7	X	27 44.002											
	Y	85 8.327		1 Bhakimlo	4			Sisoo	18	6 Khote salla	31	15	Total Count
	Forest Type	Mixed		2 Jamun	2			Khote salla	27	13 Sisoo	30	10	
	CF Name	Deupujey CF		3 Titepati	10			Khote salla	25	8			
	Address	Jeewanpur		4 Chilaune	2								
	Slope (deg)	40		5 Thotrie	1								
	Aspect	SE		6 Siru	numerous								
	Alt	700		7 Bot dhayero	3								
8	X	27 43.928											
	Y	85 8.217		1 Chilaune	5			Khote salla	18	9 Khote salla	31	15	
	Forest Type	Mixed		2 Sisoo	2			Khote salla	17	9			
	CF Name	Satiko ban CF		3				Khote salla	17	8			
	Address			4				Khote salla	19.5	12			
	Slope (deg)	30		5				Khote salla	16	8			
	Aspect	SE		6				Khote salla	17	9			
	Alt			7				Khote salla	19	11			
				8				Khote salla	15	8			
				9				Sisoo	19	6			
				10				Chilaune	18	5			
				11				Khote salla	27	13			

Plot No	Plot/Forest Details		Regeneration			Sapling			Pole			Trees		
	GPS location													
9	X	22 46.048												
	Y	85 2.283		1	Tooni	2	Tooni	5	5	Khair	11	6		
	Forest Type	Broadleaved		2	Ghursing	3	Tooni	4.5	3	Chilaune	11	3		
	CF Name	Bhasme		3			Mahuwa	4	3					
	Address	Eklephant-4		4										
	Slope (deg)	26		5										
	Aspect	SE		6										
	Alt	515	7											
10	X	27 46.258												
	Y	85 2.038		1	Bhalayo									
	Forest Type	Mixed		2	Khote salla									
	CF Name	Setidevi		3	Mahuwa									
	Address			4	toona									
	Slope (deg)	45		5	Khanayu									
	Aspect	NE		6	Khar									
	Alt	506		7	Bot Dheyero									
				8	sal									
				9	Thakre									
				10	Khaier		Inaccessible							
11	X	27 46.434												
	Y	85 1.618		1	Aanka taruwa	2	Khirra	8.5	3	Aakha taruwa	11.5	2	Khirro	41 10

VI

Plot No	Plot/Forest Details		Regeneration		Sapling			Pole			Trees		
	GPS location				Aakha taruwa	5.5	2						
	Forest Type	Mixed	2	Ramaital									
	C/F Name	Setidevi	3	Dudhilo	1	Sindhure	7	1					
	Address		4	Jhusil	3	Khirra	5	2					
	Slope (deg)	32	5	Bannara	5								
	Aspect	N	6	Dattiyun	2								
	Alt	513	7	Pani amala	3								
			8	Kyamuno	1								
12	X	27 46.807											
	Y	85 10.197	1	Sal	14	Sal	4	2	Sal	22	15		
	Forest Type	Broadleaved	2	Jamun	1	Sal	3	5	Sal	20	13		
	C/F Name	Thulodanda	3	Muse khari	2	Chilaune	8	3	Sal	24	16		
	Address		4	Siru	2				Sal	21	9		
	Slope (deg)	15	5						Sal	23.5	16		
	Aspect	NE	6						Sal	22.5	16		
	Alt	197	7						Sal	23	15		
13	X	27 47.552			No. (2*2)	species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)	Species	dbh (cm)
	Y	85 0.511	1	Sal	5	Sal	7	3	Sal	15.5	13		
	Forest Type	Broadleaved	2	Thakal	3	Sal	6.5	2	Sal	12	6		
	C/F Name	Balkumari	3						Sal	11	6		
	Address		4						Sal	13.5	9		

Plot/Forest Details No	GPS location	Regeneration		Sapling			Pole			Trees		
		5										
	Slope (deg)	10					Sal	12	8			
	Aspect	NE					Sal	13.5	6			
	Alt	499					Sal	14	12			
							Sal	18	13			
							Sal	14	9			
							Sal	11	8			
							Sal	10.5	8			
							Sal	10.5	5			
							Sal	10	4			
							Sal	13	10			
14	X	27 48.386	Sn	No. (2*2)	species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)	Species	dbh (cm)
	Y	84 58.085	1 Sal(pole)	5 sal		4	2 sal		15	6		
	Forest Type	Broadleaved	2 Bhalayo	1 sal		8	5 sal		12	7		
	CF Name	Sutkeri Dhunga	3 Kyamun	2			sal		19	10		
	Address	Baireni-6	4 Jamun	1								
	Slope (deg)	45	5 Dhangero	3								
	Aspect	North	6 Dhursul	1								
	Alt	409	7 Kutmero	1								
			8 Chilaune(small)	4								
			9 Mushe Khar	100								



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Plot No	Plot/Forest Details	Regeneration			Sapling			Pole			Trees		
		10	Fern	30									
15	X	27 48.833	Sn	Species	No. (2*2)	species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)	dbh (cm)	ht (m)
	Y	84 57.165	1	Sissoo	7	Khanayo	10	3	Sissoo	18	7	Sissoo	33
	Forest Type	Riverian	2	Khair	2				Sissoo	15	3	Sissoo	35
	CF Name	Indrayeni	3						Sissoo	17	4	Sissoo	32
	Address	Galchi Gaupalika-4	4						Sissoo	19	6		
	Slope (deg)	30	5						Khanayo	12	2		
	Aspect	west	6						Sissoo	19	8		
	Alt	376	7						Khair	12	7		
			8						Khair	18	9		
			9						Sissoo	22	6		
			10						Khair	17	10		
16	X	27 48.337	Sn	Species	No. (2*2)	species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)	dbh (cm)	ht (m)
	Y	84 56.538	1	Sal	25				Sal	12	10	Sal	60
	Forest Type	Sal	2	Babiyo	2				Sal	11	10	Sal	52
	CF Name	Gauri Vanjyang	3						Sal	13	12	Sal	30
	Address	Pida-I	4						Sal	10.5	10		
	Slope (deg)	18	5						Sal	12	11		
	Aspect	North	6						Sal	11	10		

Plot/Forest Details		Regeneration			Sapling			Pole			Trees		
Plot No	GPS location												
Alt	438	7						Sal	12	10			
		8						Sal	12.5	11			
		9						Sal	21	13			
		10						Chilaune	23	16			
		11						Chilaune	23	16			
		12						Sal	27	18			
		13						Sal	28	21			
		14						Sal	16	15			
17 X	27 48.209	Sn	No. (2*2)					Species	dbh (cm)	ht (m)	Species	dbh (cm)	ht (m)
Y	84 56.311	1 Sal	5 Sal		8			5 Sal	12	6			
Forest Type	Sal	2 Bot Dhayero	4 Sal		7			3 Sal	13	11			
C/F Name	Indradevi	3 Latikath	2 Sal		10			15 Chilaune	14	8			
Address	Pida-1	4 Thakle	1 Sal		10			11 Sal	11	2			
Slope (deg)	20	5	Sal		6			2 Sal	19	8			
Aspect	North	6	Sal		6			5 Chilaune	16	8			
Alt	431	7	Chilaune		6			2 Sal	15	3			
		8						Sal	13	4			
		9						Sal	11	4			
18 X	27 47.811												
Y	84 55.501	1 Kalikath	5					Sal	14	9			

X



Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
Plot No	GPS location								
	Forest Type	Sal	2Sal	4		Sal	18	12	
	CF Name	Panchakanya	3Bot Dhayero	4		Sal	13	11	
	Address	Pida-3	4Jamun	1		Sal	11	3	
	Slope (deg)	23	5Mushe Khar			Sal	17	11	
	Aspect	North	6Siru			Sal	11	7	
	Alt	376	7			Sal	18	12	
			8			Sal	22	12	
			9			Sal	24	12	
			10			Sal	20	12	
19	X	27 47.850							
	Y	84 55.211	1Sal	9Sal	9	2Chilaune	13	8	
	Forest Type	Sal+ Chilaune	2Kalikath	4Chilaune	5	2Sal	11	5Phalat	36
	CF Name	Panchakanya	3Aakhan	1Chilaune	9	5Sal	12	7	
	Address	Pida-3	4Dhursul	2		Chilaune	12	8	
	Slope (deg)	37	5unyu			sal	17	10	
	Aspect	North	6Mushe Khar			Chilaune	22	7	
	Alt	397	7			Chilaune	28.5	6	
			8			Chilaune	27	8	
20	X	27 47.836							
	Y	84 55.400	1Sal	9Sal	9	2Chilaune	13	8Phalat	36
	Forest Type	Sal+ Chilaune	2Kalikath	4Chilaune	5	2Sal	11	5	

Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
Plot No	GPS location								
CF Name	Amaltari	3/Aakhan	1 Chilaune		9	5 Sal	12	7	
Address		4/Dhursul	2			Chilaune	12	8	
Slope (deg)	32	5/nyu				Chilaune	22	7	
Aspect	NE	6/Mushe Khar				Sal	17	10	
Alt	400	7				Chilaune	28.5	6	
		8				Chilaune	27	8	
21 X	27 48.405								
Y	84 52.500	1 chilaune	3 Chilaune	8	4				
Forest Type		2/Dhairi	1 Chilaune	7	3				
CF Name	Mahadevkholsi	3	Chilaune	5	2				
Address	East	4	Patke	4	3				
Slope (deg)	30	5	Dhairi	7.2	3				
Aspect	North	6							
Alt	355	7							
22 X	27 48.029								
Y	84 52.318	1 Sindure	7 Dhairi	10	5 Sal	16	7		
Forest Type	Mixed	2 Sal	5			Sal	18	8	
CF Name	Kankali	3 Sandan	1			Sindure	14	9	
Address	Gajuri-1	4 Badkaule	1			Sal	13	7	
Slope (deg)	30	5 Bash Clump 4-5				Chilaune	29	16	
Aspect	East	6				Chilaune	27	15	

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Plot No	Plot/Forest Details		Regeneration			Sapling			Pole			Trees		
	No	GPS location												
	Alt		7						Sal	22	13			
23	X	27 48.046												
	Y	84 51.904	1	Sindure	3				Sal	17	7			
	Forest Type	Broadleaved	2	Bot Dhayero	2				Sal	16	7			
	CF Name	Kashi Khola	3	Gueyelo	2				Sal	9	3			
	Address	Gajure-2	4						Sal	16	7			
	Slope (deg)	53	5						Sal	18	8			
	Aspect	N	6						Sal	17	5			
	Alt	356												
24	X	27 48.272												
	Y	84 50.955	1	Sal	25	Sal	10		4Sal	13	7	Chilaune	32	15
	Forest Type	Broadleaved	2	Arceli	5	Bot Dhayero	4.5		2Chilaune	13	6	Sal	32	11.7
	CF Name	Kashi Khola	3						Chilaune	14	7			
	Address	Gajure-2	4						Sal	26	16			
	Slope (deg)	25	5						Chilaune	21	15			
	Aspect		6						Sal	28	15			
	Alt	379	7						Sal	27.5	17			
			8						Sal	28	18			
			9						Sal	29.5	15			
			10						Sal	22	13			
			11						Sal	27	18			

Plot/Forest Details No GPS location	Regeneration		Sapling		Pole			Trees		
	Forest Type	mixed	2Sindhure	3Latikath	5	2Bot Dhayero	19	10		
C/F Name	Phale Phako		3Padkye	2		Bot Dhayero	13	10		
Address	Benighat Rorang gaupalika-1		4Dhursul	2		Badkaule	10	7		
Slope (deg)	29		5Aasre	2		Bot Dhayero	14	5		
Aspect	North		6			Khirro	12	7		
Alt	377		7			Bot Dhayero	16	10		
			8			Padkye	20	10		
			9			Sissoo	24	15		
			10			Sissoo	25	20		
28 X	27 48.457									
Y	84 47.738		1Sindhure	4		Sal	17	11Sal	32	22
Forest Type	Sal		2Sal	13		Sal	15	10Sal	37	23
C/F Name	Gomati Bhairavi		3Kamuna	1		Sal	19	8Chilaune	31	12
Address	Malinga Benighat-9		4Other	3		Sal	17	8		
Slope (deg)	42		5Mushe Khari			Sal	19	8		
Aspect	NE		6Siru			Sal	18	8		
Alt	341		7			Chilaune	26	11		
			8			Sal	29	20		
			9			Sal	23	18		
			10			Sal	28	22		

Plot No	Plot/Forest Details GPS location	Regeneration			Sapling			Pole			Trees		
		11						Sal		22	7		
		12						Sal		29	20		
		13						Sal		23	18		
29 X	27 48.418												
Y	84 45.359	1 Bot Dhayero	3	Dudhe	8			3 Bot Dhayero		10	5 Patke	38	10
Forest Type	Mixed	2 Patke	1	Dudhe	7			2 Bot Dhayero		15	4		
CF Name	Bishal Samyukta	3 Others	2					Bot Dhayero		20	4		
Address	Bishaltar-8	4						Bot Dhayero		28	6		
Slope (deg)	45	5						Bot Dhayero		24	8		
Aspect	SW	6											
Alt	351												
30 X	27 48.503												
Y	84 45.491	1 Sal	7					Sal		16.5	8 Kymun	33	12
Forest Type	Sal	2 Dudhe	2					Sal		17.5	8 Sal	30	10
CF Name	Bishal Samyukta	3 Padkye	1					Sal		15	8		
Address	Bishaltar-8	4 Bire Lahara	2					Sal		20.5	9		
Slope (deg)	32	5 Thakal	2					Sal		23	10		
Aspect	NE	6						Sal		22	9		
Alt	394	7						Sal		23	9		
		8						Sal		21	9		
		9						Sal		23	10		

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Plot No	Plot/Forest Details		Regeneration		Sapling		Pole			Trees		
	GPS location											
			10				Sal	22	11			
			11				Sal	22	11			
			12				Sal	20	9			
			13				Sal	20	9			
			14				Sal	20	9			
31 X	27 42.682											
Y	85 12.078		1	Titepati	4		Utis	18	9	Utis	32	14
	Forest Type	Utis	2				Utis	18	10			
	CF Name	Government forest	3				Utis	19	12			
	Address	Near by Subba ko Ban CF	4				Payun	16	7			
	Slope (deg)	41	5				Chille Kayio	12	4			
	Aspect	North	6				Utis	21	14			
	Alt	1455	7				Utis	20	12			
			8				Utis	22	13			
			9				Chilaune	22	9			
32 X	27 48.432											
Y	84 49.045		1	Ashuro	3	5	2	Kalikath	15	5	Khair	43
	Forest Type	Riverian	2	Dhursul	2	6	2	Khair	19	6	Khair	40
	CF Name	Government forest	3	amilo	3			Khair	10	4	Khair	47
	Address	Blue Heaven aagadi	4	Others	5			Khair	29	15	Khair	34

Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
Plot No	GPS location								
	Slope (deg)	40	5			Khair	25	12	
	Aspect	SE	6						
	Alt		7						
33 X		27 48.845							Patch of Khair below and above road
Y		84 48.130	1 Bot Dhayero	3 Bot Dhayero	8	4 Khair	18	7	
	Forest Type	Riverian	2			Khair	15	6	
	CF Name	Government Forest	3			Khair	22	10	
	Address	Malinga, Benighat-9	4			Khair	21	9	
	Slope (deg)	45	5						
	Aspect	N							
	Alt	329							
34 X		27 49.200							
Y		84 39.977	Range Ma 4-5 1 Jota Khair	sindhure	5	2 khair	15	6	
	Forest Type	Mixed Riverian	2 Sindhure Ali dheri	bot dhairo	8	3 khair	14	5.5	
	CF Name	Jawang Mahuwa Khola	3 Bot Dhayero			khair	16.2	6	
	Address		4 Dhursul			bakaino	11	4.6	
	Slope (deg)	50	5 Bakino						
	Aspect	South							



Plot No	Plot/Forest Details		Regeneration		Sapling		Pole			Trees		
	GPS location											
	Alt											
35	X	27 48.589										
	Y	84 41.221	1		Bot Dhayero	5	2	Khair	12	7		
	Forest Type	Riverian	2					Khair	11	7		
	CF Name	Jaldevi	3					Sindhure	18	5		
	Address		4					Sindhure	12	4		
	Slope (deg)	42	5					Sindhure	11	4		
	Aspect	SW	6					Bot Dhayero	12	5		
	Alt	298	7					Khair	18	8		
36	X	27 48.979										
	Y	84 40.349	1	Bot Dhayero	1	Bot Dhayero	6	3	Khair	17	5	
	Forest Type	Mixed	2	Dudhe	2	sindhure	5	2	Khair	14	5	
	CF Name	Jaldevi	3	Sindhure	1			Bot Dhayero	17	6		
	Address		4									
	Slope (deg)	40										
	Aspect	West										
	Alt	283										
37	X	27 48.013										
	Y	84 42.857	1	Kutmiro	5	Khair	10	4	Khair	20	10	
	Forest Type		2	Bans	4	Khair	5	2	Khair	19	10	

Plot/Forest Details		Regeneration			Sapling		Pole			Trees	
Plot No	GPS location										
	CF Name	Madhan Pakha LHF	3	Sindhure	5	Khair	3	Khair	18	9	
	Address		4	Bot Dhayero	2			Sindhure	12	5	
	Slope (deg)	50									
	Aspect	NW									
	Alt	308									
38	X	27 47.812									
	Y	84 44.087	1					Khair	18	11	Khair
	Forest Type	Plantation(Khaier)	2					Khair	19	13	
	CF Name	Tapre	3					Khair	19	12	
	Address		4					Khair	18	10	
	Slope (deg)	35	5					Khair	15	9	
	Aspect	NW	6					Khair	22	10	
	Alt	312	7					Khair	24	10	
39	X	27 47.862									
	Y	84 44.224	1	Mauwa	1			Khair	18		
	Forest Type	Mixed(open Land)	2	Amlisho	3			Khair	14		
	CF Name	Galbangdi	3	Babio	Ample						
	Address		4	Bot Dahero	2						
	Slope (deg)	45	5								
	Aspect	North	6								

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Plot No	Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
	GPS location									
	Address	Chayalechowk-9 Goakha	4	Thakal						
	Slope (deg)	48	5	Bhalayo (Few)						
	Aspect	S	6	Khaksey						
	Alt	325	7	Sissoo						
			8	Khair						
			9	Chattium						
			10	Bahumi Kath						
42	X	27 48.43								
	Y	84 42.504	1	Sal	26		Sal	19	13	Sal 39 19
	Forest Type	Sal	2	Bot Dhayero	1		Sal	14	9	Sal 34 10
	CF Name	Salleri	3	Chilaune	1		Sal	16	12	Sal 30 11
	Address	Gandaki Gaunpalika-7	4				Sal	16	14	
	Slope (deg)	28	5				Sal	14	9	
	Aspect	S	6				Sal	19	15	
	Alt	358	7				Sal	16	11	
			8				Sal	11	8	
			9				Sal	17	10	
			10				Bot Dhayero	12	5	
			11				Sal	14	11	


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Plot/Forest Details No	GPS location	Regeneration		Sapling		Pole			Trees		
		12				Sal		16	14		
		13				Karma		20	3		
		14				Sal		15	9		
		15				Sal		13	8		
		16				Sal		18	12		
		17				Sal		22	11		
		18				Sal		29	12		
		19				Bhalayo		28	11		
		20				Sal		23	16		
43	X	27 50.266									
	Y	84 39.843	1 Gutel			khair		12	4		
	Forest Type	Riverian	2 Khair(few)			khair		16	3		
	CF Name	Nibare	3 Dhampus			Sal		17	5		
	Address	Fishling-4, Gorkha	4 chaltu			Sal		23	9		
	Slope (deg)	38	5 Karma			Sal		21	7		
	Aspect	S	5 Sal								
	Alt	295									
44	X	27 51.06									
	Y	84 39.72	1 Sal	6 Sindhure	5	4 Sal		19	15 Banghi	34	12
	Forest Type	Mixed	2 Sindhure	1 Banghi	7	3 Sal		14	14 Sal	35	19
	CF Name	Keraghari	3 Bot Dhayero	1		Sal		16	12		

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Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
Plot No	GPS location								
	Address	Fisling-4 Gorkha	4 Banghi			Banghi	16	7	
	Slope (deg)	26	5			Bot Dhayero	24.5	13	
	Aspect	SE	6			Sal	29	17	
	Alt	400	7			Khirro	21.5	11	
45	X	27 50.80							
	Y	84 39.78	1 Sal	Bot Dhangero		Khayer	16	7	
	Forest Type	Mixed	2 Bot Dhangero	Khayer		Khayer	12	4	
	CF Name	Keraghari	3 Khayer	Khayer		Khayer	19	5	
	Address	Fisling-4 Gorkha	4 Kallara	Chilaune		Sal	14	14	
	Slope (deg)	31	5 Karna	Sal		Sal	16	12	
	Aspect	S	6 Ammaru	Sal		Sal	16	7	
	Alt	335	7 Dhampus			Sal	28	14	
			8 Chilaune						
			9 Sidure						
			10 Padke						
			11 Simal (3)						
			12 Churi one Patch						
46	X	27 51.50							
	Y	84 39.056	1 Bakaino						
	Forest Type		2 Niwaro						
	CF Name	Gothepani LHF	3 Khayer						

Plot No	Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
	GPS location									
	Address	Tanglichwok-9 Gorkha	4	Dhaddy Khar						
	Slope (deg)	19								
	Aspect	W								
	Alt	352		Inaccessible						
47	X	27 51.785								
	Y	84 38.900	1	Bot Dhayero			Sal	19	12	
	Forest Type	Sal Mixed	2	Padke			Sal	14	11	
	CF Name	Laxmipani	3	Sal			Sindhure	16	13	
	Address	Gorkha, Butar	4	Saaz			Bot Dhayero	24.5	13	
	Slope (deg)	41	5	Sindhure			Sal	27	16	
	Aspect	NE	6	Khair(Few)						
	Alt		7	Banmara						
			8	Babio						
48	X	27 51.771								
	Y	84 38.977	1	Sindhure	3	Sindhure	3	Kyamun	14	3
	Forest Type	Riverian	2	Rajbrikshye	1		Bot Dhayero	14	5	Karma
	CF Name	Laxmipani	3	Sal	3		Sissoo	29	9	31
	Address	Gorkha (Near Buttar)	4				Asna	22	7	
	Slope (deg)	31	5				Padke	21.5	10	

Plot/Forest No	Plot/Forest Details		Regeneration	Sapling			Pole			Trees		
	GPS location											
	Alt	327	Khair Few in 7number									
			8Khirro									
			9Bhalayo									
			10Churi few									
			11Sissoo									
			12Babio									
			13Sisno			Inaccessible						
51	X	27 49.570										
	Y	84 39.752	1Sal									
	Forest Type	Mixed	Simal (1 2 number)									
	CF Name	Chepang	3Bot Dhayero									
	Address	Fisling, Chitwan	4Sindure									
	Slope (deg)	48	5Saaj									
	Aspect	NE	6Koirala									
	Alt	327	Khair Few in 7number									
	In accessible		8Khirro									
			9Bhalayo									
			10Churi few									
			11Sissoo									

Plot No	Plot/Forest Details GPS location	Regeneration		Sapling		Pole		Trees	
		12 Babio							
		13 Sisno	Inaccessible						
52 X	27 51.713								
Y	84 37.947	1 Majhi Bhata							
	Forest Type	Mixed							
	CF Name	Dharapani(Under handover process)							
	Address	Chitwan Fisling							
	Slope (deg)	43							
	Aspect	NE							
	Alt	326							
		7 Kurilo							
		8 Sarpaganda	Inaccessible						
53 X	27 51.710								
Y	84 37.930	1 Majhi Bhata							
	Forest Type	Mixed							
	CF Name	Dharapani(Under handover process)							
	Address	Fisling, Chitwan							
	Slope (deg)	53							
	Aspect	NE							
	Alt	326							
		7 Kurilo							

Plot No	Plot/Forest Details	Regeneration		Sapling		Pole			Trees		
		GPS location									
54	X	27 50.54	8Sarpaganda	Inaccessible							
Y		84 39.77	Khair tree 1 around 35								
	Forest Type	LHF	2 Few Sal								
	CF Name	Sirudanda LHF	3								
	Address	Fisling-3 Chitwan									
	Slope (deg)	32									
	Aspect	NE									
	Alt			Inaccessible							
55	X	27 48.77									
Y		84 38.35	Small patch of 1 Sal								
	Forest Type	LHF	2								
	CF Name	Surung Pakha LHF	3								
	Address	Darechwok-3, Chitwan									
	Slope (deg)	23									
	Aspect	North									
	Alt			Inaccessible							
56	X	27 49.82									
Y		84 38.38	1 Banana								

Plot No	Plot/Forest Details		Regeneration		Sapling		Pole		Trees	
	GPS location	Forest Type								
		LHF	2 Pineapple							
		Bambai Amp Ka + Dhap Pakha LHF	3 guava							
		Darchhwok-3 Chitwan	4 Lemon							
		22	5 Bot Dhayero							
		North	6 Sissoo Few							
			7 Sal Seedling and Pole							
			8 Kyamun							
			9 Guyalo	Inaccessible						
57	X	27 49.62								
	Y	84 38.38	1 Banana							
		LHF	2 Pineapple							
		Bambai Amp Ka + Dhap Pakha LHF	3 guava							
		Darchhwok-3 Chitwan	4 Lemon							
		22	5 Bot Dhayero							
		North	6 Sissoo Few							
			7 Sal Seedling and Pole							
			8 Kyamun							



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Plot/Forest Details No	GPS location	Regeneration		Sapling		Pole		Trees	
58	X	27 50.34	9Gyalo	Inaccessible					
	Y	84 37.98	1Pineapple						
	Forest Type	LHF	2Mango						
	CF Name	Sisne Gaira + Kumbe Gaira	3Banana						
	Address	Darchhwok-4 Chitwan	4Lemon						
	Slope (deg)	22	5Tejpaat						
	Aspect	North	6Banboo						
	Alt		Few sapling of 7Sal	Inaccessible					
59	X	27 50.34							
	Y	84 37.70	1Pineapple						
	Forest Type	LHF	2Mango						
	CF Name	Sisne Gaira + Kumbe Gaira	3Banana						
	Address	Darchhwok-4 Chitwan	4Lemon						
	Slope (deg)	22	5Tejpaat						
	Aspect	North	6Banboo						
	Alt		Few wheepry of 7Sal	Inaccessible					

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Plot No	Plot/Forest Details	Regeneration	Sapling	Pole	Trees
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The plots with unnumbered regeneration only is that the plot is inaccessible and species observation and documentation has been done. Observation would help understand the vegetation.



Annex 14.3: Mammals/Wild animal in the project area

Annex 14.3.1: Location details of sampling points to study the wild animals

SN.	Latitude	Longitude	Remarks	Altitude (m)
1	27° 42' 29.77"	85° 12' 15.30"	Patleban CF	1416
2	27° 43' 04.34"	85° 11' 36.16"	Nisakot CF	1269
3	27° 43' 13.92"	85° 11' 17.83"	Sideswori Temple	1158
4	27° 43' 29.15"	85° 10' 58.02"	Divine Wine Factory	1035
5	27° 44' 03.72"	85° 09' 40.24"	Barabise village	846
6	27° 44' 05.10"	85° 09' 26.10"	Shree Sarada School	839
7	27° 44' 11.65"	85° 08' 37.82"	Maheshkhola dovan village	825
8	27° 45' 59.80"	85° 02' 30.53"	Bhasmelampokhari CF	523
9	27° 46' 25.61"	85° 01' 54.63"	Setidevi CF	495
10	27° 46' 26.67"	85° 01' 51.91"	Khayarghari CF	476
11	27° 48' 03.09"	84° 59' 25.69"	Chisapani LF	397
12	27° 48' 21.11"	84° 56' 32.21"	Gaurivanjyang CF	460
13	27° 48' 13.50"	84° 56' 17.38"	Indradevi CF	448
14	27° 47' 49.48"	84° 55' 28.94"	Panchakanya CF	389
15	27° 47' 54.08"	84° 55' 08.56"	Amaltari CF	398
16	27° 48' 09.96"	84° 54' 24.74"	Mahadev kholi CF	383
17	27° 48' 20.19"	84° 54' 03.22"	Thuloban CF	381
18	27° 48' 03.36"	84° 52' 01.25"	Kasikhola CF	353
19	27° 48' 35.11"	84° 49' 31.83"	Falepakho CF	337
20	27° 48' 46.65"	84° 47' 49.35"	Gov. Forest	350
21	27° 48' 48.57"	84° 46' 19.85"	Majhitar	367
22	27° 43' 55.44"	85° 10' 49.26"	Small river bend	912
23	27° 43' 21.6"	85° 11' 9.48"	Between school and water source	984
24	27° 44' 18.42"	85° 8' 17.52"	Near newly build bridge	773
25	27° 47' 49.60"	85° 00' 20.53"	Balkumari CF	
26	27° 43' 35.88"	84° 58' 14.76"	Chiraudi CF	380
27	27° 48' 49.98"	84° 57' 9.9"	Indreni CF	
28	27° 48' 3.13"	84° 52' 2.20"	Thulodanda CF	383
29	27° 49' 18.18"	84° 48' 40.62"	Kankali CF	383
30	27° 48' 46.65"	84° 47' 48.35"	Gomati Bhairabi CF	350
31	27° 48' 41.22"	84° 45' 38.28"	Bishal Samyukta CF	373
32	27° 48' 20.34"	84° 43' 1.5"	Public Gathering	316
33	27° 50' 29.1"	84° 39' 59.1"	Nivare CF	286
34	27° 49' 46.14"	84° 39' 54.48"	Cheppang CF	305
35	27° 45' 36.61"	85° 2' 32.71"	Pic-1	540
36	27° 48' 50.25"	84° 47' 49.88"	Pic-2	282
37	27° 48' 50.29"	84° 47' 49.96"	Pic-3	286
38	27° 49' 4.93"	84° 48' 31.38"	Pic-4	297
39	27° 49' 4.86"	84° 48' 31.32"	Pic-5	306
40	27° 48' 49.02"	84° 46' 51.68"	Pic-6	339
41	27° 46' 36.52"	85° 1' 30.23"	Pic-7	474
42	27° 48' 3.43"	84° 42' 37.62"	Pic-8	232
43	27° 48' 27.60"	84° 42' 15.64"	Pic-9	266
44	27° 48' 26.65"	84° 40' 10.95"	Pic-10	278

Annex 14.3.2: List of mammals found in Kathmandu (Nagdhunga)-Naubise-Mugling Road

SN.	Common Name (Local name)	Scientific name	IUCN	CITES	NPWC act
1.	Common leopard (Chituwa)	<i>Panthera pardus</i>	VU	I	-
2.	Fox	<i>Vulpes bengalensis</i>	LC		-
3.	Ghoral	<i>Nemorrhaedus goral</i>			-
4.	Grey Wolf (Bwanso)	<i>Canis lupus</i>	LC	I	Protected
5.	Jackal (Syal)	<i>Canis aureus</i>	LC		-
6.	Langur	<i>Semnopithecus hector</i>	NT	I	-
7.	Leopard cat	<i>Prionailurus bengalensis</i>	LC	II	Protected
8.	Malsapro (Marten)	<i>Martes spp.</i>	LC	III	-
9.	Mongoose	<i>Herpestes urva</i>	LC		-
10.	Monitor lizard	<i>Varanus bengalensis</i>	LC	I	Protected
11.	Porcupine (Dumsi)	<i>Hystrix indica</i>	LC		-
12.	Ratuwa mriga	<i>Muntiacus muntjak</i>	LC		-
13.	Red Monkey	<i>Macaca mulatta</i>	LC		-
14.	Salak	<i>Manis pentadactyla</i>	En	I	Protected
15.	Squirrel	<i>Funanbulus spp.</i>			-
16.	Wild boar (Bandel)	<i>Sus scrofa</i>	LC		-
17.	Wild cat (Ban Biralo)	<i>Felis chaus</i>	LC		-



Annex 14.3.3: List of people interviewed for the information

S.N	Name	Title	Community forest	Contact no.	Meeting date
1	Krishna Bahadur Subedi	President	Pateleban CF		15-03-17
2	Binod Prasad Chappagain	President	Nisakot CF	9851044962	15-03-17
3	Rajendra Regmi	President	Deubuje CF		16-03-17
4	Loknath Lamsal	Officer	Baireni Illaka Ban	9841546944	16-03-17
5	Ram Sharan Adhikari	President	Indrayeni CF	9841797583	17-03-17
6			Chiraudi CF	9818947206	17-03-17
7	Raju Karakheti	President	Sutkeri Dhunga CF	9841963127	17-03-17
8	Shiva Rimal	Treasurer	Balkumari CF	9841172534	17-03-17
9	Bishnu Gatraj	Member	Balkumari CF	9841978091	17-03-17
10	Indra Bahadur Thapa	-	Bhasme lam CF	9851167571	18-03-17
11	Nawaraj Subedi	Secretary	Setidevi CF	9841610702	18-03-17
12	Binod Bhandari	-	Gauri Bhanjyan CF	9841402009	18-03-17
13	Chandra B. Tamang	-	Indradevi CF	-	19-03-17
14	Bhumi Kandel	-	Kashi khola CF	9849207355	19-03-17
15	Narendra Upreti	-	Kankali devi CF	9841781576	19-03-17
16	Dev Raj Tripathi	President	Falepakho CF	--	19-03-17
18	Kesab Raj Naharki	Member	Bishal Samyukta CF	9841813160	20-03-17
21	Tulashi Regmi	President	Salleri CF	9808413544	20-03-17
22	Ram Kumar Gurung	Member	Nivare CF	9806819764	20-03-17
24	Uttam Ghale	President	Jwang Mauwa Khola CF	9815229263	20-03-17
25	Inshan Gurung	Secretary	Cheppang CF	9845244142	21-03-17
26	Shivaram Pokharel	President	Dharapani CF	9845472371	21-03-17
27	Mundra Bahadur Thapa	President	Leasehold forest network	056-410037	21-03-17
28	Yuddhasingh Basnet	Forest guard	Gorkha Illaka	9846125572	22-03-17
29	Ram Chandra Dhakal	Forest guard	Gorkha Illaka	9811954541	22-03-17
30	Bhojraj Dhakal	-	Mugling illka ban	9845538773	23-03-17



Annex 14.3.5: Protected mammal species list under the NPWC Act 2029.

SN	Scientific Name	English Name	Nepali Name
1.	<i>Macaca assamensis</i>	Assam Macaque	Asami Rato Bandar
2.	<i>Manis pentadactyla</i>	Chinese Pangolin	Kalo Salak
3.	<i>Manis crassicaudata</i>	Indian Pangolin	Tame Salak
4.	<i>Caprolagus hispidus</i>	Hispid Hare	Laghukarna Kharayo
5.	<i>Canis lupus</i>	Grey Wolf	Bwanso
6.	<i>Ursus arctos</i>	Brown Bear	Himali rato Bhalu
7.	<i>Ailurus fulgens</i>	Red Panda	Habre
8.	<i>Prionodon pardicolor</i>	Spotted Linsang	Silu Biralo
9.	<i>Felis bengalensis</i>	Leopard Cat	Chari Bagh
10.	<i>Felis lynx</i>	Lynx	Pahan Biralo
11.	<i>Neofelis nebulosa</i>	Clouded Leopard	Dwanse Chituwa
12.	<i>Panthera tigris</i>	Tiger	Pate Bagh
13.	<i>Panthera uncial</i>	Snow Leopard	Hiun Chituwa
14.	<i>Elephas maximus</i>	Asian Elephant	Hatti
15.	<i>Rhinoceros unicornis</i>	Greater One-horned Rhino	Gaında
16.	<i>Sus salvanius</i>	Pygmy Hog	Pudke Bandel
17.	<i>Moschus moschiferos**</i>	Musk Deer	Kasturi Mirga
18.	<i>Cervus duvauceli</i>	Swamp Deer	Bahrasingha
19.	<i>Bos gaurus</i>	Gaur	Gauri Gai
20.	<i>Bos grunniens</i>	Wild Yak	Chauri Gai
21.	<i>Bubalus arnee</i>	Wild Water Buffalo	Arna
22.	<i>Ovis ammon</i>	Great Tibetan Sheep	Nayan
23.	<i>Pantholops hodgsoni</i>	Tibetan Antelope	Chiru
24.	<i>Antelope cervicapra</i>	Blackbuck	Krishnasar
25.	<i>Tetracerus quadricornis</i>	Four-horned Antelope	Chauka
26.	<i>Hyaena hyaena</i>	Striped Hyaena	Hundar
27.	<i>Platanista gangetica</i>	Ganges River Dolphin	Shons



Annex 14.3.6: Photographic evidences and figures of Wildlife Survey



Photo 1: Fishing cat killed on road accident on 16th Nov, 2016

(Source: Illaka Forest Office Mugling)



Photo 2: Group of red monkey sighted at Naubise.

V



Photo 3: Langur sighted during field visit (Langurs are common in the project site)

Annex 4: Photographic evidences of Wildlife observed during field study



Photo 4: Pug mark of cat family (leopard)



Photo 5: Scat of big cat





Photo 6: foot print of dog family



Photo 7: foot print of cat family





Photo 8: foot print of dog family



Photo 9: foot print of dog family





Photo 10: foot print of angulates (ghoral)

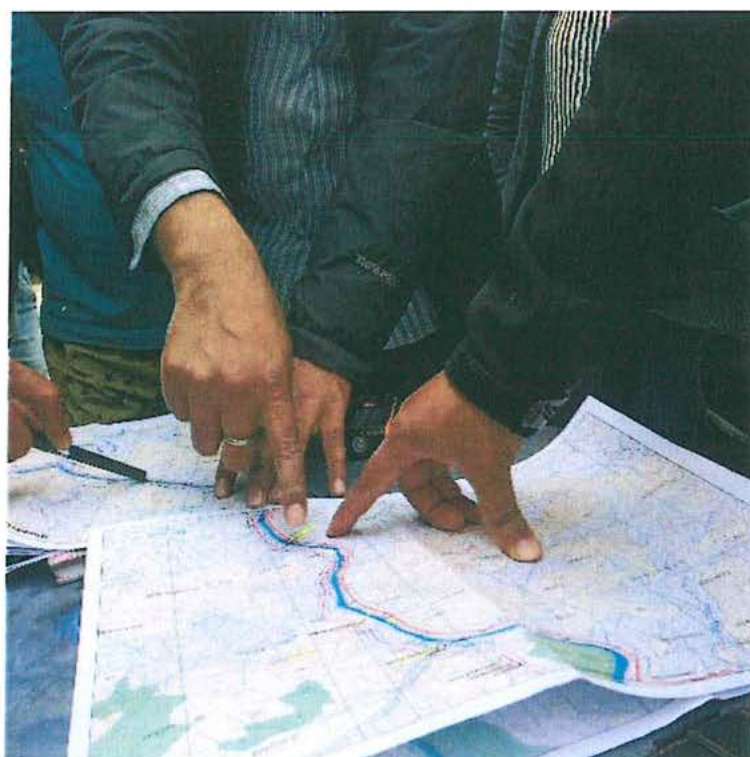


Photo 11: pug mark of cat family (wild cat or leopard cat)

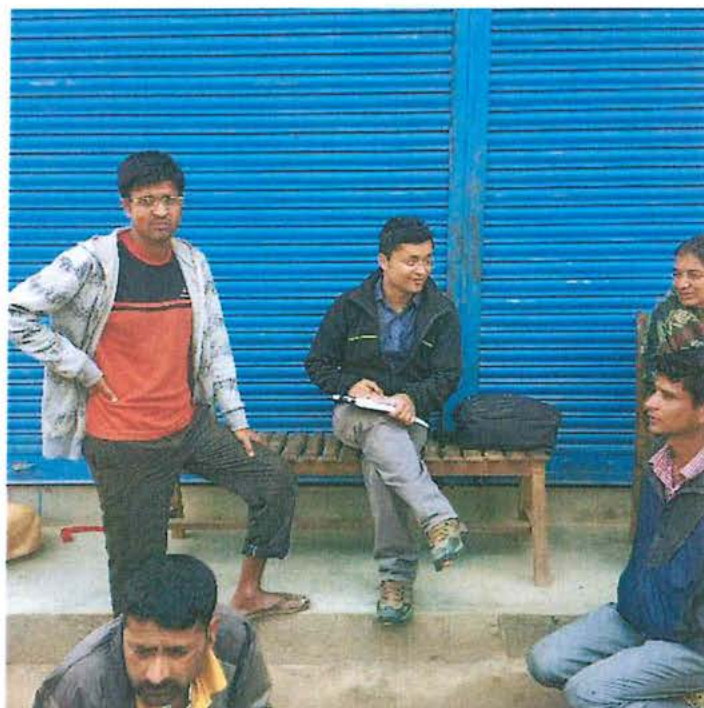




Photo 12: Scat of cat family



Literature review - Map reading



Public consultation

Figure 1: Map showing sampling sites and site of secondary wildlife evidence observation (Location details and graphic evidences are in Annex 1 and 2 respectively) (pic mentioned in the map are in annex)



XII

Annex 14.3.7: Potential Bird species found in Nagdhunga-Naubise-Mugling, proposed Highway

where , I-Nagdhunga-Naubise section, II-Naubise-Mugling section and III both sections and LC is least concern, NT is near-threatened, VU is vulnerable, E is endangered and CR is critically endangered.

