

HIS MAJESTY'S GOVERNMENT OF NEPAL
MINISTRY OF WATER RESOURCES

MASTER PLAN STUDY
ON
THE KOSI RIVER
WATER RESOURCES DEVELOPMENT

FINAL REPORT

Volume 5
DATA BOOK

MARCH 1985

JAPAN INTERNATIONAL COOPERATION AGENCY

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TABLE 1

METEOROLOGICAL STATIONS IN THE EASTERN TERRAI

Index No.	Station Name	LAT.-LONG. (Deg/Min)	Elevation (EL m)	Established Date	(A)	(B)	(C)	(D)	(E)	(F)
1111	Janakpur Airport	26/43 - 85/58	90	Jan. 1968	+	+	+	-	-	-
1112	Chisapani Bazar	26/55 - 86/10	165	Jul. 1955	+	-	-	-	-	-
1114	Kardinath	26/48 - 85/59	93	Nov. 1968	+	+	+	+	+	+
1118	Manusmara	26/53 - 85.25	100	Feb. 1979	+	-	-	-	-	-
1119	Gaushala	26/53 - 85/47	200	Feb. 1979	+	-	-	-	-	-
1215	Lahan	26/44 - 86/30	138	Dec. 1955	+	-	-	-	-	-
1216	Siraha	26/39 - 86/13	102	Jan. 1947	+	-	-	-	-	-
1223	Rajbiraj	26/33 - 86/45	91	Dec. 1971	+	-	-	-	-	-
1226	Barmajhiya	26/36 - 86/54	85	Sep. 1975	+	-	-	-	-	-
1311	Dharan Bazar	26/49 - 87/17	444	Jan. 1947	+	-	-	-	-	-
1312	Karaincha	26/37 - 87/23	152	Apr. 1956	+	-	-	-	-	-
1316	Chatra	26/49 - 87/10	183	Jun. 1948	+	-	-	-	-	-
1319	Siratnagar Airport	26/29 - 87/16	72	Jul. 1968	+	+	+	+	+	+
1320	Terahara	26/42 - 87/16	200	Jul. 1968	+	+	+	+	+	+
1323	Dharan British Camp	26/47 - 87/17	400	-	+	-	-	-	-	-
1408	Damak	26/43 - 87/40	163	Mar. 1956	+	-	-	-	-	-
1409	Anarmani Birta	23/68 - 87/59	122	Mar. 1956	+	-	-	-	-	-
1412	Chandra Gadhi	26/34 - 86/03	120	Feb. 1971	+	-	-	-	-	-
1415	Sanishchare	26/41 - 87/58	168	Jan. 1972	+	-	-	-	-	-

Note: (A) Precipitation (B) Temperature (C) Humidity
(D) Evaporation (E) Wind Velocity (F) Sunshine Hour

PRECIPITATION

TABLE 2

Index No. 1111
Station: Jarakpur Airport

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1969	1	16	29	72	27	173	154	279	68	48	2	-	-
1970	1	19	1	28	23	483	425	253	218	28	0	0	1,479
1971	3	1	0	78	80	211	257	245	79	64	7	0	1,025
1972	0	19	6	0	0	329	193	113	224	18	3	0	905
1973	41	13	12	21	86	367	156	243	148	183	0	0	1,270
1974	4	0	28	37	34	220	553	341	167	17	0	2	1,403
1975	15	10	58	5	1	221	556	179	335	32	0	0	1,412
1976	18	11	0	16	130	182	183	442	98	10	0	0	1,090
1977	0	2	0	39	159	51	321	287	58	170	17	44	1,148
1978	10	7	33	15	98	146	461	185	125	107	15	1	1,203
1979	8	18	0	1	1	130	389	160	175	87	12	30	1,011
1980	2	0	5	5	131	127	345	170	232	32	0	0	1,049
Average	8.6	9.7	14.3	26.4	64.2	220.0	332.8	241.4	160.6	66.3	4.7	7.0	1,156.0

PRECIPITATION

TABLE 3
(1 of 2)

Index No. 1112
Station: Chisapani Bazar

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	-	-	-	-	-	-	751	303	79	8	5	0	-
1956	33	0	47	27	149	583	327	532	189	144	43	1	2,075
1957	91	3	-	0	16	149	312	277	143	128	0	6	-
1958	27	0	0	52	31	123	239	545	259	177	3	61	1,517
1959	51	2	46	38	65	333	152	155	281	155	0	0	1,278
1960	0	0	49	0	74	240	700	257	225	24	0	0	1,569
1961	0	50	0	6	60	315	206	541	90	48	15	4	1,335
1962	34	20	25	6	67	360	231	226	220	2	0	0	1,191
1963	0	0	31	51	137	283	294	197	126	149	29	0	1,297
1964	0	0	15	2	14	464	981	162	345	125	0	0	2,109
1965	0	0	38	21	24	398	717	642	188	60	24	0	2,112
1966	9	2	0	0	91	41	640	989	104	21	8	0	1,905
1967	0	0	93	11	10	333	593	293	526	25	0	0	1,884
1968	60	2	36	0	4	255	321	262	222	116	0	0	1,278
1969	4	6	17	44	9	249	392	395	213	10	0	0	1,339
1970	18	31	6	10	36	334	296	356	262	26	0	0	1,385

PRECIPITATION

TABLE 3
(2 of 2)

Index No. 1112
Station: Chisapani Bazar

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	0	3	2	149	257	453	418	411	141	159	0	0	1,993
1972	0	28	5	32	48	131	333	123	215	6	0	0	921
1973	76	0	28	9	87	445	89	165	382	195	3	0	1,479
1974	8	0	20	22	85	171	510	662	430	117	0	6	2,031
1975	19	29	3	21	136	241	800	172	339	85	0	0	1,845
1976	13	5	11	38	154	402	326	367	210	112	0	0	1,638
1977	0	2	0	111	122	75	248	591	353	170	22	4	1,698
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	6	59	3	74	48	307	393	551	427	147	25	11	2,051
1980	0	19	8	13	105	266	461	275	93	94	0	0	1,334
Average	18.7	10.9	21.0	30.7	76.2	289.6	429.2	378.4	242.5	92.2	7.1	3.7	1,600.2

PRECIPITATION

TABLE 4

Index No. 1114
Station: Hardinath

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1969	1	9	24	46	63	240	160	266	161	17	0	0	987
1970	12	16	20	60	59	291	532	331	197	46	0	0	1,564
1971	1	2	0	129	172	224	270	340	106	43	0	0	1,287
1972	0	27	1	1	20	227	204	155	204	25	5	0	869
1973	52	10	13	15	106	407	201	294	123	144	0	0	1,365
1974	9	0	44	34	111	130	722	396	168	37	0	2	1,655
1975	15	9	4	22	25	213	582	180	285	42	0	0	1,377
1976	14	4	1	2	102	366	258	532	26	1	0	0	1,306
1977	0	1	0	22	76	45	305	302	62	181	45	27	1,121
1978	9	6	31	63	138	196	433	130	361	217	3	1	1,588
1979	10	26	4	70	28	186	379	282	120	69	9	20	1,203
1980	0	1	6	4	79	94	311	161	182	22	0	0	860
Average	10.3	9.3	12.3	43.6	81.6	218.3	363.1	280.8	166.3	70.3	5.2	4.2	1,265.3

Unit: millimeter

TABLE 5

PRECIPITATION

Index No. 1118

Station: Manusmara

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	14	1	13	14	198	481	338	235	88	10	25	1,417
1980	0	2	15	2	108	182	259	224	178	34	0	0	1,004
Average	0	8.0	8.0	7.5	61.0	190.0	370.0	281.0	206.5	61.0	5.0	12.5	1,210.5

PRECIPITATION

TABLE 6

Index No. 1119
Station: Gaushala

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	0	42	17	152	528	307	170	69	12	21	
1980	0	0	26	12	-	-	277	470	156	67	0	0	
Average	0	0	13.0	27.0	17.0	152.0	402.5	388.5	163.0	68.0	6.0	10.5	1,247.5

PRECIPITATION

TABLE 7
(1 of 2)

Index No. 1215
Station: Lahan

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	22	1	10	6	171	456	277	225	171	296	52	2	1,689
1957	89	0	5	0	0	75	289	216	116	78	0	13	881
1958	32	0	0	63	54	290	154	535	139	185	0	7	1,459
1959	56	0	32	31	5	464	201	105	175	119	0	0	1,188
1960	0	0	86	0	49	251	304	184	404	15	0	0	1,293
1961	0	198	0	25	183	449	145	491	110	118	0	0	1,719
1962	0	32	15	8	102	222	124	611	132	164	0	0	1,410
1963	0	0	12	116	152	471	469	465	157	195	25	0	2,062
1964	0	0	11	37	40	29	744	102	302	78	0	0	1,343
1965	0	0	34	26	16	355	446	565	165	32	29	0	1,668
1966	70	13	0	0	47	56	396	892	93	33	10	8	1,618
1967	0	0	64	27	41	260	444	175	265	0	0	0	1,276
1968	-	0	49	0	17	168	264	280	375	124	0	0	-
1969	0	15	18	49	53	291	303	405	61	36	0	0	1,231

PRECIPITATION

TABLE 7
(2 of 2)

Index No. 1215
Station: Lehan

YEAR	Unit: millimeter												Total	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1970	4	0	11	16	49	266	638	484	193	55	0	0	0	1,716
1971	0	7	6	149	212	386	412	275	267	105	15	0	0	1,834
1972	0	27	2	24	39	268	417	85	244	23	8	0	0	1,137
1973	62	20	7	15	146	425	143	294	212	129	18	0	0	1,471
1974	11	0	24	29	189	270	694	541	305	43	0	-	-	-
1975	11	5	5	27	111	336	793	185	530	-	0	0	0	-
1976	2	35	1	7	234	440	281	430	116	48	0	0	0	1,594
1977	0	0	10	61	201	130	446	422	87	178	59	35	35	1,629
1978	10	10	20	83	183	110	320	258	68	60	20	10	10	1,152
1979	0	25	0	49	44	155	485	176	181	134	13	27	27	1,289
1980	0	0	20	10	131	108	428	184	223	3	0	0	0	1,107
Average	14.8	15.5	17.7	34.3	98.8	269.2	348.7	343.4	203.6	93.8	10.0	4.3	4.3	1,455.4

PRECIPITATION

TABLE 8
(1 of 3)

Index No. 1216
Station: Siraha

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1947	-	-	-	-	-	-	451	246	150	92	0	0	-
1948	0	12	9	10	106	114	526	252	143	98	134	0	1,404
1949	22	52	0	89	178	383	381	252	177	155	0	0	1,689
1950	11	0	43	0	133	295	153	240	92	0	0	0	967
1951	1	0	9	18	74	477	260	272	150	36	14	0	1,311
1952	0	23	16	63	270	36	360	224	217	30	0	0	1,239
1953	26	0	4	1	92	263	459	191	244	3	0	0	1,283
1954	1	6	4	0	72	258	791	515	246	25	0	0	1,918
1955	0	0	2	32	82	236	817	221	105	29	0	0	1,524
1956	29	1	15	15	215	511	312	594	284	279	60	1	2,316
1957	89	1	2	2	8	237	251	398	43	39	0	6	1,076
1958	35	1	0	47	58	262	279	1,225	293	42	0	0	2,242
1959	148	0	21	34	12	170	117	61	225	104	0	0	892
1960	0	0	85	0	85	119	319	144	291	15	0	0	1,058

PRECIPITATION

TABLE 8
(2 of 3)

Index No. 1216
Station: Siraha

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1961	0	60	0	12	88	269	334	434	124	105	5	3	1,434
1962	18	15	14	13	58	196	85	568	99	162	0	10	1,238
1963	2	0	15	56	80	218	289	193	139	170	54	0	1,216
1964	0	0	39	31	82	64	485	171	374	26	0	0	1,272
1965	0	0	47	7	39	341	318	564	148	100	19	0	1,583
1966	54	12	0	0	49	20	389	662	148	47	15	9	1,405
1967	0	0	63	33	39	244	361	100	206	41	0	0	1,087
1968	36	0	10	0	60	214	249	342	86	0	0	0	997
1969	2	2	32	33	51	112	159	387	154	5	0	0	937
1970	0	12	0	10	53	334	422	264	190	37	0	0	1,322
1971	4	5	0	222	205	320	375	409	179	19	14	0	1,752
1972	-	27	17	1	28	45	301	101	327	65	0	0	0
1973	27	10	4	23	117	461	121	213	120	206	0	0	1,302
1974	5	2	35	44	65	186	623	447	283	36	0	1	1,227

PRECIPITATION

TABLE 8
(3 of 3)

Index No. 1216
Station: Siraha

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1975	15	15	5	20	79	271	740	192	510	59	0	0	1,906
1976	26	54	0	18	145	303	241	533	103	20	0	0	1,443
1977	0	3	0	46	130	138	280	333	87	151	48	35	1,251
1978	23	10	27	34	117	99	504	302	145	102	44	2	1,409
1979	20	20	3	41	5	170	456	107	305	68	14	4	1,213
1980	11	0	12	0	127	147	574	413	336	14	0	0	1,634
Average	18.9	10.8	16.2	28.9	91.0	227.7	375.9	340.3	197.7	70.0	12.4	2.1	1,391.9

PRECIPITATION

TABLE 9

Index No. 1223
Station: Rajbiraj

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	2	29	3	17	56	464	273	117	353	3	6	0	1,323
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	8	0	23	38	92	266	486	376	252	67	0	2	1,610
1975	9	8	2	22	42	316	199	138	357	53	0	0	1,146
1976	10	41	0	19	96	341	265	255	163	54	0	0	1,244
1977	0	0	0	33	65	149	187	280	58	109	41	36	958
1978	6	13	10	66	94	87	454	104	153	51	28	0	1,066
1979	2	25	0	63	4	138	758	195	267	58	8	23	1,541
1980	0	1	34	18	196	156	454	217	235	31	0	0	1,342
Average	4.6	14.6	9.0	34.5	80.6	239.6	384.5	210.3	229.8	53.3	10.4	7.6	1,287.8

PRECIPITATION

TABLE 10

Index No. 1226

Station: Barmajmiya

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	52	38	0	62	81	364	284	336	-	-	-	-	-
1977	0	6	0	52	186	99	207	492	121	192	34	71	1,460
1978	9	7	0	114	262	28	697	101	150	50	4	0	1,422
1979	0	18	118	0	0	124	1,054	333	294	126	46	16	2,129
1980	6	12	14	3	211	247	148	320	459	21	0	0	1,441
Average	13.4	16.2	26.4	46.2	148.0	178.4	478.0	316.4	256.0	97.25	21.0	21.75	1,619.0

Unit: millimeter

PRECIPITATION

TABLE 11

Index No. 1311
 Station: Dharan Bazar

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	0	0	45	212	405	660	730	555	390	312	7	0	3,316
1972	7	39	15	18	27	335	719	454	-	-	22	0	-
1973	33	15	12	104	98	1,036	426	610	373	266	0	0	2,973
1974	12	0	81	58	191	343	1,075	386	249	421	0	0	2,744
1975	4	11	0	60	144	603	728	313	679	195	0	0	2,737
1976	23	66	0	116	188	610	611	820	294	78	0	0	2,806
1977	0	2	0	134	216	337	349	649	304	167	35	27	2,220
1978	6	10	42	68	68	267	574	241	252	30	51	0	1,609
1979	3	91	2	45	68	178	685	581	343	194	12	34	2,236
1980	0	0	0	33	39	-	259	326	506	64	0	0	-
Average	8.8	23.4	19.7	84.8	144.4	485.4	615.6	493.5	376.7	191.9	12.7	6.1	1,530.2

PRECIPITATION

TABLE 12
(1 of 2)

Index No. 1312
Station: Haraincha

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1956	-	-	-	-	249	279	441	222	222	273	179	136	-
1957	110	228	0	0	246	351	290	165	18	0	80	100	1,588
1958	22	28	0	78	34	313	354	335	327	0	19	51	1,561
1959	-	-	-	-	-	-	-	-	344	45	0	10	-
1960	9	14	0	17	68	115	94	13	24	7	0	0	361
1961	31	0	10	80	47	94	319	373	472	253	63	30	1,772
1962	13	20	0	53	58	233	134	521	238	19	0	0	1,289
1963	0	0	31	117	65	87	197	276	338	219	106	0	1,436
1964	0	0	10	20	0	54	449	404	77	91	57	30	1,192
1965	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	562	636	190	23	15	0	-
1967	0	0	105	24	52	385	564	0	0	0	0	0	1,130
1968	0	0	54	0	18	143	198	225	333	447	0	0	1,418
1969	2	12	70	94	101	345	233	271	263	0	0	0	1,391

PRECIPITATION

TABLE 12
(2 of 2)

Index No. 1312
Station: Haraincha

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1970	0	0	0	61	86	308	718	672	283	0	0	0	2,128
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	27	11	0	-
1973	25	0	20	16	102	651	331	285	220	212	10	0	1,872
1974	2	0	73	67	205	233	1,092	659	485	122	0	0	2,938
1975	0	13	2	29	99	807	834	239	620	139	0	0	2,782
1976	18	31	12	80	276	442	511	490	220	31	0	0	2,111
1977	0	5	5	54	218	284	371	403	128	137	77	30	1,712
1978	0	23	12	108	53	162	644	274	374	10	2	1	1,663
1979	0	14	0	79	62	163	553	610	392	189	27	73	2,162
1980	0	18	0	3	256	264	364	240	276	14	0	0	1,435
Average	12.2	21.4	21.3	51.6	114.8	285.7	426.3	348.2	265.6	98.2	28.1	20.0	1,693.4

PRECIPITATION

TABLE 13
(1 of 3)

Index No. 1316
Station: Chatara

YEAR	Unit: millimeter												Total	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1948	-	-	-	-	-	362	454	381	219	120	91	0	0	-
1949	11	100	0	153	126	493	490	377	452	84	0	0	0	2,286
1950	8	36	12	8	76	454	389	869	242	24	0	0	0	2,118
1951	0	0	31	21	198	485	530	873	274	286	33	0	0	2,731
1952	0	12	35	38	195	185	401	667	456	70	9	0	0	2,068
1953	18	2	139	34	48	306	581	371	294	40	1	0	0	1,834
1954	4	24	6	17	66	494	1,217	499	168	149	0	0	0	2,644
1955	2	0	0	36	42	293	569	608	326	2	0	0	0	1,878
1956	64	5	12	10	228	799	497	321	164	329	28	1	1	2,458
1957	71	0	0	1	61	266	634	542	405	163	0	21	0	2,164
1958	43	0	0	118	112	235	260	552	462	69	0	0	0	1,851
1959	48	0	50	100	101	483	378	386	239	184	0	0	0	1,969
1960	0	10	57	0	193	443	549	396	563	49	0	0	0	2,260
1961	3	63	10	16	98	312	400	485	404	176	0	3	0	1,970

PRECIPITATION

TABLE 13
(2 of 3)

Index No. 1316
Station: Chatara

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1962	72	36	24	208	126	411	509	546	238	60	0	2	2,232
1963	0	0	17	57	269	361	567	328	386	112	82	0	2,179
1964	0	0	2	106	129	107	1,154	386	415	147	0	0	2,446
1965	0	7	30	11	68	283	488	787	326	10	51	0	2,061
1966	72	9	0	42	44	176	1,160	951	307	142	1	33	2,937
1967	0	0	122	34	148	324	903	186	312	30	1	0	2,060
1968	15	3	17	31	29	291	761	551	543	295	0	0	2,536
1969	2	8	76	82	131	359	390	187	102	50	1	0	1,388
1970	5	9	10	35	172	395	695	343	217	62	0	0	1,943
1971	0	2	20	175	234	552	359	238	418	474	0	0	2,472
1972	33	30	11	40	109	524	737	297	344	53	1	0	2,179
1973	31	34	4	13	94	773	299	691	327	272	9	0	2,547
1974	9	0	40	90	95	338	968	349	247	253	0	0	2,389
1975	10	10	4	20	112	575	798	222	876	132	0	0	2,759

PRECIPITATION

TABLE 13
(3 of 3)

Index No. 1316
Station: Chatara

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1976	10	26	0	80	151	454	664	1013	220	156	4	0	2,778
1977	0	2	16	89	219	300	366	743	190	165	37	22	2,149
1978	2	8	45	59	94	511	616	254	136	33	25	0	1,783
1979	72	52	1	22	57	307	741	516	256	173	10	85	2,227
1980	0	11	13	8	126	350	286	210	383	45	0	0	1,432
Average	18.9	15.6	25.1	54.8	125.9	394.0	600.3	488.6	330.6	133.6	11.6	5.6	2,204.6

TABLE 14

PRECIPITATION

Index No. 1319
Station: Biratnagar Airport

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	2	2	14	97	99	621	392	273	240	279	6	0	2,025
1972	0	30	6	12	13	340	362	174	254	13	1	0	1,205
1973	44	2	7	11	138	632	144	344	150	198	31	0	1,701
1974	35	0	60	120	216	424	1,085	654	422	48	0	0	3,064
1975	3	16	0	36	177	437	625	223	445	74	0	0	2,036
1976	12	15	2	38	148	441	412	464	121	19	0	0	1,672
1977	0	4	2	59	178	223	445	452	149	161	74	38	1,785
1978	5	12	73	55	99	126	623	119	279	44	36	0	1,471
1979	5	10	1	56	51	130	596	486	290	127	10	13	1,775
1980	0	2	21	5	272	176	528	307	462	60	0	0	1,833
Average	10.6	9.3	18.6	48.9	139.1	354.1	521.2	349.6	281.2	102.3	15.8	51	1,856.7

PRECIPITATION

TABLE 15

Index No. 1320
Station: Tarahara

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1971	2	1	10	107	150	529	386	312	314	213	15	0	2,039
1972	42	21	12	41	36	280	500	98	200	37	1	0	1,268
1973	24	5	3	10	79	584	200	190	89	176	4	3	1,367
1974	17	0	56	44	75	245	779	386	294	94	0	0	1,990
1975	7	9	0	14	100	438	655	153	504	57	0	0	1,937
1976	20	29	1	81	165	314	314	335	111	18	0	0	1,388
1977	0	4	2	63	299	195	354	473	91	138	93	33	1,745
1978	4	5	17	116	96	194	568	117	169	11	21	2	1,320
1979	5	8	3	76	70	128	592	395	366	202	16	110	1,971
1980	0	23	11	21	168	278	302	288	180	20	0	0	1,291
Average	12.1	10.5	11.5	57.3	123.8	318.5	465.0	274.7	231.8	96.6	15.0	14.8	1,631.3

TABLE 16

PRECIPITATION

Index No. 1323
 Station: Dharan British Camp

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1971	1	-	3	139	335	478	639	290	386	-	-	1	-
1972	-	-	14	31	83	615	668	245	-	34	-	0	-
1973	28	13	5	30	-	859	403	617	167	214	5	0	-
1974	10	-	131	52	179	283	921	789	270	416	0	2	-
1975	11	12	0	38	206	677	-	-	737	186	0	0	-
1976	45	59	0	77	119	540	398	730	298	126	0	0	2,392
1977	0	3	31	69	189	307	349	639	262	140	23	26	2,038
1978	6	10	46	76	61	264	593	159	233	16	36	0	1,505
1979	4	86	0	67	82	275	644	577	349	181	79	43	2,387
1980	0	6	8	16	102	500	279	199	424	42	0	0	1,576
Average	11.7	27.0	23.8	56.5	150.7	479.8	543.8	471.7	347.3	150.6	14.1	7.2	2,284.2

PRECIPITATION

TABLE 17
(1 of 2)

Index No. 1408
Station: Damak

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1961	-	-	-	-	-	-	-	-	-	-	-	-	-
1962	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	-	-	13	39	174	382	471	561	297	176	28	0	-
1964	0	0	0	30	111	224	936	590	316	78	0	0	2,285
1965	0	5	30	80	59	328	668	928	84	18	22	0	2,222
1966	0	6	0	8	112	120	720	1593	272	12	5	0	2,848
1967	0	0	40	71	232	513	1,646	387	425	172	0	0	3,486
1968	62	2	0	10	38	271	521	509	609	473	12	0	2,507
1969	10	15	0	16	141	514	916	539	66	0	0	0	2,217
1970	14	17	47	60	200	755	811	690	209	0	0	0	2,803
1971	0	0	89	445	491	982	923	481	504	448	16	0	4,379
1972	-	26	10	90	83	429	597	236	277	24	1	0	-
1973	25	0	9	23	174	795	348	626	224	205	8	0	2,437
1974	29	0	45	23	179	415	1,182	545	453	206	0	1	3,078

PRECIPITATION

TABLE 17
(2 of 2)

Index No. 1408
Station: Damak

Unit: millimeter

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1975	5	12	1	18	197	774	685	183	717	110	0	0	2,702
1976	15	12	2	85	121	497	386	671	156	131	0	0	2,076
1977	0	5	26	164	262	273	441	602	287	195	144	21	2,420
1978	4	8	24	77	134	240	523	393	248	17	20	0	1,688
1979	8	56	1	56	68	306	927	702	490	292	45	85	3,036
1980	0	2	27	10	185	289	394	383	353	68	0	0	1,711
Average	10.8	9.8	20.2	72.5	164.5	450.4	727.5	589.9	332.6	145.8	16.7	5.9	2,546.6

PRECIPITATION

TABLE 18
(1 of 2)

Index No. 1409
Station: Anarmani Birta

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	-	-	-	26	452	843	458	340	372	243	31	0	-
1957	56	0	0	0	11	306	534	790	53	104	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	5	0	29	129	28	471	515	260	453	749	0	0	2,639
1960	0	0	51	0	156	474	716	445	669	41	0	0	2,552
1961	6	40	12	21	81	426	525	755	350	97	0	14	2,327
1962	34	9	11	26	247	505	769	856	347	171	0	0	2,975
1963	0	0	12	36	190	410	489	606	277	146	52	0	2,218
1964	0	0	0	28	41	423	1,092	494	189	53	0	0	2,320
1965	0	6	3	61	194	361	644	667	300	0	0	0	2,236
1966	21	0	0	0	69	273	936	925	215	49	0	0	2,488
1967	0	0	92	75	42	445	1,055	213	344	48	0	0	2,314
1968	0	0	0	34	50	147	768	363	399	343	0	0	2,104
1969	0	0	0	0	96	368	527	437	208	91	0	0	1,727

PRECIPITATION

TABLE 18
(2 of 2)

Index No. 1409
Station: Anarmani Birta

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1970	17	0	0	57	220	400	636	538	326	69	0	0	2,263
1971	-	0	0	134	154	808	618	374	468	223	61	0	-
1972	0	26	0	69	68	577	672	407	296	10	0	0	2,125
1973	9	4	0	28	156	762	412	459	237	241	0	0	2,308
1974	36	0	86	25	421	473	1,286	750	317	197	0	2	3,593
1975	3	0	0	29	185	761	931	193	301	242	0	0	2,645
1976	16	22	0	48	125	384	386	608	179	62	0	0	1,830
1977	0	2	0	130	163	386	545	1,026	376	194	91	37	2,948
1978	4	6	14	107	141	250	447	318	314	0	15	0	1,616
1979	0	23	0	45	95	176	894	332	201	72	50	118	2,009
1980	0	12	57	5	217	413	508	421	342	69	0	0	2,044
Average	9.4	6.5	16.0	46.4	150.1	451.8	681.8	524.0	313.9	146.4	13.0	7.4	2,366.7

TABLE 19

PRECIPITATION

Index No. 1412
Station: Chandra Gadhi

YEAR	Unit: millimeter												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1971	-	-	19	221	167	512	402	443	387	153	40	-	-
1972	0	29	6	38	44	369	580	173	210	5	0	0	1,454
1973	6	10	0	18	169	427	240	351	198	181	14	0	1,614
1974	14	0	24	34	131	244	979	740	382	159	0	0	2,706
1975	1	0	0	-	151	540	800	145	413	94	0	0	-
1976	1	14	0	34	87	311	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	0	28	2	98	128	268	369	152	111	0	5	0	1,161
1979	0	0	2	53	38	218	1,191	197	285	229	14	66	2,293
1980	0	28	8	27	102	317	546	742	669	126	0	0	2,565
Average	2.8	13.6	6.7	65.4	113.0	356.2	638.4	367.9	331.9	118.4	9.1	9.4	2,032.8

PRECIPITATION

TABLE 20

Index No. 1415
Station: Sanischare

YEAR	Unit: millimeter												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1972	0	29	0	91	117	513	717	295	439	17	17	0	2,235
1973	12	3	14	32	247	757	559	662	331	257	36	0	2,910
1974	25	0	88	52	152	566	1,272	684	408	272	0	2	3,521
1975	4	4	0	28	187	593	891	296	570	122	0	1	2,696
1976	14	21	1	73	144	639	373	580	380	96	1	0	2,322
1977	0	4	39	70	181	203	673	699	432	205	140	17	2,663
1978	3	8	18	87	283	372	562	366	263	44	10	0	2,016
1979	18	44	0	21	226	423	1,089	475	283	89	43	74	2,785
1980	14	28	18	8	199	348	516	372	325	116	0	0	1,944
Average	10.0	15.7	19.8	51.3	192.9	490.4	739.1	492.1	381.2	135.3	27.4	10.4	2,565.6

TABLE 21

TEMPERATURE

Index No. 1111
Station: Jarakpur Airport

YEAR	Unit: Centigrade (°C)												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Mean
1971	16	17	23	25	28	28	24	28	28	26	22	18	23.6
1972	16	17	24	28	32	31	30	29	29	28	21	17	25.1
1973	15	18	22	29	28	29	29	28	27	25	20	17	23.9
1974	-	17	22	27	28	29	27	28	27	27	22	14	-
1975	13	17	22	27	29	30	27	25	24	22	16	-	-
1976	-	-	22	27	28	28	-	-	-	-	-	-	-
1977	-	-	-	27	28	29	29	29	29	25	23	18	-
1978	15	17	22	28	29	30	29	30	27	26	22	18	24.4
1979	16	17	23	29	31	31	30	30	29	26	23	18	25.2
1980	15	18	-	-	-	30	29	30	29	25	-	18	-
Average	15.1	17.3	22.5	27.4	29.0	29.5	28.2	28.6	27.7	25.6	21.1	17.3	24.4

TABLE 22

TEMPERATURE

Index No. 1114
Station: Hardinath

YEAR	Unit: Centigrade (°C)												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	17.2	20.3	24.5	25.7	27.2	28.8	28.9	28.1	27.9	26.5	21.4	17.5	24.5
1972	16.4	16.8	23.1	26.7	27.1	-	29.3	28.7	27.7	25.4	21.8	17.7	-
1973	16.7	19.4	22.9	29.5	28.8	29.0	29.6	28.5	28.5	26.3	22.2	17.4	24.9
1974	16.2	17.6	22.6	27.7	28.8	29.8	27.9	28.6	27.8	27.5	22.6	16.0	24.4
1975	16.0	18.3	22.9	28.4	30.7	30.4	28.2	29.0	27.9	27.3	20.8	17.2	27.8
1976	16.8	18.5	22.8	27.5	28.2	28.6	28.7	27.8	28.0	25.6	22.4	17.0	24.3
1977	15.7	18.2	24.0	26.5	27.4	29.0	29.1	28.9	28.8	25.0	22.4	17.6	24.4
1978	15.0	17.2	21.4	26.6	28.0	28.9	28.6	29.4	27.7	26.2	21.6	17.7	24.0
1979	16.9	17.9	21.6	27.5	30.0	30.2	29.0	28.3	28.3	26.3	23.3	18.0	24.8
1980	16.2	19.0	22.8	29.0	28.0	29.2	29.1	29.0	28.3	25.0	22.0	18.4	24.7
Average	16.31	18.32	22.86	27.51	28.42	29.32	28.84	28.63	28.09	26.11	22.05	17.45	24.9