Annex 14.3.8: Potential Birds species found in the project area

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioan l Status
1	Black Francolin	<i>Francolinus francolinus</i>	Survey	Yes	Forest	Resident	LC	LC
2	Hill Partridge	<i>Arborophila torqueola</i>	Literature	No	Forest	Resident	LC	NT
3	Red Junglefowl	<i>Gallus gallus</i>	Survey	Yes	Forest	Resident	LC	LC
4	Kalij Pheasant	<i>Lophura leucomelanos</i>	Survey	Yes	Forest	Resident	LC	LC
5	Bar-headed Goose	<i>Anser indicus</i>	Literature	No	Wetland	Winter visitor	LC	NT
6	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Literature	No	Wetland	Winter visitor	LC	NT
7	Gadwall	<i>Anas strepera</i>	Literature	No	Wetland	Winter visitor	LC	LC
8	Eurasian Wigeon	<i>Anas penelope</i>	Literature	No	Wetland	Winter visitor	LC	LC
9	Mallard	<i>Anas platyrhynchos</i>	Literature	No	Wetland	Winter visitor	LC	LC
10	Common Teal	<i>Anas crecca</i>	Literature	No	Wetland	Winter visitor	LC	LC
11	Red-crested Pochard	<i>Rhodonessa rufina</i>	Literature	No	Wetland	Winter visitor	LC	LC
12	Common Pochard	<i>Aythya ferina</i>	Literature	No	Wetland	Winter visitor	VU	NT
13	Ferruginous Pochard	<i>Aythya nyroca</i>	Literature	No	Wetland	Winter visitor	NT	VU
14	Common Merganser	<i>Mergus merganser</i>	Literature	No	Wetland	Winter visitor	LC	LC
15	Speckled Piculet	<i>Picumnus innominatus</i>	Literature	Yes	Forest	Resident	LC	LC
16	Rufous Woodpecker	<i>Celeus brachyurus</i>	Literature	Yes	Forest	Resident	LC	LC
17	Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	Literature	Yes	Forest	Resident	LC	NT
18	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Literature	Yes	Forest	Resident	LC	LC
19	Crimson-breasted Woodpecker	<i>Dendrocopos cathpharius</i>	Literature	Yes	Forest	Resident	LC	LC
20	Lesser Yellownape	<i>Picus chlorolophus</i>	Literature	Yes	Forest	Resident	LC	LC
21	Greater Yellownape	<i>Picus flavinucha</i>	Literature	Yes	Forest	Resident	LC	LC
22	Grey-headed Woodpecker	<i>Picus canus</i>	Survey	Yes	Forest	Resident	LC	LC
23	Great Barbet	<i>Megalaima variens</i>	Survey	Yes	Forest	Resident	LC	LC
24	Lineated Barbet	<i>Megalaima lineata</i>	Survey	Yes	Forest	Resident	LC	LC
25	Golden-throated Barbet	<i>Megalaima franklinii</i>	Survey	Yes	Forest	Resident	LC	LC
26	Blue-throated Barbet	<i>Megalaima asiatica</i>	Survey	Yes	Forest	Resident	LC	LC
27	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Survey	Yes	Forest	Resident	LC	LC
28	Common Hoopoe	<i>Upups epops</i>	Literature	No	Grassland	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
29	Chestnut-headed Bee-eater	<i>Merops leschenaultia</i>	Literature	No	Forest	Summer visitor	LC	LC
30	Green Bee-eater	<i>Merops orientalis</i>	Literature	No	Forest	Summer visitor	LC	LC
31	Common Kingfisher	<i>Alcedo atthis</i>	Survey	Yes	Wetland	Resident	LC	LC
32	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Survey	Yes	Wetland	Resident	LC	LC
33	Crested Kingfisher	<i>Megaceryle lugubris</i>	Literature	Yes	Wetland	Resident	LC	LC
34	Pied Kingfisher	<i>Ceryle rudis</i>	Literature	Yes	Wetland	Resident	LC	LC
35	Large Hawk Cuckoo	<i>Hierococcyx sparveroides</i>	Literature	Yes	Forest	Resident	LC	LC
36	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	Literature	Yes	Forest	Summer visitor	LC	LC
37	Indian Cuckoo	<i>Cuculus micropterus</i>	Literature	Yes	Forest	Summer visitor	LC	LC
38	Eurasian Cuckoo	<i>Cuculus canorus</i>	Literature	Yes	Forest	Summer visitor	LC	LC
39	Oriental Cuckoo	<i>Cuculus saturates</i>	Literature	Yes	Forest	Summer visitor	LC	LC
40	Lesser Cuckoo	<i>Cuculus poliocephalus</i>	Literature	Yes	Forest	Summer visitor	LC	LC
41	Grey-bellied Cuckoo	<i>Cacomantis passerines</i>	Literature	Yes	Forest	Summer visitor	LC	LC
42	Drongo Cuckoo	<i>Surniculus lugubris</i>	Literature	Yes	Forest	Summer visitor	LC	LC
43	Asian Koel	<i>Eudynamis scolopacea</i>	Literature	Yes	Forest	Resident	LC	LC
44	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultia</i>	Survey	Yes	Forest	Resident	LC	LC
45	Green-billed Malkoha	<i>Phaenicophaeus stritis</i>	Survey	Yes	Forest	Resident	LC	LC
46	Greater Coucal	<i>Centropus sinensis</i>	Survey	Yes	Forest	Resident	LC	LC
47	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Survey	Yes	Forest	Resident	LC	NT
48	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Survey	Yes	Forest	Resident	LC	LC
49	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Literature	Yes	Forest	Resident	LC	LC
50	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	Survey	Yes	Forest	Resident	LC	LC
51	Himalayan Swiftlet	<i>Collocalia brevirostris</i>	Literature	No	Forest	Resident	LC	LC
52	House Swift	<i>Apus nipalensis</i>	Survey	Yes	Settlement	Resident	LC	LC
53	Barn Owl	<i>Tyto alba</i>	Literature	Yes	Settlement	Resident	LC	VU
54	Brown Hawk Owl	<i>Ninox scutulata</i>	Literature	Yes	Forest	Resident	LC	LC
55	Collared Scops Owl	<i>Otus bakkamoena</i>	Literature	Yes	Forest	Resident	LC	LC
56	Eurasian Eagle Owl	<i>Bubo bubo</i>	Literature	Yes	Forest	Resident	LC	DD
57	Brown Wood Owl	<i>Strix leptogrammica</i>	Literature	Yes	Forest	Resident	LC	VU
58	Collared Owlet	<i>Glaucidium brodiei</i>	Literature	Yes	Forest	Resident	LC	LC
59	Asian Barred Owlet	<i>Glaucidium cuculoides</i>	Survey	Yes	Forest	Resident	LC	LC
60	Jungle Owlet	<i>Glaucidium radiatum</i>	Literature	Yes	Forest	Resident	LC	LC
61	Spotted Owlet	<i>Athene brama</i>	Survey	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
62	Rock Pigeon	<i>Columba livia</i>	Survey	Yes	Settlement	Resident	LC	LC
63	Speckled Wood Pigeon	<i>Columba hodgsonii</i>	Literature	Yes	Forest	Resident	LC	LC
64	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Survey	Yes	Forest	Resident	LC	LC
65	Spotted Dove	<i>Streptopelia chinensis</i>	Survey	Yes	Forest	Resident	LC	LC
66	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Literature	Yes	Forest	Resident	LC	LC
67	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Literature	Yes	Forest	Resident	LC	LC
68	Yellow-footed Green Pigeon	<i>Treron phoenicoptera</i>	Survey	Yes	Forest	Resident	LC	LC
69	Wedge-tailed Green Pigeon	<i>Treron sphenurus</i>	Survey	Yes	Forest	Resident	LC	LC
70	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Literature	Yes	Wetland	Resident	LC	LC
71	Common Greenshank	<i>Tringa nebularia</i>	Survey	No	Wetland	Winter visitor	LC	LC
72	Common Sandpiper	<i>Actitis hypoleucos</i>	Survey	No	Wetland	Winter visitor	LC	LC
73	Little Stint	<i>Calidris minuta</i>	Literature	No	Wetland	Winter visitor	LC	LC
74	Ibisbill	<i>Ibidorhyncha struthersii</i>	Survey	No	Wetland	Resident	LC	EN
75	Little Ringed Plover	<i>Charadrius dubius</i>	Survey	No	Wetland	Resident	LC	LC
76	Northern Lapwing	<i>Vanellus vanellus</i>	Literature	No	Wetland	Winter visitor	NT	NT
77	River Lapwing	<i>Vanellus duvaucelii</i>	Survey	Yes	Wetland	Resident	NT	NT
78	Red-wattled Lapwing	<i>Vanellus indicus</i>	Survey	Yes	Wetland	Resident	LC	LC
79	Grey-headed Lapwing	<i>Vanellus indicus</i>	Literature	No	Wetland	Winter visitor	LC	LC
80	Black-bellied Tern	<i>Sterna acuticauda</i>	Literature	No	Wetland	Summer visitor	EN	CR
81	Black Kite	<i>Milvus migrans</i>	Survey	Yes	Forest	Resident	LC	LC
82	Brahminy Kite	<i>Haliastur indus</i>	Literature	No	Forest	Resident	LC	CR
83	Egyptian Vulture	<i>Neophron percnopterus</i>	Survey	Yes	Forest	Resident	EN	VU
84	White-rumped Vulture	<i>Gyps bengalensis</i>	Survey	Yes	Forest	Resident	CR	CR
85	Himalayan Griffon	<i>Gyps himalayensis</i>	Survey	No	Forest	Resident	NT	VU
86	Cinereous Vulture	<i>Aegypius monachus</i>	Literature	No	Forest	Winter visitor	NT	EN
87	Red-headed Vulture	<i>Sarcogyps calvus</i>	Literature	Yes	Forest	Resident	CR	EN
88	Crested Serpent Eagle	<i>Spilornis cheela</i>	Survey	Yes	Forest	Resident	LC	LC
89	Black Eagle	<i>Ictinaetus malayensis</i>	Literature	Yes	Forest	Resident	LC	LC
90	Northern Goshawk	<i>Accipiter gentilis</i>	Literature	No	Forest	Winter visitor	LC	LC
91	Shikra	<i>Accipiter badius</i>	Survey	Yes	Forest	Resident	LC	LC
92	Besra	<i>Accipiter virgatus</i>	Literature	Yes	Forest	Resident	LC	LC
93	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	Literature	No	Forest	Resident	LC	LC
94	Common Buzzard	<i>Buteo buteo</i>	Survey	No	Forest	Winter visitor	LC	LC
95	Long-legged Buzzard	<i>Buteo rufinus</i>	Survey	No	Forest	Winter visitor	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
96	Greater Spotted Eagle	<i>Aquila clanga</i>	Literature	No	Forest	Winter visitor	VU	VU
97	Steppe Eagle	<i>Aquila nipalensis</i>	Survey	No	Forest	Winter visitor	EN	LC
98	Bonelli's Eagle	<i>Hieraetus fasciatus</i>	Literature	No	Forest	Winter visitor	LC	LC
99	Booted Eagle	<i>Hieraetus pennatus</i>	Literature	No	Forest	Winter visitor	LC	LC
100	Mountain Hawk Eagle	<i>Nisaetus nipalensis</i>	Literature	No	Forest	Resident	LC	LC
101	Collared Falconet	<i>Microhierax caerulescens</i>	Literature	Yes	Forest	Resident	LC	LC
102	Common Kestrel	<i>Falco tinnunculus</i>	Survey	Yes	Forest	Resident	LC	LC
103	Eurasian Hobby	<i>Falco subbuteo</i>	Literature	No	Forest	Winter visitor	LC	LC
104	Peregrine Falcon	<i>Falco peregrinus</i>	Literature	Yes	Forest	Resident	LC	LC
105	Great Cormorant	<i>Phalacrocorax carbo</i>	Survey	No	Wetland	Winter visitor	LC	LC
106	Little Egret	<i>Egretta garzetta</i>	Survey	Yes	Wetland	Resident	LC	LC
107	Cattle Egret	<i>Bubulcus ibis</i>	Survey	Yes	Agriculture land	Resident	LC	LC
108	Grey Heron	<i>Ardea cinerea</i>	Literature	Yes	Wetland	Resident	LC	LC
109	Indian Pond Heron	<i>Ardeola grayii</i>	Survey	Yes	Wetland	Resident	LC	LC
110	Little Heron	<i>Butorides striatus</i>	Literature	Yes	Wetland	Summer visitor	LC	LC
111	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Literature	Yes	Wetland	Summer visitor	LC	LC
112	Asian Woollyneck	<i>Ciconia episcopus</i>	Survey	Yes	Wetland	Resident	VU	NT
113	Indian Pitta	<i>Pitta brachyura</i>	Literature	Yes	Forest	Summer visitor	LC	LC
114	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	Literature	Yes	Forest	Resident	LC	LC
115	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i>	Literature	Yes	Forest	Resident	LC	LC
116	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Survey	Yes	Forest	Resident	LC	LC
117	Brown Shrike	<i>Lanius cristatus</i>	Literature	No	Forest	Winter visitor	LC	LC
118	Long-tailed Shrike	<i>Lanius schach</i>	Survey	Yes	Forest	Resident	LC	LC
119	Grey-backed Shrike	<i>Lanius tephronotus</i>	Survey	No	Forest	Winter visitor	LC	LC
120	Eurasian Jay	<i>Garrulus glandarius</i>	Literature	Yes	Forest	Resident	LC	LC
121	Black-headed Jay	<i>Garrulus lanceolatus</i>	Literature	Yes	Forest	Resident	LC	LC
122	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Survey	Yes	Forest	Resident	LC	LC
123	Common Green Magpie	<i>Cissa chinensis</i>	Literature	Yes	Forest	Resident	LC	LC
124	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Survey	Yes	Forest	Resident	LC	LC
125	Grey Treepie	<i>Dendrocitta formosae</i>	Survey	Yes	Forest	Resident	LC	LC
126	House Crow	<i>Corvus splendens</i>	Survey	Yes	Forest	Resident	LC	LC
127	Large-billed Crow	<i>Corvus macrorhynchos</i>	Survey	Yes	Forest	Resident	LC	LC
128	Ashy Woodswallow	<i>Artamus fuscus</i>	Survey	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
129	Indian Golden Oriole	<i>Oriolus oriolus</i>	Literature	Yes	Forest	Summer visitor	LC	LC
130	Maroon Oriole	<i>Oriolus trailli</i>	Survey	Yes	Forest	Resident	LC	LC
131	Large Cuckooshrike	<i>Coracina macei</i>	Survey	Yes	Forest	Resident	LC	LC
132	Black-winged Cuckooshrike	<i>Coracina melaschistos</i>	Literature	Yes	Forest	Resident	LC	LC
133	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Survey	Yes	Forest	Resident	LC	LC
134	Scarlet Minivet	<i>Pericrocotus flammeus</i>	Survey	Yes	Forest	Resident	LC	LC
135	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	Survey	Yes	Forest	Resident	LC	LC
136	White-throated Fantail	<i>Rhipidura albicollis</i>	Survey	Yes	Forest	Resident	LC	LC
137	Yellow-bellied Fantail	<i>Rhipidura hypoxantha</i>	Literature	No	Forest	Resident	LC	LC
138	Black Drongo	<i>Dicrurus macrocercus</i>	Survey	Yes	Forest	Resident	LC	LC
139	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Survey	Yes	Forest	Resident	LC	LC
140	Bronzed Drongo	<i>Dicrurus aeneus</i>	Survey	Yes	Forest	Resident	LC	LC
141	Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i>	Literature	Yes	Forest	Resident	LC	LC
142	Spangled Drongo	<i>Dicrurus hottentottus</i>	Literature	Yes	Forest	Resident	LC	LC
143	Asian Paradise Flycatcher	<i>Terpsiphone paradise</i>	Literature	Yes	Forest	Summer visitor	LC	LC
144	Common Iora	<i>Aegithina tiphia</i>	Survey	Yes	Forest	Resident	LC	LC
145	Brown Dipper	<i>Cinclus pallasii</i>	Literature	Yes	Forest	Resident	LC	LC
146	Blue-capped Rock Thrush	<i>Monticola cinclorhynchus</i>	Literature	Yes	Forest	Summer visitor	LC	LC
147	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	Survey	No	Forest	Resident	LC	LC
148	Blue Rock Thrush	<i>Monticola solitaries</i>	Literature	No	Forest	Resident	LC	LC
149	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Survey	Yes	Forest	Resident	LC	LC
150	Pied Thrush	<i>Zoothera wardii</i>	Literature	Yes	Forest	Summer visitor	LC	LC
151	Orange-headed Thrush	<i>Zoothera citrina</i>	Literature	Yes	Forest	Summer visitor	LC	LC
152	Scaly Thrush	<i>Zoothera dauma</i>	Literature	No	Forest	Winter visitor	LC	LC
153	White-collared Blackbird	<i>Turdus albocinctus</i>	Literature	No	Forest	Resident	LC	LC
154	Grey-winged Blackbird	<i>Turdus boulboul</i>	Survey	No	Forest	Resident	LC	LC
155	Dark-throated Thrush	<i>Turdus ruficollis</i>	Survey	No	Forest	Winter visitor	LC	LC
156	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	Literature	No	Forest	Summer visitor	LC	LC
157	Rufous-gorgeted Flycatcher	<i>Ficedula strophilata</i>	Survey	No	Forest	Resident	LC	LC
158	Taiga Flycatcher	<i>Ficedula albicilla</i>	Survey	No	Forest	Winter visitor	LC	LC
159	Ultramarine Flycatcher	<i>Ficedula supercilialis</i>	Literature	No	Forest	Summer visitor	LC	LC
160	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Survey	Yes	Forest	Resident	LC	LC
161	Verditer Flycatcher	<i>Eumyias thalassina</i>	Survey	Yes	Forest	Resident	LC	LC
162	Small Niltava	<i>Niltava macgrigoriae</i>	Survey	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
163	Rufous-bellied Niltava	<i>Niltava sundara</i>	Literature	No	Forest	Resident	LC	LC
164	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	Literature	No	Forest	Summer visitor	LC	LC
165	Siberian Rubythroat	<i>Luscinia calliope</i>	Literature	No	Forest	Winter visitor	LC	LC
166	White-tailed Rubythroat	<i>Luscinia pectoralis</i>	Literature	No	Forest	Resident	LC	LC
167	Bluethroat	<i>Luscinia svecica</i>	Literature	No	Forest	Winter visitor	LC	LC
168	Indian Blue Robin	<i>Luscinia brunnea</i>	Literature	No	Forest	Resident	LC	LC
169	Orange-flanked Bush Robin	<i>Tarsiger rufilatus</i>	Literature	No	Forest	Resident	LC	LC
170	Golden Bush Robin	<i>Tarsiger chrysaeus</i>	Literature	No	Forest	Resident	LC	LC
171	Oriental Magpie Robin	<i>Copsychus saularis</i>	Survey	Yes	Forest	Resident	LC	LC
172	White-tailed Robin	<i>Cinclidium leucurum</i>	Literature	No	Forest	Resident	LC	LC
173	Black Redstart	<i>Phoenicurus ochruros</i>	Survey	No	Forest	Resident	LC	LC
174	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	Survey	No	Forest	Winter visitor	LC	LC
175	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	Survey	No	Forest	Resident	LC	LC
176	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	Survey	Yes	Wetland	Resident	LC	LC
177	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	Survey	Yes	Wetland	Resident	LC	LC
178	Little Forktail	<i>Enicurus scouleri</i>	Literature	No	Wetland	Resident	LC	LC
179	Slaty-backed Forktail	<i>Enicurus schistaceus</i>	Survey	Yes	Wetland	Resident	LC	LC
180	Spotted Forktail	<i>Enicurus maculatus</i>	Survey	Yes	Wetland	Resident	LC	LC
181	Black-backed Forktail	<i>Enicurus immaculatus</i>	Survey	Yes	Wetland	Resident	LC	LC
182	Common Stonechat	<i>Saxicola torquata</i>	Survey	Yes	Grassland	Resident	LC	LC
183	Pied Bushchat	<i>Saxicola caprata</i>	Survey	Yes	Grassland	Resident	LC	LC
184	Grey Bushchat	<i>Saxicola ferrea</i>	Survey	No	Grassland	Resident	LC	LC
185	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	Survey	Yes	Forest	Resident	LC	LC
186	Brahminy Starling	<i>Sturnus pagodarum</i>	Literature	Yes	Forest	Resident	LC	LC
187	Common Myna	<i>Acridotheres tristis</i>	Survey	Yes	Settlement	Resident	LC	LC
188	Jungle Myna	<i>Acridotheres fuscus</i>	Survey	Yes	Settlement	Resident	LC	LC
189	Hill Myna	<i>Gracula religiosa</i>	Literature	Yes	Forest	Resident	LC	LC
190	Chestnut-bellied Nuthatch	<i>Sitta castanea</i>	Survey	Yes	Forest	Resident	LC	LC
191	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Literature	Yes	Forest	Resident	LC	LC
192	White-tailed Nuthatch	<i>Sitta himalayensis</i>	Literature	No	Forest	Resident	LC	LC
193	Wallcreeper	<i>Tichodroma muraria</i>	Survey	No	Settlement	Winter visitor	LC	LC
194	Great Tit	<i>Parus major</i>	Survey	Yes	Forest	Resident	LC	LC
195	Green-backed Tit	<i>Parus monticolus</i>	Survey	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
196	Black-lored Tit	<i>Parus xanthogenys</i>	Survey	Yes	Forest	Resident	LC	LC
197	Black-throated Tit	<i>Aegithalos concinnus</i>	Survey	Yes	Forest	Resident	LC	LC
198	Yellow-browed Tit	<i>Sylviparus modestus</i>	Literature	No	Forest	Resident	LC	LC
199	Barn Swallow	<i>Hirundo rustica</i>	Survey	Yes	Settlement	Resident	LC	LC
200	Red-rumped Swallow	<i>Hirundo daurica</i>	Survey	Yes	Settlement	Resident	LC	LC
201	Black-crested Bulbul	<i>Pycnonotus melanicterus</i>	Literature	Yes	Forest	Resident	LC	LC
202	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Survey	Yes	Forest	Resident	LC	LC
203	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Survey	Yes	Forest	Resident	LC	LC
204	Mountain Bulbul	<i>Hypsipetes maclellandii</i>	Survey	Yes	Forest	Resident	LC	LC
205	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Survey	Yes	Forest	Resident	LC	LC
206	Ashy Bulbul	<i>Hemixos flava</i>	Survey	Yes	Forest	Resident	LC	LC
207	Striated Prinia	<i>Prinia criniger</i>	Survey	Yes	Grassland	Resident	LC	LC
208	Grey-crowned Prinia	<i>Prinia cinereocapilla</i>	Literature	Yes	Grassland	Resident	VU	VU
209	Zitting Cisticola	<i>Cisticola juncidis</i>	Literature	Yes	Agriculture land	Resident	LC	LC
210	Oriental White-eye	<i>Zosterops palpebrosus</i>	Survey	Yes	Forest	Resident	LC	LC
211	Winter Wren	<i>Troglodytes troglodytes</i>	Literature	No	Forest	Resident	LC	LC
212	Grey-bellied Tesia	<i>Tesia cyaniventer</i>	Literature	Yes	Forest	Resident	LC	LC
213	Chestnut-headed Tesia	<i>Tesia castaneocoronata</i>	Literature	No	Forest	Resident	LC	LC
214	Common Tailorbird	<i>Orthotomus sutorius</i>	Survey	Yes	Bushes	Resident	LC	LC
215	Aberrant Bush Warbler	<i>Cettia flavolivacea</i>	Literature	No	Bushes	Resident	LC	LC
216	Grey-sided Bush Warbler	<i>Cettia brunnifrons</i>	Literature	No	Bushes	Resident	LC	LC
217	Common Chiffchaff	<i>Phylloscopus collybita</i>	Literature	No	Bushes	Winter visitor	LC	LC
218	Dusky Warbler	<i>Phylloscopus fuscatus</i>	Survey	No	Bushes	Winter visitor	LC	LC
219	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	Literature	No	Forest	Resident	LC	LC
220	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	Survey	No	Forest	Resident	LC	LC
221	Buff-barred Warbler	<i>Phylloscopus pulcher</i>	Literature	No	Forest	Resident	LC	LC
222	Greenish Warbler	<i>Phylloscopus trochiloides</i>	Survey	No	Forest	Winter visitor	LC	LC
223	Ashy-throated Warbler	<i>Phylloscopus maculipennis</i>	Literature	No	Forest	Resident	LC	LC
224	Hume's Warbler	<i>Phylloscopus humei</i>	Survey	No	Forest	Resident	LC	LC
225	Lemon-rumped warbler	<i>Phylloscopus chloronotus</i>	Literature	No	Forest	Resident	LC	LC
226	Whistler's Warbler	<i>Seicercus whistleri</i>	Literature	No	Forest	Resident	LC	LC
227	Golden-spectacled Warbler	<i>Seicercus burkii</i>	Literature	No	Forest	Resident	LC	LC
228	Grey-hooded Warbler	<i>phylloscopus xanthoschistos</i>	Survey	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
229	Chestnut-crowned Warbler	<i>Seicercus castaniceps</i>	Literature	No	Forest	Resident	LC	LC
230	Black-faced Warbler	<i>Abroscopus schisticeps</i>	Literature	No	Forest	Resident	LC	LC
231	White-throated Laughingthrush	<i>Garrulax albogularis</i>	Literature	Yes	Forest	Resident	LC	LC
232	White-crested Laughing Thrush	<i>Garrulax leucolophus</i>	Survey	Yes	Forest	Resident	LC	LC
233	Striated Laughingthrush	<i>Garrulax striatus</i>	Literature	Yes	Forest	Resident	LC	LC
234	Chestnut-crowned Laughingthrush	<i>Garrulax erythrocephalus</i>	Literature	Yes	Forest	Resident	LC	LC
235	Streaked Laughingthrush	<i>Garrulax lineatus</i>	Literature	No	Forest	Resident	LC	LC
236	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Survey	Yes	Forest	Resident	LC	LC
237	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogenys</i>	Survey	Yes	Forest	Resident	LC	LC
238	Streak-breasted Scimitar Babbler	<i>Pomatorhinus ruficollis</i>	Survey	Yes	Forest	Resident	LC	LC
239	Scaly-breasted Wren Babbler	<i>Pnoepyga albiventer</i>	Literature	No	Forest	Resident	LC	LC
240	Pygmy Wren Babbler	<i>Pnoepyga pusilla</i>	Literature	Yes	Forest	Resident	LC	LC
241	Nepal Wren Babbler	<i>Pnoepyga immaculate</i>	Literature	No	Forest	Resident	LC	LC
242	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Survey	Yes	Forest	Resident	LC	LC
243	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Literature	Yes	Forest	Resident	LC	LC
244	Striped Tit Babbler	<i>Macronous gularis</i>	Survey	Yes	Forest	Resident	LC	LC
245	Spiny Babbler	<i>Turdoides nipalensis</i>	Survey	Yes	Bushes	Resident	LC	LC
246	Jungle Babbler	<i>Turdoides striatus</i>	Literature	Yes	Forest	Resident	LC	LC
247	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Literature	Yes	Forest	Resident	LC	LC
248	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Literature	Yes	Forest	Resident	LC	LC
249	Striped-throated Yuhina	<i>Yuhina gularis</i>	Literature	No	Forest	Resident	LC	LC
250	White-bellied Erpornis	<i>Erpornis zantholeuca</i>	Literature	Yes	Forest	Resident	LC	LC
251	Rufous-winged Fulvetta	<i>Alcippe castaneiceps</i>	Literature	No	Forest	Resident	LC	LC
252	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Survey	Yes	Forest	Resident	LC	LC
253	Rufous Sibia	<i>Heterphasia capistrata</i>	Literature	No	Forest	Resident	LC	LC
254	Plain Flowerpecker	<i>Dicaeum concolor</i>	Survey	Yes	Forest	Resident	LC	LC
255	Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i>	Survey	Yes	Forest	Resident	LC	LC
256	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	Literature	Yes	Forest	Resident	LC	LC
257	Purple Sunbird	<i>Nectarinia asiatica</i>	Survey	Yes	Forest	Resident	LC	LC
258	Green-tailed Sunbird	<i>Aethopyga nipalensis</i>	Literature	No	Forest	Resident	LC	LC
259	Black-throated Sunbird	<i>Aethopyga saturate</i>	Survey	Yes	Forest	Resident	LC	LC
260	Crimson Sunbird	<i>Aethopyga siparaja</i>	Survey	Yes	Forest	Resident	LC	LC
261	Mrs Gould's Sunbird	<i>Aethopyga gouldiae</i>	Literature	No	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Current survey / Literature review	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioan l Status
262	Fire-tailed Sunbird	<i>Aethopyga ignicauda</i>	Literature	No	Forest	Resident	LC	LC
263	House Sparrow	<i>Passer domesticus</i>	Survey	Yes	Settlement	Resident	LC	LC
264	Eurasian Tree Sparrow	<i>Passer montanus</i>	Survey	Yes	Settlement	Resident	LC	LC
265	White Wagtail	<i>Motacilla alba</i>	Survey	No	Wetland	Winter visitor	LC	LC
266	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Survey	Yes	Wetland	Resident	LC	LC
267	Grey Wagtail	<i>Motacilla cinerea</i>	Survey	No	Wetland	Resident	LC	LC
268	Paddyfield Pipit	<i>Anthus rufulus</i>	Survey	Yes	Agriculture land	Resident	LC	LC
269	Olive-backed Pipit	<i>Anthus hodgsonii</i>	Survey	No	Forest	Resident	LC	LC
270	Rosy Pipit	<i>Anthus roseatus</i>	Literature	No	Wetland	Resident	LC	LC
271	Baya Weaver	<i>Ploceus philippinus</i>	Survey	Yes	Agriculture land	Resident	LC	LC
272	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Survey	Yes	Agriculture land	Resident	LC	LC
273	White-rumped Munia	<i>Lanchura striata</i>	Survey	Yes	Agriculture land	Resident	LC	LC
274	Yellow-breasted Greenfinch	<i>Carduelis spinoides</i>	Literature	No	Agriculture land	Resident	LC	LC
275	Common Rosefinch	<i>Carpodacus erythrinus</i>	Literature	No	Forest	Resident	LC	LC
276	Crested Bunting	<i>Melophus lathamii</i>	Survey	No	Agriculture land	Resident	LC	LC



Annex 14.3.9: Potential Birds found in Nagdhunga-Naubise section

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
1	Black Francolin	<i>Francolinus francolinus</i>	Yes	Forest	Resident	LC	LC
2	Hill Partridge	<i>Arborophila torqueola</i>	No	Forest	Resident	LC	NT
3	Kalij Pheasant	<i>Lophura leucomelanos</i>	Yes	Forest	Resident	LC	LC
4	Speckled Piculet	<i>Picumnus innominatus</i>	Yes	Forest	Resident	LC	LC
5	Rufous Woodpecker	<i>Celeus brachyurus</i>	Yes	Forest	Resident	LC	LC
6	Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	Yes	Forest	Resident	LC	NT
7	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Yes	Forest	Resident	LC	LC
8	Crimson-breasted Woodpecker	<i>Dendrocopos cathpharius</i>	Yes	Forest	Resident	LC	LC
9	Lesser Yellownape	<i>Picus chlorolophus</i>	Yes	Forest	Resident	LC	LC
10	Greater Yellownape	<i>Picus flavimucha</i>	Yes	Forest	Resident	LC	LC
11	Grey-headed Woodpecker	<i>Picus canus</i>	Yes	Forest	Resident	LC	LC
12	Great Barbet	<i>Megalaima varians</i>	Yes	Forest	Resident	LC	LC
13	Golden-throated Barbet	<i>Megalaima franklinii</i>	Yes	Forest	Resident	LC	LC
14	Blue-throated Barbet	<i>Megalaima asiatica</i>	Yes	Forest	Resident	LC	LC
15	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Yes	Forest	Resident	LC	LC
16	Common Hoopoe	<i>Upops epops</i>	No	Grassland	Resident	LC	LC
17	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	No	Forest	Summer visitor	LC	LC
18	Green Bee-eater	<i>Merops orientalis</i>	No	Forest	Summer visitor	LC	LC
19	Common Kingfisher	<i>Alcedo atthis</i>	Yes	Wetland	Resident	LC	LC
20	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Yes	Wetland	Resident	LC	LC
21	Large Hawk Cuckoo	<i>Hierococcyx sparverioides</i>	Yes	Forest	Resident	LC	LC
22	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	Yes	Forest	Summer visitor	LC	LC
23	Indian Cuckoo	<i>Cuculus micropterus</i>	Yes	Forest	Summer visitor	LC	LC
24	Eurasian Cuckoo	<i>Cuculus canorus</i>	Yes	Forest	Summer visitor	LC	LC
25	Oriental Cuckoo	<i>Cuculus saturatus</i>	Yes	Forest	Summer visitor	LC	LC
26	Lesser Cuckoo	<i>Cuculus poliocephalus</i>	Yes	Forest	Summer visitor	LC	LC
27	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	Yes	Forest	Summer visitor	LC	LC
28	Drongo Cuckoo	<i>Surniculus lugubris</i>	Yes	Forest	Summer visitor	LC	LC
29	Asian Koel	<i>Eudynamis scolopacea</i>	Yes	Forest	Resident	LC	LC
30	Green-billed Malkoha	<i>Phaenicophaeus stritis</i>	Yes	Forest	Resident	LC	LC
31	Greater Coucal	<i>Centropus sinensis</i>	Yes	Forest	Resident	LC	LC
32	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Yes	Forest	Resident	LC	NT
33	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Yes	Forest	Resident	LC	LC
34	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
35	Himalayan Swiftlet	<i>Collocalia brevirostris</i>	No	Forest	Resident	LC	LC
36	House Swift	<i>Apus nipalensis</i>	Yes	Settlement	Resident	LC	LC
37	Barn Owl	<i>Tyto alba</i>	Yes	Settlement	Resident	LC	VU
38	Brown Hawk Owl	<i>Ninox scutulata</i>	Yes	Forest	Resident	LC	LC
39	Collared Scops Owl	<i>Otus bakkamoena</i>	Yes	Forest	Resident	LC	LC
40	Eurasian Eagle Owl	<i>Bubo bubo</i>	Yes	Forest	Resident	LC	DD
41	Brown Wood Owl	<i>Strix leptogrammica</i>	Yes	Forest	Resident	LC	VU
42	Collared Owlet	<i>Glaucidium brodiei</i>	Yes	Forest	Resident	LC	LC
43	Asian Barred Owlet	<i>Glaucidium cuculoides</i>	Yes	Forest	Resident	LC	LC
44	Spotted Owlet	<i>Athene brama</i>	Yes	Forest	Resident	LC	LC
45	Rock Pigeon	<i>Columba livia</i>	Yes	Settlement	Resident	LC	LC
46	Speckled Wood Pigeon	<i>Columba hodgsonii</i>	Yes	Forest	Resident	LC	LC
47	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Yes	Forest	Resident	LC	LC
48	Spotted Dove	<i>Streptopelia chinensis</i>	Yes	Forest	Resident	LC	LC
49	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Yes	Forest	Resident	LC	LC
50	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Yes	Forest	Resident	LC	LC
51	Wedge-tailed Green Pigeon	<i>Treron spheonurus</i>	Yes	Forest	Resident	LC	LC
52	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Yes	Wetland	Resident	LC	LC
53	Northern Lapwing	<i>Vanellus vanellus</i>	No	Wetland	Winter visitor	NT	NT
54	Black Kite	<i>Milvus migrans</i>	Yes	Forest	Resident	LC	LC
55	Himalayan Griffon	<i>Gyps himalayensis</i>	No	Forest	Resident	NT	VU
56	Crested Serpent Eagle	<i>Spilornis cheela</i>	Yes	Forest	Resident	LC	LC
57	Black Eagle	<i>Ictinaetus malayensis</i>	Yes	Forest	Resident	LC	LC
58	Northern Goshawk	<i>Accipiter gentilis</i>	No	Forest	Winter visitor	LC	LC
59	Shikra	<i>Accipiter badius</i>	Yes	Forest	Resident	LC	LC
60	Besra	<i>Accipiter virgatus</i>	Yes	Forest	Resident	LC	LC
61	Common Buzzard	<i>Buteo buteo</i>	No	Forest	Winter visitor	LC	LC
62	Long-legged Buzzard	<i>Buteo rufinus</i>	No	Forest	Winter visitor	LC	LC
63	Steppe Eagle	<i>Aquila nipalensis</i>	No	Forest	Winter visitor	EN	LC
64	Bonelli's Eagle	<i>Hieraaetus fasciatus</i>	No	Forest	Winter visitor	LC	LC
65	Booted Eagle	<i>Hieraaetus pennatus</i>	No	Forest	Winter visitor	LC	LC
66	Mountain Hawk Eagle	<i>Nisaetus nipalensis</i>	No	Forest	Resident	LC	LC
67	Common Kestrel	<i>Falco tinnunculus</i>	Yes	Forest	Resident	LC	LC
68	Eurasian Hobby	<i>Falco subbuteo</i>	No	Forest	Winter visitor	LC	LC
69	Peregrine Falcon	<i>Falco peregrinus</i>	Yes	Forest	Resident	LC	LC
70	Great Cormorant	<i>Phalacrocorax carbo</i>	No	Wetland	Winter visitor	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
71	Little Egret	<i>Egretta garzetta</i>	Yes	Wetland	Resident	LC	LC
72	Cattle Egret	<i>Bubulcus ibis</i>	Yes	Agriculture land	Resident	LC	LC
73	Indian Pond Heron	<i>Ardeola grayii</i>	Yes	Wetland	Resident	LC	LC
74	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Yes	Wetland	Summer visitor	LC	LC
75	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	Yes	Forest	Resident	LC	LC
76	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Yes	Forest	Resident	LC	LC
77	Brown Shrike	<i>Lanius cristatus</i>	No	Forest	Winter visitor	LC	LC
78	Long-tailed Shrike	<i>Lanius schach</i>	Yes	Forest	Resident	LC	LC
79	Grey-backed Shrike	<i>Lanius tephronotus</i>	No	Forest	Winter visitor	LC	LC
80	Eurasian Jay	<i>Garrulus glandarius</i>	Yes	Forest	Resident	LC	LC
81	Black-headed Jay	<i>Garrulus lanceolatus</i>	Yes	Forest	Resident	LC	LC
82	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Yes	Forest	Resident	LC	LC
83	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Yes	Forest	Resident	LC	LC
84	Grey Treepie	<i>Dendrocitta formosae</i>	Yes	Forest	Resident	LC	LC
85	House Crow	<i>Corvus splendens</i>	Yes	Forest	Resident	LC	LC
86	Large-billed Crow	<i>Corvus macrorhynchos</i>	Yes	Forest	Resident	LC	LC
87	Indian Golden Oriole	<i>Oriolus oriolus</i>	Yes	Forest	Summer visitor	LC	LC
88	Maroon Oriole	<i>Oriolus trailii</i>	Yes	Forest	Resident	LC	LC
89	Large Cuckooshrike	<i>Coracina macei</i>	Yes	Forest	Resident	LC	LC
90	Black-winged Cuckooshrike	<i>Coracina melaschistos</i>	Yes	Forest	Resident	LC	LC
91	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Yes	Forest	Resident	LC	LC
92	Scarlet Minivet	<i>Pericrocotus flammeus</i>	Yes	Forest	Resident	LC	LC
93	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	Yes	Forest	Resident	LC	LC
94	White-throated Fantail	<i>Rhipidura albicollis</i>	Yes	Forest	Resident	LC	LC
95	Yellow-bellied Fantail	<i>Rhipidura hypoxantha</i>	No	Forest	Resident	LC	LC
96	Black Drongo	<i>Dicrurus macrocercus</i>	Yes	Forest	Resident	LC	LC
97	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Yes	Forest	Resident	LC	LC
98	Bronzed Drongo	<i>Dicrurus aeneus</i>	Yes	Forest	Resident	LC	LC
99	Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i>	Yes	Forest	Resident	LC	LC
100	Spangled Drongo	<i>Dicrurus hottentottus</i>	Yes	Forest	Resident	LC	LC
101	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	Yes	Forest	Summer visitor	LC	LC
102	Blue-capped Rock Thrush	<i>Monticola cinclorhynchus</i>	Yes	Forest	Summer visitor	LC	LC
103	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	No	Forest	Resident	LC	LC
104	Blue Rock Thrush	<i>Monticola solitarius</i>	No	Forest	Resident	LC	LC
105	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Yes	Forest	Resident	LC	LC
106	Pied Thrush	<i>Zoothera wardii</i>	Yes	Forest	Summer visitor	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
107	Orange-headed Thrush	<i>Zoothera citrina</i>	Yes	Forest	Summer visitor	LC	LC
108	Scaly Thrush	<i>Zoothera dauma</i>	No	Forest	Winter visitor	LC	LC
109	White-collared Blackbird	<i>Turdus albocinctus</i>	No	Forest	Resident	LC	LC
110	Grey-winged Blackbird	<i>Turdus bouboul</i>	No	Forest	Resident	LC	LC
111	Dark-throated Thrush	<i>Turdus ruficollis</i>	No	Forest	Winter visitor	LC	LC
112	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	No	Forest	Summer visitor	LC	LC
113	Rufous-gorgeted Flycatcher	<i>Ficedula strophilata</i>	No	Forest	Resident	LC	LC
114	Taiga Flycatcher	<i>Ficedula albicilla</i>	No	Forest	Winter visitor	LC	LC
115	Ultramarine Flycatcher	<i>Ficedula supercilialis</i>	No	Forest	Summer visitor	LC	LC
116	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Yes	Forest	Resident	LC	LC
117	Verditer Flycatcher	<i>Eumyias thalassina</i>	Yes	Forest	Resident	LC	LC
118	Small Niltava	<i>Niltava macgrigoriae</i>	Yes	Forest	Resident	LC	LC
119	Rufous-bellied Niltava	<i>Niltava sundara</i>	No	Forest	Resident	LC	LC
120	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	No	Forest	Summer visitor	LC	LC
121	Siberian Rubythroat	<i>Luscinia calliope</i>	No	Forest	Winter visitor	LC	LC
122	White-tailed Rubythroat	<i>Luscinia pectoralis</i>	No	Forest	Resident	LC	LC
123	Bluethroat	<i>Luscinia svecica</i>	No	Forest	Winter visitor	LC	LC
124	Indian Blue Robin	<i>Luscinia brunnea</i>	No	Forest	Resident	LC	LC
125	Orange-flanked Bush Robin	<i>Tarsiger rufilatus</i>	No	Forest	Resident	LC	LC
126	Golden Bush Robin	<i>Tarsiger chrysaeus</i>	No	Forest	Resident	LC	LC
127	Oriental Magpie Robin	<i>Copsychus saularis</i>	Yes	Forest	Resident	LC	LC
128	White-tailed Robin	<i>Cinclidium leucurum</i>	No	Forest	Resident	LC	LC
129	Black Redstart	<i>Phoenicurus ochruros</i>	No	Forest	Resident	LC	LC
130	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	No	Forest	Winter visitor	LC	LC
131	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	No	Forest	Resident	LC	LC
132	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	Yes	Wetland	Resident	LC	LC
133	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	Yes	Wetland	Resident	LC	LC
134	Little Forktail	<i>Enicurus scouleri</i>	No	Wetland	Resident	LC	LC
135	Slaty-backed Forktail	<i>Enicurus schistaceus</i>	Yes	Wetland	Resident	LC	LC
136	Spotted Forktail	<i>Enicurus maculatus</i>	Yes	Wetland	Resident	LC	LC
137	Black-backed Forktail	<i>Enicurus immaculatus</i>	Yes	Wetland	Resident	LC	LC
138	Common Stonechat	<i>Saxicola torquata</i>	Yes	Grassland	Resident	LC	LC
139	Pied Bushchat	<i>Saxicola caprata</i>	Yes	Grassland	Resident	LC	LC
140	Grey Bushchat	<i>Saxicola ferrea</i>	No	Grassland	Resident	LC	LC
141	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
142	Common Myna	<i>Acridotheres tristis</i>	Yes	Settlement	Resident	LC	LC
143	Jungle Myna	<i>Acridotheres fuscus</i>	Yes	Settlement	Resident	LC	LC
144	Chestnut-bellied Nuthatch	<i>Sitta castanea</i>	Yes	Forest	Resident	LC	LC
145	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Yes	Forest	Resident	LC	LC
146	White-tailed Nuthatch	<i>Sitta himalayensis</i>	No	Forest	Resident	LC	LC
147	Wallcreeper	<i>Tichodroma muraria</i>	No	Settlement	Winter visitor	LC	LC
148	Great Tit	<i>Parus major</i>	Yes	Forest	Resident	LC	LC
149	Green-backed Tit	<i>Parus monticolus</i>	Yes	Forest	Resident	LC	LC
150	Black-lored Tit	<i>Parus xanthogenys</i>	Yes	Forest	Resident	LC	LC
151	Black-throated Tit	<i>Aegithalos concinnus</i>	Yes	Forest	Resident	LC	LC
152	Yellow-browed Tit	<i>Sylviparus modestus</i>	No	Forest	Resident	LC	LC
153	Barn Swallow	<i>Hirundo rustica</i>	Yes	Settlement	Resident	LC	LC
154	Red-rumped Swallow	<i>Hirundo daurica</i>	Yes	Settlement	Resident	LC	LC
155	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Yes	Forest	Resident	LC	LC
156	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Yes	Forest	Resident	LC	LC
157	Mountain Bulbul	<i>Hypsipetes maclellandii</i>	Yes	Forest	Resident	LC	LC
158	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Yes	Forest	Resident	LC	LC
159	Striated Prinia	<i>Prinia criniger</i>	Yes	Grassland	Resident	LC	LC
160	Zitting Cisticola	<i>Cisticola juncidis</i>	Yes	Agriculture land	Resident	LC	LC
161	Oriental White-eye	<i>Zosterops palpebrosus</i>	Yes	Forest	Resident	LC	LC
162	Winter Wren	<i>Troglodytes troglodytes</i>	No	Forest	Resident	LC	LC
163	Grey-bellied Tesia	<i>Tesia cyaniventer</i>	Yes	Forest	Resident	LC	LC
164	Chestnut-headed Tesia	<i>Tesia castaneocoronata</i>	No	Forest	Resident	LC	LC
165	Common Tailorbird	<i>Orthotomus sutorius</i>	Yes	Bushes	Resident	LC	LC
166	Aberrant Bush Warbler	<i>Cettia flavolivacea</i>	No	Bushes	Resident	LC	LC
167	Grey-sided Bush Warbler	<i>Cettia brunnifrons</i>	No	Bushes	Resident	LC	LC
168	Common Chiffchaff	<i>Phylloscopus collybita</i>	No	Bushes	Winter visitor	LC	LC
169	Dusky Warbler	<i>Phylloscopus fuscatus</i>	No	Bushes	Winter visitor	LC	LC
170	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	No	Forest	Resident	LC	LC
171	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	No	Forest	Resident	LC	LC
172	Buff-barred Warbler	<i>Phylloscopus pulcher</i>	No	Forest	Resident	LC	LC
173	Greenish Warbler	<i>Phylloscopus trochiloides</i>	No	Forest	Winter visitor	LC	LC
174	Ashy-throated Warbler	<i>Phylloscopus maculipennis</i>	No	Forest	Resident	LC	LC
175	Hume's Warbler	<i>Phylloscopus humei</i>	No	Forest	Resident	LC	LC
176	Lemon-rumped warbler	<i>Phylloscopus chloronotus</i>	No	Forest	Resident	LC	LC
177	Whistler's Warbler	<i>Seicercus whistleri</i>	No	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
178	Golden-spectacled Warbler	<i>Seicercus burkii</i>	No	Forest	Resident	LC	LC
179	Grey-hooded Warbler	<i>phylloscopus xanthoschistos</i>	Yes	Forest	Resident	LC	LC
180	Chestnut-crowned Warbler	<i>Seicercus castaneiceps</i>	No	Forest	Resident	LC	LC
181	Black-faced Warbler	<i>Abroscopus schisticeps</i>	No	Forest	Resident	LC	LC
182	White-throated Laughingthrush	<i>Garrulax albogularis</i>	Yes	Forest	Resident	LC	LC
183	White-crested Laughing Thrush	<i>Garrulax leucolophus</i>	Yes	Forest	Resident	LC	LC
184	Striated Laughingthrush	<i>Garrulax striatus</i>	Yes	Forest	Resident	LC	LC
185	Chestnut-crowned Laughingthrush	<i>Garrulax erythrocephalus</i>	Yes	Forest	Resident	LC	LC
186	Streaked Laughingthrush	<i>Garrulax lineatus</i>	No	Forest	Resident	LC	LC
187	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Yes	Forest	Resident	LC	LC
188	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogenys</i>	Yes	Forest	Resident	LC	LC
189	Streak-breasted Scimitar Babbler	<i>Pomatorhinus ruficollis</i>	Yes	Forest	Resident	LC	LC
190	Scaly-breasted Wren Babbler	<i>Pnoepyga albiventer</i>	No	Forest	Resident	LC	LC
191	Pygmy Wren Babbler	<i>Pnoepyga pusilla</i>	Yes	Forest	Resident	LC	LC
192	Nepal Wren Babbler	<i>Pnoepyga immaculata</i>	No	Forest	Resident	LC	LC
193	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Yes	Forest	Resident	LC	LC
194	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Yes	Forest	Resident	LC	LC
195	Spiny Babbler	<i>Turdoides nipalensis</i>	Yes	Bushes	Resident	LC	LC
196	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Yes	Forest	Resident	LC	LC
197	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Yes	Forest	Resident	LC	LC
198	Striped-throated Yuhina	<i>Yuhina gularis</i>	No	Forest	Resident	LC	LC
199	White-bellied Erpornis	<i>Erpornis zantholeuca</i>	Yes	Forest	Resident	LC	LC
200	Rufous-winged Fulvetta	<i>Alcippe castaneiceps</i>	No	Forest	Resident	LC	LC
201	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Yes	Forest	Resident	LC	LC
202	Rufous Sibia	<i>Heterphasia capistrata</i>	No	Forest	Resident	LC	LC
203	Plain Flowerpecker	<i>Dicaeum concolor</i>	Yes	Forest	Resident	LC	LC
204	Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i>	Yes	Forest	Resident	LC	LC
205	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	Yes	Forest	Resident	LC	LC
206	Purple Sunbird	<i>Nectarinia asiatica</i>	Yes	Forest	Resident	LC	LC
207	Green-tailed Sunbird	<i>Aethopyga nipalensis</i>	No	Forest	Resident	LC	LC
208	Black-throated Sunbird	<i>Aethopyga saturata</i>	Yes	Forest	Resident	LC	LC
209	Crimson Sunbird	<i>Aethopyga siparaja</i>	Yes	Forest	Resident	LC	LC
210	Mrs Gould's Sunbird	<i>Aethopyga gouldiae</i>	No	Forest	Resident	LC	LC
211	Fire-tailed Sunbird	<i>Aethopyga ignicauda</i>	No	Forest	Resident	LC	LC
212	House Sparrow	<i>Passer domesticus</i>	Yes	Settlement	Resident	LC	LC
213	Eurasian Tree Sparrow	<i>Passer montanus</i>	Yes	Settlement	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
214	White Wagtail	<i>Motacilla alba</i>	No	Wetland	Winter visitor	LC	LC
215	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Yes	Wetland	Resident	LC	LC
216	Grey Wagtail	<i>Motacilla cinerea</i>	No	Wetland	Resident	LC	LC
217	Paddyfield Pipit	<i>Anthus rufulus</i>	Yes	Agriculture land	Resident	LC	LC
218	Olive-backed Pipit	<i>Anthus hodgsonii</i>	No	Forest	Resident	LC	LC
219	Rosy Pipit	<i>Anthus roseatus</i>	No	Wetland	Resident	LC	LC
220	Baya Weaver	<i>Ploceus philippinus</i>	Yes	Agriculture land	Resident	LC	LC
221	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Yes	Agriculture land	Resident	LC	LC
222	White-rumped Munia	<i>Lonchura striata</i>	Yes	Agriculture land	Resident	LC	LC
223	Yellow-breasted Greenfinch	<i>Carduelis spinoides</i>	No	Agriculture land	Resident	LC	LC
224	Common Rosefinch	<i>Carpodacus erythrinus</i>	No	Forest	Resident	LC	LC
225	Crested Bunting	<i>Melophus lathami</i>	No	Agriculture land	Resident	LC	LC



Annex 14.3.10: Potential Birds species found in proposed Sisne Khola-Dharke section

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
1	Black Francolin	<i>Francolinus francolinus</i>	Yes	Forest	Resident	LC	LC
2	Kalij Pheasant	<i>Lophura leucomelanos</i>	Yes	Forest	Resident	LC	LC
3	Speckled Piculet	<i>Picumnus innominatus</i>	Yes	Forest	Resident	LC	LC
4	Rufous Woodpecker	<i>Celeus brachyurus</i>	Yes	Forest	Resident	LC	LC
5	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Yes	Forest	Resident	LC	LC
6	Lesser Yellownape	<i>Picus chlorolophus</i>	Yes	Forest	Resident	LC	LC
7	Greater Yellownape	<i>Picus flavinucha</i>	Yes	Forest	Resident	LC	LC
8	Grey-headed Woodpecker	<i>Picus canus</i>	Yes	Forest	Resident	LC	LC
9	Great Barbet	<i>Megalaima varians</i>	Yes	Forest	Resident	LC	LC
10	Blue-throated Barbet	<i>Megalaima asiatica</i>	Yes	Forest	Resident	LC	LC
11	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Yes	Forest	Resident	LC	LC
12	Common Hoopoe	<i>Upupa epops</i>	No	Grassland	Resident	LC	LC
13	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	No	Forest	Summer visitor	LC	LC
14	Common Kingfisher	<i>Alcedo atthis</i>	Yes	Wetland	Resident	LC	LC
15	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Yes	Wetland	Resident	LC	LC
16	Large Hawk Cuckoo	<i>Hierococcyx sparveroides</i>	Yes	Forest	Resident	LC	LC
17	Indian Cuckoo	<i>Cuculus micropterus</i>	Yes	Forest	Summer visitor	LC	LC
18	Eurasian Cuckoo	<i>Cuculus canorus</i>	Yes	Forest	Summer visitor	LC	LC
19	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	Yes	Forest	Summer visitor	LC	LC
20	Asian Koel	<i>Eudynamis scolopacea</i>	Yes	Forest	Resident	LC	LC
21	Green-billed Malkoha	<i>Phaenicophaea stritis</i>	Yes	Forest	Resident	LC	LC
22	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Yes	Forest	Resident	LC	NT
23	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Yes	Forest	Resident	LC	LC
24	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Yes	Forest	Resident	LC	LC
25	Himalayan Swiftlet	<i>Collocalia brevirostris</i>	No	Forest	Resident	LC	LC
26	House Swift	<i>Apus nipalensis</i>	Yes	Settlement	Resident	LC	LC
27	Barn Owl	<i>Tyto alba</i>	Yes	Settlement	Resident	LC	VU
28	Asian Barred Owlet	<i>Glaucidium cuculoides</i>	Yes	Forest	Resident	LC	LC
29	Spotted Owlet	<i>Athene brama</i>	Yes	Forest	Resident	LC	LC
30	Rock Pigeon	<i>Columba livia</i>	Yes	Settlement	Resident	LC	LC
31	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Yes	Forest	Resident	LC	LC
32	Spotted Dove	<i>Streptopelia chinensis</i>	Yes	Forest	Resident	LC	LC
33	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Yes	Forest	Resident	LC	LC
34	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Yes	Forest	Resident	LC	LC
35	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Yes	Wetland	Resident	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
36	Black Kite	<i>Milvus migrans</i>	Yes	Forest	Resident	LC	LC
37	Himalayan Griffon	<i>Gyps himalayensis</i>	No	Forest	Resident	NT	VU
38	Crested Serpent Eagle	<i>Spilornis cheela</i>	Yes	Forest	Resident	LC	LC
39	Shikra	<i>Accipiter badius</i>	Yes	Forest	Resident	LC	LC
40	Common Buzzard	<i>Buteo buteo</i>	No	Forest	Winter visitor	LC	LC
41	Long-legged Buzzard	<i>Buteo rufinus</i>	No	Forest	Winter visitor	LC	LC
42	Steppe Eagle	<i>Aquila nipalensis</i>	No	Forest	Winter visitor	EN	LC
43	Bonelli's Eagle	<i>Hieraaetus fasciatus</i>	No	Forest	Winter visitor	LC	LC
44	Booted Eagle	<i>Hieraaetus pennatus</i>	No	Forest	Winter visitor	LC	LC
45	Common Kestrel	<i>Falco tinnunculus</i>	Yes	Forest	Resident	LC	LC
46	Little Egret	<i>Egretta garzetta</i>	Yes	Wetland	Resident	LC	LC
47	Cattle Egret	<i>Bubulcus ibis</i>	Yes	Agricultureland	Resident	LC	LC
48	Indian Pond Heron	<i>Ardeola grayii</i>	Yes	Wetland	Resident	LC	LC
49	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Yes	Forest	Resident	LC	LC
50	Long-tailed Shrike	<i>Lanius schach</i>	Yes	Forest	Resident	LC	LC
51	Grey-backed Shrike	<i>Lanius tephronotus</i>	No	Forest	Winter visitor	LC	LC
52	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Yes	Forest	Resident	LC	LC
53	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Yes	Forest	Resident	LC	LC
54	Grey Treepie	<i>Dendrocitta formosae</i>	Yes	Forest	Resident	LC	LC
55	House Crow	<i>Corvus splendens</i>	Yes	Forest	Resident	LC	LC
56	Large-billed Crow	<i>Corvus macrorhynchos</i>	Yes	Forest	Resident	LC	LC
57	Indian Golden Oriole	<i>Oriolus oriolus</i>	Yes	Forest	Summer visitor	LC	LC
58	Maroon Oriole	<i>Oriolus trailli</i>	Yes	Forest	Resident	LC	LC
59	Large Cuckooshrike	<i>Coracina macei</i>	Yes	Forest	Resident	LC	LC
60	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Yes	Forest	Resident	LC	LC
61	Scarlet Minivet	<i>Pericrocotus flammeus</i>	Yes	Forest	Resident	LC	LC
62	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	Yes	Forest	Resident	LC	LC
63	White-throated Fantail	<i>Rhipidura albicollis</i>	Yes	Forest	Resident	LC	LC
64	Yellow-bellied Fantail	<i>Rhipidura hypoxantha</i>	No	Forest	Resident	LC	LC
65	Black Drongo	<i>Dicrurus macrocercus</i>	Yes	Forest	Resident	LC	LC
66	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Yes	Forest	Resident	LC	LC
67	Bronzed Drongo	<i>Dicrurus aeneus</i>	Yes	Forest	Resident	LC	LC
68	Spangled Drongo	<i>Dicrurus hottentottus</i>	Yes	Forest	Resident	LC	LC
69	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	Yes	Forest	Summer visitor	LC	LC
70	Blue-capped Rock Thrush	<i>Monticola cinclorhynchus</i>	Yes	Forest	Summer visitor	LC	LC
71	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	No	Forest	Resident	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
72	Blue Rock Thrush	<i>Monticola solitarius</i>	No	Forest	Resident	LC	LC
73	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Yes	Forest	Resident	LC	LC
74	Orange-headed Thrush	<i>Zoothera citrina</i>	Yes	Forest	Summer visitor	LC	LC
75	Scaly Thrush	<i>Zoothera dauma</i>	No	Forest	Winter visitor	LC	LC
76	Dark-throated Thrush	<i>Turdus ruficollis</i>	No	Forest	Winter visitor	LC	LC
77	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	No	Forest	Summer visitor	LC	LC
78	Rufous-gorgeted Flycatcher	<i>Ficedula strophliata</i>	No	Forest	Resident	LC	LC
79	Taiga Flycatcher	<i>Ficedula albicilla</i>	No	Forest	Winter visitor	LC	LC
80	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Yes	Forest	Resident	LC	LC
81	Verditer Flycatcher	<i>Eumyias thalassina</i>	Yes	Forest	Resident	LC	LC
82	Small Niltava	<i>Niltava macgrigoriae</i>	Yes	Forest	Resident	LC	LC
83	Rufous-bellied Niltava	<i>Niltava sundara</i>	No	Forest	Resident	LC	LC
84	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	No	Forest	Summer visitor	LC	LC
85	Siberian Rubythroat	<i>Luscinia calliope</i>	No	Forest	Winter visitor	LC	LC
86	Bluethroat	<i>Luscinia svecica</i>	No	Forest	Winter visitor	LC	LC
87	Orange-flanked Bush Robin	<i>Tarsiger rufilatus</i>	No	Forest	Resident	LC	LC
88	Oriental Magpie Robin	<i>Copsychus saularis</i>	Yes	Forest	Resident	LC	LC
89	Black Redstart	<i>Phoenicurus ochruros</i>	No	Forest	Resident	LC	LC
90	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	No	Forest	Winter visitor	LC	LC
91	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	No	Forest	Resident	LC	LC
92	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	Yes	Wetland	Resident	LC	LC
93	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	Yes	Wetland	Resident	LC	LC
94	Slaty-backed Forktail	<i>Enicurus schistaceus</i>	Yes	Wetland	Resident	LC	LC
95	Spotted Forktail	<i>Enicurus maculatus</i>	Yes	Wetland	Resident	LC	LC
96	Common Stonechat	<i>Saxicola torquata</i>	Yes	Grassland	Resident	LC	LC
97	Pied Bushchat	<i>Saxicola caprata</i>	Yes	Grassland	Resident	LC	LC
98	Grey Bushchat	<i>Saxicola ferrea</i>	No	Grassland	Resident	LC	LC
99	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	Yes	Forest	Resident	LC	LC
100	Common Myna	<i>Acridotheres tristis</i>	Yes	Settlement	Resident	LC	LC
101	Jungle Myna	<i>Acridotheres fuscus</i>	Yes	Settlement	Resident	LC	LC
102	Chestnut-bellied Nuthatch	<i>Sitta castanea</i>	Yes	Forest	Resident	LC	LC
103	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Yes	Forest	Resident	LC	LC
104	Great Tit	<i>Parus major</i>	Yes	Forest	Resident	LC	LC
105	Green-backed Tit	<i>Parus monticolus</i>	Yes	Forest	Resident	LC	LC
106	Black-lored Tit	<i>Parus xanthogenys</i>	Yes	Forest	Resident	LC	LC
107	Barn Swallow	<i>Hirundo rustica</i>	Yes	Settlement	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
108	Red-rumped Swallow	<i>Hirundo daurica</i>	Yes	Settlement	Resident	LC	LC
109	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Yes	Forest	Resident	LC	LC
110	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Yes	Forest	Resident	LC	LC
111	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Yes	Forest	Resident	LC	LC
112	Striated Prinia	<i>Prinia criniger</i>	Yes	Grassland	Resident	LC	LC
113	Zitting Cisticola	<i>Cisticola juncidis</i>	Yes	Agricultureland	Resident	LC	LC
114	Oriental White-eye	<i>Zosterops palpebrosus</i>	Yes	Forest	Resident	LC	LC
115	Common Tailorbird	<i>Orthotomus sutorius</i>	Yes	Bushes	Resident	LC	LC
116	Common Chiffchaff	<i>Phylloscopus collybita</i>	No	Bushes	Winter visitor	LC	LC
117	Dusky Warbler	<i>Phylloscopus fuscatus</i>	No	Bushes	Winter visitor	LC	LC
118	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	No	Forest	Resident	LC	LC
119	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	No	Forest	Resident	LC	LC
120	Buff-barred Warbler	<i>Phylloscopus pulcher</i>	No	Forest	Resident	LC	LC
121	Greenish Warbler	<i>Phylloscopus trochiloides</i>	No	Forest	Winter visitor	LC	LC
122	Hume's Warbler	<i>Phylloscopus humei</i>	No	Forest	Resident	LC	LC
123	Lemon-rumped warbler	<i>Phylloscopus chloronotus</i>	No	Forest	Resident	LC	LC
124	Golden-spectacled Warbler	<i>Seicercus burkii</i>	No	Forest	Resident	LC	LC
125	Grey-hooded Warbler	<i>phylloscopus xanthoschistos</i>	Yes	Forest	Resident	LC	LC
126	Chestnut-crowned Warbler	<i>Seicercus castaneiceps</i>	No	Forest	Resident	LC	LC
127	White-crested Laughing Thrush	<i>Garrulax leucolophus</i>	Yes	Forest	Resident	LC	LC
128	Striated Laughingthrush	<i>Garrulax striatus</i>	Yes	Forest	Resident	LC	LC
129	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Yes	Forest	Resident	LC	LC
130	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogenys</i>	Yes	Forest	Resident	LC	LC
131	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Yes	Forest	Resident	LC	LC
132	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Yes	Forest	Resident	LC	LC
133	Spiny Babbler	<i>Turdoides nipalensis</i>	Yes	Bushes	Resident	LC	LC
134	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Yes	Forest	Resident	LC	LC
135	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Yes	Forest	Resident	LC	LC
136	Striped-throated Yuhina	<i>Yuhina gularis</i>	No	Forest	Resident	LC	LC
137	White-bellied Erpornis	<i>Erpornis zantholeuca</i>	Yes	Forest	Resident	LC	LC
138	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Yes	Forest	Resident	LC	LC
139	Rufous Sibia	<i>Heterphasia capistrata</i>	No	Forest	Resident	LC	LC
140	Plain Flowerpecker	<i>Dicaeum concolor</i>	Yes	Forest	Resident	LC	LC
141	Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i>	Yes	Forest	Resident	LC	LC
142	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	Yes	Forest	Resident	LC	LC
143	Purple Sunbird	<i>Nectarinia asiatica</i>	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
144	Black-throated Sunbird	<i>Aethopyga saturata</i>	Yes	Forest	Resident	LC	LC
145	Crimson Sunbird	<i>Aethopyga siparaja</i>	Yes	Forest	Resident	LC	LC
146	House Sparrow	<i>Passer domesticus</i>	Yes	Settlement	Resident	LC	LC
147	Eurasian Tree Sparrow	<i>Passer montanus</i>	Yes	Settlement	Resident	LC	LC
148	White Wagtail	<i>Motacilla alba</i>	No	Wetland	Winter visitor	LC	LC
149	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Yes	Wetland	Resident	LC	LC
150	Grey Wagtail	<i>Motacilla cinerea</i>	No	Wetland	Resident	LC	LC
151	Paddyfield Pipit	<i>Anthus rufulus</i>	Yes	Agricultureland	Resident	LC	LC
152	Olive-backed Pipit	<i>Anthus hodgsonii</i>	No	Forest	Resident	LC	LC
153	Baya Weaver	<i>Ploceus philippinus</i>	Yes	Agricultureland	Resident	LC	LC
154	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Yes	Agricultureland	Resident	LC	LC
155	White-rumped Munia	<i>Lanchura striata</i>	Yes	Agricultureland	Resident	LC	LC
156	Crested Bunting	<i>Melophus lathami</i>	No	Agricultureland	Resident	LC	LC



Annex 14.3.11: Potential Birds found in proposed Naubesi-Mugling section

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
1	Black Francolin	<i>Francolinus francolinus</i>	Yes	Forest	Resident	LC	LC
2	Red Junglefowl	<i>Gallus gallus</i>	Yes	Forest	Resident	LC	LC
3	Kalij Pheasant	<i>Lophura leucomelanos</i>	Yes	Forest	Resident	LC	LC
4	Bar-headed Goose	<i>Anser indicus</i>	No	Wetland	Winter visitor	LC	NT
5	Ruddy Shelduck	<i>Tadorna ferruginea</i>	No	Wetland	Winter visitor	LC	NT
6	Gadwall	<i>Anas strepera</i>	No	Wetland	Winter visitor	LC	LC
7	Eurasian Wigeon	<i>Anas penelope</i>	No	Wetland	Winter visitor	LC	LC
8	Mallard	<i>Anas platyrhynchos</i>	No	Wetland	Winter visitor	LC	LC
9	Common Teal	<i>Anas crecca</i>	No	Wetland	Winter visitor	LC	LC
10	Red-crested Pochard	<i>Rhodonessa rufina</i>	No	Wetland	Winter visitor	LC	LC
11	Common Pochard	<i>Aythya ferina</i>	No	Wetland	Winter visitor	VU	NT
12	Ferruginous Pochard	<i>Aythya nyroca</i>	No	Wetland	Winter visitor	NT	VU
13	Common Merganser	<i>Mergus merganser</i>	No	Wetland	Winter visitor	LC	LC
14	Speckled Piculet	<i>Picumnus innominatus</i>	Yes	Forest	Resident	LC	LC
15	Rufous Woodpecker	<i>Celeus brachyurus</i>	Yes	Forest	Resident	LC	LC
16	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Yes	Forest	Resident	LC	LC
17	Lesser Yellownape	<i>Picus chlorolophus</i>	Yes	Forest	Resident	LC	LC
18	Greater Yellownape	<i>Picus flavinucha</i>	Yes	Forest	Resident	LC	LC
19	Grey-headed Woodpecker	<i>Picus canus</i>	Yes	Forest	Resident	LC	LC
20	Great Barbet	<i>Megalaima varians</i>	Yes	Forest	Resident	LC	LC
21	Lineated Barbet	<i>Megalaima lineata</i>	Yes	Forest	Resident	LC	LC
22	Blue-throated Barbet	<i>Megalaima asiatica</i>	Yes	Forest	Resident	LC	LC
23	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Yes	Forest	Resident	LC	LC
24	Common Hoopoe	<i>Upups epops</i>	No	Grassland	Resident	LC	LC
25	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	No	Forest	Summer visitor	LC	LC
26	Green Bee-eater	<i>Merops orientalis</i>	No	Forest	Summer visitor	LC	LC
27	Common Kingfisher	<i>Alcedo atthis</i>	Yes	Wetland	Resident	LC	LC
28	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Yes	Wetland	Resident	LC	LC
29	Crested Kingfisher	<i>Megaceryle lugubris</i>	Yes	Wetland	Resident	LC	LC
30	Pied Kingfisher	<i>Ceryle rudis</i>	Yes	Wetland	Resident	LC	LC
31	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	Yes	Forest	Summer visitor	LC	LC
32	Indian Cuckoo	<i>Cuculus micropterus</i>	Yes	Forest	Summer visitor	LC	LC
33	Eurasian Cuckoo	<i>Cuculus canorus</i>	Yes	Forest	Summer visitor	LC	LC
34	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	Yes	Forest	Summer visitor	LC	LC
35	Drongo Cuckoo	<i>Surmiculus lugubris</i>	Yes	Forest	Summer visitor	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
36	Asian Koel	<i>Eudynamys scolopacea</i>	Yes	Forest	Resident	LC	LC
37	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultii</i>	Yes	Forest	Resident	LC	LC
38	Green-billed Malkoha	<i>Phaenicophaeus stritistis</i>	Yes	Forest	Resident	LC	LC
39	Greater Coucal	<i>Centropus sinensis</i>	Yes	Forest	Resident	LC	LC
40	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Yes	Forest	Resident	LC	NT
41	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Yes	Forest	Resident	LC	LC
42	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Yes	Forest	Resident	LC	LC
43	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	Yes	Forest	Resident	LC	LC
44	Himalayan Swiftlet	<i>Collocalia brevirostris</i>	No	Forest	Resident	LC	LC
45	House Swift	<i>Apus nipalensis</i>	Yes	Settlement	Resident	LC	LC
46	Barn Owl	<i>Tyto alba</i>	Yes	Settlement	Resident	LC	VU
47	Brown Hawk Owl	<i>Ninox scutulata</i>	Yes	Forest	Resident	LC	LC
48	Collared Scops Owl	<i>Otus bakkamoena</i>	Yes	Forest	Resident	LC	LC
49	Eurasian Eagle Owl	<i>Bubo bubo</i>	Yes	Forest	Resident	LC	DD
50	Brown Wood Owl	<i>Strix leptogrammica</i>	Yes	Forest	Resident	LC	VU
51	Collared Owlet	<i>Glaucidium brodiei</i>	Yes	Forest	Resident	LC	LC
52	Asian Barred Owlet	<i>Glaucidium cuculoides</i>	Yes	Forest	Resident	LC	LC
53	Jungle Owlet	<i>Glaucidium radiatum</i>	Yes	Forest	Resident	LC	LC
54	Spotted Owlet	<i>Athene brama</i>	Yes	Forest	Resident	LC	LC
55	Rock Pigeon	<i>Columba livia</i>	Yes	Settlement	Resident	LC	LC
56	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Yes	Forest	Resident	LC	LC
57	Spotted Dove	<i>Streptopelia chinensis</i>	Yes	Forest	Resident	LC	LC
58	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Yes	Forest	Resident	LC	LC
59	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Yes	Forest	Resident	LC	LC
60	Yellow-footed Green Pigeon	<i>Treron phoenicoptera</i>	Yes	Forest	Resident	LC	LC
61	White-breasted Waterhen	<i>Amauornis phoenicurus</i>	Yes	Wetland	Resident	LC	LC
62	Common Greenshank	<i>Tringa nebularia</i>	No	Wetland	Winter visitor	LC	LC
63	Common Sandpiper	<i>Actitis hypoleucos</i>	No	Wetland	Winter visitor	LC	LC
64	Little Stint	<i>Calidris minuta</i>	No	Wetland	Winter visitor	LC	LC
65	Ibisbill	<i>Ibidorhyncha struthersii</i>	No	Wetland	Resident	LC	EN
66	Little Ringed Plover	<i>Charadrius dubius</i>	No	Wetland	Resident	LC	LC
67	Northern Lapwing	<i>Vanellus vanellus</i>	No	Wetland	Winter visitor	NT	NT
68	River Lapwing	<i>Vanellus divaucelii</i>	Yes	Wetland	Resident	NT	NT
69	Red-wattled Lapwing	<i>Vanellus indicus</i>	Yes	Wetland	Resident	LC	LC
70	Grey-headed Lapwing	<i>Vanellus indicus</i>	No	Wetland	Winter visitor	LC	LC
71	Black-bellied Tern	<i>Sterna acuticauda</i>	No	Wetland	Summer visitor	EN	CR
72	Black Kite	<i>Milvus migrans</i>	Yes	Forest	Resident	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
73	Brahminy Kite	<i>Haliastur indus</i>	No	Forest	Resident	LC	CR
74	Egyptian Vulture	<i>Neophron percnopterus</i>	Yes	Forest	Resident	EN	VU
75	White-rumped Vulture	<i>Gyps bengalensis</i>	Yes	Forest	Resident	CR	CR
76	Himalayan Griffon	<i>Gyps himalayensis</i>	No	Forest	Resident	NT	VU
77	Cinereous Vulture	<i>Aegypius monachus</i>	No	Forest	Winter visitor	NT	EN
78	Red-headed Vulture	<i>Sarcogyps calvus</i>	Yes	Forest	Resident	CR	EN
79	Crested Serpent Eagle	<i>Spilornis cheela</i>	Yes	Forest	Resident	LC	LC
80	Northern Goshawk	<i>Accipiter gentilis</i>	No	Forest	Winter visitor	LC	LC
81	Shikra	<i>Accipiter badius</i>	Yes	Forest	Resident	LC	LC
82	Besra	<i>Accipiter virgatus</i>	Yes	Forest	Resident	LC	LC
83	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	No	Forest	Resident	LC	LC
84	Common Buzzard	<i>Buteo buteo</i>	No	Forest	Winter visitor	LC	LC
85	Long-legged Buzzard	<i>Buteo rufinus</i>	No	Forest	Winter visitor	LC	LC
86	Greater Spotted Eagle	<i>Aquila clanga</i>	No	Forest	Winter visitor	VU	VU
87	Steppe Eagle	<i>Aquila nipalensis</i>	No	Forest	Winter visitor	EN	LC
88	Booted Eagle	<i>Hieraetus pennatus</i>	No	Forest	Winter visitor	LC	LC
89	Collared Falconet	<i>Microhierax caerulescens</i>	Yes	Forest	Resident	LC	LC
90	Common Kestrel	<i>Falco tinnunculus</i>	Yes	Forest	Resident	LC	LC
91	Eurasian Hobby	<i>Falco subbuteo</i>	No	Forest	Winter visitor	LC	LC
92	Peregrine Falcon	<i>Falco peregrinus</i>	Yes	Forest	Resident	LC	LC
93	Great Cormorant	<i>Phalacrocorax carbo</i>	No	Wetland	Winter visitor	LC	LC
94	Little Egret	<i>Egretta garzetta</i>	Yes	Wetland	Resident	LC	LC
95	Cattle Egret	<i>Bubulcus ibis</i>	Yes	Agricultureland	Resident	LC	LC
96	Grey Heron	<i>Ardea cinerea</i>	Yes	Wetland	Resident	LC	LC
97	Indian Pond Heron	<i>Ardeola grayii</i>	Yes	Wetland	Resident	LC	LC
98	Little Heron	<i>Butorides striatus</i>	Yes	Wetland	Summer visitor	LC	LC
99	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Yes	Wetland	Summer visitor	LC	LC
100	Asian Woollyneck	<i>Ciconia episcopus</i>	Yes	Wetland	Resident	VU	NT
101	Indian Pitta	<i>Pitta brachyura</i>	Yes	Forest	Summer visitor	LC	LC
102	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	Yes	Forest	Resident	LC	LC
103	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i>	Yes	Forest	Resident	LC	LC
104	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Yes	Forest	Resident	LC	LC
105	Brown Shrike	<i>Lanius cristatus</i>	No	Forest	Winter visitor	LC	LC
106	Long-tailed Shrike	<i>Lanius schach</i>	Yes	Forest	Resident	LC	LC
107	Grey-backed Shrike	<i>Lanius tephronotus</i>	No	Forest	Winter visitor	LC	LC
108	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
109	Common Green Magpie	<i>Cissa chinensis</i>	Yes	Forest	Resident	LC	LC
110	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Yes	Forest	Resident	LC	LC
111	Grey Treepie	<i>Dendrocitta formosae</i>	Yes	Forest	Resident	LC	LC
112	House Crow	<i>Corvus splendens</i>	Yes	Forest	Resident	LC	LC
113	Large-billed Crow	<i>Corvus macrorhynchos</i>	Yes	Forest	Resident	LC	LC
114	Ashy Woodswallow	<i>Artamus fuscus</i>	Yes	Forest	Resident	LC	LC
115	Indian Golden Oriole	<i>Oriolus oriolus</i>	Yes	Forest	Summer visitor	LC	LC
116	Maroon Oriole	<i>Oriolus trailli</i>	Yes	Forest	Resident	LC	LC
117	Black-winged Cuckooshrike	<i>Coracina melaschistos</i>	Yes	Forest	Resident	LC	LC
118	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Yes	Forest	Resident	LC	LC
119	Scarlet Minivet	<i>Pericrocotus flammeus</i>	Yes	Forest	Resident	LC	LC
120	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	Yes	Forest	Resident	LC	LC
121	White-throated Fantail	<i>Rhipidura albicollis</i>	Yes	Forest	Resident	LC	LC
122	Black Drongo	<i>Dicrurus macrocercus</i>	Yes	Forest	Resident	LC	LC
123	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Yes	Forest	Resident	LC	LC
124	Bronzed Drongo	<i>Dicrurus aeneus</i>	Yes	Forest	Resident	LC	LC
125	Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i>	Yes	Forest	Resident	LC	LC
126	Spangled Drongo	<i>Dicrurus hottentottus</i>	Yes	Forest	Resident	LC	LC
127	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	Yes	Forest	Summer visitor	LC	LC
128	Common Iora	<i>Aegithina tiphia</i>	Yes	Forest	Resident	LC	LC
129	Brown Dipper	<i>Cinclus pallasii</i>	Yes	Forest	Resident	LC	LC
130	Blue Rock Thrush	<i>Monticola solitarius</i>	No	Forest	Resident	LC	LC
131	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Yes	Forest	Resident	LC	LC
132	Orange-headed Thrush	<i>Zoothera citrina</i>	Yes	Forest	Summer visitor	LC	LC
133	Scaly Thrush	<i>Zoothera dauma</i>	No	Forest	Winter visitor	LC	LC
134	Dark-throated Thrush	<i>Turdus ruficollis</i>	No	Forest	Winter visitor	LC	LC
135	Taiga Flycatcher	<i>Ficedula albicilla</i>	No	Forest	Winter visitor	LC	LC
136	Ultramarine Flycatcher	<i>Ficedula supercilialis</i>	No	Forest	Summer visitor	LC	LC
137	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Yes	Forest	Resident	LC	LC
138	Verditer Flycatcher	<i>Eumyias thalassina</i>	Yes	Forest	Resident	LC	LC
139	Small Niltava	<i>Niltava macgrigoriae</i>	Yes	Forest	Resident	LC	LC
140	Rufous-bellied Niltava	<i>Niltava sundara</i>	No	Forest	Resident	LC	LC
141	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	No	Forest	Summer visitor	LC	LC
142	Siberian Rubythroat	<i>Luscinia calliope</i>	No	Forest	Winter visitor	LC	LC
143	White-tailed Rubythroat	<i>Luscinia pectoralis</i>	No	Forest	Resident	LC	LC
144	Bluethroat	<i>Luscinia svecica</i>	No	Forest	Winter visitor	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
145	Indian Blue Robin	<i>Luscinia brunnea</i>	No	Forest	Resident	LC	LC
146	Oriental Magpie Robin	<i>Copsychus saularis</i>	Yes	Forest	Resident	LC	LC
147	White-tailed Robin	<i>Cinclidium leucurum</i>	No	Forest	Resident	LC	LC
148	Black Redstart	<i>Phoenicurus ochruros</i>	No	Forest	Resident	LC	LC
149	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	No	Forest	Winter visitor	LC	LC
150	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	No	Forest	Resident	LC	LC
151	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	Yes	Wetland	Resident	LC	LC
152	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	Yes	Wetland	Resident	LC	LC
153	Slaty-backed Forktail	<i>Enicurus schistaceus</i>	Yes	Wetland	Resident	LC	LC
154	Spotted Forktail	<i>Enicurus maculatus</i>	Yes	Wetland	Resident	LC	LC
155	Black-backed Forktail	<i>Enicurus immaculatus</i>	Yes	Wetland	Resident	LC	LC
156	Common Stonechat	<i>Saxicola torquata</i>	Yes	Grassland	Resident	LC	LC
157	Pied Bushchat	<i>Saxicola caprata</i>	Yes	Grassland	Resident	LC	LC
158	Grey Bushchat	<i>Saxicola ferrea</i>	No	Grassland	Resident	LC	LC
159	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	Yes	Forest	Resident	LC	LC
160	Brahminy Starling	<i>Sturnus pagodarum</i>	Yes	Forest	Resident	LC	LC
161	Common Myna	<i>Acridotheres tristis</i>	Yes	Settlement	Resident	LC	LC
162	Jungle Myna	<i>Acridotheres fuscus</i>	Yes	Settlement	Resident	LC	LC
163	Hill Myna	<i>Gracula religiosa</i>	Yes	Forest	Resident	LC	LC
164	Chestnut-bellied Nuthatch	<i>Sitta castanea</i>	Yes	Forest	Resident	LC	LC
165	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Yes	Forest	Resident	LC	LC
166	Wallcreeper	<i>Tichodroma muraria</i>	No	Settlement	Winter visitor	LC	LC
167	Great Tit	<i>Parus major</i>	Yes	Forest	Resident	LC	LC
168	Green-backed Tit	<i>Parus monticolus</i>	Yes	Forest	Resident	LC	LC
169	Black-lored Tit	<i>Parus xanthogenys</i>	Yes	Forest	Resident	LC	LC
170	Barn Swallow	<i>Hirundo rustica</i>	Yes	Settlement	Resident	LC	LC
171	Red-rumped Swallow	<i>Hirundo daurica</i>	Yes	Settlement	Resident	LC	LC
172	Black-crested Bulbul	<i>Pycnonotus melanicterus</i>	Yes	Forest	Resident	LC	LC
173	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Yes	Forest	Resident	LC	LC
174	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Yes	Forest	Resident	LC	LC
175	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Yes	Forest	Resident	LC	LC
176	Ashy Bulbul	<i>Hemixos flava</i>	Yes	Forest	Resident	LC	LC
177	Striated Prinia	<i>Prinia criniger</i>	Yes	Grassland	Resident	LC	LC
178	Grey-crowned Prinia	<i>Prinia cinereocapilla</i>	Yes	Grassland	Resident	VU	VU
179	Zitting Cisticola	<i>Cisticola juncidis</i>	Yes	Agricultureland	Resident	LC	LC
180	Oriental White-eye	<i>Zosterops palpebrosus</i>	Yes	Forest	Resident	LC	LC
181	Common Tailorbird	<i>Orthotomus sutorius</i>	Yes	Bushes	Resident	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
182	Aberrant Bush Warbler	<i>Cettia flavolivacea</i>	No	Bushes	Resident	LC	LC
183	Common Chiffchaff	<i>Phylloscopus collybita</i>	No	Bushes	Winter visitor	LC	LC
184	Dusky Warbler	<i>Phylloscopus fuscatus</i>	No	Bushes	Winter visitor	LC	LC
185	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	No	Forest	Resident	LC	LC
186	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	No	Forest	Resident	LC	LC
187	Greenish Warbler	<i>Phylloscopus trochiloides</i>	No	Forest	Winter visitor	LC	LC
188	Hume's Warbler	<i>Phylloscopus humei</i>	No	Forest	Resident	LC	LC
189	Lemon-rumped warbler	<i>Phylloscopus chloronotus</i>	No	Forest	Resident	LC	LC
190	Whistler's Warbler	<i>Seicercus whistleri</i>	No	Forest	Resident	LC	LC
191	Golden-spectacled Warbler	<i>Seicercus burkii</i>	No	Forest	Resident	LC	LC
192	Grey-hooded Warbler	<i>phylloscopus xanthoschistos</i>	Yes	Forest	Resident	LC	LC
193	Chestnut-crowned Warbler	<i>Seicercus castaneiceps</i>	No	Forest	Resident	LC	LC
194	White-crested Laughing Thrush	<i>Garrulax leucolophus</i>	Yes	Forest	Resident	LC	LC
195	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Yes	Forest	Resident	LC	LC
196	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogenys</i>	Yes	Forest	Resident	LC	LC
197	Scaly-breasted Wren Babbler	<i>Pnoepyga albiventer</i>	No	Forest	Resident	LC	LC
198	Pygmy Wren Babbler	<i>Pnoepyga pusilla</i>	Yes	Forest	Resident	LC	LC
199	Nepal Wren Babbler	<i>Pnoepyga immaculata</i>	No	Forest	Resident	LC	LC
200	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Yes	Forest	Resident	LC	LC
201	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Yes	Forest	Resident	LC	LC
202	Striped Tit Babbler	<i>Macronous gularis</i>	Yes	Forest	Resident	LC	LC
203	Spiny Babbler	<i>Turdoides nipalensis</i>	Yes	Bushes	Resident	LC	LC
204	Jungle Babbler	<i>Turdoides striatus</i>	Yes	Forest	Resident	LC	LC
205	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Yes	Forest	Resident	LC	LC
206	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Yes	Forest	Resident	LC	LC
207	White-bellied Erpornis	<i>Erpornis zantholeucais</i>	Yes	Forest	Resident	LC	LC
208	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Yes	Forest	Resident	LC	LC
209	Plain Flowerpecker	<i>Dicaeum concolor</i>	Yes	Forest	Resident	LC	LC
210	Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i>	Yes	Forest	Resident	LC	LC
211	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	Yes	Forest	Resident	LC	LC
212	Purple Sunbird	<i>Nectarinia asiatica</i>	Yes	Forest	Resident	LC	LC
213	Black-throated Sunbird	<i>Aethopyga saturata</i>	Yes	Forest	Resident	LC	LC
214	Crimson Sunbird	<i>Aethopyga siparaja</i>	Yes	Forest	Resident	LC	LC
215	House Sparrow	<i>Passer domesticus</i>	Yes	Settlement	Resident	LC	LC
216	Eurasian Tree Sparrow	<i>Passer montanus</i>	Yes	Settlement	Resident	LC	LC
217	White Wagtail	<i>Motacilla alba</i>	No	Wetland	Winter visitor	LC	LC
218	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Yes	Wetland	Resident	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
219	Grey Wagtail	<i>Motacilla cinerea</i>	No	Wetland	Resident	LC	LC
220	Paddyfield Pipit	<i>Anthus rufulus</i>	Yes	Agricultureland	Resident	LC	LC
221	Olive-backed Pipit	<i>Anthus hodgsonii</i>	No	Forest	Resident	LC	LC
222	Rosy Pipit	<i>Anthus roseatus</i>	No	Wetland	Resident	LC	LC
223	Baya Weaver	<i>Ploceus philippinus</i>	Yes	Agricultureland	Resident	LC	LC
224	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Yes	Agricultureland	Resident	LC	LC
225	White-rumped Munia	<i>Lanchura striata</i>	Yes	Agricultureland	Resident	LC	LC
226	Common Rosefinch	<i>Carpodacus erythrinus</i>	No	Forest	Resident	LC	LC
227	Crested Bunting	<i>Melophus lathami</i>	No	Agricultureland	Resident	LC	LC