TEMPERATURE

TABLE 23

Index No. 1319
Station: Biratnagar Airport

Unit: Centigrade (°C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	-	17.2	22.8	24.9	26.7	28.4	28.3	27.6	27.4	25.2	20.8	17.1	-
1972	16.3	16.6	23.3	26.7	29.9	28.7	28.5	28.6	26.9	26.0	21.4	17.2	24.2
1973	16.2	19.4	22.9	29.1	28.1	28.2	29.4	29.2	28.3	25.9	22.0	17.6	24.7
1974	16.1	18.1	23.0	26.8	26.9	28.3	27.5	28.6	27.3	27.0	22.2	16.0	24.0
1975	15.6	19.2	23.6	28.0	28.2	29.0	27.8	28.8	27.6	26.8	20.5	16.6	24.4
1976	16.3	19.0	22.9	27.10	27.6	28.0	28.6	27.8	27.4	25.3	22.2	17.0	24.1
1977	15.7	18.6	24.3	26.2	26.4	27.7	28.6	29.0	28.8	24.7	21.7	17.4	24.1
1978	14.8	17.3	21.5	26.3	28.1	28.8	28.2	29.2	27.5	25.8	21.0	17.5	23.8
1979	17.0	18.1	22.6	28.3	30.3	30.3	28.6	29.2	28.0	25.8	23.0	18.2	25.0
1980	17.2	18.6	23.2	29.2	26.8	29.1	28.9	29.0	28.6	25.6	21.9	18.5	24.7
Average	16.13	18.21	23.01	27.26	27.9	28.65	28.44	28.70	27.78	25.81	21.67	17.31	24.3

TEMPERATURE

TABLE 24

Index No. 1320
Station: Farabara

YEAR	Unit: Centigrade (°C)												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	16.3	17.2	21.9	25.1	26.7	28.2	29.2	28.6	28.4	25.9	22.4	17.9	24.0
1972	16.2	16.8	22.8	26.5	29.5	28.7	28.5	28.1	27.7	26.1	20.4	17.3	24.1
1973	16.4	18.4	22.2	28.2	28.2	27.8	29.1	28.4	27.8	25.6	21.2	17.0	24.2
1974	15.4	17.3	21.6	26.0	27.2	28.0	27.2	28.0	27.0	26.2	21.4	15.6	23.4
1975	14.9	18.0	22.0	27.1	27.8	28.6	27.8	28.6	27.4	26.5	20.6	16.9	23.9
1976	15.7	18.3	22.2	26.0	27.6	27.8	28.6	27.8	28.0	24.8	22.2	17.3	23.9
1977	15.7	18.2	23.3	25.6	26.4	27.8	28.6	28.7	28.4	24.4	21.8	17.6	23.9
1978	15.0	17.8	20.7	25.9	28.1	28.9	28.2	29.1	27.4	25.5	21.2	17.6	23.8
1979	16.7	17.6	21.3	27.3	28.9	29.7	28.7	29.1	27.7	25.2	22.5	17.8	24.4
1980	16.0	18.1	22.2	27.8	26.7	29.0	28.8	28.9	28.2	25.2	21.8	18.3	24.3
Average	15.83	17.77	22.02	26.55	27.71	28.45	28.47	28.53	27.80	25.54	21.55	17.33	24.0

TABLE 25

HUMIDITY

Index No. 1111
Station: Janakpur Airport

Unit: Percent (%)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	81	77	58	67	76	82	81	86	82	80	79	71	76.7
1972	58	41	37	64	60	76	84	76	79	67	56	56	62.8
1973	76	79	68	-	-	-	-	96	84	88	71	82	79.3
1974	59	54	44	-	-	88	90	93	72	71	48	48	59.9
1975	85	84	68	54	82	68	76	84	91	84	87	89	82.2
1976	56	46	44	38	63	76	87	78	83	80	68	71	64.3
1977	-	72	55	68	72	76	87	85	85	82	75	81	76.2
1978	76	48	34	41	55	62	79	77	73	72	52	51	58.5
1979	59	72	63	50	73	90	80	81	84	87	82	76	76.2
1980	85	49	47	39	59	72	80	76	77	73	55	54	61.7
1981	85	81	62	67	79	83	84	-	86	85	84	86	80.2
1982	66	56	30	44	67	78	81	-	78	74	68	68	64.5
1983	-	-	-	-	-	88	91	89	91	92	88	87	89.4
1984	-	-	-	-	-	83	86	84	85	89	84	76	83.9
1985	91	91	88	72	75	87	90	95	90	87	90	85	86.8
1986	81	88	68	69	90	83	79	90	87	85	76	79	81.3
1987	92	87	75	75	70	82	92	88	92	88	88	91	85.0
1988	90	75	71	66	59	74	90	80	91	88	91	86	80.1
1989	92	85	81	76	80	88	91	91	89	87	-	91	86.5
1990	94	88	80	63	82	87	90	87	84	90	-	86	84.6
Average	84.8	80.9	68.7	66.1	75.9	84.9	87.3	87.2	87.4	86.0	82.7	83.9	81.9
	70.4	60.6	50.6	53.0	66.9	75.9	82.8	81.2	80.9	78.9	66.4	67.5	70.2
	77.6	70.2	59.6	59.6	71.4	80.4	85.1	84.2	84.2	82.0	74.6	75.9	76.1

Note: Upper column = 8:40; Lower Column = 17:40

HUMIDITY

TABLE 26

Index No. 1114
Station: Hardinath

YEAR	Unit: Percent (%)												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	85	79	63	70	77	83	84	87	87	83	81	80	79.9
	66	57	49	68	69	80	81	82	81	80	71	62	70.5
1972	86	80	64	57	62	78	87	84	85	84	82	87	78.0
	66	63	48	31	42	62	77	79	80	81	70	62	63.4
1973	90	84	62	54	72	85	83	85	86	86	81	89	79.8
	75	66	44	34	60	74	76	83	83	80	68	71	67.8
1974	86	79	60	69	70	78	91	88	86	85	79	89	80.0
	66	53	47	46	64	68	61	80	81	77	64	66	64.4
1975	88	85	64	51	60	75	86	86	87	84	75	88	77.4
	69	59	38	34	63	63	80	80	81	77	63	60	63.9
1976	82	84	55	60	74	85	87	-	84	82	81	85	78.1
	68	61	54	32	68	74	78	-	84	74	58	56	64.3
1977	90	78	59	68	72	76	83	87	84	84	87	88	79.7
	57	48	37	49	52	66	79	80	77	77	78	77	64.8
1978	86	87	73	54	85	87	90	85	90	73	86	86	81.8
	75	69	60	58	78	80	83	80	87	81	81	74	75.5
1979	88	83	65	49	70	75	86	80	86	83	84	85	77.8
	66	65	47	38	52	75	76	87	80	81	78	73	68.2
1980	87	83	66	50	70	82	85	83	86	82	76	85	77.9
	66	61	43	32	63	75	76	83	85	83	72	67	67.2
Average	86.8	82.2	63.1	58.2	71.2	80.4	86.2	85.0	86.1	82.6	81.2	86.2	79.0
	67.4	60.2	46.7	42.2	61.1	71.7	76.7	81.6	81.9	79.1	70.3	66.8	67.0
	77.1	71.2	54.9	50.2	66.2	76.1	81.5	83.3	84.0	80.9	75.8	76.5	73.0

Note: Upper column = 8:40; Lower Column = 17:40

TABLE 27

HUMIDITY

Index No. 1319
Station: Biratnagar Airport

Unit: Percent (%)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	88	85	83	84	84	93	90	90	86	88	85	85	86.8
1972	52	37	49	65	62	78	76	76	78	71	63	65	64.3
1973	91	82	58	51	72	85	83	83	83	84	80	87	78.3
1974	74	56	35	30	64	79	78	79	80	79	72	66	66.0
1975	86	76	58	70	77	78	89	87	86	82	76	86	79.3
1976	64	49	38	57	68	67	83	79	77	76	61	56	64.6
1977	90	80	-	57	69	82	-	83	86	82	81	87	-
1978	56	61	-	33	58	70	-	76	79	77	68	60	-
1979	88	80	56	55	73	86	85	86	82	79	82	90	78.5
1980	63	55	29	39	64	73	76	80	80	72	66	62	63.3
1977	88	83	60	70	74	83	85	86	84	84	83	89	80.8
1978	60	48	35	54	63	76	80	78	74	76	72	65	65.1
1979	92	87	68	51	71	80	86	80	86	80	87	88	79.7
1980	62	51	38	44	61	71	77	80	80	69	75	63	64.3
1979	94	88	59	57	60	76	88	86	85	81	84	91	79.1
1980	62	53	31	41	39	58	82	78	77	76	72	68	61.4
1980	92	82	65	57	73	79	85	83	81	76	76	85	77.8
1980	59	53	42	32	67	73	78	79	78	73	62	63	58.3
Average	89.9	82.6	63.4	61.3	72.6	82.4	86.3	84.9	84.3	81.8	81.6	87.6	80.0
	61.3	51.4	37.1	43.9	60.7	71.7	78.8	78.3	78.1	74.3	67.9	63.1	63.4
	75.6	67.0	50.3	52.6	66.7	77.1	82.6	81.6	81.2	78.0	74.8	75.4	71.7

Note: Upper column = 8:40; Lower Column = 17:40

HUMIDITY

TABLE 28

Index No. 1320
Station: Tarahara

Unit: Percent (%)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	83	70	57	70	70	77	79	79	80	71	68	74	73.2
	84	74	65	69	75	82	82	85	87	84	85	84	79.7
1972	77	77	60	57	63	76	86	79	80	80	75	84	74.5
	79	71	57	50	52	71	78	68	83	84	86	82	71.8
1973	89	79	54	49	68	78	80	82	81	81	72	87	75.0
	82	74	51	40	65	80	80	84	85	86	82	87	74.8
1974	86	80	59	64	69	79	85	84	82	79	73	84	77.0
	82	60	54	62	68	73	82	80	82	82	83	81	74.1
1975	89	82	57	56	65	79	85	79	81	76	71	83	75.3
	80	66	54	53	64	71	82	79	81	83	82	80	72.9
1976	85	79	56	50	67	81	80	80	76	73	75	87	74.1
	80	59	45	42	66	74	76	80	79	80	87	74	70.2
1977	88	78	57	64	69	78	80	82	78	77	80	87	76.5
	69	52	44	56	66	76	77	80	79	82	81	81	70.3
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-
Average	85.3	77.9	57.1	58.6	67.3	78.3	82.1	80.7	79.7	76.7	73.4	83.7	75.0
	79.4	65.1	52.9	53.1	65.1	75.4	79.6	79.4	82.3	83.0	83.7	81.3	73.4
	82.4	71.5	55.0	55.9	66.2	76.9	80.9	80.1	81.0	79.9	78.6	82.5	74.2

Note: Upper column = 8:40; Lower Column = 17:40

EVAPORATION

TABLE 29

Index No. 1114
 Station: Hardinath

YEAR	Unit: mm/day												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	1.9	2.9	4.6	4.4	4.8	5.0	5.2	4.6	4.0	3.3	2.7	2.1	3.8
1972	1.9	2.9	4.9	6.7	8.0	6.4	4.4	5.1	4.0	3.1	2.6	1.9	4.3
1973	1.4	2.1	4.0	6.5	5.6	4.2	5.0	3.9	4.2	2.8	2.7	2.0	3.7
1974	1.9	2.9	4.6	5.2	6.7	6.0	4.2	3.5	3.6	3.4	2.6	1.8	3.9
1975	1.6	2.4	4.3	6.8	7.5	5.8	4.1	4.4	3.8	3.1	2.7	1.8	4.0
1976	1.7	2.7	5.3	8.5	6.6	5.9	4.6	-	3.8	3.2	2.6	2.1	-
1977	2.0	2.9	5.0	6.3	6.2	7.2	5.4	4.3	4.3	3.2	2.5	2.0	4.3
1978	2.0	2.7	4.6	6.6	6.4	5.3	4.9	5.4	4.1	3.4	2.6	2.2	4.2
1979	2.0	2.8	5.0	7.6	7.4	6.0	4.1	4.9	3.9	2.9	2.6	2.0	4.3
1980	2.4	2.8	5.1	7.9	6.3	5.4	5.3	4.1	4.1	3.3	2.7	3.0	4.4
Average	1.9	2.4	4.7	6.7	6.6	5.7	4.7	4.5	4.0	3.2	2.6	2.1	4.1

TABLE 30
EVAPORATION

Index No. 1320
Station: Farabara

YEAR	Unit: mm/day												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	2.2	2.9	4.2	4.8	5.2	5.7	5.3	4.8	4.1	3.9	3.5	2.8	4.1
1972	2.5	3.3	4.9	6.0	7.7	5.4	4.7	3.6	3.9	3.2	2.5	1.9	4.1
1973	1.8	2.8	4.4	7.0	5.8	4.0	4.5	3.2	2.8	2.8	3.1	2.1	3.7
1974	2.1	3.0	4.5	4.9	5.2	4.2	3.9	3.1	3.3	3.2	2.9	2.0	3.5
1975	2.0	2.9	5.2	6.1	5.9	4.3	3.2	3.9	3.6	3.3	3.0	2.0	3.8
1976	2.1	3.4	5.1	6.7	5.6	3.3	3.7	3.4	3.7	3.7	2.7	2.0	3.8
1977	1.9	2.7	4.2	5.5	5.1	5.6	4.9	4.3	3.3	2.6	2.4	2.1	3.7
1978	1.7	2.6	4.3	6.0	5.6	5.3	4.5	4.8	3.7	3.3	2.5	1.9	3.9
1979	2.1	2.8	4.1	5.3	5.8	5.8	4.2	4.4	4.1	3.9	2.6	1.9	3.9
1980	2.0	3.0	4.6	6.6	6.9	5.4	4.4	5.0	3.8	3.8	2.9	2.1	4.2
Average	2.0	2.9	4.6	5.9	5.9	4.9	4.3	4.1	3.6	3.4	2.8	2.1	3.9

WIND VELOCITY

TABLE 31

Index No. 1114
Station: Hardinath

YEAR	Unit: km/hour												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	-	4.1	5.3	10.5	8.6	11.5	11.9	10.7	7.1	4.2	3.1	2.9	-
1972	3.4	5.4	5.8	8.5	12.7	11.6	9.6	10.0	6.3	3.7	3.2	3.2	7.0
1973	4.4	4.4	5.6	10.4	12.1	9.3	10.9	8.4	7.7	4.5	2.5	2.6	6.9
1974	3.2	4.4	5.9	8.0	11.0	9.4	8.7	6.8	6.8	3.8	2.7	3.2	6.2
1975	3.6	4.6	5.9	8.7	12.3	11.2	9.2	7.9	7.3	3.2	1.0	0.7	6.3
1976	0.6	2.8	5.7	10.9	10.6	8.6	7.4	7.8	6.8	3.4	2.4	2.2	5.8
1977	2.8	3.0	4.8	8.6	8.5	13.6	11.2	7.1	5.6	4.0	3.2	3.0	6.3
1978	3.1	3.9	4.8	8.0	11.2	9.1	9.9	8.5	6.7	3.2	3.6	2.4	6.2
1979	3.0	4.2	5.4	8.2	8.6	9.0	8.4	6.2	5.9	4.2	2.8	2.5	5.7
1980	3.2	3.8	5.6	7.8	12.9	11.7	12.2	10.3	6.5	3.4	2.1	2.0	6.8
Average	3.0	4.1	5.5	9.0	10.9	10.5	9.9	8.4	6.7	3.8	2.7	2.5	6.4