Annex 14.3.12: Potential Birds found along proposed Benighat-Phisling Section

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
1	Black Francolin	<i>Francolinus francolinus</i>	Yes	Forest	Resident	LC	LC
2	Red Junglefowl	<i>Gallus gallus</i>	Yes	Forest	Resident	LC	LC
3	Kalij Pheasant	<i>Lophura leucomelanos</i>	Yes	Forest	Resident	LC	LC
4	Bar-headed Goose	<i>Anser indicus</i>	No	Wetland	Winter visitor	LC	NT
5	Ruddy Shelduck	<i>Tadorna ferruginea</i>	No	Wetland	Winter visitor	LC	NT
6	Gadwall	<i>Anas strepera</i>	No	Wetland	Winter visitor	LC	LC
7	Eurasian Wigeon	<i>Anas penelope</i>	No	Wetland	Winter visitor	LC	LC
8	Mallard	<i>Anas platyrhynchos</i>	No	Wetland	Winter visitor	LC	LC
9	Common Teal	<i>Anas crecca</i>	No	Wetland	Winter visitor	LC	LC
10	Red-crested Pochard	<i>Rhodonessa rufina</i>	No	Wetland	Winter visitor	LC	LC
11	Common Pochard	<i>Aythya ferina</i>	No	Wetland	Winter visitor	VU	NT
12	Ferruginous Pochard	<i>Aythya nyroca</i>	No	Wetland	Winter visitor	NT	VU
13	Common Merganser	<i>Mergus merganser</i>	No	Wetland	Winter visitor	LC	LC
14	Speckled Piculet	<i>Picumnus innominatus</i>	Yes	Forest	Resident	LC	LC
15	Rufous Woodpecker	<i>Celeus brachyurus</i>	Yes	Forest	Resident	LC	LC
16	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Yes	Forest	Resident	LC	LC
17	Lesser Yellownape	<i>Picus chlorolophus</i>	Yes	Forest	Resident	LC	LC
18	Greater Yellownape	<i>Picus flavinucha</i>	Yes	Forest	Resident	LC	LC
19	Grey-headed Woodpecker	<i>Picus canus</i>	Yes	Forest	Resident	LC	LC
20	Great Barbet	<i>Megalaima varians</i>	Yes	Forest	Resident	LC	LC
21	Lineated Barbet	<i>Megalaima lineata</i>	Yes	Forest	Resident	LC	LC
22	Blue-throated Barbet	<i>Megalaima asiatica</i>	Yes	Forest	Resident	LC	LC
23	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Yes	Forest	Resident	LC	LC
24	Common Hoopoe	<i>Upups epops</i>	No	Grassland	Resident	LC	LC
25	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	No	Forest	Summer visitor	LC	LC
26	Green Bee-eater	<i>Merops orientalis</i>	No	Forest	Summer visitor	LC	LC
27	Common Kingfisher	<i>Alcedo atthis</i>	Yes	Wetland	Resident	LC	LC
28	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Yes	Wetland	Resident	LC	LC
29	Crested Kingfisher	<i>Megaceryle lugubris</i>	Yes	Wetland	Resident	LC	LC
30	Pied Kingfisher	<i>Ceryle rudis</i>	Yes	Wetland	Resident	LC	LC
31	Indian Cuckoo	<i>Cuculus micropterus</i>	Yes	Forest	Summer visitor	LC	LC
32	Eurasian Cuckoo	<i>Cuculus canorus</i>	Yes	Forest	Summer visitor	LC	LC
33	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	Yes	Forest	Summer visitor	LC	LC

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S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
34	Drongo Cuckoo	<i>Surniculus lugubris</i>	Yes	Forest	Summer visitor	LC	LC
35	Asian Koel	<i>Eudynamis scolopacea</i>	Yes	Forest	Resident	LC	LC
36	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultii</i>	Yes	Forest	Resident	LC	LC
37	Green-billed Malkoha	<i>Phaenicophaeus stritiss</i>	Yes	Forest	Resident	LC	LC
38	Greater Coucal	<i>Centropus sinensis</i>	Yes	Forest	Resident	LC	LC
39	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Yes	Forest	Resident	LC	NT
40	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Yes	Forest	Resident	LC	LC
41	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Yes	Forest	Resident	LC	LC
42	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	Yes	Forest	Resident	LC	LC
43	House Swift	<i>Apus nipalensis</i>	Yes	Settlement	Resident	LC	LC
44	Barn Owl	<i>Tyto alba</i>	Yes	Settlement	Resident	LC	VU
45	Brown Hawk Owl	<i>Ninox scutulata</i>	Yes	Forest	Resident	LC	LC
46	Eurasian Eagle Owl	<i>Bubo bubo</i>	Yes	Forest	Resident	LC	DD
47	Brown Wood Owl	<i>Strix leptogrammica</i>	Yes	Forest	Resident	LC	VU
48	Collared Owlet	<i>Glaucidium brodiei</i>	Yes	Forest	Resident	LC	LC
49	Asian Barred Owlet	<i>Glaucidium cuculoides</i>	Yes	Forest	Resident	LC	LC
50	Spotted Owlet	<i>Athene brama</i>	Yes	Forest	Resident	LC	LC
51	Rock Pigeon	<i>Columba livia</i>	Yes	Settlement	Resident	LC	LC
52	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Yes	Forest	Resident	LC	LC
53	Spotted Dove	<i>Streptopelia chinensis</i>	Yes	Forest	Resident	LC	LC
54	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Yes	Forest	Resident	LC	LC
55	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Yes	Forest	Resident	LC	LC
56	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Yes	Wetland	Resident	LC	LC
57	Common Greenshank	<i>Tringa nebularia</i>	No	Wetland	Winter visitor	LC	LC
58	Common Sandpiper	<i>Actitis hypoleucos</i>	No	Wetland	Winter visitor	LC	LC
59	Little Stint	<i>Calidris minuta</i>	No	Wetland	Winter visitor	LC	LC
60	Ibisbill	<i>Ibidorhyncha struthersii</i>	No	Wetland	Resident	LC	EN
61	Little Ringed Plover	<i>Charadrius dubius</i>	No	Wetland	Resident	LC	LC
62	Northern Lapwing	<i>Vanellus vanellus</i>	No	Wetland	Winter visitor	NT	NT
63	River Lapwing	<i>Vanellus divauctelii</i>	Yes	Wetland	Resident	NT	NT
64	Red-wattled Lapwing	<i>Vanellus indicus</i>	Yes	Wetland	Resident	LC	LC
65	Grey-headed Lapwing	<i>Vanellus indicus</i>	No	Wetland	Winter visitor	LC	LC
66	Black Kite	<i>Milvus migrans</i>	Yes	Forest	Resident	LC	LC
67	Egyptian Vulture	<i>Neophron percnopterus</i>	Yes	Forest	Resident	EN	VU
68	Himalayan Griffon	<i>Gyps himalayensis</i>	No	Forest	Resident	NT	VU

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
69	Crested Serpent Eagle	<i>Spilornis cheela</i>	Yes	Forest	Resident	LC	LC
70	Northern Goshawk	<i>Accipiter gentilis</i>	No	Forest	Winter visitor	LC	LC
71	Shikra	<i>Accipiter badius</i>	Yes	Forest	Resident	LC	LC
72	Besra	<i>Accipiter virgatus</i>	Yes	Forest	Resident	LC	LC
73	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	No	Forest	Resident	LC	LC
74	Common Buzzard	<i>Buteo buteo</i>	No	Forest	Winter visitor	LC	LC
75	Long-legged Buzzard	<i>Buteo rufinus</i>	No	Forest	Winter visitor	LC	LC
76	Greater Spotted Eagle	<i>Aquila clanga</i>	No	Forest	Winter visitor	VU	VU
77	Steppe Eagle	<i>Aquila nipalensis</i>	No	Forest	Winter visitor	EN	LC
78	Booted Eagle	<i>Hieraaetus pennatus</i>	No	Forest	Winter visitor	LC	LC
79	Collared Falconet	<i>Microhierax caerulescens</i>	Yes	Forest	Resident	LC	LC
80	Common Kestrel	<i>Falco tinnunculus</i>	Yes	Forest	Resident	LC	LC
81	Great Cormorant	<i>Phalacrocorax carbo</i>	No	Wetland	Winter visitor	LC	LC
82	Little Egret	<i>Egretta garzetta</i>	Yes	Wetland	Resident	LC	LC
83	Cattle Egret	<i>Bubulcus ibis</i>	Yes	Agricultureland	Resident	LC	LC
84	Indian Pond Heron	<i>Ardeola grayii</i>	Yes	Wetland	Resident	LC	LC
85	Little Heron	<i>Butorides striatus</i>	Yes	Wetland	Summer visitor	LC	LC
86	Asian Woollyneck	<i>Ciconia episcopus</i>	Yes	Wetland	Resident	VU	NT
87	Long-tailed Broadbill	<i>Psarismus dalhousiae</i>	Yes	Forest	Resident	LC	LC
88	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i>	Yes	Forest	Resident	LC	LC
89	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Yes	Forest	Resident	LC	LC
90	Long-tailed Shrike	<i>Lanius schach</i>	Yes	Forest	Resident	LC	LC
91	Grey-backed Shrike	<i>Lanius tephronotus</i>	No	Forest	Winter visitor	LC	LC
92	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Yes	Forest	Resident	LC	LC
93	Common Green Magpie	<i>Cissa chinensis</i>	Yes	Forest	Resident	LC	LC
94	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Yes	Forest	Resident	LC	LC
95	House Crow	<i>Corvus splendens</i>	Yes	Forest	Resident	LC	LC
96	Large-billed Crow	<i>Corvus macrorhynchos</i>	Yes	Forest	Resident	LC	LC
97	Ashy Woodswallow	<i>Artamus fuscus</i>	Yes	Forest	Resident	LC	LC
98	Indian Golden Oriole	<i>Oriolus oriolus</i>	Yes	Forest	Summer visitor	LC	LC
99	Black-winged Cuckooshrike	<i>Coracina melaschistos</i>	Yes	Forest	Resident	LC	LC
100	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Yes	Forest	Resident	LC	LC
101	Scarlet Minivet	<i>Pericrocotus flammeus</i>	Yes	Forest	Resident	LC	LC
102	Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	Yes	Forest	Resident	LC	LC
103	White-throated Fantail	<i>Rhipidura albicollis</i>	Yes	Forest	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
104	Black Drongo	<i>Dicrurus macrocercus</i>	Yes	Forest	Resident	LC	LC
105	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Yes	Forest	Resident	LC	LC
106	Bronzed Drongo	<i>Dicrurus aeneus</i>	Yes	Forest	Resident	LC	LC
107	Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i>	Yes	Forest	Resident	LC	LC
108	Spangled Drongo	<i>Dicrurus hottentottus</i>	Yes	Forest	Resident	LC	LC
109	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	Yes	Forest	Summer visitor	LC	LC
110	Common Iora	<i>Aegithina tiphia</i>	Yes	Forest	Resident	LC	LC
111	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Yes	Forest	Resident	LC	LC
112	Orange-headed Thrush	<i>Zoothera citrina</i>	Yes	Forest	Summer visitor	LC	LC
113	Scaly Thrush	<i>Zoothera dauma</i>	No	Forest	Winter visitor	LC	LC
114	Dark-throated Thrush	<i>Turdus ruficollis</i>	No	Forest	Winter visitor	LC	LC
115	Taiga Flycatcher	<i>Ficedula albicilla</i>	No	Forest	Winter visitor	LC	LC
116	Ultramarine Flycatcher	<i>Ficedula superciliosa</i>	No	Forest	Summer visitor	LC	LC
117	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Yes	Forest	Resident	LC	LC
118	Verditer Flycatcher	<i>Eumyias thalassina</i>	Yes	Forest	Resident	LC	LC
119	Small Niltava	<i>Niltava macgrigoriae</i>	Yes	Forest	Resident	LC	LC
120	Rufous-bellied Niltava	<i>Niltava sundara</i>	No	Forest	Resident	LC	LC
121	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	No	Forest	Summer visitor	LC	LC
122	Siberian Rubythroat	<i>Luscinia calliope</i>	No	Forest	Winter visitor	LC	LC
123	Bluethroat	<i>Luscinia svecica</i>	No	Forest	Winter visitor	LC	LC
124	Oriental Magpie Robin	<i>Copsychus saularis</i>	Yes	Forest	Resident	LC	LC
125	Black Redstart	<i>Phoenicurus ochruros</i>	No	Forest	Resident	LC	LC
126	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	No	Forest	Winter visitor	LC	LC
127	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	No	Forest	Resident	LC	LC
128	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	Yes	Wetland	Resident	LC	LC
129	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	Yes	Wetland	Resident	LC	LC
130	Slaty-backed Forktail	<i>Enicurus schistaceus</i>	Yes	Wetland	Resident	LC	LC
131	Spotted Forktail	<i>Enicurus maculatus</i>	Yes	Wetland	Resident	LC	LC
132	Common Stonechat	<i>Saxicola torquata</i>	Yes	Grassland	Resident	LC	LC
133	Pied Bushchat	<i>Saxicola caprata</i>	Yes	Grassland	Resident	LC	LC
134	Grey Bushchat	<i>Saxicola ferrea</i>	No	Grassland	Resident	LC	LC
135	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	Yes	Forest	Resident	LC	LC
136	Brahminy Starling	<i>Sturnus pagodarum</i>	Yes	Forest	Resident	LC	LC
137	Common Myna	<i>Acridotheres tristis</i>	Yes	Settlement	Resident	LC	LC
138	Jungle Myna	<i>Acridotheres fuscus</i>	Yes	Settlement	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	National Status
139	Chestnut-bellied Nuthatch	<i>Sitta castanea</i>	Yes	Forest	Resident	LC	LC
140	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Yes	Forest	Resident	LC	LC
141	Great Tit	<i>Parus major</i>	Yes	Forest	Resident	LC	LC
142	Black-lored Tit	<i>Parus xanthogenys</i>	Yes	Forest	Resident	LC	LC
143	Barn Swallow	<i>Hirundo rustica</i>	Yes	Settlement	Resident	LC	LC
144	Red-rumped Swallow	<i>Hirundo daurica</i>	Yes	Settlement	Resident	LC	LC
145	Black-crested Bulbul	<i>Pycnonotus melanicterus</i>	Yes	Forest	Resident	LC	LC
146	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Yes	Forest	Resident	LC	LC
147	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Yes	Forest	Resident	LC	LC
148	Ashy Bulbul	<i>Hemixos flavela</i>	Yes	Forest	Resident	LC	LC
149	Striated Prinia	<i>Prinia criniger</i>	Yes	Grassland	Resident	LC	LC
150	Oriental White-eye	<i>Zosterops palpebrosus</i>	Yes	Forest	Resident	LC	LC
151	Common Tailorbird	<i>Orthotomus sutorius</i>	Yes	Bushes	Resident	LC	LC
152	Common Chiffchaff	<i>Phylloscopus collybita</i>	No	Bushes	Winter visitor	LC	LC
153	Dusky Warbler	<i>Phylloscopus fuscatus</i>	No	Bushes	Winter visitor	LC	LC
154	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i>	No	Forest	Resident	LC	LC
155	Greenish Warbler	<i>Phylloscopus trochiloides</i>	No	Forest	Winter visitor	LC	LC
156	Grey-hooded Warbler	<i>Phylloscopus xanthoschistos</i>	Yes	Forest	Resident	LC	LC
157	White-crested Laughing Thrush	<i>Garrulax leucolophus</i>	Yes	Forest	Resident	LC	LC
158	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Yes	Forest	Resident	LC	LC
159	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogems</i>	Yes	Forest	Resident	LC	LC
160	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Yes	Forest	Resident	LC	LC
161	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Yes	Forest	Resident	LC	LC
162	Striped Tit Babbler	<i>Macronous gularis</i>	Yes	Forest	Resident	LC	LC
163	Spiny Babbler	<i>Turdoides nipalensis</i>	Yes	Bushes	Resident	LC	LC
164	Jungle Babbler	<i>Turdoides striatus</i>	Yes	Forest	Resident	LC	LC
165	Red-billed Leiothrix	<i>Leiothrix lutea</i>	Yes	Forest	Resident	LC	LC
166	Whiskered Yuhina	<i>Yuhina flavicollis</i>	Yes	Forest	Resident	LC	LC
167	White-bellied Erpornis	<i>Erpornis zantholeuca</i>	Yes	Forest	Resident	LC	LC
168	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Yes	Forest	Resident	LC	LC
169	Plain Flowerpecker	<i>Dicaeum concolor</i>	Yes	Forest	Resident	LC	LC
170	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	Yes	Forest	Resident	LC	LC
171	Purple Sunbird	<i>Nectarinia asiatica</i>	Yes	Forest	Resident	LC	LC
172	Black-throated Sunbird	<i>Aethopyga saturata</i>	Yes	Forest	Resident	LC	LC
173	Crimson Sunbird	<i>Aethopyga siparaja</i>	Yes	Forest	Resident	LC	LC
174	House Sparrow	<i>Passer domesticus</i>	Yes	Settlement	Resident	LC	LC

S. N	Common Name	Scientific name	Possibly Breeding	Habitat	Migration status	Conservation Status	Natioanl Status
175	Eurasian Tree Sparrow	<i>Passer montanus</i>	Yes	Settlement	Resident	LC	LC
176	White Wagtail	<i>Motacilla alba</i>	No	Wetland	Winter visitor	LC	LC
177	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Yes	Wetland	Resident	LC	LC
178	Grey Wagtail	<i>Motacilla cinerea</i>	No	Wetland	Resident	LC	LC
179	Paddyfield Pipit	<i>Anthus rufulus</i>	Yes	Agricultureland	Resident	LC	LC
180	Olive-backed Pipit	<i>Anthus hodgsonii</i>	No	Forest	Resident	LC	LC
181	Baya Weaver	<i>Ploceus philippinus</i>	Yes	Agricultureland	Resident	LC	LC
182	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Yes	Agricultureland	Resident	LC	LC
183	White-rumped Munia	<i>Lanchura striata</i>	Yes	Agricultureland	Resident	LC	LC
184	Crested Bunting	<i>Melophus lathami</i>	No	Agricultureland	Resident	LC	LC



Annex 14.4: Herpetofauna and Aquatic fauna

Annex 14.1: Stream habitat survey and aquatic

Stream habitat survey provide the quantitative information of habitat condition of stream as aquatic species diversity and distribution differs significantly with the valley and stream geomorphic features. Stream habitat survey and aquatic inventories along the existing Nagdhunga-Naubise-Muglin and proposed new road alignment carried referring to "Aquatic Survey Methods developed by Oregon Department of Fish and Wildlife". General information through map and direct observation of the stream characteristics in the field.

The river valley and stream geomorphic features such as; Channel Form, Valley Form, Valley Width Index, Stream Flow, river side vegetation and land use was examined and quantified. The study on presence absence of fish fauna followed with the stream habitat survey. The resulting matrix of measurements and spatial relationship generalized in frequently occurring valley and channel types.

- i) **Channel Form:** Determined by the morphology of the active channel, hill slopes, terraces, and flood plains. The channel form is refer as narrow valley floor type if the VWI is 2.5 or less while the channel form is broad valley floor type if VWI is greater than 2.5. Furthermore, the channel form could be constrained or unconstrained depending upon the adjacent landforms since landforms restricts the later movement of the channel.

- Narrow Valley Floor Types ($VWI \leq 2.5$) - Always constrained, defined by the characteristics of the constraining feature.

2.7 **CB** Constrained by **B**edrock (bedrock-dominated gorge)

2.8 **CH** Constrained by **H**ill slope

2.9 **CF** Constrained by alluvial **F**an

2.10

- Broad Valley Floor Types ($VWI > 2.5$) - The valley is several times wider than the active channel. The channel, however, may be either unconstrained or constrained depending on the height and configuration of the adjacent landforms.

- a) Unconstrained Channel (terrace height is less than the flood prone height* and the flood prone width* is $>$ than 2.5X active channel width). Low terraces overflow channels, and flood plains adjacent to the active channel.

2.11 **US** Unconstrained-predominantly Single channel.

2.12 **UA** Unconstrained-Anastomosing (several complex, interconnecting channels)

UB Unconstrained-Braided channel (numerous, small channels often flowing over alluvial deposits)

- b) Constrained Channel (terrace height is greater than the flood prone height*). Adjacent landforms (terraces, hillslopes) are not part of the active flood plain.

CT Constraining Terraces. (Terrace height $>$ flood prone height and flood prone width $<$ 2.5 X active channel width).

CA Constrained by **A**lternating terraces and hill slope. Same rule for terrace height but the channel may meander across the valley floor. The stream channel confined by contact with hill slopes and high terraces.

2.13 **CL** Constrained by **L**and use (road, dike, landfill)

2.14

2.15

ii) **Valley Form:** Valley form is the general description of the valley cross section with emphasis on the configuration of the valley floor. Similar to the channel form, valley form is divided into types with a narrow valley floor ($VWI \leq 2.5$ times stream active channel width) and types with a broad valley floor (Valley Width Index > 2.5 times active channel width) depending upon the side slopes.

2.16

2.17 Narrow Valley Floor ($VWI \leq 2.5$)

2.18

2.19 **SV** Steep **V**-shaped valley (SV) or bed gorge (side slopes $\geq 60^\circ$)

2.20 **MV** Moderate **V**-shaped valley (side slopes $> 30^\circ$, $< 60^\circ$)

2.21 **OV** Open **V**-shaped valley (side slopes $\leq 30^\circ$)

Broad Valley Floor ($VWI > 2.5$)

CT Constraining Terraces. Presence of terraces typically high and close to the active channel and is unlikely to receive flood flows and lacks of water dependent (hydrophilic) vegetation,

MT Multiple Terraces. Surfaces with varying height and distance from the channel. High terraces may be present but they are a sufficient distance from the channel that they have little impact.

WF Wide- active Flood plain. Significant portion of valley floor influenced by annual floods, and has water dependent vegetation (mesic meadow). Any terrace present not impinge on the lateral movement and expansion of the channel

iii) **Valley Width Index (VWI):** VWI is ratio of the width of the active stream channel to the width of the valley floor. Computation of VWI determine the Channel Form and Valley Form.

iv) **Vegetation Class:** Vegetation along the channel side and proposed alternative road segment in Kathmandu-Naubise segment is of deciduous forest type while Naubise-Muglin segment is of Sub-tropical forest type.

v) **Landuse:** Determined from observation of terraces and hill slopes beyond the riparian zone

AG **A**gricultural crop or dairy land.

TH **T**imber **H**arvest. Active timber management including tree felling, logging, etc. Not yet replanted.

YT **Y**oung **F**orest **T**rees. Can range from recently planted harvest units to stands with trees up to 15 cm dbh.

ST **S**econd **G**rowth **T**imber. Trees 15-30 cm dbh in generally dense, rapidly growing, uniform stands.

XLVIII



LT	Large Timber (30-50 cm dbh)
MT	Mature Timber (50-90 cm dbh)
OG	Old Growth Forest. Many trees with 90+ cm dbh and plant community with old growth characteristics.
PT	Partial cut Timber. Selection cut or shelterwood cut with partial removal of large trees. Combination of stumps and standing timber. If only a few live trees or snags in the unit, describe in note column.
FF	Forest Fire. Evidence of recent charring and tree mortality.
BK	Bug Kill. Eastside forests with > 60% mortality from pests and diseases. Enter bug kill as a comment on the unit sheet when it is observed in small patches.
LG	Light Grazing Pressure. Grasses, forbs and shrubs present, banks not broken down, animal presence obvious only at limited points such as water crossings. Cow pies evident.
HG	Heavy Grazing Pressure. Broken banks, well established cow paths. Primarily bare earth or early successional stages of grasses and forbs present.
EX	EXclosure. Fenced area that excludes cattle from a portion of range land
GN	Green way. Designated Green Way areas, Parks (city, county, state).
UR	URban
RR	Rural Residential
IN	Industrial
CR	Conservation area or wildlife Refuge.
MI	MIning
WL	WetLand.
NU	No Use identified.

vi) **Stream Flow:** Stream flow ascertained by observing the discharge condition.

DR	DRy
PD	Puddled. Series of isolated pools connected by surface trickle or subsurface flow.
LF	Low Flow. Surface water flowing across 50 to 75 percent of the active channel surface. Consider general indications of low flow conditions.
MF	Moderate Flow. Surface water flowing across 75 to 90 percent of the active channel surface.
HF	High Flow. Stream flowing completely across active channel surface but not at bank full.
BF	Bank full Flow. Stream flowing at the upper level of the active channel bank.
FF	Flood Flow. Stream flowing over banks onto low terraces or flood plain.