WIND VELOCITY

TABLE 32

Index No. 1320
Station: Tarahara

YEAR	Unit: km/hour												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	2.5	2.7	4.2	10.4	7.7	10.8	9.9	8.4	5.2	3.4	3.9	3.8	6.1
1972	4.5	5.8	8.1	10.9	15.0	11.8	9.8	9.4	6.2	4.3	4.1	4.0	7.8
1973	4.9	6.2	7.4	12.3	11.4	7.3	7.6	8.8	4.0	3.6	4.3	4.5	6.9
1974	5.1	5.8	7.7	9.5	10.2	8.9	8.2	6.6	6.8	4.9	4.2	4.6	6.9
1975	5.0	6.0	8.2	9.8	11.6	9.9	10.1	8.6	7.8	4.8	4.2	4.6	7.6
1976	5.0	6.7	8.0	10.4	9.6	7.7	7.8	8.0	7.8	5.0	4.2	4.2	7.0
1977	4.8	5.3	7.7	10.2	8.0	9.6	9.6	6.7	5.4	3.9	3.6	3.8	6.6
1978	4.3	5.0	6.4	7.9	8.6	7.8	6.6	6.1	5.6	4.4	4.4	3.6	5.9
1979	3.6	4.6	6.3	6.7	6.4	7.2	6.2	5.4	4.4	4.0	3.1	2.4	5.0
1980	2.8	4.0	5.8	7.4	9.4	8.0	7.8	7.8	4.7	3.1	2.2	1.8	5.4
Average	4.3	5.2	7.0	9.6	9.8	8.9	8.4	7.6	5.8	4.1	3.8	3.7	6.5

TABLE 33

SUNSHINE HOURS

Index No. 1114
Station: Hardinath

YEAR	Unit: hours/day												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	6.7	8.6	8.7	6.3	9.1	3.7	6.6	6.3	6.7	8.0	9.5	9.2	7.9
1972	8.1	8.5	8.9	9.7	9.7	5.9	5.1	9.3	6.5	7.6	9.3	8.8	8.1
1973	7.1	9.1	9.1	9.4	7.6	3.9	7.7	7.8	6.3	7.8	9.7	8.7	7.9
1974	8.8	9.6	8.8	9.8	10.2	6.3	4.6	5.1	6.5	8.9	10.1	-	-
1975	7.7	8.4	8.6	9.5	9.9	6.7	4.9	8.1	6.8	8.7	9.7	8.7	8.1
1976	8.3	8.7	9.4	9.1	10.2	4.7	7.7	6.5	6.9	9.3	9.1	8.5	8.2
1977	9.5	9.1	9.7	9.6	10.2	7.4	7.0	7.8	7.9	8.3	8.3	8.1	8.6
1978	8.4	8.0	9.3	10.4	8.9	5.2	6.7	8.0	5.6	8.4	8.4	9.0	8.0
1979	7.8	8.4	9.3	9.8	11.2	7.8	5.5	6.2	7.0	8.6	7.9	7.6	8.1
1980	8.5	8.9	8.6	10.1	9.3	7.5	6.8	7.1	6.9	-	-	-	-
Average	8.1	8.7	9.0	9.4	9.6	5.9	6.3	7.2	6.7	8.4	9.1	7.6	8.1

SUNSHINE HOUR

TABLE 34

Index No. 1319
Station: Biratnagar Airport

YEAR	Unit: hours/day												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	9.1	9.9	7.1	4.9	8.1	6.3	7.5	9.7	8.2	-
1973	6.5	7.8	8.2	7.5	7.1	4.5	6.4	7.2	5.7	7.4	9.1	8.4	7.2
1974	8.9	9.4	8.3	8.7	-	-	-	5.7	5.7	7.9	-	9.8	-
1975	7.8	8.2	8.7	8.7	9.4	7.1	4.5	6.4	5.3	8.1	9.7	8.7	7.7
1976	8.5	8.7	8.9	7.8	9.6	6.0	6.5	5.6	7.0	9.3	8.9	8.5	7.9
1977	8.2	9.2	9.4	8.6	10.0	6.8	5.1	5.6	7.1	7.5	8.0	8.1	7.8
1978	8.5	8.5	9.0	9.8	8.1	6.4	6.7	8.5	5.8	8.2	8.0	8.9	8.0
1979	8.0	8.4	9.5	9.3	10.8	8.2	-	5.6	6.9	7.3	8.0	7.6	-
1980	8.2	8.1	8.8	9.9	8.0	7.6	5.7	-	-	-	-	7.8	-
Average	8.08	8.54	8.85	8.82	9.11	6.71	5.69	6.59	6.23	7.90	7.68	8.44	7.7

SUNSHINE HOUR

TABLE 35

Index No. 1320
Station: Tarahara

YEAR	Unit: hours/day												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Mean
1971	7.8	8.4	8.1	6.3	8.5	5.3	6.1	5.8	-	-	-	-	-
1972	7.2	8.0	8.3	8.6	9.7	6.6	5.2	7.8	6.2	7.1	8.7	8.4	7.7
1973	5.6	7.5	7.6	8.3	7.8	4.0	5.0	6.1	4.9	6.9	9.6	7.7	6.8
1974	8.9	9.2	8.1	9.3	8.9	7.4	4.9	4.9	5.3	7.9	9.5	8.2	7.7
1975	8.0	8.1	7.9	8.8	8.9	7.1	4.4	6.7	4.3	7.8	9.3	8.5	7.5
1976	8.4	7.6	9.1	8.3	8.8	5.9	6.1	5.5	6.7	8.6	8.1	8.3	7.6
1977	7.2	8.3	8.3	7.8	8.4	7.0	6.1	5.6	6.7	7.2	7.9	8.3	7.4
1978	7.9	7.7	8.9	9.0	7.5	7.0	-	-	5.6	8.0	6.9	8.8	-
1979	8.5	-	9.2	9.1	9.9	-	-	2.9	6.8	7.9	7.1	7.4	-
1980	-	8.2	8.7	10.1	9.0	7.7	5.7	7.4	5.9	8.4	9.3	7.9	-
Average	7.7	8.1	8.4	8.6	8.8	6.4	5.4	5.9	5.8	7.6	8.5	8.2	7.5

TABLE 36 POPULATION PROJECT OF NEPAL BY DEVELOPMENT REGION

Development Region	Ecological Zone	1981		1986		1991		1996		2001		2006	
		Population	Ratio (%)	Population	P.C.R. (%)	Population	P.C.R. (%)	Population	P.C.R. (%)	Population	P.C.R. (%)	Population	P.C.R. (%)
Eastern	Mountain	398,405	11.04	430,231	1.51	573,744	1.94	534,260	2.43	618,982	2.99	733,004	3.44
	Hill	1,453,113	40.27	1,588,519	1.80	1,771,078	2.20	2,019,459	2.66	2,358,989	3.16	2,808,150	3.55
	Terai	1,756,965	48.67	2,169,803	5.31	2,637,802	3.98	3,173,274	3.76	3,790,918	3.62	4,503,375	3.50
	Total	3,608,483	100.00	4,188,553	3.02	4,882,624	3.11	5,726,993	3.24	6,768,889	3.40	8,044,529	3.51
Central	Mountain	435,861	9.22	478,471	1.86	531,675	2.13	599,268	2.42	685,493	2.72	792,845	2.95
	Hill	2,176,705	46.06	2,429,279	2.22	2,739,510	2.43	3,125,002	2.67	3,606,310	2.91	4,198,101	3.08
	Terai	2,113,632	44.72	2,465,102	3.12	2,868,804	3.08	3,330,065	3.03	3,854,864	2.97	4,450,220	2.92
	Total	4,726,398	100.00	5,372,852	2.60	6,139,989	2.70	7,054,335	2.81	8,146,667	2.92	9,441,716	2.99
Western	Mountain	44,398	1.44	37,411	-3.37	31,319	-3.49	27,032	-2.90	25,395	-1.24	26,691	1.00
	Hill	2,310,282	74.83	2,540,837	1.92	2,814,782	2.07	3,148,093	2.26	3,558,357	2.48	4,050,651	2.62
	Terai	732,536	23.73	933,641	4.83	1,148,152	4.22	1,388,223	3.87	1,660,405	3.64	1,967,728	3.45
	Total	3,087,216	100.00	3,511,889	2.58	3,994,253	2.61	4,563,258	2.70	5,244,157	2.82	6,045,070	2.88
Middle Western	Mountain	281,782	13.97	301,959	1.39	330,739	1.82	376,188	2.61	443,424	3.34	534,084	3.79
	Hill	1,218,060	60.37	1,336,334	1.87	1,498,572	2.32	1,732,262	2.94	2,062,168	3.55	2,502,335	3.94
	Terai	517,761	25.66	670,710	5.31	841,067	4.63	1,034,911	4.23	1,257,680	3.98	1,513,441	3.72
	Total	2,017,603	100.00	2,309,003	2.73	2,670,378	2.95	3,143,361	3.31	3,763,272	3.66	4,549,860	3.87
Far Western	Mountain	303,076	25.00	329,576	1.69	360,146	1.79	397,790	2.01	444,396	2.24	499,766	2.38
	Hill	663,375	54.68	719,144	1.62	792,203	1.95	891,687	2.39	1,025,604	2.84	1,198,080	3.16
	Terai	246,683	20.32	365,550	8.18	490,975	6.08	623,966	4.91	765,562	4.17	916,933	3.67
	Total	1,213,134	100.00	1,414,270	3.11	1,643,324	3.05	1,913,443	3.09	2,235,562	3.16	2,614,779	3.18
All Nepal	14,652,834		16,796,567	2.76	19,330,568	2.85	22,401,390	2.99	26,158,547	3.15	30,695,954	3.25	

Source: Agricultural Project Services Center (APPROSC), Kathmandu

Note: P.C.R. = projected population growth rate per annum

TABLE 37 POPULATION DISTRIBUTION BY SEX AND DEVELOPMENT REGION, 1981

Development Regions	Total Populat.	Male Populat.	Female Populat.
Eastern Development Region	3,708,923	1,901,957	1,806,966
Central Development Region	4,909,357	2,538,615	2,370,742
Western Development Region	3,128,859	1,584,542	1,544,317
Middle Western Development Region	1,955,611	994,505	961,106
Far Western Development Region	1,320,089	675,717	644,372
Total	15,022,839	7,695,336	7,327,503

Source: Population Census 1981, Central Bureau of Statistics

TABLE 38 POPULATION DISTRIBUTION BY DIFFERENT ZONE IN NEPAL, 1981

Development Regions	Total Populat.	Male Populat.	Female Populat.
Mechi Zone	932,625	481,359	451,266
Koshi Zone	1,423,624	731,610	692,014
Sagarmatha Zone	1,352,674	688,988	663,686
Janakpur Zone	1,688,115	864,100	824,015
Bagmati Zone	1,782,439	391,076	851,363
Narayani Zone	1,438,803	743,439	695,364
Gandaki Zone	1,107,569	545,728	561,841
Dhaulagiri Zone	453,462	228,621	224,841
Lumbini Zone	1,567,828	810,193	757,635
Rapti Zone	876,723	438,810	437,913
Bheri Zone	836,402	429,859	406,543
Karnali Zone	242,486	125,836	116,650
Seti Zone	794,911	401,020	393,891
Mahakali Zone	525,178	274,697	250,481
Total	15,022,839	7,695,336	7,327,503

Source: Population Census 1981, Central Bureau of Statistics

TABLE 39 POPULATION DISTRIBUTION BY SEX AND AGRO-CLIMATIC ZONE IN NEPAL, 1981

Development Regions	Total Populat.	Male Populat.	Female Populat.
Eastern Mountain	338,439	170,848	167,591
Central Mountain	413,143	213,292	199,851
Western Mountain	19,951	10,378	9,573
Middle Western Mountain	242,486	125,836	116,650
Far Western Mountain	288,877	146,078	142,799
Total	1,302,896	666,432	636,464
Eastern Hill	1,257,042	633,054	623,988
Central Hill	2,108,433	1,089,381	1,019,052
Western Hill	2,150,939	1,074,819	1,076,120
Middle Western Hill	1,042,365	521,695	520,670
Far Western Hill	604,336	300,490	303,846
Total	7,163,115	3,619,439	3,543,676
Eastern Terai	2,113,442	1,098,055	1,015,387
Central Terai	2,387,781	1,235,942	1,151,839
Western Terai	957,969	499,345	458,624
Middle Western Terai	670,760	346,974	323,786
Far Western Terai	426,876	229,149	197,727
Total	6,556,828	3,409,465	3,147,363
Nepal	15,022,839	7,695,336	7,327,503

Source: Population Census 1981, Central Bureau of Statistics

TABLE 40 SUMMARY OF THE POPULATION DISTRIBUTION IN THE PROJECT DISTRICTS, 1981

	Total Population	Male Population	Female Population	No. of H. H.	Family Size	Geographical Area	Population Density
Sarlahi	398,766	205,991	192,775	71,667	5.56	1,052	379.1
Mahottari	361,054	187,092	173,962	64,262	5.61	1,052	343.2
Dharusba	432,569	224,900	207,669	79,785	5.42	1,219	354.9
Siraha	375,358	194,958	180,400	68,644	5.47	1,013	370.5
Saptari	379,055	194,376	184,679	68,646	5.52	1,494	253.7
Sunsari	344,594	178,355	166,239	58,187	5.92	1,265	272.4
Morang	534,692	278,355	256,337	91,045	5.87	1,914	279.4
Jhapa	479,743	252,011	227,732	81,113	5.91	1,532	313.1
Total	3,305,831	1,716,038	1,589,793	583,349	5.66	10,541	313.6
Nepal	15,022,839	7,695,336	7,327,503	2,585,154	5.81		

Source: Population Census 1981, Central Bureau of Statistics

TABLE 41 GAINFUL POPULATION ENGAGED TO THE FARMING AND FISHERY BY SEX AND AGE
GROUP OF 10 YEARS AND OVER IN THE PROJECT DISTRICTS, 1981

Subjected Area	Total Population of 10 Years and Over	Farm/Fish Workers		Ratio %	
		Male	Female		Total
Sarlahi	140,651	106,345	14,550	120,895	85.95
Mahottari	143,597	99,536	29,459	128,995	89.83
Dhanusha	154,385	105,178	18,226	123,404	79.93
Siraha	149,302	100,037	31,209	131,246	87.91
Saptari	143,375	82,722	28,240	110,962	77.39
Sunsari	122,759	69,000	18,583	87,583	71.35
Morang	219,563	121,274	58,925	180,199	82.07
Jhapa	193,555	104,825	47,571	152,396	78.73
Total	1,267,187	788,917	246,763	1,035,680	81.73