Annex 14.2: Details of Stream Habitat Survey in Sampling Sites

DATE	SAMPLING SITES	CHANNEL FORM	VALLEY FORM	VWI	VEGETATION CLASS	LANDUSE	WATER TEMP (°C)	STREAM FLOW	LOCATION	ALTITUDE (M)	UTM
15-03-17	1	US	OV	3.0	Alder, schima & Wild sage	LT	-	Dry	Jhyaple Khola	1344	27° 42' 38.04" N 85° 12' 07.69" E
	2	US	OV	4.0	Alder, schima & Wild sage	Rocks	-	Dry	Sisne Khola	1317	27° 42' 25.10" N 85° 12' 04.54" E
16-03-17	3	CH	OV	2.0	Alder & Pine	AG, LT	14	LF	Dhuni Khola, Nearby United Cement	912	27° 48' 41.85" N 85° 10' 43.38" E
	4	CH	MV	2.0	Alder & Pine	AG, LT	14	LF	Jhyaple, Sisne & Sikre Tributary, Devithan	1077	27° 42' 58.26" N 85° 11' 22.83" E
	5	CB	MV	2.3	Alder & Pine	LT	12	LF	Rupse Khola	842	27° 44' 10.93" N 85° 10' 04.41" E
	6	CB	MV	2.3	Alder	AG	12	LF	Dhobi Khola	821	27° 44' 14.64" N 85° 09' 09.39" E
	7	US	OV	2.8	Alder	RR, AG	12	LF	Maresh Khola at Dharke	770	27° 44' 05.15" N 85° 08' 10.43" E
	8	CH	MV	2.4	Alder	RR, AG		LF	Khani Khola	993	27° 43' 09.60" N 85° 09' 17.08" E
17-03-17	9	CH	SV	2.0	Alder	LT	14	LF	Sikre Khola	1130	27° 42' 34.19" N 85° 10' 59.71" E
	10	US	OV	4.0	Alder	MI		Dry	Khatripauwa Khola	1260	27° 42' 28.56" N 85° 11' 47.18" E
	11	US	OV	3.5	Sal & Sisau	YT	14	LF	Maresh Khola & Trisuli river tributary at Galchi	406	27° 48' 02.83" N 85° 00' 03.21" E
	12	CL	WF	6.5	No vegetation	HW, AG	14	LF	Maresh Khola at Khayarghari CF	476	27° 46' 26.67" N 85° 01' 51.91" E
18-03-17	13	CH	OV	2.5	Wild sage	Bushes, AG	14	LF	Dhangdhuge Khola, Dhunge	516	27° 45' 34.65" N 85° 02' 32.20" E
	14	US	WF	2.7	grasses, sedges & rushes	AG, RR	15	LF	Trisuli & Chiraudi Khola Tributary	390	27° 48' 24.93" N 84° 58' 08.30" E
	15	US	WF	5.7	grasses, sedges & rushes	RR	15	LF	Trisuli & Belkhu Khola Tributary	385	27° 48' 54.48" N 84° 57' 08.00" E
	16	CB	CT	1.6	Sal	Bedrock	15	LF	Trisuli River at Banchetar	391	27° 48' 15.54" N 84° 56' 14.46" E

DATE	REACH#	CHANNEL FORM	VALLEY FORM	VWI	VEGETATION CLASS	LANDUSE	WATER TEMP (°C)	STREAM FLOW	LOCATION	ALTITUDE (M)	UTM
18-03-17	17	CB	CT	1.5	Acacia	RR	15	LF	Trisuli River at Amaltari CF	391	27° 47' 58.17" N 84° 55' 05.73" E
	18	CA	WF	3.3	Acacia	RR, MI	15	LF	Trisuli & Galaudi Khola Tributary	365	27° 48' 32.81" N 84° 53' 24.08" E
	19	US	WF	4.6	Grasses, sedges & rushes	AG, RR	15	LF	Soti Khola at Gajuri	373	27° 48' 03.13" N 84° 52' 22.20" E
	20	CL	WF	3.5	No vegetation	Rocks, RR	15	LF	Malekhu Khola	345	27° 48' 22.05" N 84° 49' 58.73" E
	21	CB	OV	1.6	Fig, grasses, sedges & rushes	Rocks	15	MF	Trisuli at Malinga	321	27° 48' 50.70" N 84° 47' 51.80" E
19-03-17	22	CH	OV	1.5	Acacia, grasses, sedges & rushes	AG, RR	15	MF	Trisuli & Bhante Khola Tributary at Salandovan	305	27° 49' 04.80" N 85° 48' 27.42" E
	23	CA	MT	3.2	Sisau, grasses, sedges & rushes	LT, RR	15	MF	Trisuli & Kadam Khola Tributary	330	27° 48' 25.10" N 84° 49' 09.30" E
	24	CA	WF	3.0	Acacia & Cotton Tree	RR	15	LF	Trisuli & Budigandaki Tributary at Benighat	315	27° 48' 49.95" N 84° 46' 55.01" E
	25	US	WF	3.2	Sisau & grasses, sedges & rushes	RR, AG	15	LF	Maresh & Junga Khola tributary	687	27° 44' 43.86" N 85° 06' 29.03" E
	26	US	MT	4.4	Sisau & grasses, sedges & rushes	RR, AG	14	LF	Maresh & Agra Khola tributary, Mahadevbesi	611	27° 45' 14.29" N 85° 03' 52.06" E
21-03-17	27	US	OV	3.7	Sal & grasses, sedges & rushes	LG, AG	14	LF	Maresh & Kheshte Khola Tributary	506	27° 46' 39.15" N 85° 01' 30.07" E
	28	CB	OV	1.8	Fig & Sisau	Bedrock & HW	15	LF	Trisuli & Hugdi Khola Tributary at Syauli bazar	297	27° 48' 31.23" N 84° 41' 50.76" E
	29	CB	OV	1.8	Acacia & Cotton Tree	Bedrock & HW	15	LF	Trisuli & Mauwa Khola Tributary	274	27° 49' 32.87" N 84° 39' 54.33" E
	30	CB	OV	2.1	Sisau & Rhino apple tree	Bedrock	15	LF	Trisuli & Khani Khola tributary at Phisling	272	27° 50' 36.15" N 84° 34' 45.83" E



DATE	REACH#	CHANNEL FORM	VALLEY FORM	VWI	VEGETATION CLASS	LANDUSE	WATER TEMP (°C)	STREAM FLOW	LOCATION	ALTITUDE (M)	UTM
22-03-17	31	CH	OV	1.6	Sisau & Acacia	Rocks	15	LF	Trisuli, Barbang Khola and Juidi Khola Tributary at Kuringhat	228	27° 52' 10.24" N 84° 37' 51.46" E
	32	CA	WF	2.7	Grasses, sedges & rushes	Rocks	15	LF	Trisuli & Chum Khola tributary at Chumlintar	240	27° 51' 36.28" N 84° 38' 24.41" E
	33	CA	WF	4.5	Acacia & Cotton Tree	RR, AG	15	LF	Trisuli & Kum Khola tributary at Lewatar	245	27° 52' 19.14" N 84° 36' 16.27" E
	34	CH	MV	1.8	Acacia & Rhino apple tree	Rocks	15	LF	Trisuli & Joltreap Khola tributary nearby cable car station	240	27° 52' 39.49" N 84° 35' 10.76" E
	35	CB	MV	1.3	Acacia, grasses, sedges & rushes	Bedrock	15	LF	Trisuli & Nagdi Khola tributary	217	27° 51' 48.96" N 84° 34' 35.36" E
23-03-17	36	CB	MV	1.3	Sisau & Rhino apple tree	Bedrock	15	LF	Trisuli & Marsyangdi tributary at Muglin	215	27° 51' 30.60" N 84° 33' 40.38" E
	37	US	OV	5.0	Fig & Rhino apple tree	Rocks	15	LF	Pan Khola	298	27° 51' 39.80" N 84° 39' 05.69" E
	38	US	WF	2.1	Sal & Sisau	Bedrock, RR, MI	15	LF	Trisuli & Charaudi Khola Tributary	302	27° 48' 12.91" N 84° 44' 58.79" E
	39	US	OV	1.4	Sal & Sisau	RR, Bedrock	15	LF	Trisuli & Khatauti Khola Tributary	318	27° 48' 01.49" N 84° 43' 31.07" E



Annex 14.4: Stream Flow and Flow Contribution of the Tributaries

S.N	Stream/River	Confluence	% flow Contb.	Stream Flow
1	Jhyaple Khola	Dhuni	0	Dry
2	Sisne Khola	Dhuni	0	Dry
3	Devithan Khola	Dhuni	0	Dry
4	Khatripauwa Khola	Dhuni	0	Dry
5	Sikre Khola	Dhuni	1	LF
6	Dhuni Khola	Mahesh	10	LF
7	Khani Khola, Naubise	Mahesh	30	LF
8	Rupse Khola	Mahesh	1	LF
9	Dhobi Khola	Mahesh	1	LF
10	Naubise Khola, Dharke	Mahesh	30	LF
11	Mahesh Khola Dharke	—	100	LF
12	Agra Khola, Mahadevbesi	Mahesh	20	LF
13	Kheste Khola	Mahesh	5	LF
14	Mahesh Khola, Khayarghari CF	—	100	LF
15	Dhangdhuge Khola, Dhunge	Mahesh	2	LF
16	Mahesh Khola, Galchi	Trisuli	15	LF
17	Chiraudi Khola	Trisuli	> 1	LF
18	Belkhu Khola, Adamghat	Trisuli	1	LF
19	Trisuli River, Banchetar	Trisuli	100	LF
20	Trisuli River, Amaltari CF	Trisuli	100	LF
21	Galaudi Khola, Gajuri	Trisuli	>1	LF
22	Soti Khola, Gajuri	Trisuli	>1	LF
23	Malekhu Khola, Malekhu	Trisuli	2	LF
24	Trisuli River, Malinga	Trisuli	100	MF
25	Bhante Khola, Salandovan	Trisuli	>1	MF
26	Kadam Khola	Trisuli	>1	MF
27	Budigandaki, Benighat	Trisuli	40	LF
28	Charaudi Khola, Charaudi bazar	Trisuli	>1	LF
29	Khatauti Khola, Khatauti bazar	Trisuli	>1	LF
30	Hugdi Khola, Syauli bazar	Trisuli	1	LF
31	Mauwa Khola, Mauwa bazar	Trisuli	1	LF
32	Khani Khola, Phisling	Trisuli	0	LF
33	Barbang Khola and Juidi Khola, Kuringhat	Trisuli	0	LF
34	Chum Khola, Chumlintar	Trisuli	>1	LF
35	Pan Khola	Trisuli	>1	LF
36	Kum Khola, Lewatar	Trisuli	0	LF
37	Joltreap Khola, Cable car station	Trisuli	>1	LF
38	Nagdi Khola	Trisuli	1	LF
39	Marsyangdi, Muglin	Trisuli	30	LF

Annex 14.5: Photographs of Herpetofauna Observed at Sampling Sites During Field Survey



Photo1: *Duttaphrynus melanostictus* (Schneider, 1799)

Common Name: Black Spined Toad, Common Asian Toad; Local Name: Khasre Bhyaguta



Photo 2: *Euphlyctis cynoplyctis* (Schneider, 1799) form

Common Name: Skittering Frog; Local Name: Dholbaje Paha, Tik-Tike Paha, Chhotki Meghi



Photo 3: *Calotes versicolor versicolor* (Daudin, 1801)

Common Name: Garden Lizard; Local Name: Chheparo, Chhepado, Girgitan, Girgit, Kanthutara



Photo 4: *Mabuya carinata* (Schneider, 1801)

Common name: Brahminy skink; Local Name: Bhanemungro, Chikani girgit

Annex 14.6: Photographs of Fish Fauna Observed at Sampling Sites During Field Survey



Photo 1: *Tor putitora* (Hamilton-Buchanan)

Common Name: Putitora Mahseer, Golden Mahseer; Local Name: Pahale sahar, Mahseer, Mansar



Photo 2: *Barilius bendelisis* (Hamilton-Buchanan)

Common Name: Hamilton's Barila; Local Name: Chiple faketa, Gurdere, Khasree chala

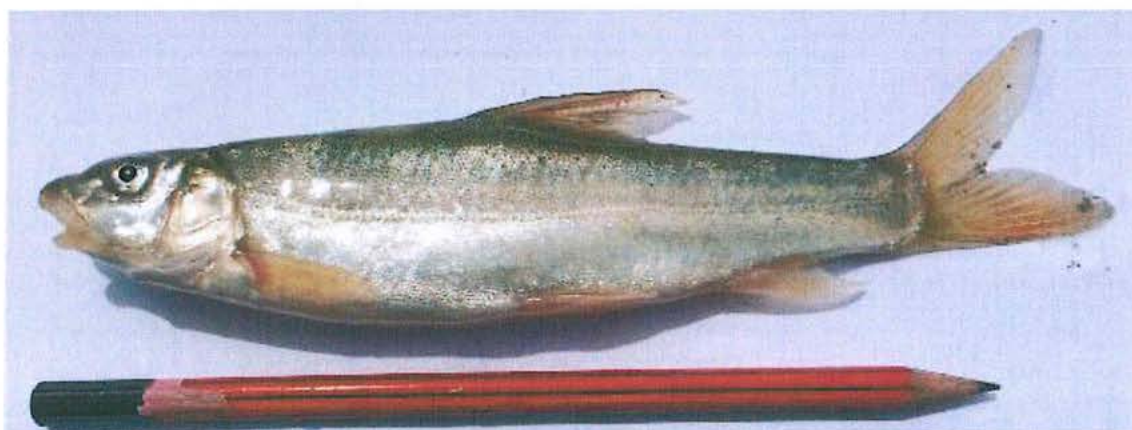


Photo 3: *Schizothorax plagiostomus* (Heckel)

Common Name: Golden Snowtrout, spotted snowtrout; Local Name: Sun Asla



Photo 4: *Crossocheilus latius latius* (Hamilton-Buchanan)
Common Name: Gangetic Laita, Stone Roller; Local Name: Lohari, Mate Buduna



Photo 5: *Garra annandalei* (Hora)
Common Name: Annandale Garra; Local Name: Lahare buduna

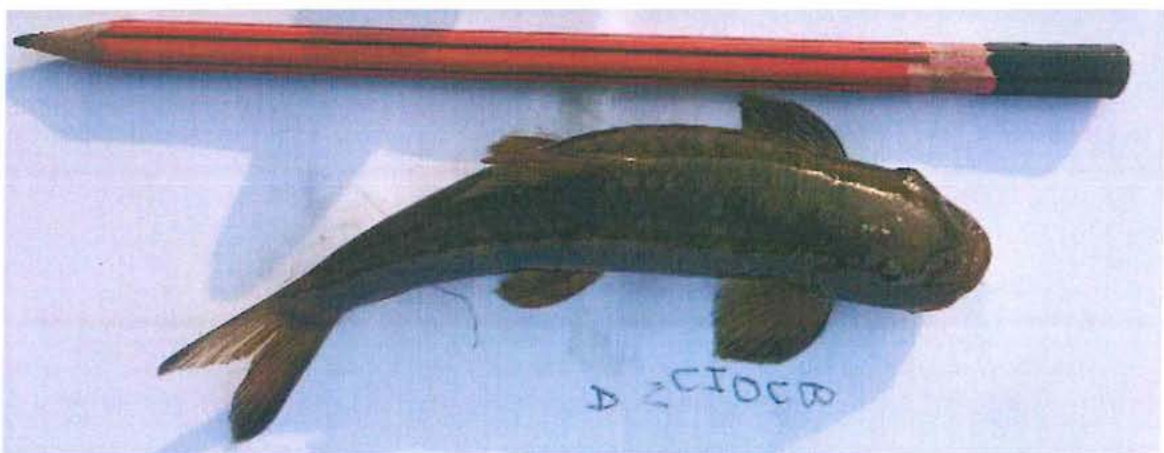


Photo 6: *Garra gotyla gotyla* (Gray)
Common Name: Gotyla; Local Name: Buduna, Dhumke Buduna

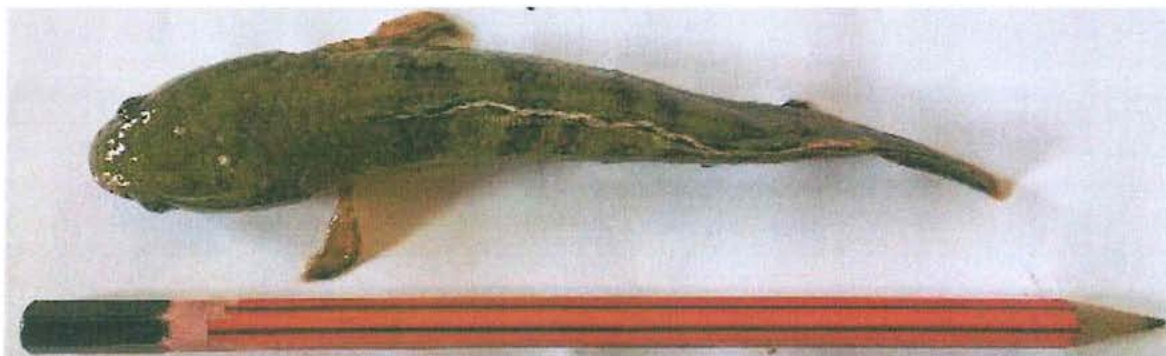


Photo 7: *Channa orientalis* (Bloch and Schneider) or *Channa gachua* (Hamilton-Buchanan)
Common Name: Asiatic Snakehead; Local Name: Garahi, Bhoti, Ghau Nya (Newari L.)



Photo 8: *Pseudecheneis sulcatus* (McClelland)
Common Name: Sulcatus catfish; Local Name: Kabre



Photo 9: *Botia almorhea* (Gray)
Common Name: Almorah Loach; Local Name: Baghi, Baghwa



Photo 10: *Labeo bata* (Hamilton-Buchanan)
Common Name: Bata Labeo; Local Name: Rohu

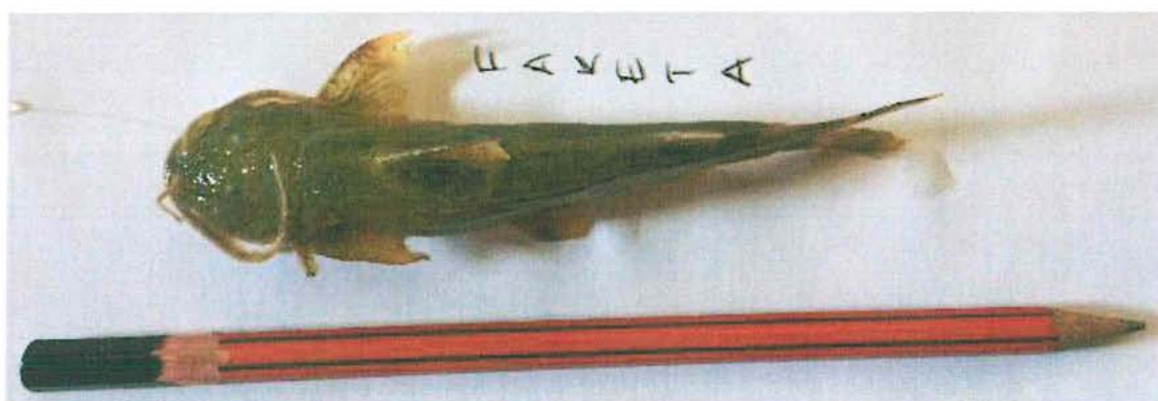


Photo 11: *Glyptothorax pectinopterus* (McClelland)
Local Name: Capre



Photo 12: *Glyptothorax cavia* (Hamilton-Buchanan)
Local Name: Vedro

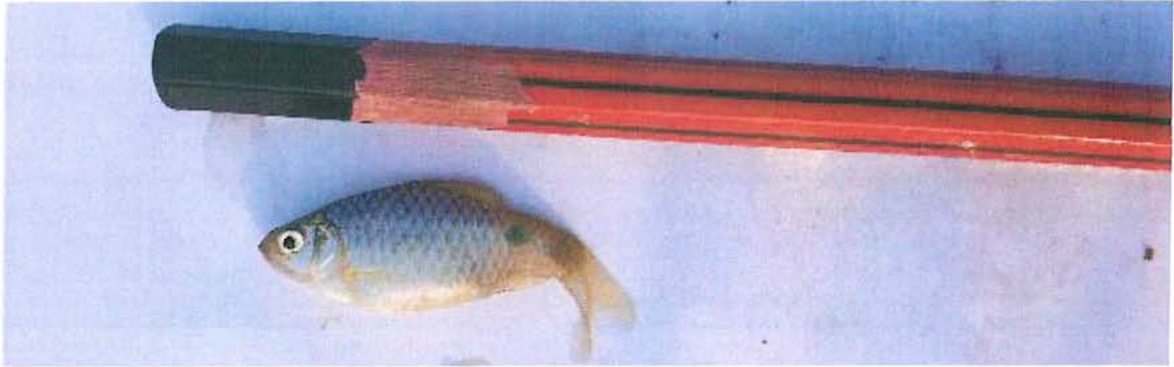


Photo 13: *Punctius* sp.



Photo 14: *Barilus barna* (Hamilton-Buchanan)
Common Name: Barna baril; Local Name: Titerkane faketa



Photo 15: *Schistura sovana* (McClallend), *Nemacheileu sovanan*
Common Name: Ring Loach Local Name: Gadela



Photo 16: *Neolissochilus hexagonolepis*
Common Name: Copper Mahseer; Local Name: Katle, Vadelke



Photo 17: Tadepole, Chepagada



Annex 14.7: Photographs of Macro-Invertebrates observed in Sampling Sites During Field Survey



Photo 1: Nymphs of Dragonfly-Trisuli river, Malekhu



Photo 2: *Nepa sp.*

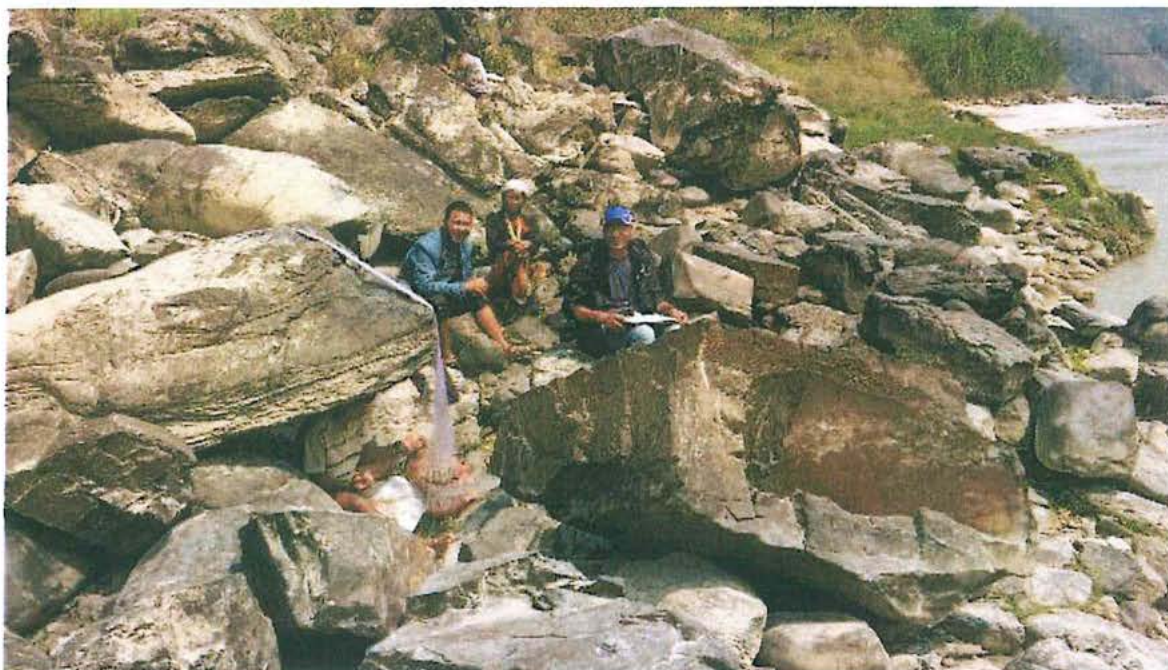


Photo 3: *Lymnea sp.*



Photo 4: Water beetle

Annex 14.8: Photographs of Social Survey and Sampling Sites





Annex 14.9: Extraction Activities in the Rivers/streams Nagdhunga-Naubise-Muglin Road alignment



Photo 1: Ongoing Extraction of construction material in Charaudi Khola

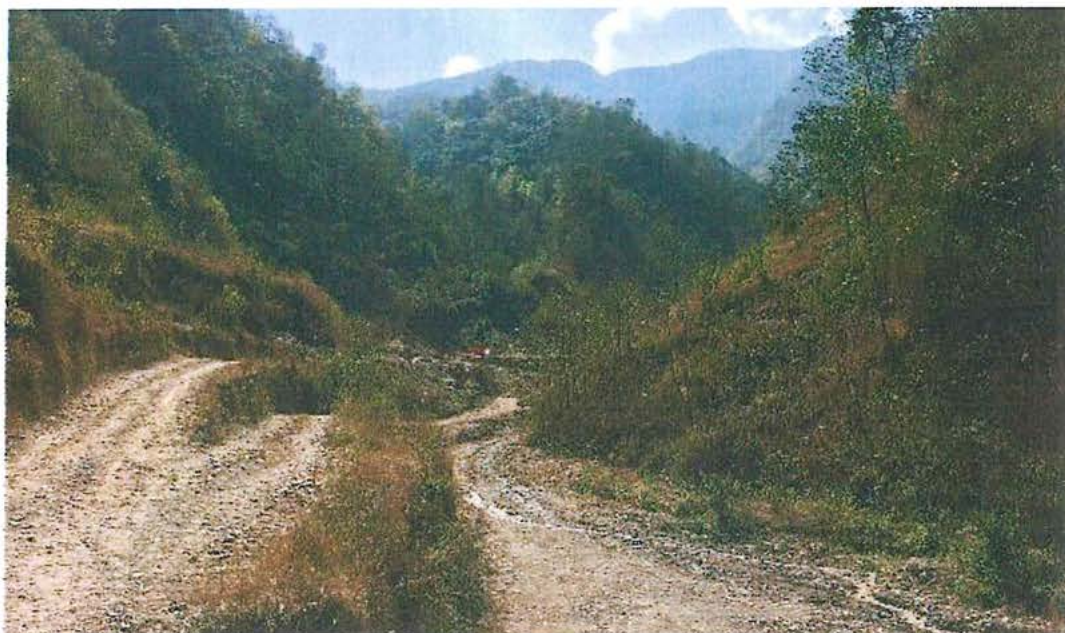


Photo 2: Ongoing Extraction of construction material in Khatripauwa Khola



Photo 3: Ongoing extraction of construction materials in Belkhu Khola and Trisuli tributary



Photo 4: Ongoing sand mining and crusher at the bank of the Trisuli River near Gajuri



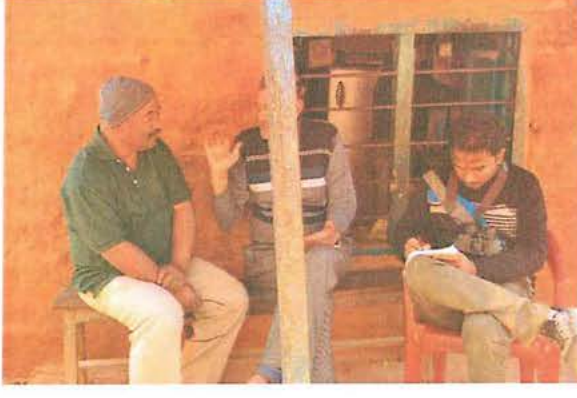
Photo 5: Highly turbid water flowing in Agra khola caused by mining, refining of construction materials in upstream



Photo 6: Trash and disposals in Sisne Khola

Annex 15: Photographs- Public Consultation and Hearing

	
Consultation during Scoping at Naubise	Consultation with locals at Jogimara during Scoping
	
Discussion with locals at Ghatbeshi	Discussion with indigenous chepangs at Jogimara

	
Consultation with locals at S-D alternative alignment	Ghyalchowk, Siurenitar
	
Public Consultation at Buttar, Makaising	Consultation at Ghyalchowk, Siurenitar
	
Illegal riverbed material extraction along the Trishuli River	Crusher plants established at at the bank of Trishuli River.



Public Hearing at Dhunibeshi RM



Public Hearing at Dhunibeshi RM



Public Hearing at Phisling



Public Hearing at Phisling



Public Hearing at Pida, Jogimara RM



Public Hearing at Benighat Rorang RM

Annex 16: Team Declaration Form

S.N	Name	Designation
1.	Ms. Elena Kreuzberg	Team Leader/ Environmental Management Specialist (International)
2.	Mr. Rikesh Chitrakar	Deputy Team Leader/Environment Specialist
3.	Mr. Prakash Pandey	Social Development and Resettlement Specialist
4.	Mr. Prayag R. Tamrakar	Biodiversity / Ecology Expert
5.	Mr. Ishwor Man Shrestha	Economist
6.	Mr. Ram Bindu Shrestha	Highway Engineer
7.	Mr. Uddab Raj Chaulagain	Hydrologist
8.	Mr. Prakash Ulak	Engineering Geologist
9.	Mr. Saroj Ghimire	Environment Expert (Internal supporting)
10.	Mr. Bishnu Maharjan	GIS expert (Internal supporting)



**Name of firm and experts involved in EIA of Kathmandu (Nagdhunga)-
Naubise-Mugling Road and Bridges study and Declaration forms**

**Project name: EIA of Kathmandu (Nagdhunga)-Naubise-Mugling Road and
Bridges**

Name of the Firm: Environment & Resource Management Consultant (ERMC)
Contact address: P.O.B: 12419, New Baneshwor, Kathmandu.
Phone:01-4483064, 4465863

Declaration from Exports

We declare that we have conducted the study professionally using acceptable and standard methodologies. To the best of our knowledge, study findings are correct and have not been altered in any manner. We shall be accountable for any misleading information in any part of this report in respective areas of study.

On behalf of ERMC Pvt. Ltd.

(Mrs. Elena Kreuzberg, Team Leader)



Signature.....



Declaration from Team Leader

I declare that I have read and checked the content of KNM-EIA Study. My study team has conducted the study professionally using acceptable methodologies. The study findings are corrected to the best of my knowledge. The mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that myself and my team shall be accountable for any misleading information in any part of this report.

Signature:



Name: Mrs. Elena Kreuzberg, Team Leader
Date: July, 2019



Declaration from Environmental Expert

I declare that I have read and checked the content of KNM-EIA Study. The study findings are corrected to the best of my knowledge. The issues identified and mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that myself shall be accountable for any misleading information in respective areas of the study.

Signature:



Name: Rikesh Chitrakar

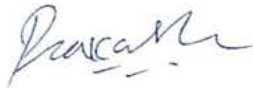
Date: July, 2019



Declaration from Sociologist

I declare that I have read and checked the content of KNM-EIA Study. The study findings are corrected to the best of my knowledge. The issues identified and mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that myself shall be accountable for any misleading information in respective areas of the study.

Signature:



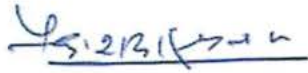
Sociologist: Prakash Panday
Date: July, 2019



Declaration from Geologist

I declare that I have read and checked the content of KNM EIA Study. The study findings are corrected to the best of my knowledge. The issues identified and mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that myself shall be accountable for any misleading information in respective areas of the study.

Signature:



Geologist: Prakash Das Ulak
Date: July 2019



Declaration from Biologist

I declare that I have read and checked the content of KNM EIA Study. The study findings are corrected to the best of my knowledge. The issues identified and mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that myself shall be accountable for any misleading information in respective areas of the study.

Signature:



Biologist: Prayag Raj Tamrakar
Date: July 2019



Declaration from Consultant

I declare that my study team has conducted EIA study for KNM Road and Bridges professionally using acceptable methodologies. The study findings are corrected to the best of my knowledge. The mitigation measures proposed are reliable, practical and adequate to comply with legal requirements. I also declare that my consultancy and my team members shall be accountable for any misleading information in any part of this report.

On Behalf of consultancy:

Signature



Name: Hem Nidhi Sharma
Director, ERM

Email: ermc@ermcnepal.com

Official stamp



Annex 17: Approved TOR





Government of Nepal

Ministry of Physical Infrastructure and Transport

Department of Roads

Terms of Reference (TOR)

for

Environmental Impact Assessment (EIA)

of

Kathmandu (Nagdhunga)-Naubise-Mugling (KNM) Road and Bridges

CONTRACT IDENTIFICATION NUMBER: NIRTTP-DOR-S-QCBS-2

Submitted to:

Ministry of Population and Environment

Singhadarbar, Kathmandu

Submitted by:	Prepared on behalf of GESU by: JV of
Ministry of Physical Infrastructure & Transport Department of Roads, Foreign Cooperation Branch, NIRTTP and Geo-Environment and Social Unit (GESU), Chakupat, Lalitpur Kathmandu, Nepal	Environment & Resource Management Consultant (P) Ltd.; Group of Engineer's Consortium (P) Ltd. And Udaya Consultancy (P.) Ltd.

December, 2017



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- Annex-1: Location Map/Road Alignment Route Map
- Annex-2: Baseline information table;
- Annex-3: Checklist and Questionnaire for EIA study



Abbreviation

CBS	- Centre Bureau of Statistics
CFUG	- Community Forest User Group
°C	- Degree Celsius
DIA	- Direct Impact Area
DOR	- Department of Roads
EIA	- Environmental Impact Assessment
EMAP	- Environment Management Action Plan
EMP	- Environmental Management Plan
EPA	- Environment Protection Act
EPR	- Environment Protection Rules/Regulation
ESIA	- Environmental and Social Impact Assessment
ESMF	- Environmental and Social Management Framework
GESU	- Geo-Environmental and Social Unit
GoN	- Government of Nepal
ha	- Hectare
HMG	- His Majesty's Government
IEE	- Initial Environmental Examination
IIA	- Indirect Impact Area
Km/km	- Kilo Meter
Km ²	- Square Kilometer
l/s	- Liter per Second
m	- Meter
mm	- Millimeter
MFSC	- Ministry of Forest and Soil Conservation
MOPIT	- Ministry of Physical Infrastructure and Transport
NPC	- National Planning Commission
NGO	- Non-Governmental Organization

NIRTP	- Nepal India Regional Trade and Transport Project
NTFP	- Non-Timber Forest Product
NTIS	- Nepal Trade Integration Strategy
NLTA	- Non-Lending Technical Assistance Program
PRM	- Prithvi Rajmarg
ROW	- Right of Way
RM	- Rural Municipality
TOR	- Terms of Reference
TRP	- Tribhuvan Rajpath
VDC	- Village Development Committee
ZOI	- Zone of Influence



1. Name and Address of the Institution Preparing the Report

1.1 Introduction of the proponent

The Proponent of this project is the Department of Roads (DoR) implementing through Foreign Cooperation Branch, Kathmandu. It functions under the Ministry of Physical Infrastructure & Transport (MoPIT) and has the responsibility of the planning, design, construction and maintenance of strategic road networks and feeder roads including its associated other physical structures e.g. Bridge. The name and address of the proponent is as follows;

Name and address of proponent

Nepal India Regional Trade and Transport Project, Foreign Cooperation Branch, Department of Roads, Jwagal, Lalitpur, Kathmandu, Nepal Facsimile: 977-1-5542532 Phone No.: +977-1-5541686/87 Email: dorfcfb@dor.gov.np	Geo-Environment and Social Unit (GESU), Department of Roads, Chakupat, Lalitpur, Nepal Tel: 977-01-5005520
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1.2 Name and Address of the consultant preparing the report

The present Terms of References (TOR) for the “**Environmental and Social Impact Assessment of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges**” has been prepared for the Project Proponent by the following Consultancy:

Environment Resource Management Consultant, (ERMC) (P.) Ltd.

Joint venture with

Group of Engineers’ Consortium (P) Ltd. (GEC) and

Udaya Consultancy (P.) Ltd.

P. O. Box 12419, New-Baneshwor, Kathmandu, Nepal

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2. Proposal's Introduction

2.22 General introduction

Nepal is geographically a small landlocked country situated between India and China. Most of the commercial transactions are conducted through India. Thus, the Government of Nepal (GoN) has the responsibility of improving the performance of road network in the country to improve trade and ensure communication networks between different regions of the country. The 276 Km stretch of road from Birgunj to Kathmandu is part of the Asian Highway (AH-42) and it is an important trade corridor in Nepal. The road transport between Kathmandu to Birgunj plays a vital role in both the trade and transit between Nepal and India, and provides access to the markets of third countries through Kolkata seaport. Kathmandu connects with Birgunj via Naubise-Mugling-Narayanghat-Hetauda-Pathlaiya for the freight transportation.

To enhance efficiency in the road transport and improve road safety, Nepal government intends to improve the road corridor from Birgunj to Kathmandu. As a first step, improvement of road section from Narayanghat to Mugling is considered under Nepal India Regional Trade and Transport Project (NIRTTP).

Enhancing trade competitiveness is one of six priorities of the Government of Nepal's development plan. For this, the Government of Nepal (GoN) has requested the World Bank to provide IDA financing, to support Nepal in addressing its commitments to enhancing regional trade including along the Kathmandu-Kolkata Corridor. The GoN's 2010 Nepal Trade Integration Strategy (NTIS) seeks to enable inclusive growth in Nepal through enhancing the competitiveness of Nepal's exports and reducing the cost of trade.

The priorities of this strategy include: (i) reducing the time and cost of trade-related transactions through efforts on simplification, harmonization, and automation; (ii) building the capacity of domestic trade-related institutions including for sanitary and phytosanitary inspections, trade negotiations, trade facilitation and logistics, and monitoring and regulating trade-related sectors; and, (iii) enhancing the Government's ability to coordinate trade-related institutions and development partners.

Towards meeting the priorities identified in the NTIS, the World Bank is implementing the Nepal Regional Trade Non-Lending Technical Assistance Program (NLTA), designed to enhance the government's capacity to implement the NTIS by providing technical assistance to the key trade-related institutions to: (a) develop plans for trade facilitation and logistics; (b) put in place an effective monitoring system; (c) undertake key sector studies and receive just-in-time expertise (as needed) and; (d) draft capacity development plans (including for HR development, change management and coordination).



Institutions covered by this NLTA include the Ministry of Commerce and Supplies (and its agencies Nepal Intermodal Transport Development Board Secretariat and Trade and Export Promotion Council), Department of Customs, and Ministry of Physical Planning, Works and Transport Management. Key results expected include: (i) Enhanced capacity to monitor transport time and costs at Nepal's main trade corridor, the Kolkata-Raxaul-Birgunj-Kathmandu Corridor; (ii) Enhanced capacity to coordinate trade-related institutions and development partners; and (iii) Enhanced capacity/knowledge in trade facilitation and logistics.

The name of the Proposal is "Environmental and Social Impact Assessment of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges". However, the project also comprises new alignments such as Sisnekhola to Dharke, which is approximately 11 km and Benighat to Kurintar approximately 19 km.

2.23 Salient feature of proposed road alignment

The project road is part of two major Highways of Nepal as described below:

- From Nagdhunga to Naubise (12.5 Km) is part of Tribhuwan Rajpath (TRP); and
- From Naubise to Mugling (83 Km) is part of Prithvi Rajmarg (PRM).

Based on preliminary survey and investigations by the Design Consultants the salient features of existing project road is given below **Table 1**:

Table 1: Salient features of the project.

Sn.	Salient features	Descriptions
1	Name of the Project Road	Nagdhunga-Naubise-Mugling Road
2	Length	96 Km
3	Terrain	Steep Hilly and Mountainous
4	Existing bituminous carriageway width	5.50m to 6.50m
5	Existing shoulders widths	0.50m to 1.00m
6	Number of major horizontal curves	107
7	Location of steep vertical gradients	46
8	Number of hairpin bends/blind curves	6
9	Number of major villages/bazaar	12
10	Length of existing side drains	102 Km
11	Number of existing bridges	26

Sn.	Salient features	Descriptions
12	Number of existing culverts	445
13	Length of existing retaining walls	14985 m
14	Length of existing breast walls	6701 m
15	Length of existing gabion walls	5135 m
16	Number of major junctions	6
17	Number of minor junctions	64
18	Length of existing median	Nil
19	Length of existing footpath	Nil
20	Right of Way	50 m

Source: Feasibility Study for Improvement of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges, Final Feasibility Report April, NIRTTP, 2017.

Nagdhunga — Naubise Road

Nagdhunga- Naubise Road is part of Trivuan Rajpath (TRP) which is a national highway as per DOR classification with road reference no. H 02. This road was initially constructed in 1956 AD, and, then, rehabilitated in 1997 AD. The present salient existing features of this section of road are mentioned below:

Name of Road	:	Nagdhunga — Naubise Road
Road Reference No	:	H 02
Nagdhunga to Peepalmod	:	H 0214
Peepalmod to Naubise	:	H0213
Length	:	12.5 Km
Carriageway Width	:	5.5 to 7.5 m
Shoulder Width	:	0.5 m
Formation Width	:	7.5 — 9.5 m
Minimum Radius of Horizontal Curve	:	17 m
Number of Horizontal Curves	:	169 Nos
Number Curves with R=or<25m	:	33Nos.
Maximum Gradient	:	10.19%(0+289);10.34%(1+512); 10.31%(2+451)
Grade more than 7 %	:	At 20 locations

Pavement Composition	:	Sub-base 20 cm
Base 18-25 cm and Bituminous Layer	:	5 - 10 cm
Condition of Road Pavement	:	Fair to Poor; IRI >7; SDI 1.7— 3.
Number of Bridges	:	2 Nos, Total Length: 45 m
Hume Pipe	:	52 Nos.
Slab Culvert	:	8 Nos.

Naubise — Mugling Road

Naubise — Mugling Road is a part of Prithvi Rajmarg (PRM), a national highway as per DOR classification with road reference no. H04. The road was constructed in 1973 AD and rehabilitated/ upgraded in 1995 AD. Some of the existing features of this road are depicted below:

Name of Road	:	Naubise - Mugling Road (Part of Prithvi
Length	:	82+850Km
Road Reference No	:	H 04
Naubise to Galchhi	:	H 0401
Galchhi to Trishuli Bridge	:	H 0402
Trishuli Bridge to Mawa Khola	:	H 0403
Mawa Khola to Mugling	:	H 0404
Carriageway Width	:	6.5 m
Shoulder Width	:	1.0 m
Formation Width	:	8.5 m
Minimum Radius of Horizontal Curve	:	20 m at Km 12+324 and Km 79+786
Number of Horizontal Curves	:	577 Nos.
Maximum Gradient	:	8.21 % at Km 38+324
Gradient more than 7%	:	At 30 places
Pavement Composition	:	Wearing Course 40 mm
Binder Course	:	60 mm
Wet mix Base/ESB	:	150-200 mm
Granular Sub-base	:	200-250 mm
Condition of Road Pavement	:	Fair to Good; IRI <6, SDI <3
Number of Bridges	:	24 Nos. Total Length 766.5 m

Hume Pipe	:	50 Nos.
Box Culvert	:	2 nos
Slab Culvert	:	333 nos
Major Landslide Areas	:	Krishnabhir at 58+00; Jogimara at 64+00
Major Junctions		
Naubise at Km 0+000	:	Junction to Hetauda (TRP)
Galchhi at Km 22+400	:	Junction to Nuwakot
Malekhu at Km 42+200	:	Junction to Dhadingbesi
Benighatat Km 50+900	:	Junction to Gorkha District
Darechaur at Km 78+100	:	Junction to Manakamana Cable Car Gate
Mugling at Km 82+000	:	Junction to Narayanghat and Pokhara

2.24 Technical features of the project

2.24.1 Design standards of existing roads

A. Kathmandu (Nagdhunga) — Naubise Road

This section of project road was originally constructed in 1956 AD with the assistance from Government of India. Thus, the design standards adopted during the construction time are not known. However, later this section was rehabilitated by DOR in 1997 AD under RMRP project financed by the IDA and after that continuous improvement works such as curve widening, pavement strengthening, slope stabilization, etc. have been carried out in each fiscal year. Examining the existing geometric features, the present road may even not meet the design standards of class IV road as defined in Nepal Road Standards, 2070.

Table 2: Design parameters

Sn.	Design parameters	DOR standards class IV				Existing road			
		P	R	M	S	P	R	M	S
1	Carriageway Width m	7	7	7	7			6-7	6-7
2	Design Speed, Km/hr	60	40	30	20			30	10
3	Radius of Horizontal Curve, m	110	40	20	10			12	12
4	Max Vertical Gradient, %	7	7	7	7			8	8
5	Shoulder Width, m	1.5	1.5	1.5	1.5			0.5	0.5

B. Naubise — Mugling Road



Naubise — Mugling Road is a section of Prithvi Highway built in 1974 AD with the assistance of Government of People's Republic of China. At that time, the design standards were combination of Chinese and Nepalese standards with carriageway width 3.5 and formation width 6.0 m. In 1991, the road was upgraded with assistance from IDA and ODA, when the physical parameters and design standards were also adopted as per DOR standards. Since the upgrading was carried out on the existing road alignment, certain design criteria were difficult to improve and they were left below DOR Standards. Some of the existing design parameters are as follows:

Table 3: Design parameters of class IV

Sn.	Design parameters	DOR standards class IV			
		P	R	M	S
1.	Carriageway Width, m	6.5	6.5	6.5	6.5
2.	Shoulder width, m	1	1	1	1
3.	Design Sped	80	50	30	30
4.	Min Radius of Horizontal Curve, m	175	70	25	25
5.	Max Vertical Gradient, %	4	8	8	8
6.	Max Super Elevation, %	8%			
7.	Camber, %	2.5%			
8.	Min Transition Curve, m	400	250	40	40
9.	Stopping Sight Distance, m	110	65	30	30
10.	Right of Way, m	50			

2.24.2 Design standards

Road

The new design of the highway and proposed new sections is to enhance the road capacity by decreasing the road congestion improving the speed of commercial vehicles. The terrain classifications along the project road are as follows:

- Plain (P) : Slope 0 to 10%

- Rolling (R) : Slope more than 10 to 25 %
- Mountainous (M) : Slope more than 25 to 60 %
- Steep (S) : Slope more than 60 %

Proposed road standards for Improvement of existing roads to two-lanes, construction of two-lane new road and construction of four-lane road are provided in table below.

Table 4: Two-lane road: new construction and improvement of existing roads

Sn.	Design parameters	DOR standards class IV				Remarks
		P	R	M	S	
1.	Carriageway Width, m	7	7	7	7	
2.	Formation width, m	9 - 12				
3.	Shoulder width	1	1	1	1	For Existing Nagdhunga — Naubise Road
		2	2	2	2	For Difficult Sections of Existing Naubise-Mugling Road
		2.5	2.5	2.5	2.5	For New Construction and Improvement of Existing Naubise - Mugling Road
4.	Design Speed	60	40	30	25	For Existing Nagdhunga - Naubise Road
		100	80	60	40	For New Alignment and Naubise - Mugling Road
5.	Radius of Horizontal Curve	110	80	40	40	For New Alignment and Existing Nagdhunga - Naubise - Mugling Road
6.	Vertical Gradient in %	4	6	7	8	
7.	Super Elevation in %	7 to 10%				
8.	Camber in %	2.5%				
9.	Min Transition Curve, m	400	250	40	35	
10.	Stopping Sight Distance, m	190	130	80	50	
11.	Extra Widening, m	0.0 - 1.2				
12.	Max Length of Gradient, m	400	400	400	300	

Sn.	Design parameters	DOR standards class IV				Remarks
		P	R	M	S	
13.	Min value of K for Summit Curve	29				
14.	Min value of K for Valley Curve	17				
15.	Right of Way, m	50				

Typical Cross Section of Road

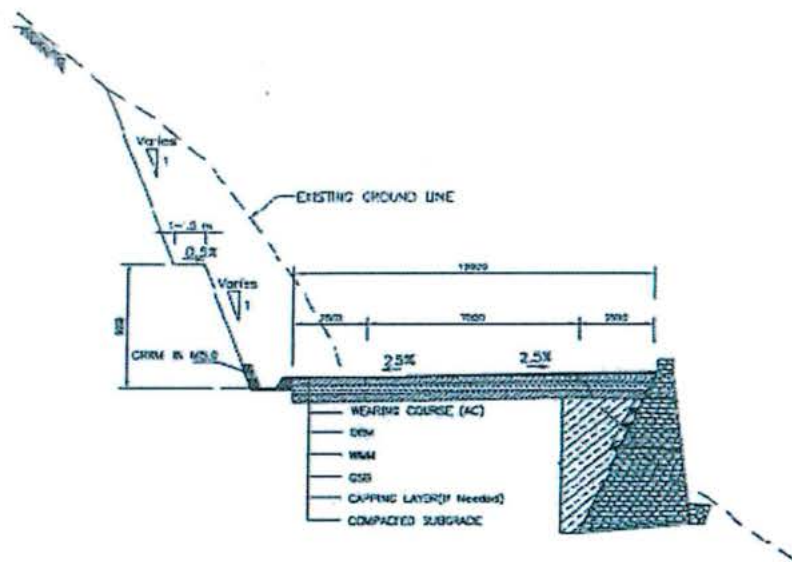


Figure 1: Typical X-Section for Improvement of Existing Road to Two Lane Standard



Retaining Structures

Different types of retaining walls will be proposed in the design of road such as Gabion wall, Stone Masonry wall, Reinforced Concrete wall and Geogrid Reinforced Retaining wall as required at site. Geogrid reinforced retaining wall is also known mechanically stabilized earth wall; the application of geogrid of different strength as per need for the stabilization of high fill embankment will be also applied. Height of wall may be up to 40 m, so high tensile strength geogrid will be used in this structure basically ultimate tensile strength ranging from 192 KN/m to 600 KN/m. All retaining structures will be designed for life cycle of 50 years.

Protection Works

Protection works will be provided in all vulnerable areas, like upstream and downstream areas of culverts, bridges, river banks, road sides and other special structures, all protection structures will be designed for design life of 50 years.

2.25 Objectives of Terms of Reference

The main objectives of the Terms of Reference for the Environmental Impact Assessment (EIA) of the improvement and upgrading of existing Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges are as follows:

- To fulfill legal requirement,
- To identify major issues on Physical, Biological, Socio-economic and Cultural Environment that may arise as results of proposed works,
- To systemize the working procedure,
- To comply the EIA report with existing Rules, Policies and Guidelines,
- To provide technical guidance to proponent/consultant,
- To accomplish the job in specific time.

The approved TOR document serves as the basic guideline for preparation of the EIA report.

2.26 Relevancy of the project

The major means of transportation in Nepal has been identified as automobile roads and air transport. Other than these two, there were also some efforts to work with ropeways, railways and waterways, but they all remain in an elementary state. Nepal's lack of infrastructure and geographic constraints have also led to poor road conditions and chronic trade deficits every year. The growing and continued mismatch between import and export has resulted in an alarming level of trade deficit in Nepal. Over the years, export has almost been stagnated, and the import skyrocketed. All types of infrastructure such as trade related as well as others remain inadequate and in poor condition. The need in improvements of basic industrial infrastructures of the country become very urgent. Nagdhunga-Naubise-Mugling road provides connecting to the Birgunj dry port near Nepal-India border via

Narayanghat and serves as a major road section for the freight transportation connecting capital city the Kathmandu. The improvement and upgrading of this road section is needed to support communication for the growing population of the country and for the sustainable plying of existing highway and adjacent road users as well as to improve trade with neighboring countries.

2.27 Rationality of the EIA

The necessity of EIA report renders this TOR; whereas the EPA 1997 (Amended 2007), prohibits the implementation of proposal without its approval. The clause 7 of EPA also prohibits everybody from polluting; that will cause significant adverse impact on the environment. At the same time, the construction of proposed road under forest rules needs to go through Environmental Impact Assessment as per the Schedule 2 (Section-D Road Sector number 1a.) pertaining to Rule 3 of Environment Protection Rules (EPR) 1997, (amendment 2007) of the Government of Nepal. This Terms of Reference is prepared as per the EPR to carry out EIA of the proposed 96 km of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges.

2.28 Objectives of EIA

As set out in the Environment Protection Rules (EPR) of 1997 and its amendment in 1999, and the National EIA Guidelines 1993, the main objectives of this EIA are to:

1. Collect baseline data on physical, biological, socio-economic and cultural environment;
2. **Identify, predict and evaluate the potential environmental impacts of the alternatives in proposed Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges, covering Kathmandu, Dhading, Gorkha and Chitwan districts in 3 provinces of Nepal.**
3. **Calculate loss of different categories of land, property, forest and other resources as a part of site clearance and maintaining the RoW of the proposed road alignment**
4. **Suggest mitigation measures for adverse impacts and enhancement measures to maximize beneficial impacts.**
5. **Consult and inform the project affected parties and other concerned stakeholders and ensure active people participation.**
6. **Provide information for decision makers regarding environmental implementation of the project.**
7. **Develop Environmental Management Action Plan (EMAP), comprising of:**
 - **Environmental Monitoring Plan (with implementation modalities of the proposed mitigation measures and monitoring requirement), and**
 - **Environmental Auditing Plan.**
8. **Develop information dissemination and consultation strategy for implementation of the project.**

2.29 EIA study team

The overall responsibility of the contents of this Document for EIA study report will lie with report preparing institution, namely ERM-C-GEC-Udaya Jv.

Table 5: The study team involved in preparation of this EIA document

Sn.	Name	Designation
11.	Dr. Elena Kreuzberg	Team Leader/ Environmental Management Specialist (International)
12.	Mr. Rikesh Chitrakar	Environment Specialist
13.	Mr. Prakash Panday	Social Development and Resettlement Specialist
14.	Mr. Prayag R. Tamrakar	Biodiversity / Ecology Expert
15.	Mr. Ishwor Man Shrestha	Economist
16.	Mr. Ram Bindu Shrestha	Highway Engineer
17.	Mr. Uddab Raj Chaulagain	Hydrologist
18.	Mr. Saroj Ghimire	Environmental Expert
19.	Mr. Bishnu Maharjan	GIS expert
20.	Mr. Prakash Ulak	Engineering Geologist

2.30 Project location

The project area lies between 27°42' 6.031" North latitude and 85°12' 28.061" East Longitude at Nagdhunga to 27° 51' 20.014" North Latitude and 84° 33' 45.526" East longitude at Mugling. The alignment traverse through the Kathmandu, Dhading and Chitwan District; whereas, Kathmandu and Dhading District lies within the Bagmati zone and Chitawan District lies within the Narayani Zone of the Central Development Region of Nepal. The project Districts of the proposed alignment presented in the following Map.

2.31 Project area delineation

The project area delineation of proposed road alignment will be the area that will receive both beneficial as well as adverse impacts due to its construction and implementation. The project area delineation of this project consists of the settlements located within two kilometres either side from the road centre of the alignment. The ZOI of the project area has been categorized as Direct Impact Area (DIA) and Indirect Impact Area (IIA) which is described below:

Direct Impact Area (DIA) includes all areas where activities, related to the construction, will take place. The area within 150 m on each side from the centre of the road (300m corridor) will be considered as the Direct Impact Area (DIA), because land use change will occur within this corridor and land and

property acquisition will take place within this corridor and direct effects of activities will be evident. This area has a greater likelihood that it will be a subject of impact on human population, private land and other resources, including impacts on physical, biological as well as socio-economic and cultural environment. Thus, it is considered as high impact area. The DIA extent may vary in some locations due to physio-geographic conditions. Stakeholder consultations during scoping stage will provide also valuable feedback regarding DIA. Area for the establishment of burrow sites, quarry sites, spoils management sites, campsites and other facilities will be considered also like DIA. Besides, the labour related issues affect the socio-economic and cultural environment of the project area.

Indirect Impact Area (IIA) is presented by adjacent territory within 2 kilometres of each side of road alignment. In this area, the physical, biological and socio-economic environment will experience impacts during time of construction and beyond. Impacts during construction phase are likely to occur in these areas due to various construction activities. The Rural Municipalities/Municipalities of Kathmandu, Dhading, Gorkha and Chitwan district through which the alignment passes are considered to be the project influenced area. After construction, impacts of operations and road maintenance activities also can be observed within this area. For example, employment opportunities for the development of local communities, new settlements along the road, dust and gas emissions due to high flow of traffic, etc.

Table 6: Districts and wards along the existing KNM alignment

Sn.	District	Municipality/ VDCs	Earlier wards		New Municipality	New wards
			Along the alignment	Indirect influence wards		
1.	Kathmandu	Chandragiri Municipality	3		Chandragiri Municipality	2
2.	Dhading	Chhatredeurali VDC	1		Dhunibeshi Municipality	2
		Naubise VDC	3,5,6,4,7,8,1		Dhunibeshi Municipality	6,7,8,9
		Thakre VDC	2,8,5,4,3	6	Thakre Rural Municipality	6,7,8
		Bhumisthan VDC	4,6,7,8,9		Thakre Rural Municipality	1,2
		Baireni VDC	8,9,7		Galchi Rural Municipality	4,6,7
		Pida VDC	1,3,2		Gajuri Rural Municipality	5,6
		Gajuri VDC	1,2		Gajuri Rural Municipality	1,2
		Benighat VDC	1,9,8,7	2	Benighat Rorang Rural Municipality	3,5
		Dhusa VDC	1,3		Benighat Rorang Rural Municipality	7,8

Sn.	District	Municipality/ VDCs	Earlier wards		New Municipality	New wards
			Along the alignment	Indirect influence wards		
		Jogimara VDC	8,9,1,2		Benighat Rorang Rural Municipality	9,10
3.	Chitwan	Darechok VDC	9,1,2,7,3,4	5	Ichakamana Rural Municipality	3,5

Source: Field Survey, 2016

Table 7: Wards along the Sisnekhola-Dharke Proposed Alignment

Sn.	District	VDC/ Municipality	Wards		New Municipality	New Wards
			Along the alignment	Indirect influence wards		
1.	Kathmandu	Chandragiri Municipality	3		Chandragiri Municipality	2
2.	Dhading	Naubise	3, 4, 2, 1		Dhunibeshi Municipality	6,8,9
	Dhading	Chhatredeurali		1, 3	Dhunibeshi Municipality	2
	Dhading	Jiwanpur	9		Dhunibeshi Municipality	5

Source: Field Survey, 2016

Table 8: Wards along the Benighat-Narshimhatar Proposed Alignment

Sn.	District	VDC	Wards		New Municipality	New Wards
			Along the alignment	Indirect influence wards		
1.	Dhading	Benighat	8		Benighat Rorang RMC	5
2.	Gorkha	Ghyalchok	9, 5, 6	3	Gandaki RMC	7, 8
	Gorkha	Bhumlichok	8, 9, 2, 4		Gandaki RMC	6
	Gorkha	Tanglichok	9		Gandaki RMC	2
	Gorkha	Makaising	1, 2	3	Gandaki RMC	1
3.	Gorkha	Taklung		3	Sahid Lakhana RMC	4
4.	Chitawan	Darechok	7		Ichakamana RMC	3

Source: Field Survey, 2016

3. Data Required For Preparation the EIA Report and Methods of Data Collection

The EIA Study will be carried out in accordance with the EPR of GoN. The National Environmental Impact Assessment Guidelines (1993), NPC/IUCN will be referred to carry out the Study. The EIA study will adopt the methodologies in general as presented in following sub-sections.

3.1 Desk Study

The reports and documents relevant to the project will be reviewed to the extent possible and available. Questionnaires and checklists for interview with local citizens will be developed, and data collection on physical, biological and socio- economic and cultural environment of the project area will be executed. Project site map will be studied and analyzed in detail. The geographic boundary of the influence area will be designated using topographic maps.

3.2 Field Study

After receiving approval for TOR, secondary data will be inquired and field study will be carried out for the collection of baseline information on physical, biological, socio- economic and cultural environment of the project area. Interview, interaction and discussion will be held along the existing KNM alignment and 2km corridor boundary of project influence area to collect information and views of the local citizens.

In order to crosscheck the local information, local officials, particularly Municipality and District Coordination Committee, as well as other administrative and community bodies will be contacted to solicit site specific information. The baseline information data will include, but not limited to the following:

3.2.1 **Physical Environment**

Geology and Land Use: Field investigation will be carried out by the consultant for surface geology, geomorphology and slope stability inventory (in particular identification of existing landslide or erosion-prone areas will be included). Based on the regional geological map prepared by DMG, 1987 and field visit data, distribution of the rocks and soil, rock types and soil types along the road alignment will be analysed. Basing on the field visits, the information on surface geological conditions will be collected. Distribution of the instability area, its level of hazard in soil and rock will be clarified, also basing on field visits. Distribution and location of construction materials will be identified after survey and mapped accordingly. The project team will identify and describe the mitigation measures after

excavation of construction materials and slopes in instability areas or possible instable areas. The spoil disposal area and its stability conditions as well as engineering geological conditions of the road alignment will be designated and clarified in the report. The slope stability conditions will be analysed by measured discontinuities in the field. The measured and estimated data will be plotted in computer program DIP 5.1 in stereographic projection. The data will be analysed in relation to natural hill slope and wedges, formed by discontinuities.

Collected data will include land use patterns and other information, regarding physical resources of the project area. Besides, the categories of land uses will be described, including areas used for cultivation of crops, grazing areas, hilly and forested areas, industrial and urbanized areas, land ownership (Public, Private, and Community forest), common properties, etc. Land use patterns and geology of the project area, as well as other relevant information will be derived from available topographical maps, site observations, geological mapping, site specific photographs, consultations with local communities and inquiring history of landslides in the area. Finally, the probable seismic hazard and its likely impact on physical structures will be predicted and evaluated.

Hydrology: The hydrology assessment will cover estimating of flood magnitudes as the result of precipitation. For most road drainage design purposes, there are three primary categories of hydrologic data sets such as surface water runoff, precipitation and drainage basin characteristics. The evaluation of water runoff includes daily and annual averages, peak discharges, instantaneous values, and high-water marks. Precipitation includes rainfall, snowfall, hail, and sleet characteristics. Drainage Basin Characteristics, more likely, will be estimated or measured from maps, field reviews or surveys.

The information on climatic and meteorological conditions will be gathered, including available historical and modern data on average annual and monthly temperature and precipitation. Records of highs and low parameters, available information on flood levels and areas of influence also will be compiled (including flood maps where available, identification of areas susceptible to flash floods from runoff, etc.), taking into account various intervals for storm events (for example, 5-year, 20-year, and 100-year storm events). Then, available information on climate change projections for the area of study also will be compiled. The conclusion will be based on the analysis of potential effects of temperature/rainfall and storm intensity variations, covering present variability and anticipated effects of climate change along the route, which may be relevant to the design of road segments and bridges.

In the design of road drainage structures, floods are usually considered in terms of peak runoff or discharge in cubic meter per second and hydrographs as discharge per time. In this study, hydrological assessment will be based on secondary sources.

Detail inventory of water resources and their use, surface and ground water, irrigation waters, drinking waters, public taps and other structures will be prepared. Available information on climate change projections for the study area will also be compiled. Finally, the conclusion will be made on the

potential effects of weather climate change along the route, which may be relevant to the design of road segments and bridges.

Physical and Chemical Parameters: The data on Air quality, Water quality and Noise level will be also gathered as baseline information. Air quality data will be collected, at least, in three places along the Nagdhunga-Naubise-Mugling with identification of content for Carbon Monoxide, Sulphur Dioxide, Nitrogen Dioxide, Lead, PM₁₀, Total Suspended Particles and Total Suspended Solid. Noise level will be investigated, at least, in 5 places along the alignment. Samples to identify water quality of major rivers, crossing the road alignment, will be collected during field visits. Physio-chemical parameters such as water temperature, pH, total dissolved solid, Ammonia, Nitrate, Phosphorous, Sulphate, Dissolve Oxygen, Biological Oxygen Demand, Coliform (cfu/100ml), Calcium, Sodium, Magnesium, Potassium, Chlorine, Fluoride, Sulphate, Cadmium, Iron, Copper, Mercury, Lead, Hardness, Oil and grease will be measured.

Moreover, information on chemical features of the project area will be investigated and the impacts of project construction on the chemical environment will be identified and predicted in order to propose appropriate mitigation and enhancement measures.

Land Use: The use of Permanent, Temporary, Barren and Agricultural land will be evaluated along the proposed alignment. Land area required for temporary and permanent acquisition will be estimated. The possible locations for establishment of Labour Camp sites along the highway will be identified and will be described with presentation of environmental management procedure. The traffic study and its analysis will be presented in the EIA report; this study will be based mostly on secondary data. Then, the burrow pit areas and quarry sites, including amount of required construction material, will be designed with estimated amount and area required for stock piling, storage of topsoil, dumping of excavated soil, treatment of slope stabilization of tipping sites and natural slopes, waterlogging and management of runoff water. All relevant data will be collected, analysed and presented in the EIA report. The EIA report will incorporate also information about possible workshop location and store yards for its proper establishment and maintaining healthy environment during its operations. All these locations will be presented in the EMP in order to monitor and safeguard the environment of the project site.

Infrastructure: Besides, existing infrastructures and physical structures that are likely to be affected with the construction works will be taken into account and mitigation measures will be proposed, if relocation and rehabilitation is required. The data on common property resources (Water Supply, Electricity, temples, cultural heritage sites etc.), cultural water resources, unique features (rocks, waterfalls, etc.) will be also collected through field visits.

3.2.2 Biological Environment



Field surveys will be carried out for assessing biological features of the project area: vegetation, wildlife, avian fauna, aquatic wildlife, reptiles and amphibians. The literature sources will be reviewed, first, in order to understand the nature and diversity of flora and fauna of the KNM road section area of influence. Documentation will be gathered for assessment of (i) Forest and vegetation, including flora and fauna in the project area and forest cover quality, (ii) Wildlife in the Project Area, including mammals, birds, aquatic fauna, reptiles and amphibians and possible impacts on them with the construction of road and bridges, (iii) description of wildlife habitat area within or in proximity to the project influence area (Direct or Indirect) and possible impact to habitat, which may further threaten or endanger wildlife species and their movements through landscape, including any zones or locations of known wildlife crossing along the existing alignment, and (iv) Endangered, vulnerable, threatened species or legally protected species, species listed in IUCN red-list, found in the Project Area. Areas of natural habitat for flagship species and critical natural habitats will be identified.

Information regarding terrestrial and aquatic flora and fauna of the existing forest area will be collected and established for baseline information; the impacts of project construction on the flora and fauna will be identified and predicted in order to propose appropriate mitigation or enhancement measures, including any national protection requirements within the project area. Participation of concerned government officials will be facilitated in all possible locations, when needed. Community will be engaged for the assessment of community forests. Besides, fish survey will be carried out at appropriate locations along the Trishuli River and its major tributaries, which will be crossed by the road alignment. The consultant will coordinate and will acquire relevant information from separately contracted consultant team under the NIRTTP project carrying out the Strategic Environmental and Social Assessment (SESA)/Sustainability Study for the entire Birgunj-Kathmandu Corridor and will ensure the required information is included in EIA.

Vegetation Survey: Site visits, line transect walk survey and forest inventory using plot method will be carried out by the consultant. Forest inventory to identify number of trees that will be cleared up for implementation of the Project will be carried out using sample plot method. Vegetation status, forest area, medicinal plants and non-timber forest product (NTFP) will be documented in accordance with the established and prevailing norms and practices. Forest survey will allow to characterize forest resources and their quality within the entire DIA and IIA. Habitat quality of forest areas will be noted for any natural and critical natural habitats. Sample plots will be laid exactly following a systematic sampling technique, where identification of first point is randomly laid and rest of the sample plots are laid at equal distance systematically on the predetermined vegetated area along the proposed KNM alignment. Total number of sample plots to be laid will be determined during the scoping exercise. Each sampling plots with a mosaic have three different sizes of plots within it. The outer plot will be 400 sq. m area (20 m X 20 m) for the enumeration of tree species, second sub-plot of 25 sq. m area (5 m X 5 m) within the outer plot for the enumeration of shrub species and finally, four number of 1 sq. m (1 m X 1 m) plots within the corner of outer plot for herb species will be laid. The number of trees and volume of timber to be cleared will be estimated using quarter girth formula.



Data Analysis: Ecological study of herbs will be conducted by following the methodology proposed by Raunkiaer (1934) and Zoebel *et al.* (1987) while the percentage coverage will be estimated by employing visual observation.

$$\begin{aligned} \text{Frequency of 'A' species} &= \frac{\text{Number of plots in which species 'A' occur}}{\text{Total number of plots}} \times 100 \\ \text{Relative Frequency (RF)} &= \frac{\text{Relative Frequency (RF)}}{\text{Sum of all frequencies}} \times 100 \\ \text{Density of 'A' Species} &= \frac{\text{No. of individuals of 'A' species in all plots}}{\text{Total number of plots}} \times \text{size of the plot} \\ \text{Relative Density of 'A' Species (RD)} &= \frac{\text{Number of individuals of 'A' species}}{\text{Total number of individuals of all species}} \times 100 \end{aligned}$$

Coverage is the percentage of plot area covered by a given species, which will be estimated by visual observation. Relative coverage will be calculated by using the following formulae:

$$\text{Relative Coverage of 'A' Species (RC)} = \frac{\text{Coverage of the 'A' Species}}{\text{Total coverage of all species}} \times 100$$

In case of tree species, basal area and relative dominance will be calculated by using the following formulae:

$$\begin{aligned} \text{Basal Area (BA)} \\ \text{(Area occupied at breast height)} &= (\text{Circumference})^2 / 4\pi \end{aligned}$$

Quantification in terms of numerical strength (number of individuals) volume and biomass will be also provided. The Standing Tree Volume will be calculated on the basis of following formula:

$$\ln(v) = a + b \times \ln(d) + c \times \ln(h)$$

[Where *a*, *b* and *c* are volume constants, *d*: diameter at breast height and *h*: height of the tree]

The tentative cost of forest clearance along the alignment, including cost required for compensatory re-plantation in the ratio of 1:25 and its protection for 5 years (according to Working Policy on Construction and Operation of Physical Infrastructures within Conservation Areas, 2008), will also be estimated and presented in the EIA final report. The area required for the compensatory re-plantation

will be estimated and identified by consulting with respective FUGs and district forest offices during EIA stage. Interaction with DFO office staff and Forest User Groups (CFUGs), photographs, interviews, reference to secondary data etc. method will be adopted in this regard.

Documentation of vegetation status, endangered plants, medicinal and non-timber forest products (NTFPs) will be recorded and likely impact upon and its user group will be identified and will be presented in the final EIA report. Site visit protocols, minutes of interaction with Community Forest User Groups (CFUGs) and Photography will be taken for the documentation and records of conducted activities.

Wildlife and Birds Survey: It is expected that study will document the presence of mammal and bird species as well as their habitats in the project area. To address the intended objectives, special scientific techniques like sign survey along the transects, informal interviews and random surveys will be carried out for the documentation of species occurring in the project area. Then, the valuable ecological habitats of the bird and mammal species in the project area will be identified. Basing on gathered information, the possible impacts during road construction and operations on bird and mammal fauna and their habitats will also be identified. The project team will evaluate and finally recommend the pragmatic measures to avoid, mitigate or compensate the impact of the proposed project on bird and mammal fauna and their habitats following to mitigation hierarchy recommendations in road projects. The approaches and methodology that will be used for the study include:

Literature Review

The Consultant will gather and review the previous study reports about wildlife in Mid-Hill area and, in particular, in KNM section, reviewing publications of National Parks, wildlife reserves and other relevant literature. The information of the bird and mammal fauna distribution, occurrence, habitats and diversity, relevant to project area will be obtained and analyzed.

Field Survey

During field studies, the animals and birds sighted directly will be recorded with description of their locations (GPS Coordinates and Elevations), behavior and biology. Additionally, habitat attributes of the area of sightings will be recorded. Habitat attributes will be described by vegetation types and coverage, proximity to water bodies, ecosystem type; attributes will include also other ecological characteristics. Random line transects will be laid in and around the project area in order to observe wildlife.

Sign Survey

That to detect the presence of secretive animals within the project area, the special surveys of possible animal signs along transect will be conducted. Animal signs include footprints, feces

(pellets/scats/droppings), diggings, scents, which have specific characteristics for each species. They allow detecting presence of species within the area without their visual observations. Animal signs will be looked for and recorded on distance in 5m left and right along the transect trails. All found signs will be identified and documented following standard field protocols, including GPS locations and habitat attributes for each identified sign.

Fish Survey: Assessment of the fish biodiversity (species and abundance) will be carried out using internationally accepted ecological assessment techniques to describe habitats, communities or species of fish with respect to their ecological significance at local, national and regional level. The fish sampling will be done by Wading Method and will be carried out at Trishuli River area.

Reptile and Amphibians: Assessment of reptiles and amphibians will be carried out following internationally accepted ecological assessment techniques to collect species information, assess the habitats and its ecological significance, etc.

3.2.3 Socio-economic and Cultural Environment

Information on general socio-economic conditions of the people of the project affected Municipalities/Rural Municipalities shall be collected through focus group discussions or informal public consultation at the Municipalities/Rural Municipalities level participatory rural appraisal methods as applicable. The information shall be collected through pre-designed checklists, which shall include key socio-economic characteristics of the people of all class, caste and economic categories. The information shall include demographic features of the households, migration pattern, employment, landholding size, agricultural production, food sufficiency, other productive resources, livestock raising, , access to different social infrastructures such as drinking water, education, health-posts, general health, hygiene and sanitation condition, etc.

The people occupying the land in the ROW shall be the focus of study. Such households shall be surveyed for their socio-economic conditions using structured questionnaires. The survey question shall include, the family size, education, health, religion, economic activities, land holding size, agricultural production, horticultural production, livestock, household income (farm and off farm), general household expenditures etc. to unravel the living status of the affected households.

Information on social infrastructures such as schools, health posts, drinking water etc. shall be collected from the Municipalities/Rural Municipalities or Ward offices, consultation with village elites and through focus group discussions at Municipalities/Rural Municipalities levels to assess the current situation of these facilities and the general sanitation status of the project area community. Information shall also be collected on the conditions of these facilities, their adequacy and beneficiary population.

All sites of religious, cultural and historical importance on the directly project affected area shall be visited and observed in the area. The social, cultural and religious values and significance of these sites shall be noted through consultation with the communities. Possibilities of protecting, conserving or

relocating such sites would also be examined thoroughly in consultation with local people, priests and village elite.

At the same Information on socio-economic and cultural features of the project area shall be collected, including population, ethnic composition, employment facilities and education, health and sanitation conditions. Similarly, cultural and religious sites, sources of energy, infrastructures, market centers, agricultural practices and development activities in project area shall be collected and compiled.

Table 9: Specific Data Collection and Analysis Technique

Environmental Components	Data Collection Techniques	Analysis Technique
Physical Environment		
Topography	Map interpretation and field investigation	Descriptive
Physiography	Literature review	Descriptive
Geology and Soil	Field observation and literature review	Descriptive
Soil Erosion and Landslides	Field observation and literature review	Descriptive
Land Use	Literature review and map interpretation	Percentage analysis
Climate (Rainfall and Temperature)	Literature review and records from DHM	Average analysis
Hydrology and Drainage Pattern	Map interpretation and field investigation	Descriptive plus quantitative
Air Quality	Field observation	Lab test
Water Quality	Field observation	Lab test
Noise Level	Field observation	Lab test
Seismicity	Literature review	Comparison
Biological Environment		
Forest and Vegetation	Field inventory and literature review	Descriptive
Wildlife (Mammals, Avifauna, Herpetofauna)	Field inventory, interview and literature review	Descriptive
Rare, Endangered and Endemic Species	Field inventory and literature review	Descriptive and Comparison
Ethnobiology	Field observation and key informant interview	Descriptive
Socio-economic and Cultural Environment		
Population and other demographic indicators including ethnicity and religion	Literature review (District and VDC profiles, CBS Records)	Percentage and average analysis
Literacy	Literature review (District and VDC profiles, CBS Records)	Percentage and average analysis

Occupation	Literature review (District and VDC profiles, CBS Records) and Discussion	Percentage and average analysis
Public Health and Sanitation	Observation and Interview, Literature Review	Descriptive
Infrastructures/Service Facilities	Literature review (District and VDC profiles, CBS Records) and Discussion	Descriptive
Law and Order	Group Discussion and Interview	Descriptive
Religious, Archaeological and Historical Sites	Observation and Literature review (District and VDC profile)	Descriptive
Religious and Cultural Activities	Observation and Group Discussion	Descriptive

3.3 Data Processing

Primary and secondary data will be processed, available technologies such as Microsoft office, GIS etc. Available maps will be interpreted. The Physical and Biological information will be tabulated to the extent possible. Socio-economic and cultural information will be cross-checked and analyzed. Socio-economic information will be processed using computer- spreadsheet, tabulated and presented in the text as appropriate.

3.4 Public Consultation

While preparing the EIA Study and according to Rule 7 of EPR, the concern people and institutions will be informed regarding the Proposal, the EIA Study will be conducted and on possible impacts of implementation of the proposal on the socio-economic and cultural, physical, chemical and biological environment. 15 days Public Notice seeking the written opinions from the concerned stakeholders will be also published in a national newspaper. Similarly, Public Notice will be affixed at the offices of Rural Municipality, Municipality, School, Health Post and other local bodies as far as possible of the concerned District, and a public deed of act (*Muchulka*) will be collected confirming the pasting of such notice. Any comments or suggestions from the concerned stakeholders and affected peoples will be collected.

Public hearing will be carried out at four locations along the entire stretch of road alignment, covering all project affected Rural Municipalities and Municipalities. Public hearings will be carried out after preparing the draft of EIA. For Public Hearing, a leaflet will be prepared in Nepali language with major findings, potential impacts and suggestions as well as suggested mitigation measures and will be distributed to all concerned stakeholders during Public Hearing Programme. The program will be conducted with participation of representatives of DoR, DFO, DDC, CDO, NGOs, CBOs, political parties and other public representatives. Further, the recommendation letters

will be collected from all project affected rural and urban municipalities and will be attached to the final EIA report.

3.4.1 Matters to be included in the Recommendation Letters

- Impacts on local schools, Health posts, community infrastructures due to project and proposed mitigation measures;
- Other impacts on local environment due to the project and mitigation measures proposed;
- Impact on Community Forests and its users, and mitigation measures proposed. Any subject matter that is not concerned with the project will be clearly indicated.

3.5 Identification, Prediction and Evaluation of Impacts

Identification, prediction and evaluation of impacts is one of the most important stages of EIA process that to ensure road sustainability, targeted environmental management and social wellbeing. The project team will carry out analysis of proposed project activities at pre-construction, construction and operation stages that to identify and predict possible impacts. All impacts will be sorted out on their nature: physical, biological and socio-economic, and on their value – positive and adverse using extrapolative method, expert judgment and available maps.

The impacts will be classified in terms of their extent (site specific, local, and regional), magnitude (low, medium, and high) and duration (short-term, medium-term and long-term).

The Numerical values, provided by national EIA guidelines, 1993, will be used that to evaluate identified and predicted impacts in terms of their importance, significance and nature. The possible impacts will be assessed covering both adverse and beneficial ones. Standard checklists will be utilized as a methodology adopted for impact identification and prediction. A sum of impact values for magnitude, extent, duration provides a maximum of 140-point score and a minimum of 25 points. Impact values or scores for each of the selected alternatives are summed up and multiplied by the probability of occurrence of the particular impact. Then, final impact scores for all alternatives are compared and the highest value detected corresponds to the greatest potential for environmental impact.

3.6 Preparation of EIA Report

Basing on the analysis of impacts and their nature, the measures to increase beneficial impacts and mitigate adverse impacts will be proposed in accordance with mitigation hierarchy in road projects. The identification and selection of measures will be based on site-specific issues, past experience on similar projects, and expert judgments. The monitoring plan to assess the effectiveness of mitigation measures during implementation will be prepared. After analysis of all relevant information, the Consultant will prepare an Environmental Management Plan (EMP), covering the cost for mitigation as well as prescribed monitoring activities and selected indicators of mitigation effectiveness. The EMP will be divided into two sections:

- First, a “project owner’s” version containing the comprehensive set of mitigation, management and monitoring measures, requirements, and institutional responsibilities for

both construction and operation stages in order to fully address all identified impacts within reasonable budgets.

- Second, a monitoring program including indicators, parameters/thresholds, and locations, frequency with a methodology for monitoring to enable verification that mitigation measures are successful.



Review of Plan, Policies, laws, Guidelines and Conventions

Limiting within the scope of works, following policies, legislation (with amendments), guidelines, and appropriate information will be incorporated into the final EIA report. They are as presented hereunder:

4.1 Constitution of Nepal

4.2 Plan and Policies

- Forest Policy, 2071
- Land acquisition, Rehabilitation and Resettlement Policy, 2015
- National Transport Policy, 2001
- Environmental Assessment in the Road Sector of Nepal: A Policy Document, GESU / DOR, January, 2000
- Fourteen Three Years Plan, 2073
- Working Policy on Procurement of Forest Land for Other Provision, 2063
- 20 Year Road Plan, 2002-2022
- Nepal Biodiversity Strategy and Action Plan 2014- 2020

4.3 Acts

- Environment Protection Act, 1996
- CITES Act, 2074
- Public Road Act, 1974
- Aquatic Life Protection Act, 1961
- Water Resources Act, 1992
- Local Governance Operationalization Act, 2017
- Forest Act, 1993
- Land Acquisition Act, 1978
- Plant Protection Act, 1973
- Soil and Watershed Conservation Act, 1982
- Labor Act, 1992
- Child Labour (Prohibition and Regulation) Act, 2000 (2056)

4.4 Rules and Regulations

- Environmental Protection Rules 1997 as amended 1997, 1999, 2007
- Water Resources Regulation, 1993
- Land Acquisition Rules, 1969
- Forest Rules, 1995 (Revised 2062)
- Local Self Governance Rules, 1999
- Labor Rule, 1994



4.5 Review of Guidelines and Manuals

- National EIA Guidelines, 1993
- ESMF, 2007 (Addendum 2013)
- Environmental Management Guidelines, GESU/DoR, July, 1997
- Land Acquisition Guidelines, 1989
- EIA Guidelines for Forestry Sector, 1995
- Forest Produce Collection, Sale and Distribution Guidelines, 2000
- National Adaptation Program of Action (NAPA) 2010
- Procedure Regarding the Procurement of Forest Land for Other Provision, 2063 (2006)
- Resettlement Policy Framework, NPC, 2072.
- National Standard for Sound Quality, 2069
- National Ambient Air Quality Standard, 2069 (2012)
- Inventory Guidelines of community forest, 2009

4.6 International Conventions and Treaties

- Biodiversity Convention, 1992
- Convention (No.169) Concerning Indigenous and Tribal Peoples in Independent Countries, 1991
- ILO Convention 169
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), (1973 amended 1979)

4.7 World Bank Operational Policies

With respect to Environmental Strategies, the World Bank pursues three interrelated objectives:

- (1) Improving the quality of life
- (2) Improving the prospects for and the quality of growth
- (3) Protecting the quality of the regional and global environmental commons.

Concerning Safeguard Policies: the operations of World Bank are guided by a comprehensive set of policies and procedures, taking into account the Bank's core development objectives and goals, the instrument for pursuing them, and specific requirements for Bank financed operations. The core of this guidance lies in the Operational Policies (OPs), which are short, focused statements that follow from the Bank's Articles of Agreement, its general conditions and from policies specifically approved by the Board will be reviewed as follows;

- *Environmental Assessment EA (OP 4.01)*
- *Natural Habitats (OP 4.04)*
- *Pest Management (OP 4.09)*
- *Indigenous People (OP 4.10)*
- *Physical Cultural Resources (OP 4.11)*
- *Involuntary Resettlement (OP 4.12)*
- *Forests (OP 4.36)*
- World Bank Group Environmental Health and Safety Guidelines

Review of all listed acts, rules, manuals, guidelines and policies will be presented in EIA report.

4. Required Time, Budget and Experts

5.1 Time

The tentative schedule for the EIA study and over-duration required for its approval is presented in the Table below.

Table 10: Work schedule for conducting EIA study

Sn	Activities	Month/Weeks of 2017/18															
		Nov				Dec				Jan				Feb			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Desk Study: Mobilization of Study Team, Literature Review																
2	Preparation and Submission of Draft TOR																
3	Submission of Final TOR and its approval																
4	Field Study and Investigation																
4.1	Interaction with Stakeholders and Collection of Suggestions and Comments																
5	Analysis and Prediction of Impacts																
6	Development of Mitigation and Enhancement Measures and Preparation of Monitoring plan																
	Draft Report Preparation and Submission																
7	Public Hearing																
8	Comments on EIA Report																
9	Submission and Approval of Final Report																

5.2 Estimated Budget

The total estimated budget for the EIA study is NRs. 20,00,000/- (NRs. Twenty Lakhs only) excluding VAT.

5.3 Study team

A multi-disciplinary team of subject matter specialists with good orientation on environmental aspects will be involved in the Study. The composition will be as under:

- Team Leader/ Environmental Management Specialist (International)
- Environment Specialist
- Highway Engineer
- Engineering Geologist
- Hydrologist
- Social Development and Resettlement Specialist
- Economist
- Biodiversity / Ecology Expert (A team with forest expert, wildlife expert, ornithologist, fisheries and herpeto-fauna expert will be mobilized for the collection of information.)

Field level assistants and other support staffs will be engaged to collect field level data, verify secondary information, and conduct data analysis.

5. Scope Determined For the Preparation of the Report

In order to meet the above set objectives, the EIA study will collect and analyze environmental information in the project area comprising of proposed road alignment and its RoW of 50 m also up to the 2-km corridor for the road alignment. The EIA study should make every effort to quantify and evaluate site-specific impacts to the extent possible within the direct impact zones.

The likely beneficial and significant adverse environmental issues from the implementation of proposal during construction and operation stages upon Physical, Biological, Socio-economic and Cultural environment will be identified and predicted, and, then, they will be further assessed during the study as it is described in the following sub-sections. The EIA report will address these issues, basing on primary data collected during the EIA baseline study. Anticipated issues of the project development, which will be covered by the EIA study, are presented below.