Source: Population Census 1981, Central Bureau of Statistics

TABLE 42

POPULATION BY AGE GROUP IN THE PROJECT DISTRICT, 1981

ITEM	AGE GROUP	Sarlihi	Mahottori	Dhanusha	Siraha	Saptari	Sunsari	Morang	Jhapa	Total	Ratio %
Total Population	0-9	126,285	114,798	130,135	113,932	117,170	106,352	165,794	147,650	1,022,081	30.92
	10-14	42,119	33,815	43,856	35,957	37,648	41,989	67,185	64,508	367,077	11.10
	15-19	27,987	24,240	32,108	26,499	28,880	31,226	48,266	45,702	264,908	8.01
	20-59	179,956	165,899	204,365	178,235	176,162	147,520	230,352	201,318	1,483,807	44.88
	60 and over	22,419	22,302	22,105	20,735	19,195	17,507	23,130	20,565	167,958	5.08
	Total	398,766	361,054	432,569	375,358	379,055	344,594	534,692	479,743	3,305,831	100
Male Population	0-9	64,600	60,157	67,059	59,228	59,473	53,560	83,532	74,303	521,912	30.41
	10-14	24,123	19,402	24,990	20,181	20,765	22,777	36,288	34,202	202,728	11.81
	15-19	15,099	12,827	17,115	14,241	14,828	16,363	25,537	24,429	140,439	8.18
	20-59	90,813	83,579	104,677	90,700	89,311	76,464	120,343	107,890	763,777	44.50
	60 and over	11,356	11,127	11,059	10,608	9,959	9,191	12,655	11,187	87,182	5.08
	Total	205,991	187,092	224,900	194,958	194,376	178,355	278,355	252,011	1,716,038	100
Female Population	0-9	61,685	54,641	63,076	54,704	57,697	52,792	82,227	73,347	500,169	31.46
	10-14	17,996	14,413	18,866	15,776	16,833	19,212	30,807	30,306	164,349	10.34
	15-19	12,888	11,413	14,993	12,258	14,052	14,863	22,729	21,273	124,469	7.83
	20-59	89,143	82,320	99,688	87,535	86,851	71,056	110,009	93,428	720,030	45.29
	60 and over	11,063	11,175	11,046	10,127	9,196	8,316	10,475	9,378	80,776	5.08
	Total	192,775	173,962	207,669	180,400	184,679	166,239	256,337	227,732	1,589,793	100

Source; Population Census 1981, Central Bureau of Statistics

ITEM	ACE GROUP	Sarlahi	Mahottori	Dhanusha	Siraha	Saptari	Sunsari	Morang	Jhapa	Total	Ratio %
Total	0-9	126,285	114,798	130,135	113,932	117,170	106,352	165,794	147,650	1,022,081	30.92
	10-14	42,119	33,815	43,856	35,957	37,648	41,989	67,185	64,508	367,077	11.10
	15-19	27,987	24,240	32,108	26,499	28,880	31,226	48,266	45,702	264,908	8.01
	20-59	179,956	165,899	204,365	178,235	176,162	147,520	230,352	201,318	1,483,807	44.88
	60 and over	22,419	22,302	22,105	20,735	19,195	17,507	23,130	20,565	167,958	5.08
	Total	398,766	361,054	432,569	375,358	379,055	344,594	534,692	479,743	3,305,831	100
Male	0-9	64,600	60,157	67,059	59,228	59,473	53,560	83,532	74,303	521,912	30.41
	10-14	24,123	19,402	24,990	20,181	20,765	22,777	36,288	34,202	202,728	11.81
	15-19	15,099	12,827	17,115	14,241	14,828	16,363	25,537	24,429	140,439	8.18
	20-59	90,813	83,579	104,677	90,700	89,311	76,464	120,343	107,890	763,777	44.50
	60 and over	11,356	11,127	11,059	10,608	9,999	9,191	12,655	11,187	87,182	5.08
	Total	205,991	187,092	224,900	194,958	194,376	178,355	278,355	252,011	1,716,038	100
Female	0-9	61,685	54,641	63,076	54,704	57,697	52,792	82,227	73,347	500,169	31.46
	10-14	17,996	14,413	18,866	15,776	16,883	19,212	30,807	30,306	164,349	10.34
	15-19	12,888	11,413	14,993	12,258	14,052	14,863	22,729	21,273	124,469	7.83
	20-59	89,143	82,320	99,688	87,535	86,851	71,056	110,009	93,428	720,030	45.29
	60 and over	11,063	11,175	11,046	10,127	9,196	8,316	10,475	9,378	80,776	5.08
	Total	192,775	173,962	207,669	180,400	184,679	166,239	256,337	227,732	1,589,793	100

Source; Population Census 1981, Central Bureau of Statistics

TABLE 10. WHEAT PROJECT TREND BY DIFFERENT AGRO-ECONOMICAL ZONES IN NEPAL, 1970-83
(2 of 2)

	Area		Prod.		Yield/ha		Area		Prod.		Yield/ha	
	ha	M.T.	ha	M.T.	kg	MT	ha	kg	ha	MT	kg	MT
1970-71	16,400	14,310	873	3,600	2,633	731	116,000	81,626	704			
1971-72	16,400	15,185	926	5,800	4,570	788	127,050	99,502	783			
1972-73	17,950	21,005	1,170	9,201	7,908	952	149,050	192,244	1,290			
1973-74	19,300	22,000	1,140	7,050	9,250	1,312	153,640	186,258	1,212			
1974-75	19,850	22,006	1,109	9,250	9,465	1,023	174,007	211,189	1,214			
1975-76	22,307	26,386	1,183	15,100	17,365	1,150	222,984	261,519	1,173			
1976-77	22,922	19,283	841	16,645	17,012	1,022	233,567	236,315	1,012			
1977-78	23,210	23,874	1,029	17,631	18,512	1,050	240,034	258,177	1,076			
1978-79	27,400	25,880	1,054	11,200	14,070	1,256	202,790	233,620	1,152			
1979-80	24,500	29,400	1,200	12,300	14,210	1,155	237,330	286,680	1,208			
1980-81	28,290	33,830	1,196	16,790	19,620	1,169	250,590	317,750	1,268			
1981-82	32,430	48,150	1,485	21,860	27,520	1,259	249,060	331,030	1,329			
1982-83	30,930	38,910	1,258	25,750	39,550	1,536	313,930	360,910	1,150			
								Total				
1970-71	16,950	17,669	1,042	17,400	16,575	953	83,650	82,868	991			
1971-72	17,350	19,199	1,107	17,200	17,152	997	84,313	94,072	1,116			
1972-73	16,485	13,737	833	17,200	15,535	903	82,436	94,919	1,151			
1973-74	17,260	15,724	911	18,100	15,729	869	91,659	97,489	1,064			
1974-75	17,325	15,793	912	19,215	16,829	876	93,121	99,090	1,064			
1975-76	16,563	18,335	1,107	15,850	18,538	1,169	89,888	106,414	1,184			
1976-77	18,129	19,197	1,051	15,997	11,645	728	100,727	114,062	1,132			
1977-78	18,580	18,819	1,013	16,020	12,894	805	106,576	130,442	1,224			
1978-79	26,420	30,370	1,150	14,720	13,080	877	114,980	142,120	1,236			
1979-80	26,400	31,150	1,178	14,920	13,550	908	116,360	140,610	1,208			
1980-81	31,420	35,360	1,125	16,200	14,380	888	126,200	144,420	1,144			
1981-82	32,530	36,490	1,122	18,160	22,530	1,241	134,420	177,860	1,323			
1982-83	32,330	36,120	1,117	25,910	290,620	1,143	152,010	196,440	1,292			
							Total					
1970-71	10,400	10,940	1,051	11,400	11,385	999	28,550	28,866	1,011			
1971-72	10,500	11,753	1,120	10,400	10,720	1,031	27,820	29,611	1,064			
1972-73	10,500	9,384	893	10,400	9,384	902	27,943	25,331	907			
1973-74	9,404	9,356	995	10,300	8,937	868	26,626	24,639	925			
1974-75	7,464	7,178	962	10,212	7,948	778	24,671	20,531	832			
1975-76	4,260	4,928	1,157	7,222	8,216	1,138	15,665	18,024	1,151			
1976-77	3,961	3,365	849	6,261	4,236	677	14,086	11,476	815			
1977-78	3,225	3,056	948	5,780	4,177	723	13,005	11,319	870			
1978-79	3,480	3,580	774	5,780	4,430	766	12,720	11,630	914			
1980-81	2,590	2,800	1,029	3,780	4,960	858	13,340	13,080	981			
1981-82	2,880	2,880	1,000	6,850	6,600	964	16,410	17,040	1,039			
1982-83	2,880	2,930	1,017	6,940	6,940	1,000	16,370	17,190	1,050			
							Total					
1970-71	10,400	10,940	1,051	11,400	11,385	999	28,550	28,866	1,011			
1971-72	10,500	11,753	1,120	10,400	10,720	1,031	27,820	29,611	1,064			
1972-73	10,500	9,384	893	10,400	9,384	902	27,943	25,331	907			
1973-74	9,404	9,356	995	10,300	8,937	868	26,626	24,639	925			
1974-75	7,464	7,178	962	10,212	7,948	778	24,671	20,531	832			
1975-76	4,260	4,928	1,157	7,222	8,216	1,138	15,665	18,024	1,151			
1976-77	3,961	3,365	849	6,261	4,236	677	14,086	11,476	815			
1977-78	3,225	3,056	948	5,780	4,177	723	13,005	11,319	870			
1978-79	3,480	3,580	774	5,780	4,430	766	12,720	11,630	914			
1980-81	2,590	2,800	1,029	3,780	4,960	858	13,340	13,080	981			
1981-82	2,880	2,880	1,000	6,850	6,600	964	16,410	17,040	1,039			
1982-83	2,880	2,930	1,017	6,940	6,940	1,000	16,370	17,190	1,050			

TABLE 11. BARLEY PRODUCTION TREND BY DIFFERENT AGRO-ECOLOGICAL ZONES IN NEPAL, 1970-83

(2 OF 2)

Year	Middle Western Terai		Far Western Terai		Total	Yield/ha kg
	Area ha	Prod. M.T.	Area ha	Prod. MT		
1970-71	355	248	10	6	8,000	5,594
1971-72	355	250	10	7	8,165	5,750
1972-73	360	250	6	4	7,861	5,203
1973-74	765	254	15	19	8,250	5,576
1974-75	390	268	41	24	7,976	5,658
1975-76	312	249	100	59	6,087	4,433
1976-77	316	210	115	68	4,401	3,181
1977-78	325	221	110	66	4,282	3,108
1978-79	910	910	150	140	6,830	5,994
1979-80	740	740	180	150	6,860	6,260
1980-81	730	710	180	170	6,840	5,430
1981-82	590	530	190	180	6,590	5,490
1982-83	280	260	160	70	4,470	3,860
						Total
1970-71	3,925	3,871	2,005	2,032	9,981	9,810
1971-72	3,935	3,883	2,005	2,033	10,042	9,841
1972-73	3,995	3,983	2,067	2,075	10,186	10,072
1973-74	3,970	3,953	2,025	2,060	10,320	10,224
1974-75	3,935	3,959	2,025	2,059	10,514	10,360
1975-76	4,050	4,068	2,440	2,486	10,606	10,362
1976-77	4,460	3,822	2,300	2,072	10,904	9,511
1977-78	4,420	4,369	2,335	2,379	10,629	10,418
1978-79	3,890	3,350	2,130	1,870	9,750	8,604
1979-80	3,900	3,400	2,140	1,960	9,810	8,890
1980-81	5,180	4,460	1,700	1,340	10,720	9,140
1981-82	5,140	4,460	2,000	1,720	10,810	9,310
1982-83	5,250	4,340	1,830	1,550	11,010	9,280
						Total
1970-71	3,705	4,070	2,025	2,172	9,315	9,883
1971-72	3,705	4,025	2,025	2,172	9,315	9,830
1972-73	3,730	3,991	2,010	2,169	9,090	9,543
1973-74	3,664	3,923	2,005	2,154	9,379	9,828
1974-75	3,675	3,935	1,930	2,075	9,337	9,781
1975-76	3,950	4,226	2,100	2,073	9,785	9,878
1976-77	3,535	3,721	2,440	1,666	9,575	7,963
1977-78	2,885	2,980	2,940	1,984	8,910	7,759
1978-79	3,230	3,100	2,100	1,950	8,020	7,536
1979-80	3,230	3,110	2,800	2,110	9,220	8,090
1980-81	3,300	3,080	2,890	2,390	9,400	8,460
1981-82	3,300	2,950	3,110	2,600	9,620	8,520
1982-83	3,110	2,640	2,510	2,160	8,880	7,760
						Total
1970-71	3,705	4,070	2,025	2,172	9,315	9,883
1971-72	3,705	4,025	2,025	2,172	9,315	9,830
1972-73	3,730	3,991	2,010	2,169	9,090	9,543
1973-74	3,664	3,923	2,005	2,154	9,379	9,828
1974-75	3,675	3,935	1,930	2,075	9,337	9,781
1975-76	3,950	4,226	2,100	2,073	9,785	9,878
1976-77	3,535	3,721	2,440	1,666	9,575	7,963
1977-78	2,885	2,980	2,940	1,984	8,910	7,759
1978-79	3,230	3,100	2,100	1,950	8,020	7,536
1979-80	3,230	3,110	2,800	2,110	9,220	8,090
1980-81	3,300	3,080	2,890	2,390	9,400	8,460
1981-82	3,300	2,950	3,110	2,600	9,620	8,520
1982-83	3,110	2,640	2,510	2,160	8,880	7,760

TABLE 12. MAIZE PRODUCTION TREND BY DIFFERENT AGRO-ECOLOGICAL ZONES IN NEPAL, 1970-83
(1 of 2)

	Eastern Terai		Central Terai		Western Terai	
	Area ha	Prod. M.T.	Area ha	Prod. MT	Area ha	Prod. MT
	Yield/ha kg	Yield/ha kg	Yield/ha kg	Yield/ha kg	Yield/ha kg	Yield/ha kg
1970-71	11,400	15,115	56,900	100,708	20,850	35,978
1971-72	10,975	13,704	56,026	97,597	22,400	38,320
1972-73	11,050	19,135	57,168	104,219	20,740	39,241
1973-74	12,400	15,440	52,951	90,439	19,455	35,810
1974-75	13,200	17,179	54,880	93,766	20,175	37,340
1975-76	12,670	14,990	49,880	78,800	20,170	36,860
1976-77	15,912	21,665	46,951	79,980	17,650	33,371
1977-78	16,248	22,118	43,201	78,016	16,916	35,124
1978-79	10,260	14,960	43,000	65,450	15,760	32,830
1979-80	16,690	23,000	38,080	30,600	15,470	14,790
1980-81	19,130	30,080	43,630	73,090	16,870	32,870
1981-82	21,000	33,190	45,040	78,380	17,270	28,740
1982-83	28,000	44,350	59,220	90,740	7,260	13,780
						Western Hill
1970-71	61,250	119,132	75,950	149,324	95,300	151,029
1971-72	60,550	105,604	74,288	127,014	72,000	128,916
1972-73	61,333	110,795	77,026	140,998	75,908	155,188
1973-74	65,246	120,900	80,550	148,437	77,500	147,671
1974-75	65,890	122,109	79,750	147,090	78,210	149,375
1975-76	65,890	110,400	79,790	140,210	78,210	151,130
1976-77	65,990	115,770	68,769	118,838	78,620	198,768
1977-78	70,614	104,102	75,608	137,354	81,778	118,405
1978-79	71,810	117,150	68,450	123,520	82,760	124,480
1979-80	66,180	82,170	70,530	101,140	79,480	87,810
1980-81	71,850	109,420	75,420	130,310	81,880	120,900
1981-82	81,370	124,470	88,980	152,940	79,720	117,850
1982-83	79,720	87,080	90,500	138,780	99,610	131,740
						Western Mountain
1970-71	14,350	27,500	14,100	27,932	2,800	5,024
1971-72	14,250	27,240	14,260	27,619	2,700	4,812
1972-73	15,694	29,211	14,285	27,093	2,350	4,198
1973-74	16,540	30,835	14,620	28,030	2,350	4,150
1974-75	16,050	30,354	14,625	28,137	2,400	4,235
1975-76	16,050	30,590	14,620	28,120	2,400	4,139
1976-77	16,050	30,444	14,625	27,646	2,400	4,310
1977-78	15,538	25,915	14,625	24,599	2,400	4,381
1978-79	15,960	28,920	13,920	20,830	2,400	4,360
1979-80	15,090	21,030	19,920	17,260	2,400	3,690
1980-81	18,020	30,100	12,820	19,640	2,400	4,290
1981-82	16,970	27,190	14,500	22,500	2,330	4,290
1982-83	16,970	25,390	13,500	19,960	900	1,600
					860	1,557
						1,370

TABLE 12. MAIZE PRODUCTION TREND BY DIFFERENT AGRO-ECOLOGICAL ZONES IN NEPAL, 1970-83
(2 of 2)

	Middle Western Teral		Far Western Teral		Total	
	Area ha	Prod. M.T.	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg
1970-71	35,900	58,158	1,620	15,500	20,784	1,341
1971-72	34,600	56,416	1,632	15,100	19,230	1,274
1972-73	34,697	58,830	1,696	15,332	20,384	1,330
1973-74	36,000	60,430	1,679	15,060	20,048	1,331
1974-75	36,500	62,022	1,699	16,183	21,943	1,356
1975-76	36,500	33,960	930	16,180	15,690	970
1976-77	31,058	54,624	1,759	17,200	24,420	1,420
1977-78	36,207	59,754	1,650	17,073	24,149	1,414
1978-79	51,310	86,530	1,686	15,280	22,930	1,501
1979-80	51,310	72,620	1,415	15,280	22,620	1,480
1980-81	34,230	57,780	1,688	17,790	27,220	1,530
1981-82	32,140	52,670	1,639	14,580	20,760	1,424
1982-83	35,860	51,930	1,448	20,110	26,480	1,317
	Middle Western Hill		Far Western Hill		Total	
1970-71	37,900	74,767	1,973	13,800	24,750	1,793
1971-72	37,800	74,987	1,989	13,600	24,324	1,789
1972-73	37,600	74,106	1,971	14,100	26,105	1,851
1973-74	36,716	68,212	1,858	14,100	27,465	1,907
1974-75	37,350	59,676	1,598	14,050	26,859	1,912
1975-76	37,350	59,410	1,591	14,050	23,350	1,662
1976-77	36,570	68,598	1,870	13,850	24,305	1,755
1977-78	34,378	61,197	1,780	13,400	22,168	1,654
1978-79	39,180	66,140	1,688	13,500	22,320	1,653
1979-80	39,280	61,020	1,553	13,500	22,250	1,648
1980-81	40,620	64,060	1,571	13,120	19,800	1,509
1981-82	41,230	60,780	1,474	12,430	17,830	1,434
1982-83	42,740	59,830	1,400	12,490	16,600	1,324
	Middle Western Mountain		Far Western Mountain		Total	
1970-71	5,350	9,541	1,783	4,600	7,776	1,690
1971-72	5,350	9,086	1,698	4,500	7,434	1,652
1972-73	4,850	8,647	1,773	3,900	6,462	1,657
1973-74	4,950	8,967	1,812	4,114	4,809	1,169
1974-75	5,150	9,325	1,811	3,614	6,028	1,668
1975-76	5,150	8,400	1,631	4,610	5,730	1,587
1976-77	5,250	8,820	1,680	3,620	6,020	1,663
1977-78	3,445	5,314	1,543	3,713	5,377	1,445
1978-79	5,270	8,670	1,645	3,640	6,150	1,690
1979-80	5,270	8,110	1,539	3,670	6,150	1,690
1980-81	5,390	8,020	1,485	4,350	6,340	1,457
1981-82	4,410	5,820	1,320	4,350	6,960	1,600
1982-83	3,660	4,390	1,200	4,250	5,620	1,322
	Total		Total		Total	
	140,550	230,743	1,642	140,550	230,743	1,642
	139,101	225,327	1,620	139,101	225,327	1,620
	138,987	236,809	1,704	138,987	236,809	1,704
	138,876	222,167	1,600	138,876	222,167	1,600
	140,938	232,250	1,648	140,938	232,250	1,648
	135,400	180,300	1,332	135,400	180,300	1,332
	128,771	214,080	1,662	128,771	214,080	1,662
	129,645	219,161	1,690	129,645	219,161	1,690
	136,610	222,700	1,630	136,610	222,700	1,630
	126,830	163,830	1,197	126,830	163,830	1,197
	131,650	221,040	1,679	131,650	221,040	1,679
	130,030	213,740	1,644	130,030	213,740	1,644
	138,450	227,200	1,531	138,450	227,200	1,531
	264,200	525,002	1,987	264,200	525,002	1,987
	258,261	460,407	1,783	258,261	460,407	1,783
	265,467	507,182	1,911	265,467	507,182	1,911
	274,412	512,625	1,868	274,412	512,625	1,868
	262,250	505,774	1,929	262,250	505,774	1,929
	275,290	490,500	1,782	275,290	490,500	1,782
	263,804	505,979	1,918	263,804	505,979	1,918
	275,778	443,226	1,607	275,778	443,226	1,607
	275,700	453,610	1,645	275,700	453,610	1,645
	263,970	354,390	1,318	263,970	354,390	1,318
	282,890	453,510	1,603	282,890	453,510	1,603
	302,730	473,870	1,560	302,730	473,870	1,560
	323,060	434,230	1,344	323,060	434,230	1,344
	41,200	77,773	1,888	41,200	77,773	1,888
	41,060	76,186	1,855	41,060	76,186	1,855
	41,079	75,611	1,841	41,079	75,611	1,841
	42,574	76,791	1,804	42,574	76,791	1,804
	41,839	78,079	1,866	41,839	78,079	1,866
	41,830	76,970	1,840	41,830	76,970	1,840
	41,945	77,240	1,841	41,945	77,240	1,841
	39,721	65,586	1,651	39,721	65,586	1,651
	41,190	68,950	1,674	41,190	68,950	1,674
	41,320	56,240	1,361	41,320	56,240	1,361
	42,910	68,390	1,594	42,910	68,390	1,594
	41,130	63,910	1,554	41,130	63,910	1,554
	39,260	56,730	1,445	39,260	56,730	1,445

TABLE 13. MILLET PRODUCTION TREND BY DIFFERENT AGRO-ECOLOGICAL ZONES IN NEPAL, 1970-83
(2 of 2)

	Middle East Terai		Far East Terai		Middle Western Hill		Far Western Mountain		Total	
	Area ha	Prod. M.T.	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Prod. MT
1970-71	2,450	2,019	824	1,850	1,600	865	193,300	17,191	891	
1971-72	2,450	2,019	824	1,850	1,600	865	19,200	17,191	895	
1972-73	2,400	2,077	865	1,900	1,672	904	19,125	16,975	888	
1973-74	2,600	2,278	876	1,900	1,722	906	20,150	18,088	888	
1974-75	2,600	2,277	876	1,900	1,618	852	19,508	17,609	903	
1975-76	2,400	2,207	946	1,900	1,730	910	19,810	18,120	915	
1976-77	2,060	1,815	881	1,900	1,730	911	17,410	15,370	883	
1977-78	1,842	1,963	1,066	1,900	1,951	1,027	18,907	17,575	930	
1978-79	1,300	1,510	1,162	1,900	1,900	1,000	14,820	13,810	932	
1979-80	1,300	1,340	1,031	1,900	1,830	963	18,820	16,690	887	
1980-81	1,880	1,850	984	1,970	2,050	1,041	19,210	18,120	943	
1981-82	1,880	1,790	952	1,550	2,170	1,113	18,800	18,130	964	
1982-83	1,820	1,340	901	1,900	1,900	1,000	21,320	17,840	837	
								Total		
1970-71	7,700	8,875	1,153	4,375	5,067	1,158	80,720	94,465	1,170	
1971-72	7,700	8,875	1,153	4,375	5,157	1,179	80,770	94,555	1,171	
1972-73	8,236	8,394	1,019	4,973	5,863	1,179	86,937	100,594	1,157	
1973-74	8,636	8,585	994	5,350	6,340	1,185	88,602	103,640	1,170	
1974-75	8,640	8,593	995	5,350	6,339	1,185	88,965	104,015	1,170	
1975-76	8,630	8,770	1,016	5,350	6,071	1,135	88,820	104,561	1,177	
1976-77	8,510	8,495	998	5,050	5,831	1,155	87,952	102,685	1,168	
1977-78	8,520	9,770	1,147	4,782	5,726	1,197	85,982	90,605	1,054	
1978-79	9,670	11,050	1,143	6,950	5,920	852	87,090	94,700	1,087	
1979-80	9,240	8,240	892	5,040	5,750	1,141	86,740	84,950	979	
1980-81	12,060	12,960	1,075	5,020	5,700	1,135	86,450	87,520	1,012	
1981-82	11,450	12,680	1,061	6,120	6,740	1,101	87,790	88,220	1,005	
1982-83	12,300	12,570	1,022	6,570	5,400	895	91,740	87,100	949	
							Total			
1970-71	2,425	3,588	1,480	2,400	2,866	1,194	14,175	17,554	1,238	
1971-72	3,025	3,688	1,219	2,400	2,866	1,194	14,775	17,554	1,188	
1972-73	3,054	3,726	1,220	2,500	2,990	1,196	14,735	17,775	1,223	
1974-75	3,943	4,701	1,192	2,653	3,133	1,181	16,676	20,286	1,216	
1975-76	3,930	4,650	1,183	2,650	3,150	1,189	16,750	19,510	1,165	
1976-77	3,922	4,643	1,184	2,640	3,130	1,186	16,532	19,993	1,209	
1977-78	3,090	3,578	1,158	1,970	2,332	1,184	14,834	16,985	1,145	
1978-79	3,800	3,980	1,047	1,970	2,450	1,244	15,410	17,680	1,147	
1979-80	3,800	3,810	1,003	1,970	2,120	1,076	15,890	16,420	1,033	
1980-81	3,690	3,620	981	2,880	2,590	899	15,096	15,890	987	
1981-82	3,850	3,770	979	2,110	1,900	900	15,510	15,360	990	
1982-83	3,580	3,500	978	2,420	2,140	884	15,750	16,130	944	

TABLE 49 PADDY PRODUCTION TREND BY DIFFERENT DISTRICTS IN THE STUDY AREA, 1970-83

Years	Sarlahl			Mahalari			Dhanusa			Siraha			Saptari		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg
1970-71	42,200	71,740	1,700	63,000	113,400	1,800	60,000	108,000	1,800	62,400	111,072	1,780	63,500	114,300	1,800
1971-72	42,000	77,700	1,850	63,500	114,300	1,800	60,000	105,600	1,760	62,400	113,750	1,823	62,800	112,500	1,791
1972-73	41,000	61,500	1,500	57,333	85,598	1,493	55,300	82,563	1,493	61,000	86,925	1,425	60,000	85,564	1,426
1973-74	42,500	75,437	1,775	63,500	114,300	1,800	60,000	108,000	1,800	64,000	115,200	1,800	63,970	113,546	1,775
1974-75	42,500	76,500	1,800	64,000	115,200	1,800	60,000	108,600	1,810	64,300	116,393	1,810	65,600	118,080	1,800
1975-76	39,230	71,900	1,820	60,230	110,820	1,840	58,000	110,200	1,900	66,420	128,850	1,940	70,200	136,890	1,950
1976-77	36,320	59,201	1,630	65,825	92,156	1,400	61,110	86,774	1,420	70,110	119,187	1,700	70,200	118,080	1,682
1977-78	35,453	57,898	1,633	68,599	96,938	1,400	55,225	92,693	1,678	66,468	101,696	1,530	73,456	114,904	1,564
1978-79	35,450	60,270	1,700	68,000	116,620	1,715	53,720	96,370	1,794	-	-	-	-	-	-
1979-80	34,670	54,840	1,582	68,260	113,120	1,657	54,840	100,930	1,840	66,930	133,490	1,994	72,850	144,240	1,980
1980-81	33,680	63,650	1,890	68,500	122,950	1,793	54,800	104,200	1,901	67,460	134,250	1,990	73,460	145,450	1,980
1981-82	38,870	73,850	1,900	63,010	126,020	2,000	57,680	98,060	1,700	67,200	112,220	1,670	74,340	104,080	1,400
1982-83	44,000	29,550	672	38,290	21,520	562	44,990	32,810	729	58,590	54,300	927	69,310	76,900	1,110

Years	Sunsari			Morang			Jhapa			Total		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area Cultivated ha	Prod. MT	Average m/ha
1970-71	46,300	79,173	1,710	80,000	152,800	1,910	76,300	148,022	1,940	493,700	898,507	1,858
1971-72	47,000	88,250	1,878	79,750	151,525	1,900	79,400	158,430	1,995	496,850	923,055	1,856
1972-73	42,000	67,200	1,600	77,500	124,000	1,600	75,212	120,339	1,600	469,345	713,689	1,521
1973-74	47,500	85,500	1,800	83,718	154,878	1,850	80,000	154,000	1,925	505,188	920,861	1,823
1974-75	48,400	87,120	1,800	85,500	161,167	1,885	80,500	155,365	1,930	510,800	938,415	1,837
1975-76	48,820	98,130	2,010	90,000	171,900	1,910	88,550	187,430	2,117	521,450	1,015,610	1,948
1976-77	46,281	80,992	1,750	83,453	142,704	1,710	88,500	175,230	1,980	521,799	874,323	1,676
1977-78	46,335	93,133	2,010	87,600	158,870	1,814	86,643	161,710	1,866	519,779	876,942	1,687
1978-79	-	-	-	78,430	129,410	1,650	84,430	143,530	1,700	320,030	546,200	1,707
1979-80	50,350	91,390	1,815	78,430	139,160	1,782	87,070	148,020	1,700	513,400	925,790	1,803
1980-81	50,340	91,500	1,818	78,400	141,100	1,800	87,000	142,250	1,635	513,640	945,250	1,840
1981-82	46,680	107,360	2,300	80,470	152,890	1,900	91,380	137,070	1,500	519,630	911,550	1,754
1982-83	42,670	76,820	1,800	74,570	119,180	1,598	84,350	126,570	1,501	456,770	537,680	1,177

Source: Ministry of Food, Agriculture and Irrigations; Department of Food and Agricultural/Marketing Services; Agricultural Statistics Division