6.1 Beneficial issues

Beneficial issues due to implementation of the proposal during construction and operation of the project will be assessed and further enhancement measures will be suggested (as mentioned in Chapter 9). They are mainly related to improvement of livelihoods of the local people. The likely beneficial issues, envisaged during construction and operation stages, are:

❖ Construction Stage



- Generation of Employment
- Opportunities of New Income Generating Activities (IGAs)
- Increase in Land Values
- Enhancement in Technical Skills and Know-How
- Easement of former Environmental Problems
- Improved Access to Services and Decrease in Transportation Cost
- Gender Specific Benefits
- Exploitation of Untapped Potentials
- Poverty Alleviation

❖ **Operation Stage**

- Easy access for local people of project Rural Municipality and adjoining Rural Municipalities to existing highway and urban areas
- Opened markets to generate more income for livelihood at local level
- Opportunities for tourism development and enhancement of local economy
- New updated and constructed infrastructure (highway) with safe, fast and clean driving conditions
- Enhance in living standard and lifestyle of local communities
- Facilitated Industrial Development along the proposed alignment.
- Increased economic activities/employment opportunities
- Appreciation of Land Value
- Access to social services for local people
- Opportunities for diversification of local economy

6.2 Adverse Issues

The project activities during construction and in subsequent operation and maintenance stages may create also a number of adverse issues and impact environment due to interactions between project actions and local environment. The possible adverse issues during construction and subsequent operation and maintenance stages in terms of Physical, Biological, Socio-economic and cultural environment, will be identified, predicted and evaluated as stated in the following sections.

6.2.1 **Physical and Chemical Environment**

Physical issues that will be assessed during the EIA study will be included as follows:

❖ **Pre-construction Stage**

- Loss of physical infrastructures due to Site clearance

❖ **Construction Stage**

- Temporary disruption and relocation of existing services and public utilities
- Change in Land use and loss of productive topsoil
- Landslides, Slope Destabilization and Soil Erosion
- Potential hazards due to blasting from Tunnel
- Hazards due to spoil disposal and construction wastes
- Disruption and blockage upon natural drainage, runoff water
- Pollution of Water Resources
- Contamination of Soil



- Water logging
- Quarrying of Construction Materials
- Stone Crushing Plants
- Stockpiling and transportation of Materials
- Air Pollution
- Potential hazards caused by bitumen and other toxic chemicals
- Hazards related to noise pollution
- Erosion of river banks
- Solid Waste Management
- Issue related to Road Safety during construction
- Occupational Health and Safety of Labor and accidents
- Loss of physical and cultural structures and infrastructures
- Issues related to establishment of labor camps and contractor's camp

❖ **Operation Stage**

- Landslide and slope stability along proposed new sections
- Air pollution
- Noise
- Cross drainage outfall and gullies
- Traffic safety and accident
- Waste Management

6.2.2 Biological Environment

The biological issues that will be assessed during the EIA study will include followings.

Pre-Construction Stage

- Loss of vegetation and scattered trees due to site clearance

❖ **Construction Stage**

- Clearing of Forest and loss of vegetation and grazing area
- Disturbance to natural habitats and critical natural habitats
- Habitat fragmentation and barrier effect for wildlife movement
- Disturbance to biodiversity and wildlife
- Damage of aquatic habitats with the construction of bridge foundations along the River
- Use of forest products and fuel wood by the construction workers during construction activities
- Hunting and poaching of wild animals by labors
- Forest fire

❖ **Operation Stage**

- Illegal felling of trees
- Hunting and poaching of birds and wildlife

- Damage of aquatic habitats
- Road safety concerns in wildlife crossing area
- Issues related to aquatic life due to vehicle drop in the river due to accident
- Spillage of oil, diesel in the river due to accident

6.2.3 Socio-economic and cultural environment

The following social and economic issues will be assessed during EIA study for impact identification and prediction.

❖ **Pre-Construction Stage**

- Loss of private property and assets
- Grievances raised by the locals and labours if any

❖ **Construction Stage**

- Loss of productive land
- Land and property acquisition, compensation, resettlement and rehabilitation
- Disruption of community structure
- Livelihood issues
- Conflict in or with nearby host community
- Issues related to vulnerable indigenous people
- Impact due to damages of community infrastructures
- Potential issues of conflicts associated with road construction work forces
- Road safety issues
- Issues related to cultural assets
- Issues on landscape aesthetics
- HIV/AIDS and other diseases

❖ **Operation and Maintenance Stage**

- Possible ribbon development along the road alignment
- Increase in accidents
- Development of settlements and market places along the proposed new sections
- Increase in sell and use of alcoholic products along the new proposed sections
- Girl trafficking
- Migration and immigration
- Increasing in prostitution
- HIV/AIDS and other diseases

6.2.4 Cumulative Issues

- Likely spread of diseases
- Influence of outside people
- Increase of multicultural practice
- Landscape simplification
- Invasive species expansion

- Deforestation
- Land use change with negative impact on soil erosion and drainage systems

6.2.5 Management of the detected Issues

Some project-level issues can be easily managed through avoidance or minimization of negative impacts. Others need more thorough consideration and development of mitigation strategy at the stage of EIA.

The road is envisaged to be constructed with labor-intensive technique as per the intent of the Proponent. The management issues associated in this project will be of two pronged: one with local people working as unskilled labors, and second is contractor. The work will also include several stakeholders including Consultant, NGOs/CBOs, sub-contractors and others. Thus, following management issues needs to be addressed:

- Minimization of social conflicts.
- Availability of local labors for labor-intensive construction works.
- Measurement and payment modality without gender biasness.
- Modality of initiating social development, vulnerable community development plan, income generation activities and their long-term sustainability, including post-project continuation and cut-off point of involvement of the project.
- Traffic management during construction.
- Managing spoils during construction phase.
- Managing engineering camps worker's camp and workshops.
- Managing Quarry and Burrow pits.
- Managing access to indigenous people PAF/SPAFS, vulnerable groups

6.2.6 Enhancement and Other Issues

Enhancement issues like protection of springs/spouts, bar-peepal chautaries, gumbas and other issues (formation of public tap stands, construction of vegetable market sub-center, nurseries for felled trees, application of bio-engineering measures, cross road structures for wildlife and rural citizens, etc.) need to be considered. Issues that are not incorporated in this report shall be incorporated in the final EIA. EIA Report shall be prepared based upon baseline data collection and public interactions.



6. Impact on the Environment from Implementation of the Proposal

The proponent should incorporate the impacts on following environmental aspects during the EIA study and its report:

- Social and Economic,
- Cultural and Physical,
- Biological, and
- Chemical.

The proponent should elaborately (i) identify, (ii) predict and (iii) evaluate each impact of the project activities on the environment in and around the project area quantitatively, to the extent possible, for both construction and operational & maintenance stages. Impact identification, prediction and impact

evaluation have been carried out by using standard methods and techniques, and will be documented in the final EIA report. The lessons and experience of other hill roads in Nepal should be evaluated and considered.

The impact description will include its nature, magnitude, extent and duration using appropriate symbols and definitions with due consideration of the relevant Guidelines in general, and that of GESU/ DoR in Nepal in particular. Magnitude of each impact should be further classified into (i) site specific, (ii) local and (iii) regional. The duration of impact should be further classified into (i) short-term, (ii) medium-term and (iii) long-term. Environmental impacts can also be presented in the matrix form.



7. Other Alternatives for the Implementation of the Proposal

The alternative analysis of the project shall consider the following issues:

- No action option
- Project alternatives
- Alternative alignment
- Alternative design and construction approach
- Alternative schedule and process
- Alternative resources

8. Measures to Remove Any Negative Impact That May Be Noticed While Implementing the Proposal (Mitigation Measures)

Two types of mitigation measures will be included in the EIA Report. They are benefit augmentation measures and adverse impacts mitigation measures. Further, the mitigation for the adverse impact will be preventative, minimizing, compensatory, and corrective/rehabilitative measures. The mitigation measures will be suggested for including at both construction and operational stages. Suggested mitigation measures will be pragmatic and proven by application practices in the past. Monitoring plan will be drafted, proposed and recommended for all the issues and impacts identified from the EIA study. However, the report will focus more on detail site specific Environmental Management Plan, identifying and specifying:

- Quarry sites
- Environmentally safe tipping areas for surplus mass of excavated or any other material
- Work Camp sites
- Crusher plant sites
- Compensatory plantation, bioengineering etc.
- Stabilization of existing land slide area

Further, environmental enhancement issues may also be proposed as follows;

- Orientation of the EIA and Monitoring Plan to authority & contractor groups during pre-construction phase.
- Skill enhancement training such as Bioengineering, slope maintaining, Road accident awareness, etc.
- Plantation of tree nursery along the road and in other possible areas with engagement of community in planning and planting activities, especially within the community forest area near the road alignment.
- Paved shoulders at destination/roadside, establishment of Bus bays to avoid traffic obstructions.
- Wider embankment at some possible areas along the alignment for stacking materials for maintenance ensuring free flow of traffic movements.
- Establishment of traffic signals and follow of traffic rules.

Role and Responsibilities of other Institutions

DOR as a proponent is responsible to carry out environment assessment study and detail design of the proposed road. The local bodies such as Municipality, Rural Municipality of project affected Districts are the major stakeholder providing opinions, suggestions, and recommendation letter to get approval of final EIA report. Besides, the Ministry of Physical Infrastructure and Transport is responsible to review the EIA document and to provide decision for its implementation by approving the final version of the document. Awarded contractor will be responsible to carry out construction activities in environmentally friendly manner, avoiding significant adverse impact on ambient environment. Moreover, the Environment Management Action Plan (EMAP) shall be updated as per provisions mentioned in approved EIA report prior to the execution of construction works. Preparation of site specific EMAP will be coordinated with the joint study from proponent and contractor for its proper implementation during construction and operation phase. DOR will coordinate and supervise the monitoring activities, carried out by supervision consultant during the time of operation phase to provide service and maintenance. Monitoring and supervision consultant will be a major responsible body to maintain quality of construction works, including monitoring and supervision of all construction related activities. Besides, proponent DOR and supervision consultant will also be responsible to monitor construction-associated activities such as labor camp establishment, waste disposal, earthwork excavation for road widening, operation

of quarry and stock piling of construction material, occupation health and safety of labor etc. in order to maintain healthy environment condition of the project area.

Further, the proponent DOR office will be responsible to recruit length-man along the chainage to maintain road conditions and drainage clearance during the time of operation. The office will be responsible to allocate maintenance fund for periodic maintenance and yearly maintenance.

Particulars of the cost and returns of the proposal

The study team will include analysis-based cost for benefits augmentation and adverse impacts mitigation measures to the extent possible in the EIA report. The environmental cost sharing, if any, will also be included in the main EIA report.

9. Matters To Be Monitored While Implementation of the Proposal (Environmental Monitoring Plan)

Environment Management and Monitoring Plans will be prepared to safeguard and preserve existing environment from the implementation of the proposed project. The plan will comprise actions and construction activities that are likely can produce impact on environment during construction and operation phases with its proposed measures for mitigation. The monitoring plan will categorize the type of monitoring, such as compliance monitoring and impact monitoring not only for construction and operational stages, but also sub-categorized in terms of physical environment, biological environment, socioeconomic and cultural environment. Monitoring parameters and/or indicators will also be identified. The Plan will also include schedule of monitoring methods, location and responsible agency for monitoring as well as required work force for the monitoring. Responsibility of monitoring agencies, including estimated cost for environmental monitoring, will be included in the report. The plan will further comprise list of institutions that will be involved in the project implementation at different project stages as well as for supervision and monitoring.

Table 11: Monitoring

Parameter / Impact	Verifiable Indicators	Verification method	Implementing agency	Monitoring agency	cost
Baseline/pre-construction phase (all domain)					
Compliance/construction phase (all domain)					

Impact/Operation and maintenance phase (all domain)					

10. Other Necessary Matters

The other necessary matters, included in the EIA Report, will cover the relevant information, reference list, annexes, maps, photographs, tables and questionnaires requiring at the time of carrying out survey. Also, included will be the details of public notice, deeds (muchulka) of pasting public notice and recommendation letters from concerned Districts, Rural Municipalities and Municipalities.

The Report Format for EIA Study will follow Schedule 6 of EPR, 1997. All requirements indicated in Schedule 6 of the EPR will be included and addressed in the EIA report. The report will also be compatible with Environmental and Social Impact Assessment (ESIA) report of world bank requirement as the project funded by the bank and will fulfil all the required information for the bank provisions. The conclusions and the recommendations of the Study will also be drawn and presented at the end of the report.

Deliverable

The Proponent will submit ten copies of the Final EIA Report to the Ministry of Population and Environment via Ministry of Physical Infrastructure and Transport / DOR, in accordance with the Rules 10 of EPR, 1997.

11. Format of the EIA Report

Table of Content

कार्यकारी सारांश (Executive Summary in Nepali)

Executive Summary Acronyms and Abbreviations

1. Name and Address of the Proponent and Institution/s Preparing the Report

- 1.1 Name and Address of Proponent
- 1.2 Name and Address of Institution preparing EIA Report

2. Introduction

- 2.1 The Project Background
- 2.2 Context of the Proposed Project (including new construction, upgrading of road, bridges and tunnel)
- 2.3 Basis of Selection of the Road (including Bridge and Tunnel) Alignment
- 2.4 EIA Study Team and Declaration
- 2.5 Objectives of EIA
- 2.6 Rationale for Conducting EIA

3 Description of the Proposed Project

- 3.1 Type of Proposal
 - 3.1.1 New Construction (Road, Bridge and Tunnel)
 - 3.1.2 Upgrading (Road, Bridge and Tunnel)
- 3.2 Objectives and Anticipated Benefits from the Proposed Project
- 3.3 Salient Features of the Project: (*With Location map and Alignment map of proposal in topographical map, goggle map and drawings*)
- 3.4 Project Setting
 - 3.4.1 Delineation of the Project Area –
Direct Impact Zone (DIZ): -Construction Area including Row-formation width, drain/shoulder, Slope required for construction (Area within 500 m radius from the center of the project implementation for bridge)
Indirect impact Zone (IIZ): -Adjoining Wards of Municipality and Rural Municipality (Within 2 Km from Center line of road beside DIZ)
Zone of Influence (Zoi): -Affected Municipality and Rural Municipality

3.5 Technical Characteristics of the Project/ Road alignment and Bridge site

3.6 Technical Standard of Road and Bridges

3.7 Relevancy of the Proposed Project

3.8 Project Implementation Approach and Modality

3.9 Requirement of the project (Human resource, Energy, Materials, Investment and Land)

Table: Energy to be used for the project

Sn.	Name of the Energy to be used (Specify Renewable & Non-Renewable)	Source of Energy	Amount (Volume, Weight etc) to be used	Estimated Carbon Emission	Remarks
					Follow IPCC guidelines and methods

Table: Material to be used for the project

Sn.	Name of the material to be used	Amount (Volume, Weight etc)	Remarks

Table: Land use type along the road alignment

Sn.	Land use type		TL (km)	Area (ha)	Percentage	Remarks
1	Private land					
	a.	Forest				
	b.	Khet				
	c.	Bari				
	d.	Others				
	Total					
2	Government land					
	Forest	National				

		Community				
		Leasehold				
	Total					
	b.	Barren				
	c.	Others				
3.	Settlement area					
4.	Others (if)					

3.11 Existing Road Network

3.12 Details of the Proposed Road Alignment including Bridges and Tunnel

3.13 Project Components and Construction Schedules*

4. EIA Approach and Methods

4.1 Desk Study/Literature Review and Reconnaissance Visit

4.2 EIA Screening, Scoping, and Preparation of Terms of Reference

4.3 Field Survey and Investigations for EIA

4.3.1 Physical and Chemical Environment

4.3.2 Biological Environment

4.3.3 Socio-economic and Cultural Environment

4.4 Database Preparation, Analysis, Prediction and Assessment of Impact

4.5 Data Analysis and Interpretation

4.6 Impact Identification, Prediction and Assessment/Evaluation Method

4.7 Prescription based on Mitigation Hierarchy (Avoid, Minimize and Mitigate) including Enhancement Measures

4.8 Preparation of Environmental Management Plan and Monitoring Plan

4.9 Public Notice, Public Hearing and Stakeholders Consultations

4.10 Public Disclosure (as per GoN and World Bank Requirements)

4.11 Data gaps and limitations

5. Existing Environmental Condition (Follow the ToR for EIA to incorporate all the relevant issues but not limited to the followings)

5.1 Physical Environment

- 5.1.1 Topography and Geomorphology
- 5.1.2 Climate and Hydrology
- 5.1.3 Regional Geology
- 5.1.4 Engineering Geological Condition
- 5.1.4 Hazards and Hazards Mapping
- 5.1.5 Construction Materials
- 5.1.6 Soil Types and Their Distribution
- 5.1.7 Seismicity
- 5.1.8 Landslide and Slope Stability
- 5.1.9 Air Quality
- 5.1.10 Noise Level
- 5.1.11 Water Quality
- 5.1.12 Land Use
- 5.1.13 Solid Waste Management

5.2 Biological Environment

- 5.2.1 General
- 5.2.2 Types of Forest by Vegetation
- 5.2.3 Types of Forest by Ownerships
- 5.2.4 Distribution of Tree Species along the Road Alignment
- 5.2.5 Trees to be felled along the Road Alignment
- 5.2.6 Ecological Resources Use
- 5.2.6 Ethno-Botanical Knowledge and Practice
- 5.2.7 Fauna in the Project Area
- 5.2.8 Aquatic Biology and Fisheries
- 5.2.9 Protected, Rare or Endangered Flora and Fauna Species
- 5.2.10 Protected Areas
- 5.2.11 Biological Environmental Benefits and Economic Value

5.3 Socio-economic and Cultural Environment (Caste, Ethnic & Gender disaggregated information shall be required)

- 5.3.1 Demography of the Project Area
- 5.3.2 Caste, Ethnicity, Religion and Language

5.3.3 Settlement Pattern and Housing Structures

5.3.4 Profile of Project Affected Families

5.3.5 Gender Situation

5.3.6 Profiles of Service Providing Institutions

5.3.7 Access to GoN Service facilities

5.3.8 Access to Private Service facilities

5.3.9 Occupational Status

5.3.10 Work Force and Employment 5.3.11In and Out Migration Pattern

5.3.11 Land Holding Pattern

5.3.12 Land Use Pattern

5.3.13 Land Value

5.3.14 Agriculture Practices

5.3.15 Food Sufficiency Level

5.3.16 Off-farm Activities

5.3.17 Non-Timber Forest Products

5.3.18 Household Income and Expenditure

5.3.19 Cottage and Small Industries

5.3.20 Market Centre and Marketing

5.3.21 Mode of Transportation

5.3.22 Sources of Energy

5.3.23 Historical, Cultural, Religious and Aesthetic Sites and Values

5.3.24 Tourism

5.3.25 Identification of Potential Economic Activities

5.3.26 Local NGOs and Community Based Organizations

5.3.27 Identification of Vulnerable Groups

5.3.28 Vulnerability of Project Affected Families

6. Consultations and Public Hearing

6.1 Consultations with local communities and stakeholders

6.2 Public Notice and Public Hearing

6.3 Public Consultation and Disclosure Plan

7. Alternatives of the proposal

7.1 Proposal Design, Location and Implementation Methods

7.1.1 Route of Road Alignment

7.1.2 Project Design

7.1.3 Construction Approach and Methods

7.1.4 Project Implementation Time Schedule

7.1.5 Construction Materials

7.2 Comparison of Capital Investment and E&S Costs and Returns

7.3 Adverse E&S Impacts

7.4 New State of Art technology and process in road construction (Tunneling, Sortcreeting with rock bolt to replace the heavy retaining walls, rock cutting without using blasting materials etc.)

7.5 Use of Energy and Energy Saving Measures during Project Implementation

7.6 No Action Alternative/Do Nothing Scenario

8. Specific Impacts of the implementation of the proposal on the environment

8.1 Beneficial Impact

☐ Generation of Employment ☐ Opportunities of New Income Generating Activities (IGAs) ☐ Increase in Land Values ☐ Enhancement in Technical Skills and Know-How ☐ Easement of former Environmental Problems ☐ Improved Access to Services and Decrease in Transportation

Cost ☐ Gender Specific Benefits ☐ Exploitation of Untapped Potentials ☐ Poverty Alleviation ☐ Others (Relevant of all domains)

8.2 Adverse Impact *(Shall incorporate all the categories of impacts mentioned in Part-A: Part-2, 3.1 iv and V of ToR and all the other relevant impacts identified by the EIA))*

8.2.1 Physical environment

8.2.1.1 Pre-construction phase

8.2.1.2 Construction phase

8.2.1.3 Operation and maintenance phase

8.2.2 Biological environment

8.2.2.1 Pre-construction phase

8.2.2.2 Construction phase

8.2.2.3 Operation and maintenance phase

8.2.3 Socio-economic environment (Loss of private land and assets, Loss of Income Sources, Restriction on access to natural and community/public resources, Loss of Common Property Resources (CPR), Impacts on Indigenous People, Loss of Traditional Occupation etc.)

8.2.3.1 Pre-construction phase

8.2.3.2 Construction phase

8.2.3.3 Operation and maintenance phase

8.2.4 Cultural (physical and social)/religious/historical) Environment

8.2.4.1 Pre-construction phase

8.2.4.2 Construction phase

8.2.4.3 Operation and maintenance phase

8.2.5 Chemical Environment

8.2.5.1 Pre-construction phase

8.2.5.2 Construction phase

8.2.5.3 Operation and maintenance phase

8.3.6 Cumulative Impacts of the projects

9. Impact Analysis and Evaluation

9.1 Impact analysis and Evaluation

9.2 Significance of the Impacts (Scoring Tables)

10. Measures to reduce or control the impact of the implementation of the proposal on environment (shall give Site Specific EMAP for Project)

10.1 Institutional Arrangement for EMP Implementation

10.2 Human Resources Requirements and Capacity Assessment EMP Implementing Agency

Table: Benefits augmentation and enhancement measures

Domains	Activities/ Issue	Location/s	Impact	Augmentation, and enhancement measures	Cost	Responsible agency	Verification Methods
Construction Phase							
Operation and maintenance Phase							

--	--	--	--	--	--	--	--

Table: Adverse Impact Mitigation Measures

Domains	Activities/ Issue	Location/s	Impact	Augmentation, and enhancement measures	Cost	Responsible agency	Verification Methods
	Pre-Construction Phase (all domain)						
	Construction Phase (all domain)						
	Operation and maintenance Phase (all domain)						

10.3 Summary of Benefit Augmentation and Mitigation Cost (EMP Cost)

Table: Summary of Benefit Augmentation and Mitigation Cost

Sn.	Description	Cost	Remarks

10.4 International and National Best Practices for Enhancement & Mitigation Measures

11. Environmental Monitoring and Audit

11.1 Environment Monitoring Plan

11.2 Institutions Role in Project

11.3 Environmental Monitoring Organization Structure

11.4 Environmental Monitoring and Evaluation

11.4.1 Methods of Monitoring and Evaluation

11.4.2 Monitoring and Evaluation Indicators, Period and Responsible

11.4.3 Inputs for Monitoring and Evaluation

Table: Monitoring

Parameters/ Impact	Verifiable indicators	Verification method	Location/s	Implementing agency	Monitoring agency	cost
Baseline/pre-construction phase (all domain)						
Compliance/construction phase (all domain)						
Impact/Operation and maintenance phase (all domain)						

{Review and follow monitoring indicators as specified in ESMF where possible}

11.5 Environmental Audit

11.5.1 Types of Audit

11.5.2 Agencies Responsible for Audit

11.5.3 Elements in the Audit Report

11.5.4 Estimated Budget for Audit

12. Review of Policies and Regulatory Frameworks

12.1 Constitution of Nepal

12.2 Plans and Policies

12.3 Acts and Rules

12.4 Manuals/Guidelines/Directives

12.5 Environmental Standards

12.6 International Laws /Conventions

12.7 World Bank Policies

13. Conclusions

References Annexes

- Approved SD and ToR
- Map with environmental component (quarry site, spoil disposal site, stock piling, camp site, forest, impact zone, hot mix plant)
- Public Notice and participants of public hearings
- Deed of enquiry

- Recommendation letter (District Forest Office, Community Forestry, Rural Municipality/Municipality, School, Health Post, Conservation Area/National Park/Buffer Zone/Chure and another concerned stakeholder)
- Minutes (Focus Group Discussion-FGD, public consultation/interaction/meeting)
- Supporting document of cost estimation of land and structure
- Supporting document of cost estimation of compensatory tree plantation
- Water quality analysis test report; Baseline data on Air and Noise quality
- List of Flora and Fauna with scientific name (*italics*)
- Sample filled checklist
- Photographs
- Others (If Any)



References

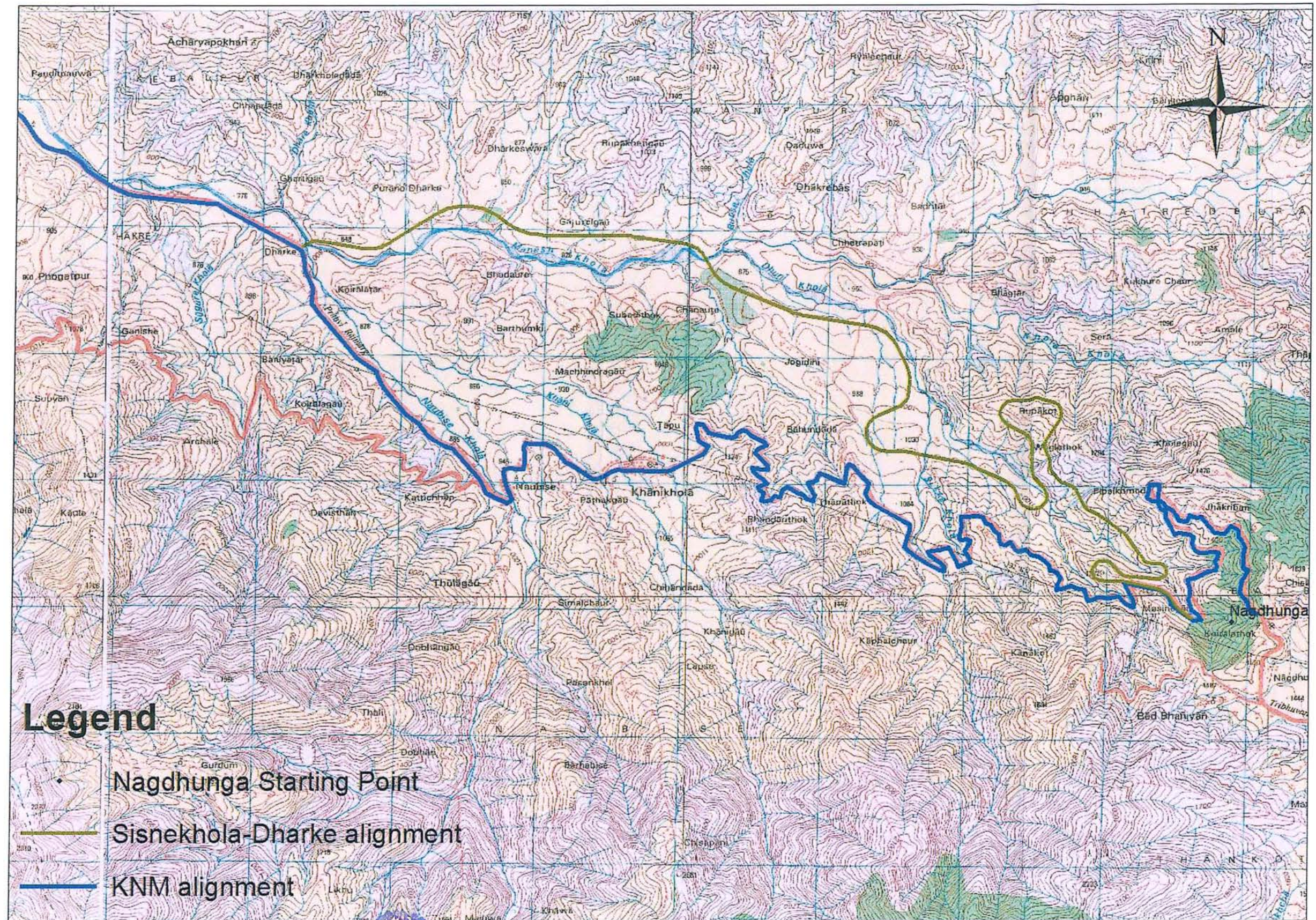
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5. Government of Nepal, MOPIT, DOR, Planning and Design Branch, 2013
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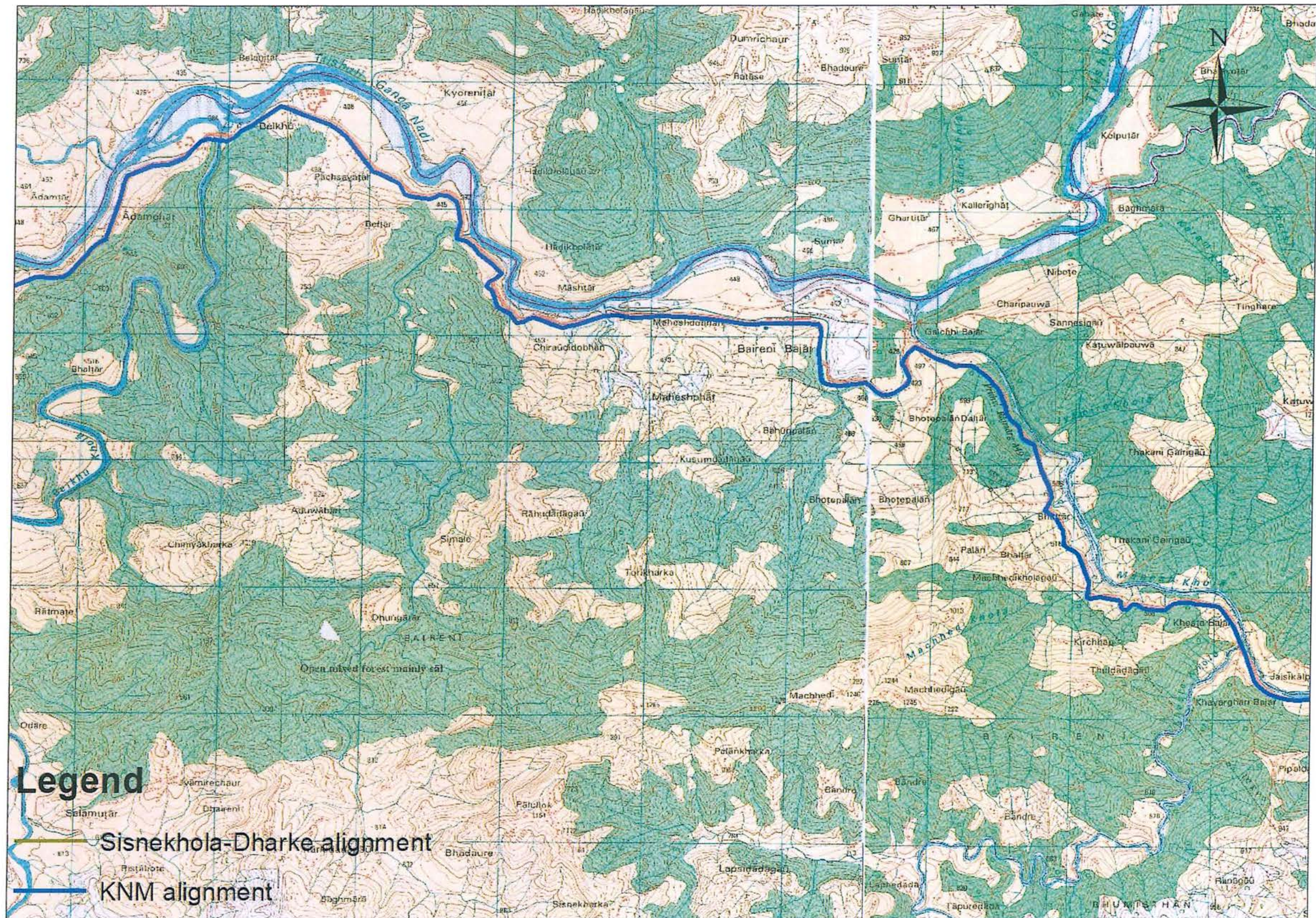
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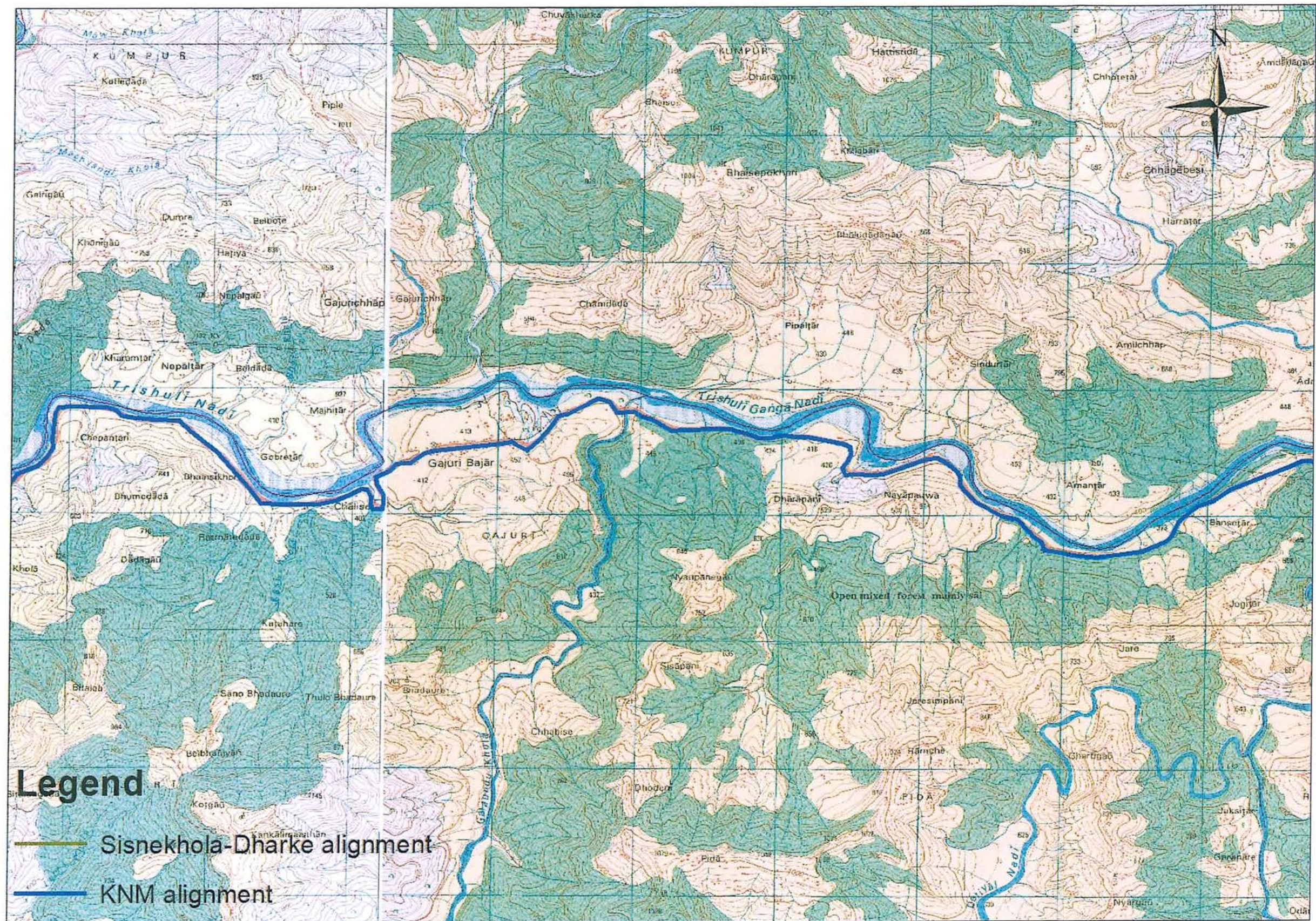
- Annex-1: Location Map/Road Alignment Route Map**
- Annex-2: Baseline information table;**
- Annex-3: Checklist and Questionnaire for EIA study**

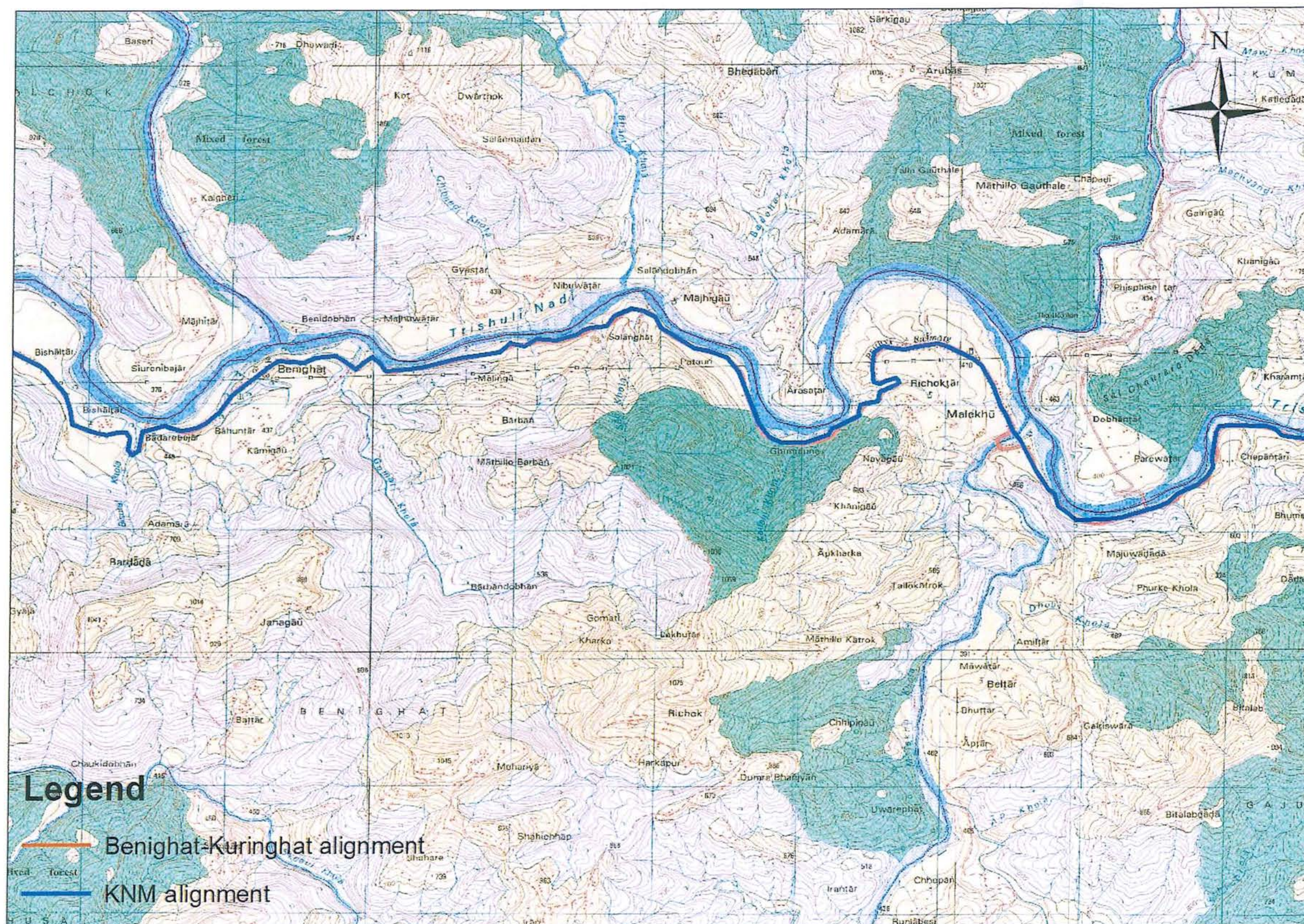
Annex-1: Location Map/Road Alignment Route Map