TABLE 50 WHEAT PRODUCTION TREND BY DIFFERENT DISTRICTS IN THE STUDY AREA, 1970-83

Years	Sarlahi			Mahottari			Dhanusa			Siraha			Saptari		
	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	
1970-71	3,300	1,815	4,100	2,460	5,700	3,135	3,500	550	3,500	2,030	3,500	580	3,500	2,065	
1971-72	3,600	2,005	4,500	2,565	6,500	3,705	4,000	570	4,000	2,360	4,000	590	4,000	2,380	
1972-73	5,000	5,300	6,006	9,009	10,000	15,000	9,002	1,500	9,002	11,252	8,139	1,250	8,139	10,174	
1973-74	7,391	11,825	6,500	7,800	10,500	12,600	8,000	1,200	8,000	8,000	8,000	1,000	8,000	8,000	
1974-75	8,100	12,960	6,575	8,153	13,000	16,900	12,000	1,300	12,000	12,600	10,552	1,050	10,552	10,552	
1975-76	10,045	12,149	12,140	13,839	15,875	18,120	11,799	1,140	11,799	13,804	8,530	1,170	8,530	9,980	
1976-77	10,143	10,041	990	13,961	1,103	16,213	17,023	1,050	13,422	13,287	8,538	990	8,538	8,991	
1977-78	9,120	9,211	1,100	13,900	1,080	19,908	21,500	1,080	13,422	14,753	8,198	1,099	8,198	9,181	
1978-79	9,150	10,980	1,200	11,000	1,200	18,000	20,700	1,150	-	-	-	-	-	-	
1979-80	9,150	11,530	1,260	11,100	1,250	18,000	20,520	1,140	14,850	17,520	8,000	1,180	8,000	8,800	
1980-81	10,840	14,160	1,300	14,670	1,250	17,940	24,220	1,350	10,000	13,500	5,420	1,350	5,420	7,050	
1981-82	12,600	8,820	700	14,230	919	15,320	17,620	1,150	5,510	7,710	4,830	1,399	4,830	3,380	
1982-83	13,220	17,180	1,300	15,320	750	24,260	29,110	1,200	12,170	17,180	10,240	1,353	10,240	13,310	
Years	Sunsari			Morang			Jhapa			Total					
	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	Area ha	Prod. Yield/ha kg	
1970-71	3,900	2,301	4,000	2,400	3,800	2,432	3,800	600	3,800	2,432	31,800	586	31,800	18,638	
1971-72	5,000	3,000	5,700	3,990	4,000	2,800	4,000	700	3,300	2,800	37,300	611	37,300	22,805	
1972-73	3,600	4,479	4,500	5,801	3,200	3,925	3,200	1,289	4,447	3,925	49,447	1,313	49,447	64,940	
1973-74	4,000	4,200	5,000	5,250	4,000	4,400	4,000	1,050	53,391	4,400	53,391	1,163	53,391	62,075	
1974-75	4,300	4,558	5,500	5,885	4,855	5,340	4,855	1,070	64,882	5,340	64,882	1,186	64,882	76,948	
1975-76	7,950	9,540	8,500	10,200	5,355	6,533	5,355	1,200	80,214	6,533	80,214	1,174	80,214	94,165	
1976-77	8,745	8,307	9,200	9,163	5,890	6,107	5,890	996	86,112	6,107	86,112	1,009	86,112	86,924	
1977-78	7,732	8,505	9,486	11,383	5,350	6,105	5,350	1,200	87,116	6,105	87,116	1,098	87,116	95,650	
1978-79	-	-	11,330	13,140	5,000	6,000	5,000	1,160	54,480	6,000	54,480	1,175	54,480	64,020	
1979-80	8,000	9,600	12,500	15,000	6,000	6,600	6,000	1,200	87,600	6,600	87,600	1,181	87,600	103,450	
1980-81	5,140	6,940	11,300	15,250	5,100	6,370	5,100	1,350	80,460	6,370	80,460	1,315	80,460	105,830	
1981-82	8,030	15,260	10,200	18,770	5,000	6,000	5,000	1,840	75,720	6,000	75,720	1,198	75,720	90,640	
1982-83	16,140	29,050	13,310	23,960	1,800	7,820	1,800	1,800	113,010	10,950	113,010	1,317	113,010	152,230	

Source: Ministry of Food, Agriculture and Irrigations; Department of Food and Agricultural/Marketing Services; Agricultural Statistics Division

TABLE 51 BARLEY PRODUCTION TREND BY DIFFERENT DISTRICTS IN THE STUDY AREA, 1970-83

Years	Sarlahi			Manottari			Dhanusa			Siraha			Saptari		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg
1970-71	280	224	800	260	208	800	360	270	750	100	67	670	180	117	650
1971-72	280	224	800	260	208	800	360	270	750	100	67	670	180	117	650
1972-73	275	220	800	225	180	800	325	244	751	80	53	663	100	60	600
1973-74	285	231	810	230	188	817	350	271	774	80	52	665	87	56	644
1974-75	255	206	808	230	187	813	355	275	775	80	52	665	90	58	644
1975-76	220	170	773	260	210	808	280	217	775	80	51	638	80	51	638
1976-77	215	172	800	312	252	808	260	201	773	136	86	632	75	47	627
1977-78	150	120	800	290	232	800	210	157	748	130	83	638	70	45	643
1978-79	120	120	1,000	390	360	923	200	160	800	-	-	-	-	-	-
1979-80	120	120	1,000	380	300	789	200	170	850	110	110	1,000	50	40	800
1980-81	320	280	875	790	400	506	870	430	494	100	80	800	80	60	750
1981-82	320	230	719	790	550	696	870	610	701	100	80	800	80	60	750
1982-83	300	240	800	680	340	500	510	400	784	20	30	1,500	60	50	833

Years	Sunsari			Morang			Jhapa			Total		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Average m/ha
1970-71	180	144	800	275	220	800	170	131	771	1,805	1,381	765
1971-72	180	153	850	280	224	800	180	139	772	1,820	1,402	770
1972-73	200	170	850	300	240	800	160	123	769	1,665	1,290	775
1973-74	200	170	850	200	160	800	213	165	775	1,645	1,293	786
1974-75	200	170	850	200	160	800	215	167	777	1,625	1,275	785
1975-76	160	136	850	150	120	800	95	73	768	1,325	1,028	776
1976-77	120	102	850	48	38	792	73	56	767	1,239	954	770
1977-78	140	119	850	50	40	800	70	54	771	1,110	850	766
1978-79	-	-	-	50	40	800	60	50	833	820	730	890
1979-80	120	120	1,000	50	50	1,000	50	50	1,000	1,080	960	889
1980-81	50	40	800	100	90	900	50	40	800	2,360	1,420	602
1981-82	50	40	800	100	80	800	50	40	800	2,360	1,690	716
1982-83	40	40	1,000	80	70	875	50	60	1,200	1,740	1,230	707

Source: Ministry of Food, Agriculture and Irrigations; Department of Food and Agricultural/Marketing Services; Agricultural Statistics Division

TABLE S2 MAIZE PRODUCTION TREND BY DIFFERENT DISTRICTS IN THE STUDY AREA, 1970-83

Years	Sarlahi			Mahottari			Dhanusa			Siraha			Saptari		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg
1970-71	7,100	12,496	1,760	4,100	6,765	1,650	6,600	7,920	1,200	2,600	3,380	1,300	500	625	1,250
1971-72	7,200	12,456	1,730	4,100	6,724	1,640	6,500	7,800	1,200	2,600	3,250	1,250	450	495	1,100
1972-73	7,200	12,240	1,700	4,321	8,037	1,860	7,071	11,313	1,606	2,600	3,380	1,300	500	650	1,300
1973-74	4,550	6,597	1,450	4,500	5,625	1,250	6,500	8,125	1,250	2,500	2,990	1,150	600	720	1,200
1974-75	4,700	6,815	1,450	5,750	7,331	1,275	6,500	8,125	1,250	2,500	2,950	1,100	700	974	1,391
1975-76	5,470	6,340	1,159	6,390	8,110	1,269	6,200	7,470	1,205	1,970	2,330	1,183	700	760	1,086
1976-77	7,000	8,470	1,210	6,070	8,093	1,333	4,100	4,510	1,100	1,888	1,888	1,000	700	970	1,386
1977-78	5,978	7,956	1,331	4,500	5,665	1,259	3,141	3,769	1,200	1,662	1,700	1,023	360	498	1,383
1978-79	6,840	9,100	1,330	4,500	6,300	1,400	3,440	4,400	1,401	-	-	-	-	-	-
1979-80	6,500	7,280	1,120	4,100	5,740	1,400	2,980	3,740	1,255	1,940	2,560	1,320	400	550	1,375
1980-81	6,870	11,000	1,601	4,700	7,520	1,600	3,180	5,090	1,600	2,000	3,360	1,680	650	900	1,385
1981-82	6,870	11,000	1,601	4,700	7,570	1,611	3,180	5,100	1,604	1,760	3,010	1,710	700	980	1,400
1982-83	10,550	16,620	1,575	2,730	5,950	2,179	3,790	6,830	1,802	1,570	2,860	1,822	450	550	1,223

Years	Sunsari			Morang			Jhapa			Total		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Average m/ha
1970-71	4,000	5,560	1,390	2,700	3,726	1,380	1,600	1,824	1,140	29,200	42,296	1,448
1971-72	4,000	5,160	1,290	2,375	3,064	1,290	1,550	1,736	1,120	28,775	40,685	1,414
1972-73	4,000	5,001	1,250	2,400	3,360	1,400	1,550	1,744	1,125	29,642	45,725	1,543
1973-74	4,000	5,000	1,250	3,000	4,200	1,400	2,200	2,530	1,150	27,950	35,787	1,280
1974-75	4,100	5,330	1,300	3,600	5,050	1,403	2,300	2,875	1,250	30,150	39,450	1,308
1975-76	4,100	4,260	1,039	3,600	4,620	1,283	2,300	3,020	1,313	30,730	36,910	1,201
1976-77	3,914	5,557	1,420	5,960	8,940	1,500	3,450	4,310	1,249	33,082	42,738	1,292
1977-78	4,344	6,164	1,419	5,620	8,430	1,500	4,262	5,326	1,250	29,867	39,508	1,323
1978-79	-	-	-	6,000	7,000	1,500	4,260	5,960	1,399	24,740	34,760	1,405
1979-80	5,970	7,620	1,276	5,400	8,100	1,500	2,980	4,170	1,399	30,270	39,760	1,314
1980-81	5,980	9,530	1,594	6,000	9,540	1,590	4,500	6,750	1,500	33,880	52,690	1,585
1981-82	4,950	7,920	1,600	9,040	14,460	1,600	4,550	6,820	1,499	35,750	56,860	1,590
1982-83	4,350	7,300	1,678	12,100	20,550	1,698	4,530	13,090	1,374	45,070	73,750	1,636

Source: Ministry of Food, Agriculture and Irrigations; Department of Food and Agricultural/Marketing Services; Agricultural Statistics Division

TABLE 53 MILLET PRODUCTION TREND BY DIFFERENT DISTRICTS IN THE STUDY AREA, 1970-83

Years	Sarliahi			Mahottari			Dhanusa			Siraha			Saptari		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg
1970-71	1,050	577	550	1,100	935	850	2,000	1,600	800	1,150	1,380	1,200	1,500	1,200	800
1971-72	1,050	577	550	1,100	935	850	2,000	1,600	800	1,150	1,380	1,200	1,500	1,200	800
1972-73	1,000	550	550	950	969	1,020	2,000	1,600	800	1,150	920	800	1,500	1,200	800
1973-74	1,100	605	550	1,000	1,020	1,020	1,950	1,560	800	1,250	978	782	1,400	1,190	850
1974-75	1,050	577	550	1,000	1,020	1,020	1,925	1,540	800	700	875	1,250	800	680	850
1975-76	1,050	590	562	1,000	1,020	1,020	1,920	1,550	807	1,250	930	744	820	920	1,122
1976-77	800	440	550	1,500	1,303	869	1,920	1,550	807	700	870	1,243	820	920	1,122
1977-78	715	615	860	1,425	1,450	1,018	2,734	2,526	924	1,140	1,044	916	1,200	1,000	833
1978-79	680	570	838	1,420	1,420	1,000	2,730	2,530	927	-	-	-	-	-	-
1979-80	650	350	538	1,500	1,800	1,200	2,730	2,530	927	2,190	1,420	648	870	720	828
1980-81	1,150	1,030	895	1,450	1,360	938	2,730	2,540	930	2,200	2,190	995	870	720	828
1981-82	1,150	1,040	904	1,450	1,380	952	2,730	2,590	949	2,200	2,190	995	870	830	954
1982-83	3,710	2,600	701	4,780	2,600	544	1,150	800	696	2,000	2,090	1,045	700	670	957

Years	Sunsari			Morang			Jhapa			Total		
	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Yield/ha kg	Area ha	Prod. MT	Average m/ha
1970-71	500	530	1,060	700	738	1,054	850	901	1,060	8,850	7,861	888
1971-72	500	530	1,060	700	738	1,054	850	901	1,060	8,850	7,861	888
1972-73	500	530	1,060	700	738	1,054	1,000	1,060	1,060	8,800	7,567	860
1973-74	500	530	1,060	850	935	1,100	1,150	1,236	1,075	9,200	8,054	875
1974-75	550	583	1,060	900	990	1,100	1,150	1,236	1,075	8,075	7,501	929
1975-76	550	580	1,055	850	960	1,129	1,150	1,240	1,078	8,590	8,250	960
1976-77	700	595	850	850	920	1,082	680	544	800	7,970	7,142	896
1977-78	817	916	1,121	933	867	929	985	800	812	9,949	9,218	927
1978-79	-	-	-	1,000	950	950	990	820	828	6,820	6,290	922
1979-80	1,070	1,050	981	1,100	950	864	990	820	828	11,100	9,640	868
1980-81	600	590	983	1,000	950	950	950	850	895	10,950	10,230	934
1981-82	600	540	900	750	530	707	950	1,140	1,200	10,700	10,240	957
1982-83	600	540	900	700	840	1,200	900	1,100	1,222	14,540	11,240	773

Source: Ministry of Food, Agriculture and Irrigations; Department of Food and Agricultural/Marketing Services; Agricultural Statistics Division

TABLE 54 FOOD BALANCE ACCORDING TO GEOGRAPHICAL REGION 1981/1983 (2038/2039)

Regions	Rice	Maize	Wheat	Millet+Buckwheat	Barley	Total
	%	%	%	%	%	%
<u>Highland</u>						
Product	25,875	54,526	13,308	13,138	7,102	113,949
Necessary	30,544	70,896	29,457	20,190	9,020	160,107
+1-	-4,669	-16,370	-16,149	-7,052	-1,918	-46,158
	-15.3	-23.1	-54.8	-34.9	-21.3	-28.8
<u>Midland</u>						
Product	285,041	404,299	142,103	15,484	7,749	114,676
Necessary	349,114	442,660	101,978	93,328	13,926	1,001,006
+1-	-64,073	-38,361	+40,125	-17,844	-6,177	-86,330
	-18.4	-8.7	+39.3	-19.1	-44.4	-8.6
<u>Terai</u>						
Product	1,012,861	182,471	264,574	15,497	4,563	1,479,968
Necessary	716,216	198,947	141,219	20,037	10,092	1,086,511
+1-	+279,645	-16,476	+123,355	-4,538	-5,529	1,393,457
	+41.4	-8.3	+87.4	-22.6	-54.8	+36.2
<u>Nepal</u>						
Product	1,323,777	641,296	419,985	104,121	19,414	2,508,593
Necessary	1,095,874	712,503	272,654	133,555	33,038	2,247,624
+1-	+227,903	-71,207	+147,331	-29,434	-13,624	260,969
	+20.8	-10.0	+54.0	-22.0	-41.2	+11.6

Note: (+) Surplus product
(-) Less product

Source : Department of Food and Agricultural Marketing Services, Agril. Statistic Division.

TABLE 55 FOOD BALANCE ACCORDING TO DEVELOPMENT REGION 1981/1982 (2038/2039)

Development Region	Rice	Maize	Wheat	Millet+Buckwheat	Barley	Total
<u>Eastern Dev. Reg.</u>						
Product	388,543	157,697	55,397	23,900	1,333	626,870
Necessary	281,279	135,560	31,777	25,944	3,314	477,874
+/-	+107,264	+22,137	+23,620	-2,044	-1,981	+148,996
<u>Central Dev. Reg.</u>						
Product	498,759	216,802	165,984	22,572	4,627	908,744
Necessary	388,243	251,393	102,700	30,686	5,257	778,279
+/-	+110,516	-34,591	+63,284	-8,114	-630	+130,465
<u>Western Dev. Reg.</u>						
Product	234,748	126,246	83,917	32,774	3,095	480,780
Necessary	208,978	156,748	55,065	50,113	7,657	478,561
+/-	+25,770	-30,502	+28,852	-17,339	-4,562	+2,219
<u>Cent. West. Dev. Reg.</u>						
Product	115,755	101,736	69,777	15,615	6,616	309,499
Necessary	132,757	122,379	49,076	18,626	10,678	333,516
+/-	-17,002	-20,643	+20,701	-3,011	-4,062	-24,017
<u>Far West. Dev. Reg.</u>						
Product	85,972	38,815	44,910	9,260	3,743	182,700
Necessary	84,617	46,423	34,036	8,186	6,132	179,394
+/-	+1,355	-7,608	10,874	+1,074	-2,389	+3,309
<u>Nepal</u>						
Product	1,323,777	641,296	419,985	104,121	19,414	2,508,593
Necessary	1,095,874	712,503	272,654	133,555	33,038	2,247,624
+/-	+227,903	-71,207	+147,331	-29,434	-13,624	+260,969

Note : (+) Surplus product
 (-) Less product

TABLE 56 FOOD BALANCE ACCORDING TO STUDY ZONE 1981/1982 (2038/2039)

ZONE	Rice	Maize	Wheat	Millet+2uckwheat	Barley	Total
<u>Mechi zone</u>						
Product	90,720	40,323	8,737	6,541	175	146,496
Necessary	75,744	31,719	8,982	6,340	1,110	123,895
+/-	+14,976	+8,604	-245	+201	-935	+22,601
<u>Kosi zone</u>						
Product	171,104	82,874	32,701	9,771	432	296,882
Necessary	114,563	58,024	13,080	10,175	1,208	197,050
+/-	+56,541	+24,850	+18,621	-404	-776	+99,832
<u>Sagarmatha</u>						
Product	126,719	34,500	13,959	7,588	729	183,492
Necessary	90,972	45,817	9,715	9,429	996	156,929
+/-	+35,747	-11,317	+4,244	-1,841	-270	+26,563
<u>Janakpur</u>						
Product	168,234	52,141	37,793	8,463	1,419	268,050
Necessary	138,276	63,826	30,956	8,140	1,057	242,255
+/-	+29,958	-11,685	+6,837	+323	+362	+25,795
<u>Nepal</u>						
Product	1,323,777	641,296	419,985	104,121	19,414	2,508,593
Necessary	1,095,874	112,503	272,654	133,555	33,038	2,247,624
+/-	+227,903	-71,207	+147,331	-29,434	-13,624	+260,769

Note : (+) Surplus product
 (-) Less product

TABLE 58 SUMMARY ON THE CROP BUDGET PER HECTARE IN THE WESTERN PROJECT AREA

Crops	Without Project			With Project		
	Net Revenue/ha	Cropping Intensity %	Net Revenue in ha	Net Revenue/ha	Cropping Intensity %	Net Revenue in ha
Irrig. Summer Paddy	3,670.46	4.5	165.17	4,139.70	25.0	1,034.93
Improved Rainfed Paddy	3,674.46	17.9	657.77	5,050.00	97.0	4,898.50
Local Rainfed Paddy	1,345.40	56.1	154.77	-	-	-
Improved Wheat	2,840.36	13.7	339.81	6,508.00	35.0	2,277.80
Sugarcane	874.84	1.0	8.75	2,531.00	1.0	25.31
Rainfed Maize	2,892.78	9.0	260.35	-	-	-
Summer Maize	2,858.86	3.4	97.20	3,747.70	15.0	562.16
Winter Pulses	554.32	1.7	9.42	2,233.40	8.0	178.67
Oilseeds	2,213.16	6.8	150.49	3,887.40	14.0	544.24
Relayed Oilseeds	2,819.48	10.7	301.68	-	-	-
Mixed Crop	1,263.46	4.6	58.12	-	-	-
Tabacco	13,576.20	2.2	298.87	18,300.60	1.0	183.01
Potato	-	-	-	23,809.00	1.0	238.09
Summer Pulses	-	-	-	585.00	19.0	111.15

TABLE 59

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	122.0	976.00	163.0	1,304.00
Bullock Labour	A.M.D.	58.0	348.00	64.0	384.00
Seed	kg	5,000.0	250.00	5,000.0	250.00
Manure	kg	40.0	100.00	40.0	100.00
Fertilizer	kg	150.0	450.00	200.0	600.0
P.P. Aid	kg	-	-		150.00
Others		-	-		
2. Fixed Cost					
	‰	6	127.44	10	278.80
Total Cost			2,251.44		3,066.80
3. Gross Revenue					
Main Product	kg	2,876	5,752.00	3,500	7,000.00
By-product	kg	1,699	169.90	2,065	2,065.0
4. Net Revenue					
			3,670.46		4,139.70

1) Crop: Irrigated Summer Paddy (Improved)

2) Cropping Intensity:

Without Project 4.5% With Project 25.0% (West, East areas)

TABLE 60

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	123.0	984.00	113.0	1,384.00
Bullock Labour	A.M.D.	56.0	336.00	66.0	396.00
Seed	kg	40.0	100.00	40.0	100.00
Manure	kg	5,000.0	250.00	5,000.0	250.00
Fertilizer	kg	150.0	450.00	200.0	600.0
P.P. Aid	kg	-	-		150.00
Others		-	-		
2. Fixed Cost					
	%	6	127.20	10	288.00
Total Cost			2,247.20		3,168.00
3. Gross Revenue					
Main Product	kg	2,876	5,752.00	4,000	8,000.00
By-product	kg	1,699	169.90	2,360	236.00
4. Net Revenue					
			3,674.70		5,050.00

1) Crop: Rainfed/Irrigated Rainfed Paddy (Improved)

2) Cropping Intensity:

Without Project 17.9%

With Project; Western area 97% Eastern area 94%

TABLE 61

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	123.0	984.00	-	-
Bullock Labour	A.M.D.	56.0	336.00	-	-
Seed	kg	50.0	115.00	-	-
Manure	kg	1,000.0	50.00	-	-
Fertilizer	kg	75.0	225.00	-	-
P.P. Aid	kg	-	-	-	-
Others		-	-	-	-
2. Fixed Cost					
	₹	6	102.60	-	-
Total Cost			1,812.60	-	-
3. Gross Revenue					
Main Product	kg	1,479	2,958.00	-	-
By-product	kg	2,000	200.00	-	-
4. Net Revenue					
			1,345.40	-	-

1) Crop: Rainfed Rainfed Paddy (Local)

2) Cropping Intensity:

Without Project 56.1% With Project 25.0% (West, East areas)

TABLE 62

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	92.0	736.00	149.0	1,192.00
Bullock Labour	A.M.D.	58.0	348.00	64.0	384.00
Seed	kg	160.0	480.00	70.0	210.00
Manure	kg	2,500.0	125.00	5,000.0	250.00
Fertilizer	kg	80.0	240.00	150.0	450.00
P.P. Aid	kg	-	-	-	150.00
Others		-	-	-	-
2. Fixed Cost					
	%	6	115.74	10	263.60
Total Cost			2,044.74		2,899.60
3. Gross Revenue					
Main Product	kg	1,443	4,329.00	3,000	9,000.00
By-product	kg	1,961	196.10	4,076	407.60
4. Net Revenue					
			2,480.36		6,508.00

1) Crop: Wheat (Improved)

2) Cropping Intensity:

Without Project 4.5% With Project 25.0% (West, East areas)

TABLE 63

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	220.0	1,760.00	249.0	1,992.00
Bullock Labour	A.M.D.	102.0	612.00	116.0	696.0
Seed	kg	2,000.0	1,650.00	2,000.0	1,650.00
Manure	kg	5,000.0	250.00	5,000.0	250.00
Fertilizer	kg	300.0	900.00	450.0	1,350.00
P.P. Aid	kg	-	-	-	100.00
Others		-	-	-	-
2. Fixed Cost	%	6	332.04	10	603.80
Total Cost			5,866.04		6,641.80
3. Gross Revenue					
Main Product	kg	22,046	6,172.88	30,000.0	8,400.00
By-product	kg		568.00		773.00
4. Net Revenue			874.84		2,531.20

1) Crop: Sugar Cane

2) Cropping Intensity:

Without Project 1% With Project 1% (West, East areas)

TABLE 64

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	110.0	880.00	-	-
Bullock Labour	A.M.D.	72.0	432.00	-	-
Seed	kg	15.0	45.00	-	-
Manure	kg	600.0	30.00	-	-
Fertilizer	kg	-	-	-	-
P.P. Aid	kg	-	-	-	-
Others		-	-	-	-
2. Fixed Cost					
	₹	6	83.22	-	-
Total Cost			1,470.22	-	-
3. Gross Revenue					
Main Product	kg	1,411.0	4,233.00	-	-
By-product	kg		130.00	-	-
4. Net Revenue					
			2,892.78	-	-

1) Crop: Rainfed Maize

2) Cropping Intensity:

Without Project 9% With Project 0% (West, East areas)

TABLE 65

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	114.0	912.00	128.0	1,024.00
Bullock Labour	A.M.D.	72.0	432.00	74.0	444.00
Seed	kg	15.0	45.00	15.0	45.00
Manure	kg	600.0	30.00	2,000.0	100.00
Fertilizer	kg	-	-	150.0	450.00
P.P. Aid	kg	-	-	-	-
Others		-	-	-	-
2. Fixed Cost					
	%	6	85.14	10	221.30
Total Cost			1,504.14		2,434.30
3. Gross Revenue					
Main Product	kg	1,411	4,233.00	2,000	6,000.00
By-product	kg		130.00		182.00
4. Net Revenue					
			2,858.86		3,747.70

1) Crop: Summer Maize (Improved)

2) Cropping Intensity:

Without Project 3.4% With Project 15% (West, East areas)

TABLE 66

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	207.0	1,656.00	263.0	2,104.00
Bullock Labour	A.M.D.	88.0	528.00	92.0	552.00
Seed	kg	6.0	90.00	6.0	90.00
Manure	kg	1,000.0	200.00	2,000.0	100.00
Fertilizer	kg	50.0	150.00	150.0	450.00
P.P. Aid	kg	-	-	-	50.00
Others		-	-	-	-
2. Fixed Cost					
	₹	6	157.44	10	334.60
Total Cost			2,781.44		3,680.60
3. Gross Revenue					
Main Product	kg	1,673	5,019.00		7,500.00
By-product	kg		300.00		450.00
4. Net Revenue					
			2,537.56		4,269.40

1) Crop: Jute

2) Cropping Intensity:

Without Project 6.2% With Project 5% (Eastern area only)

TABLE 67

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	51.0	408.00	76.0	608.00
Bullock Labour	A.M.D.	50.0	300.00	58.0	348.00
Seed	kg	60.0	420.00	60.0	420.00
Manure	kg	-	-	1,000.0	50.00
Fertilizer	kg	-	-	50.0	150.00
P.P. Aid	kg	-	-	-	30.00
Others		-	-	-	-
2. Fixed Cost					
	%	6	67.68	10	160.60
Total Cost			1,195.68		1,766.60
3. Gross Revenue					
Main Product	kg	350	1,750.00	800	4,000.00
By-product	kg	-	-	-	-
4. Net Revenue					
			554.32		2,233.40

1) Crop: Winter Pulses

2) Cropping Intensity:

Without Project 1.7% With Project 8% (West, East areas)

TABLE 68

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	52.0	416.00	61.0	488.00
Bullock Labour	A.M.D.	56.0	336.00	54.0	324.00
Seed	kg	21.0	168.00	20.0	160.00
Manure	kg	5,000.0	250.00	5,000.0	250.00
Fertilizer	kg	-	-	50.0	150.00
P.P. Aid	kg		40.00		40.00
Others		-	54.00		54.00
2. Fixed Cost	%	6	75.84	10	146.60
Total Cost			1,339.84		1,612.60
3. Gross Revenue					
Main Product	kg	646	3,553.00	1,000	5,500
By-product	kg				
4. Net Revenue			2,213.16		3,887.40

1) Crop: Oilseed

2) Cropping Intensity:

Without Project 6.8%

With Project; Western area 14% Eastern area 15%

TABLE 69

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	23.0	184.00	-	-
Bullock Labour	A.M.D.	4.0	24.00	-	-
Seed	kg	30.0	90.00	-	-
Manure	kg	-	-	-	-
Fertilizer	kg	100.0	300.00	-	-
P.P. Aid	kg		40.00	-	-
Others			54.00	-	-
2. Fixed Cost					
	%	6	41.52	-	-
Total Cost			733.52	-	-
3. Gross Revenue					
Main Product	kg	646	3,553.00	-	-
By-product	kg				
4. Net Revenue					
			2,819.48	-	-

1) Crop: Relayed Oilseeds

2) Cropping Intensity:

Without Project 10.7% With Project 0% (West, East areas)

TABLE 70

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	43.0	344.00	-	-
Bullock Labour	A.M.D.	4.0	24.00	-	-
Seed	kg	13.0	91.00	-	-
Manure	kg	-	-	-	-
Fertilizer	kg	-	-	-	-
P.P. Aid	kg	-	-	-	-
Others		-	-	-	-
2. Fixed Cost					
	₹	6	27.54	-	-
Total Cost			486.54	-	-
3. Gross Revenue					
Main Product	kg	350	1,750.00	-	-
By-product	kg				
4. Net Revenue					
			1,263.46	-	-

1) Crop: Mixed Crop (Pulses)

2) Cropping Intensity:

Without Project 4.6% With Project 0% (West, East areas)

TABLE 71

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	115.0	920.00	124.0	992.0
Bullock Labour	A.M.D.	50.0	300.00	52.0	312.00
Seed	kg	2.5	200.00	2.5	200.00
Manure	kg	5,000.0	250.00	5,000.0	250.00
Fertilizer	kg	100.0	300.00	150.0	450.00
P.P. Aid	kg	-	100.00		150.00
Others			60.00		100.00
2. Fixed Cost	%	6	127.80		245.40
Total Cost			2,257.80		2,699.40
3. Gross Revenue					
Main Product	kg	754	15,834.00	1,000	21,000
By-product	kg				
4. Net Revenue			13,576.20		18,300.60

1) Crop: Tobacco

2) Cropping Intensity:

Without Project 2.2% With Project 1% (West area only)

TABLE 72

CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	-	-	230.0	1,840.00
Bullock Labour	A.M.D.	-	-	98.0	588.00
Seed	kg	-	-	800.0	2,000.00
Manure	kg	-	-	6,000.0	300.00
Fertilizer	kg	-	-	200.0	600.00
P.P. Aid	kg	-	-	-	150.00
Others		-	-	-	150.00
2. Fixed Cost	%	-	-	10	562.80
Total Cost					6,190.80
3. Gross Revenue					
Main Product	kg	-	-	15,000	30,000
By-product	kg	-	-	-	-
4. Net Revenue		-	-		23,809.20

1) Crop: Potato

2) Cropping Intensity:

Without Project 0% With Project 1% (West, East areas)

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CROP BUDGET PER HECTARE

Particular	Unit	Without Project		With Project	
		Quantity	Value Rs	Quantity	Value Rs
1. Variable Cost					
Man Labor	M.D	-	-	94.0	752.00
Bullock Labour	A.M.D.	-	-	58.0	348.00
Seed	kg	-	-	50.0	350.00
Manure	kg	-	-	1,000.0	50.00
Fertilizer	kg	-	-	50.0	150.00
P.P. Aid	kg	-	-	-	-
Others		-	-	-	-
2. Fixed Cost					
	%	-	-	10	165.00
Total Cost		-	-		1,815.00
3. Gross Revenue					
Main Product	kg	-	-	800	2,400.00
By-product	kg	-	-	-	-
4. Net Revenue					
		-	-		585.00

1) Crop: Summer Pulses

2) Cropping Intensity:

Without Project 0%

With