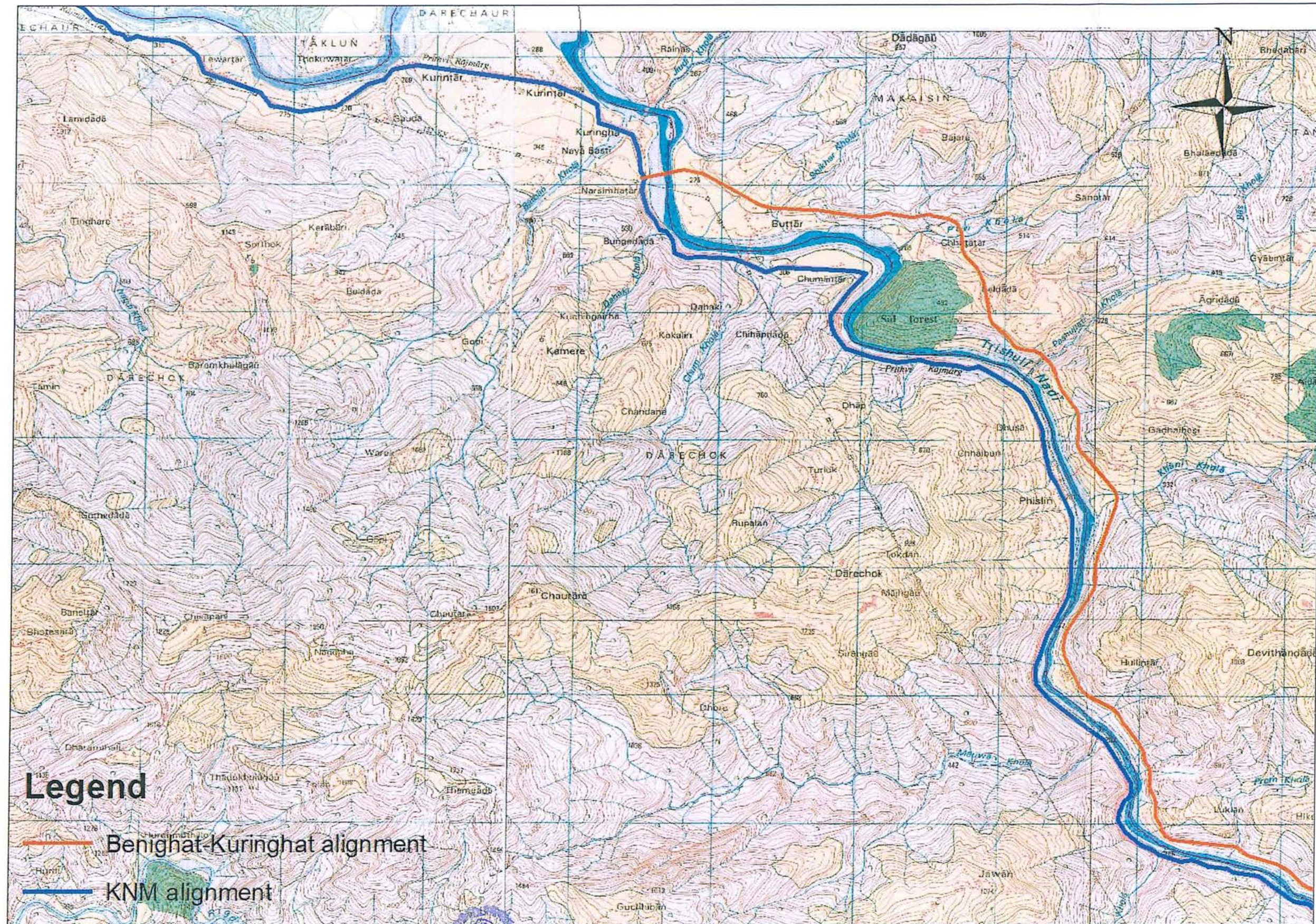


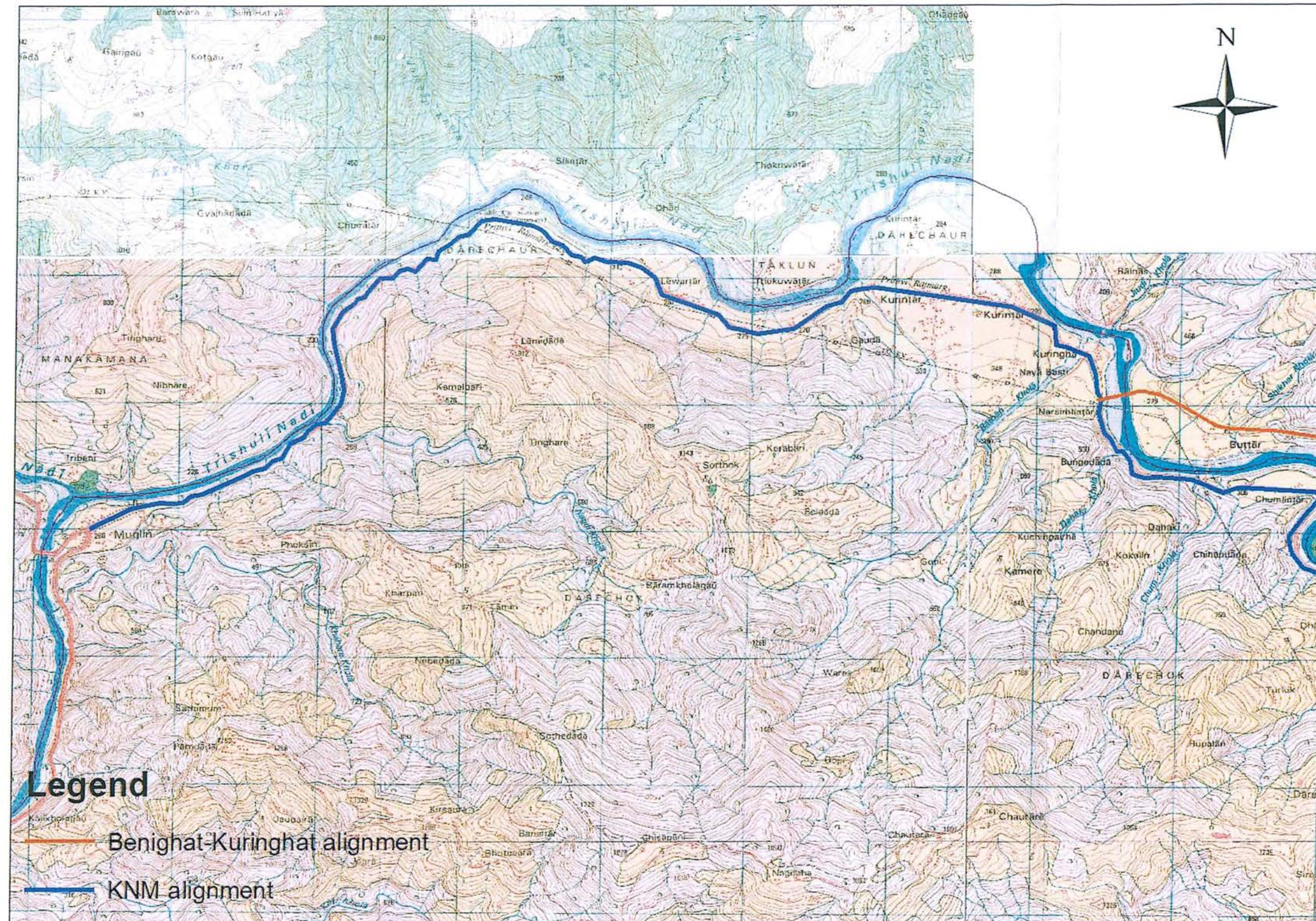












Annex-2: Baseline information table

Annex-2 Baseline information table to be filled

Sn,	Section chainage	Length (m)	Elevation range (m)	Cross slope degree	Aspect	Geology	Topography	Soil type	Land use pattern
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									

Annex-3: Checklist and Questionnaire for EIA study

Annex-3 Questionnaire for interview, interaction and discussion

1. In your view; what are the major adverse environmental impacts in Physical, Biological and Socio-economic and cultural aspects with the construction and operation of road alignment?
2. What could be the major beneficial impacts with the implementation of the Highway?
3. In your view, what should be done to mitigate the adverse environmental impacts that you have mentioned?
4. Are there any other likely impacts with its implementation?
5. Do you have any suggestions to safeguard social and environmental condition of the project area with its implementation and operation?

Additional Checklists for EIA

Major exporting goods (local products) from the area		
Lighting energy source (hhs)	Electricity	
	Kerosene	

	Solar	
	Other (specify)	
Cooking energy source (hhs)	Fuel wood	
	Bio-gas	
	LPG	
	Other (Specify)	
Migration Pattern (hhs)	In migration & purpose	
	Out migration & purpose	
	Out migration (India) & purpose	
	Out migration (Foreign) & purpose	
Market place (name and distance)	Local Market and distance	
	Major Market and distance	
Community forest in the area	Name of the CF and area coverage in ha.	
Historical, cultural, religious and tourist attraction places located in the area.		

Access Road Requirement: Total length of access road (left and right bank), total area, owner name and land to be acquired;

Suitable Camp Site Location:
Stockpiling Area:

Possible Quarry site: Distance from highway, area and quantity

Spoil Disposal sites:

Status of Air, Water and Noise Quality:

Name of forest, Type and Location	Tree Species	Animal Species	Forest Resource Use Pattern

Forest Clearance Checklist

Lt Bank or Rt Bank	Land Ownership/Name of the Forest	Name of Tree	Number of trees to be cut down	Average circumference (cm)	Average Height (m)

Project Impact on Infrastructures

Sn.	Distance from Highway	Project affected features and description (Electricity Poles, irrigation canal, water supply pipes, taps, local kuwa/springs, Buildings, Temples etc.	Photograph numbers

Annex 4:- Existing Physical Infrastructure within the Project Area

List of Existing Tracks within the RoW of alignment

Sn.	Chainage along the KNM	Road name	Approx. length affected Width (m)	Road Type	Linkage between
1.					
2.					
3.					
4.					
5.					
6.					

List of existing bridges

Sn.	Chainage along the KNM	Location Name	Bridge over	Bridge type	Connecting location
1.					
2.					
3.					
4.					
5.					
6.					

Existing Electric Poles and Pylons

List of 66 and 132 kv Pylons situated close to the proposed alignment

S.N.	Chainage	Type of electric pole/number	Capacity (KV)	Approximate Distance in (m) from KNM	Side
1.					
2.					
3.					

Water Supply situation in project districts

Water Supply in Project Areas

Major Drinking Water Supply in the Project Area

S.N.	Chainage along the KNM	Type of water supply	Approx. length affected (m.)	Number of HHs using water supply
1.				
2.				
3.				

Irrigation Facility in Project Area

List of major Irrigation Canals identified within the proposed alignment

S.N.	Chainage	Canal Type	Approx. Length Affected (m.)	Canal Name
1.				
2.				
3.				
4.				

Annex 5:- Checklists for construction material availability and quarry sites

Sources of local construction materials available in the road sections

Types of Materials	Location	Estimated quantity in m ³ .	Total Quantity in m ³	Tentative distance in (m) from KNM road center
Natural Sand	a			
	b			
	c			
Natural Gravel Subbase Course	a			
	b			
Crushed Stone Subbase Course	a			
	b			
Crushed Stone Base Course	a			
	b			
Natural Gravel Concrete Aggregate	a			
	b			
Crushed Stone Concrete Aggregate	a			
	b			

Types of Materials	Location	Estimated quantity in m ³ .	Total Quantity in m ³	Tentative distance in (m) from KNM road center
Crushed Stone Asphalt Aggregate	a			
	b			
Natural Granular Material	a			
	b			
Stone Block	a			
	b			
Boulder	a			
	b			

Present Traffic Situation in Sector

Availability of lands for labour camps

Proposed Labour Camp locations along the Highway alignment

S.N.	Location	KNM Chainage	Land use type	Area in m ²	Land owner	Distance from KNM alignment
1						
2						
3						
4						
5						
6						

Possible Crusher Plant Location

Proposed Crusher Plant Locations along Highway alignment

S.N.	Location	KNM Chainage	Land use type	Approx. Area (m ²)	Land owner	Distance from KNM alignment
1.						
2.						
3.						
4.						
5.						
6.						

Spoil Estimation and identified spoil disposal sites

Estimation of Excavation Quantity, Usable Quantity and Disposable Spoil Quantity (in m³)

S.N.	Road Section / Chainage	Quantity from excavation	Excavated quantity required for Filling	Excavated quantity for Pavement and Construction	Total Usable Quantity	Disposable Spoil amount
1.						
2.						
3.						
4.						
5.						
6.						

Identified Spoil Disposal Sites

S.N.	Location of Disposal Site	Land Type	Distance from Road Section Chainage	Estimated area in m ²	Estimated volume for disposal in m ³	Protection required
1.						
2.						

S.N.	Location of Disposal Site	Land Type	Distance from Road Section Chainage	Estimated area in m ²	Estimated volume for disposal in m ³	Protection required
3.						
4.						

काठमाण्डौ(नागदुङ्गा)-नौविसे-मुग्लिन सडक आयोजना

क्र.सं.....

सडक विभाग(बैदेशिक महाशाखा)

सडक खण्ड :

ज्वागल, ललितपुर ।

सामाजिक-आर्थिक अध्ययनको लागि घरधुरीसंग लिईने अन्तर्वाताको प्रश्नावली

अन्तरवार्ता लिनेको नाम:

अन्तरवार्ता मिति : २०७४/ /

१. सामान्य जानकारी

१.१ उत्तरदाताको नाम: उमेर:.....वर्ष, लिंग:..... शिक्षा: पेशा:

.....

१.२ घरमुलीको नाम: उमेर:..... वर्ष, लिंग:..... शिक्षा: पेशा:

१.३ साविक ठेगाना: जिल्ला गा.वि.स/न.पा. वडा नं. गाउँ/टोल

१.४ हाल जिल्ला गाउँपालिका/न.पा. वडा नं. गाउँ/टोल

१.५ जाती/जनजाती

२. निम्न/आर्थिक अवस्था कमजोर भएका पारिवार

क) महिला घरमुली (विधवा) ☐

ख) महिला घरमुली (पुरुष जागिरको लागि बसाई सरेका

)☐

ग) शारीरिक असक्तता भएको व्यक्ति घरमुली ☐

ड) कमाउन नसक्ने जेष्ठ नागरिक घरमुली ☐

३. जनसंख्यिक तथा सामाजिक विवरण

३.१ पारिवारका सदस्यहरूको विवरण (घरमूली सहित)

क्र.सं.	घरमूली संगको नाता	लिंग	उमेर	वैवाहिक अवस्था	शैक्षिक योग्यता	विद्यालय छाड्ने (६-१८ वर्ष)	पेशा	हालको बसोबास ^६

संकेत :

१.लिंग : पुरुष-१, महिला-२, तेस्रो लिङ्ग-३

२. वैवाहिक अवस्था : विवाहित-१, अविवाहित-२, पारपाचुके-३, विधवा/विधुर-४

३. शिक्षा : १- निरक्षर, २- साक्षर, ३- कक्षा ५ सम्म, ४- कक्षा ६ देखि १० सम्म, ५- एस.एल.सी./एस.इ.ड. देखि १२ कक्षा सम्म, ६- स्नातक वा माथि

४. विद्यालय छाडेको : हो-१, होइन-२

५. पेशा : कृषि-१, जागिर-२, व्यापार/व्यावसाय-३, कृषि मजदुर-४, गैर कृषि मजदुर-५, विद्यार्थी-६, वैदेशिक रोजगार-७, गृहिणी-८, पेन्सनवाला-९, केहि पनि नगर्ने-१०, शारीरिक असक्तता-११, अन्य (खुलाउने

६. हालको बसोबास: घरमा भएका-१, घरमा नभएका-२

३.२ वसाई सराई सम्बन्धी जानकारी

३.२.१ के तपाई यस क्षेत्रमा वसाई सरि आउनु भएको हो ? १. हो ☐ २. होइन ☐

यदि हो भने

१ वसाई सरिआएको ठाँउ	बसाई सरेको वर्ष	३ कारण	३ स्थाई/अस्थायी	५ उद्देश्य	कैफियत

संकेत:

१. बसाई सरिआएको ठाउँ : आफ्नै गा. वि.स.-१, आफ्नै जिल्ला-२, जिल्ला बाहिर-३, अन्य-४

२. कारण : सडक सुविधा-१, अन्य-२

३. स्थाई/अस्थायी : स्थाई-१, अस्थायी-२

४. उद्देश्य : रोजगारी-१, व्यापार व्यावसाय-२, शिक्षा-३, अन्य-४

३.२.२ के तपाईंको परिवारका सदस्य विशेष उद्देश्यले घर छोडी अन्यत्र गएका छन् ? १. छन् ☐ २. छैनन् ☐

यदि छन् भने

क्र.सं.	१ घर छोडी गएको ठाउँ	गएको		३ स्थायी / अस्थायी	३ उद्देश्यहरु	५ लिंग
		साल	महिना			

१. घर छोडी गएको ठाउँ : नेपाल भित्र-१, भारत-२, खाडी/अरब-३, अन्य देशहरु (अमेरीका,अष्ट्रेलिया आदि)-४

२. स्थाई/अस्थायी : स्थाई - १, अस्थायी-२

३. उद्देश्यहरु : रोजगारीको लागि-१, व्यापार व्यावसाय गर्न-२, जागिरको लागि-३, शिक्षाको लागि-४, अन्य (.....)-५

४. लिंग : पुरुष-१, महिला-२, तेश्रो लिंग-३

४. आर्थिक सूचना

४.१ कृषि तथा घर जग्गा सम्बन्धि विवरण

(क) तपाईं वा परिवार सदस्यको नाममा गा.पा./वडा भित्र जग्गा छ ? छ ☐ छैन ☐

यदि छ भने तलको विवरण भर्नुहोस् ।

क्र.सं.	स्वामित्व	जग्गा (रोपनीमा)				कैफियत
		खेत	बारी	खरवारी	वन	
१	आफ्नै					

२	सगोलको					
३	कमाई आएको					
४	कमाउन दिएको					
जम्मा						

(ख) गा.पा. वा वडा बाहिर कुन ठाउँमा जग्गा छ ?

क्र.स.	ठाउँको नाम	जग्गा (रोपनीमा)				कैफियत
		खेत	वारी	खरवारी	बन	

४.२ तपाईंको आफ्नै कृषि उत्पादनले परिवारलाई कति महिना खान पुग्छ ?

क्र.स.	खान पुग्ने महिना	√ चिन्ह लगाउने	क्र.स.	खान पुग्ने महिना	√ चिन्ह लगाउने
१	१२ महिना वा सो भन्दा माथि		४	४ देखि ६ महिना सम्म	
२	१० देखि १२ महिना सम्म		५	३ महिना भन्दा कम	
३	७ देखि ९ महिना सम्म		६	शुन्य महिना	

४.२.१ अपर्याप्त खाद्यान्नको आपूर्ति परिवारमा कसरी गर्नुहुन्छ ? (प्राथमिकता १, २, ३, ४, ५)

ऋण/सापट लिएर	☐	ज्यालादारी	☐	नोकरी	☐
व्यवसाय बाट आम्दानी	☐	मुलुक बाहिर काम	☐	फलफूल विक्रीबाट	☐
पशु र पशुजन्य पदार्थ विक्रीबाट	☐	पेन्सन	☐	अन्य.....	☐

४.३ मुख्य वाली लगाएको क्षेत्रफल र त्यसको उत्पादन विवरण

४.३.१ तपाईंको जमिनमा उत्पादन हुने मुख्य वाली के हो र यसबाट कति आम्दानी गर्नुहुन्छ ?

क्र.सं.	मुख्य बालीहरू	गन्तव्य कति क्षेत्रफलमा बाली लगाउनु भएको छ ?	ले कति उत्पादन गर्नु भयो ? (परिमाण के.जी.)	आफ्नो उत्पादन लगभग कति जतिको विक्री गर्नु हुन्छ ?	मौसमी बजार मूल्य प्रति के.जी.को कति पर्छ ?
खाद्यान्न तर्फ					
१	धान			जानकारी नभएको छ	
२	मकै				
३	कोदो				
४	दाल/गोडागुडी				
५	अन्य (खुलाउने)				
६	अन्य (खुलाउने)				
नगदेवाली तर्फ					
१.	आलु				
२.	तोरी				
३.	तरकारी				
४.	उखु				
५.	अन्य (खुलाउने)				
६.	अन्य (खुलाउने)				
जम्मा					

४.३.२ उत्पादित बालीहरू कुन ठाउँमा लगेर विक्री गर्नु हुन्छ ? ☐ १. घरबाटै ☐ २. नजिकको बजारमा भए नाम.....

४.४ फलफूल सम्बन्धि विवरण

४.४.१ तपाईंको घरमा कुनै पनि किसिमका फलफूलका अथवा अन्य रुख विरुवाहरू छन् ? ☒ छन् ☐ छैनन्

यदि छन भने कुन कुन जातको फलफूलका बोटहरू छन् ?.....

४.४.२ फलफूल विक्री गरेर लगभग कति आम्दानी गर्नु भयो ? रु.....

४.४.३ उत्पादित फलफुलहरु कुन ठाँउमा लगेर विक्री गर्नु हुन्छ ? ☐१. घरबाटै ☐२. नजिकको बजारमा भए नाम.....

४.५ गत वर्ष रासायनिक मल तथा किटनाशक औषधीको प्रयोग गर्नु भयो ? १. भयो ☐ २. भएन ☐
यदि रासायनिक मल तथा किटनाशक औषधीको प्रयोग गरेको भए लगभग कति रुपैया खर्च गर्नु भयो ?
रु.....

४.६ पशुपंक्षी सम्बन्धि विवरण

४.६.१ के तपाईंले पशुपंक्षीपालन गर्नु भएको छ ? ☒ छ ☐ छैन ☐
यदि छ भने के के पालन गर्नु भएको छ ?

क्र.सं	पालन	पशुपक्षीको प्रकारहरु			
१	पशु पालन तर्फ	१.	२.	३.	४.
		५.	६.	७.	८.
२	पंक्षी पालन तर्फ	१.	२.	३.	४.
		५.	६.	७.	८.

४.६.२ पशुपंक्षी विक्री पनि गर्नु हुन्छ ? ☒ गर्छु ☐ गर्दिन ☐
यदि पशुपंक्षी विक्री गर्नु हुन्छ भने, विक्रीबाट वार्षिक आम्दानी लगभग कति जति हुन्छ ? रु.....

४.६.३ उत्पादित पशुपंक्षीहरु कुन ठाँउमा लगेर विक्री गर्नु हुन्छ ? ☐१.घरबाटै ☐२. नजिकको बजारमा भए नाम.....

४.७ पशुपंक्षीको उत्पादन र विक्री

४.७.१ पशुपंक्षीजन्य पदार्थहरु जस्तै दुध, दहि, ध्यू, अण्डा आदी पनि उत्पादन गर्नु हुन्छ ? ☒ गर्छु ☐ गर्दिन ☐
यदि गर्नु हुन्छ भने के के उत्पादन विक्री गर्नु हुन्छ ?
.....

४.७.२ उत्पादित विक्रीबाट लगभग कति जति आम्दानी हुन्छ ? रु.....

४.७.३ उत्पादित पदार्थहरु कुन ठाँउमा लगेर विक्री गर्नु हुन्छ ? ☐१. घरबाटै ☐२. नजिकको बजारमा भए नाम.....

५. जंगल

५.१ तपाईंको परिवारको नाममा वडा/गा.वि.स. भित्र जंगल छ ? ☒ छ ☐ छैन ☐

यदि छ भने कति रोपनी ? कुन जातका कति रूख छन् ?

.....

.....

५.२ जंगलबाट केहि पैदावार लिनु हुन्छ ?

काठ ☐ पातपतिङ्गर ☐ दाउरा ☐ अन्य ☐

६. गत वर्षको आम्दानी र खर्चको विवरण

६.१ गत वर्ष तपाईंको परिवारले लगभग कति आम्दानी गर्नुभयो ?

क्र.स.	आम्दानीको स्रोतहरू	रकम रु.	कसले (पुरुष-१, महिला-२)	कैफियत
१				
२				
३				
४				
५				
ज्ञानाज्ञा जम्मा				

६.२ गत वर्ष तपाईंले निम्न शीर्षकमा कति खर्च गर्नुभयो ?

क्र.स.	खर्चको विवरण	रकम रु.	कैफियत
१	खाद्यान्न (अन्नपात)		
२	फलफूल तथा तरकारी		
३	नुन, तेल, मसला आदि		
४	लुगाफाटा		
५	शिक्षा		
६	स्वास्थ्य उपचार		
७	दाउरा मट्टितेल, ग्यास		
८	पानी, विजुली		
९	कृषि सामग्री (मल, विउ, औजार)		
१०	दाना (पराल, मकै, घाँस)		

क्र.स.	खर्चको विवरण	रकम रु.	कैफियत
११	ऋणको व्याज तिर्न		
१२	यातायात र संचार		
१३	धर्मिक कार्यको लागि/चाडवाड मान्न		
१४	गहना किन्न		
१५	मनोरञ्जन		
१६	सामाजिक कार्यको लागि चन्दा		
१७	चिया सुर्तिजन्य तथा मादक पदार्थमा		
१८	माछामासु		
	ज्ञाज्ञाज्ञाघ अन्य (खुलाउने)		
	ज्ञाज्ञाज्ञाद्र अन्य (खुलाउने)		
	ज्ञाज्ञाज्ञाछ जम्मा		

७. स्वास्थ्य सम्बन्धि सेवाहरु

७.१ गत वर्ष तपाईं वा तपाईंको परिवारको सदस्य विरामी हुनु भएको थियो ?

१. थियो

२. थिएन

यदि विरामी हुनु भएको थियो भने कस्तो किसिमको रोग लाग्यो उल्लेख गर्नुहोस ?

क्र.स.	रोगहरु	प्रभावित सदस्य संख्या		कैफियत
		महिला	पुरुष	
१	भाडापखाला			
२	टाईफाईड			
३	मलेरिया			
४	जण्डिस			
५	प्रशुति सम्बन्धि			
६	आइखस्ने (पाठेघर)			
७	छाला सम्बन्धि			

क्र.स.	रोगहरु	प्रभावित सदस्य संख्या		कैफियत
		महिला	पुरुष	
८	ग्यासट्रिक			
९	छम			
१०	आँखा सम्बन्धि			
११	हैजा			
१२	एच.आई. भि.			
	अन्य (खुलाउने)			

७.२ तपाईंको परिवारका सदस्यहरु विरामी हुदा सर्वप्रथम कहाँ उपचार गर्न जान हुन्छ ? प्राथमिकताक्रमका आधारमा उल्लेख गर्नुहोस ।

क्र.स.	स्वास्थ्य संस्था	^१ प्राथमिकता क्रम
१	अस्पताल	
२	प्राथमिक स्वास्थ्य केन्द्र	
३	स्वास्थ्य/उप स्वास्थ्य चौकी	
४	प्राइभेट क्लिनिक	
५	नर्सिङ होम	
६	आर्युवेदिक औषधालय	
७	धामिभाँकी/ भारफुक	
८	अन्य (खुलाउने)	

^१प्राथमिकता क्रम: पहिलोलाई १, दोस्रोलाई २, तेस्रोलाई ३, चौथोलाई ४.....

७.३ तपाईंलाई एच.आई.भी./एड्स रोगको बारेमा केहि जानकारी छ ?

१. छ २. छैन

यदि थाहा छ भने कहाँबाट जानकारी पाउनु भयो ?

१. छिमेकीले भनेर ☐ २. रेडियो/टि.भी. ☐ ३. पत्रपत्रिका ☐ ४. सरकारी निकाय ☐

५. गैर सरकारी संस्था ☐ ६. सामाजिक कार्यकर्ता ☐ ५. अन्य (खुलाउने)

यस सम्बन्धी संचालित कार्यक्रम तथा प्रभावित जनसंख्या बारेमा वताई दिनुहोस् ।

७.४ तपाईंको विचारमा एच.आइ.भी./एड्स लाई कसरी लिन सकिन्छ ? यस सम्बन्धी कस्ता कार्यक्रम संचालन गर्नु उपयुक्त होला ?

७.५ विगत पाँच वर्षमा तपाईंको परिवारका कुनै सदस्यहरुको मृत्यु भएको थियो?

१. थियो ☐ २. थिएन ☐

यदि भएको थियो भने कसको कति वर्षको उमेरको हुँदा मृत्यु भयो ?

क्र.स.	लिंग	मृतकको उमेर	मृत्यु हुनाको कारण	मृत्यु भएको साल	कैफियत

संकेत- ^१लिंग : पुरुष-१, महिला-२

८. सामाजिक सहभागिता

८.१ के तपाईं वा तपाईंको परिवारका सदस्य कुनै सामाजिक संस्थाको सदस्य हुनुहुन्छ?

१. छ ☐ २. छैन ☐

यदि हुनुहुन्छ भने कुन कुन संस्थामा सहभागी हुनुहुन्छ?

क्र.स.	विवरण	साधारण सदस्य संख्या		कार्यकारी सदस्य संख्या		कैफियत
		पुरुष	महिला	पुरुष	महिला	
१	कृषक समूह					
२	सहकारी संस्था					
३	वन उपभोक्ता समूह					
४	आमा समूह / महिला समूह					
५	खानेपानी उपभोक्ता समूह					
६	सिंचाई/कुलो समूह					

क्र.सं.	विवरण	साधारण सदस्य संख्या		कार्यकारी सदस्य संख्या		कैफियत
		पुरुष	महिला	पुरुष	महिला	
७	आय आर्जन समूह					
८	गैर सरकारी संस्था					
९	युवा क्लब					
	अन्य (खुलाउने)					
	अन्य (खुलाउने)					

९. शिप तथा तालिमको विवरण

९.१ तपाईंको परिवारका सदस्यहरुमा कस्तो प्रकारको सीप र अनुभव छ ?

क्र.सं.	गतिविधि	पुरुष संख्या	महिला संख्या
१	बाँसको काम गर्ने		
२	काठको काम गर्ने		
३	गारो लगाउने		
४	ग्याभिएन बुन्ने		
५	सिमेन्ट पलास्टर गर्ने		
६	बन नर्सरी सम्बन्धि ज्ञान		
७	अन्य (.....)		

९.२ तपाईंको परिवारका सदस्यहरुले कुनै सीपमूलक तालिम लिनुभएको छ भने उल्लेख गर्नुहोस् ।

क्र.सं.	तालिम विवरण	सहभागि (पुरुष-१, महिला-२)	आयोजक संस्था	समय अवधि

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संकेत- १आयोजक संस्था : घरेलु तथा साना उद्योग-१, जिल्ला कार्यलयहरु-२, पुर्व गा.वि.स.-३, गैर सरकारी संस्था-४, निजि संस्था -५

१०. आधारभूत संरचना

१०.१ तपाइको घरमा चर्पिको सुविधा छ ?

१. छ ☐ २. छैन ☐

यदि छ भने कस्तो खालको चर्पि छ ?

क्र.स.	चर्पिको प्रकार	कैफियत
१	खाल्डे/अस्थायी	
२	दुङ्गाको-अर्ध-आधुनिक	
३	आधुनिक	

१०.२ खानेपानी कहाँबाट ल्याउनु हुन्छ? (प्राथमिकता अनुसार लेख्ने १, २, ३.....)

क्र.स.	श्रोतहरु	प्राथमिकता	कैफियत
१	व्यवस्थित खा.पा प्रणालीको धारा		
२	अव्यवस्थित पाइप		
३	प्राकृतिक कुवा/दुङ्गेधारा		
४	नदि/खोला/खोल्सा		
५	जमिन मुनिको पानी (ट्यूबेल, पम्प)		
६	अन्य		

१०.३ तपाईले प्रयोग गरेको नकुहिने प्लास्टिक जन्य फोहरको व्यवस्थापन कसरी गर्नु हुन्छ ?

१.खुल्ला जलाउने २.फोहर संकलन गर्नेलाई पठाउने ३.निश्चित फाल्ने स्थान नभएको
४.....

१०.४ तपाईको घरमा व्यवस्थित ढलको पाईप लाइन जोडिएको छ ? १.छ २.छैन

यदि छैन भने, कसरी फोहर पानीको व्यवस्थापन गरी रहनु भएको छ ?

१. खाल्डोमा जम्मा गरी बारीमा व्यवस्थापन २. प्राकृतिक खोल्सामा पठाएर ३.खुल्ला त्यतिकै छाडने
४.....

१०.५ खाना पकाउन के प्रयोग गर्नुहुन्छ ? (प्राथमिकता अनुसार लेख्ने १, २, ३.....)

क्र.सं.	श्रोतहरु	प्राथमिकता	कैफियत
१	दाउरा		
२	गोबर ग्यास		
३	एल.पी. ग्यास (सिलिन्डर)		

४	गुईठा / घाँसवाट उत्पादित		
५	विजुली		

१०.६ पकाउनका लागि दाउरा पनि प्रयोग गर्नु हुन्छ भने कहाँबाट ल्याउनु हुन्छ ? (प्राथमिकता अनुसार लेख्ने १, २, ३...)

क्र.सं.	श्रोतहरू	प्राथमिकता	क्र.सं.	श्रोतहरू	प्राथमिकता
१	सरकारी वन		४	कबुलीयत वन	
२	सामुदायिक वन		५	धार्मिक वन	
३	आफ्नै वारी/निजी वन		६	अन्य श्रोत	

१०.६.१ हप्तामा कति भारी दाउरा प्रयोग गर्नु हुन्छ ? हप्तामा प्रयोग हुने जम्मा भारी (प्रति भारी केजी)

१०.७ वत्ति वालको लागि के प्रयोग गर्नुहुन्छ ? (प्राथमिकता अनुसार लेख्नुहोस् १, २, ३)

क्र.सं.	श्रोतहरू	प्राथमिकता	कैफियत
१	मट्टितेल		
२	विजुली		
३	सोलार		
४	अन्य (खुलाउने)		

१०.८ निम्न सेवा सुविधामा पहुँच सम्बन्धी विवरण

क्र.सं.	सुविधाको अवस्था	स्थान	जान आउन लाग्ने समय (मिनेट)	साधन
१	प्राथमिक विद्यालय			
२	निम्न-माध्यमिक विद्यालय			
३	माध्यमिक विद्यालय			
४	कलेज / क्याम्पस			
५	अस्पताल			
६	स्वास्थ्य / उप-स्वास्थ्य चौकी			
७	प्राथमिक स्वास्थ्य केन्द्र			
८	स्थानीय बजार			
९	मूख्य बजार			
१०	जिल्ला सदरमुकाम			
११	गा.पा. सदरमुकाम			
१२	वडा कार्यालय			

सङ्केत: १ स्थान : गाउँ भित्र-१, वडा भित्र-२, गा.पा. भित्र-३, जिल्ला भित्र-४, जिल्ला बाहिर-५, भारत-६ अन्य.....

साधन: पैदल-१, सार्वजनिक यातायातका साधन-२, निज यातायातका साधन-३,सार्वजनिक र निज यातायातका साधन-४,अन्य...

११.जिवनस्तर

११.१ तपाइको घर कस्तो किसिमको छ ?

क्र.सं.	घरको किसिम	विवरण	✓ चिन्ह लगाउने
१	परम्परागत	ढुङ्गा र माटोको गारो सहित खरको छाना	
२	अर्ध-आधुनिक	ढुङ्गा र माटोको गारो सहित जस्ता वा स्लेटको छाना	
३	आधुनिक	सिमेन्ट र ढुङ्गा वा इटाको गारो सहित ढलान छाना	
४	भुप्रा/छाप्रा	बाँस वा काठले वारेका	

१२. महिला र लैङ्गिक विवरण

१२.१ पुरुष र महिला बीच निम्न क्रियाकलापमा कस्तो खालको संलग्नता हुन्छ ?

ज्ञानाज्ञाछाडा	क्र.सं.	कृयाकलाप	पुरुष (संकेत)	महिला (संकेत)	कैफियत
	१	घरायसी कामकाज			
	२	कृषि सम्बन्धि कार्य			
	३	निर्णयमा सहभागिता			
	४	सम्पत्तीको स्वामित्व			
	५	सामाजिक सहभागीता			

संकेत : धेरै-१, कम-२, बराबर-३

१३. महिलाको अवस्था

१३.१ सम्पत्तिमा अधिकार

क्र.सं.	कामको विवरण	हिस्सा प्रतिशतमा	
		पुरुष	महिला
१	घर		
२	जग्गा		
३	पशुपंक्षी		
५	गरगहना		
६	उद्योग धन्दा		
७	अन्य		

१३.२ तपाईंको परिवारमा कुनै महिला सदस्यहरु निम्न लिखित संस्थामा प्रतिनिधित्व गर्दछन् ?

क्र.सं	संस्था उपभोक्ता समिति	छन्	संख्या
१	सिंचाई कुलो उपभोक्ता समिति		
२	घरेलु उद्योग उपभोक्ता समिति		
३	वन उपभोक्ता समिति		
४	पशुपालन सम्बन्धी उपभोक्ता समिति		
५	कृषि उपज उपभोक्ता समिति		
६	गाउँ पालिका/नगरपालिका		
७	गैरसरकारी संस्था (आमा समुह आदि)		
८	अन्य		

१४. सडक आयोजना प्रति स्थानिय जनताको धारणा

१४.१ तपाईंले प्रस्तावित सडक आयोजनाको बारेमा थाहा पाउनु भएको छ ? १. छ ☐ २. छैन ☐

यदि थाहा पाउनु भएको छ भने, कसरी थाहा पाउनु भयो ?

१. छिमेकीले भनेर २. रेडियो/टि.भी. ३. पत्रपत्रिका
४. आयोजनाका सम्बन्धित व्यक्ति ध्वारा ५. अन्य (खुलाउने)

१४.२ यस प्रस्तावित सडक आयोजना प्रति तपाईं सहमत हुनुहुन्छ ?

१. पूर्ण सहमत २. सहमत
३. असहमत (कारणहरु)
४. थाहा छैन

१५. तपाईंको परिवारलाई यस आयोजना कार्यान्वयन हुँदा रोजगारी अवसर उपलब्ध भएमा तपाईंको परिवारको सदस्य सहभागी हुन सक्नु हुन्छ ? १. हुन्छ ☐ २. हुदैन ☐

यदि हुन्छ भने कति जना सदस्य उक्त काममा सहभागी हुन सक्नुहुन्छ ? परिवारको सदस्य संख्या.....

१५.१ कस्तो प्रकृतीको काममा सहभागी हुन चाहानु हुन्छ ?

१. लेवर ☐ २. दक्ष लेवर ☐ ३. प्रशासनीक कार्य ☐ ४. व्यवस्थापक ☐ ४. अन्य.....

१५.२ तपाईंको विचारमा यस प्रस्तावित सडकको अलावा बैकल्पिक मार्ग रेखा अर्को पनि हुन सक्थ्यो कि ?

१५.३ सडक सुधार आयोजनाका सकारात्मक पक्षहरु के के हुन्? यसबाट के के राम्रा कुरा आउँछन् ?

१. यातायात सुविधामा वृद्धि २. समयको बचत ३. आमदानीमा वृद्धि ४. रोजगारीमा वृद्धि
५. वातावरणमा सफाई ६. स्वास्थ्य सुविधामा वृद्धि ७. बजार विस्तार ८. उधमीको विकास
९. स्थानिय उत्पादनले बजार पाउने १०. घर जग्गाको मुल्याङ्कनमा वृद्धि

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१५.४ प्रस्तावित सडक आयोजनाका नकारात्मक पक्षहरु के के हुन् ?

१. घर जग्गामा क्षति २. आमदानीमा क्षति ३. वातावरणमा असर ४. सडक दुर्घटना
५. बाडिपहिरो जाने ६. सामाजिक विकृति ७. अव्यवस्थित बसाईसराई ८. प्राकृतिक श्रोतको दोहन

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१६. यस ठाउँका मुख्य मुख्य समस्याहरु के के हुन् ? कृपया प्राथमिकता अनुसार उल्लेख गर्नुहोस् १, २, ३ ...

१. २.
३. ४.

१७. यस ठाउँका मानिसहरुको आर्थिक अवस्था सुधार गर्न कस्तो खालको कार्यक्रमले सहयोग गर्दछ ।

क्र.स.	कार्यक्रम	प्राथमिकता (१, २, ३)	कारण
१			
२			

१८. तपाईंलाई महिला तथा बालिका बेचबिखन वारेमा केहि जानकारी छ ? यदि थाहा छ भने यस सम्बन्धमा जानकारी दिनुहोस् ।

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१९. अन्य केहि सुझाव तथा टिप्पणी छन् भने बुदागतरूपमा बताई दिनुहोस् ।

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धन्यवाद

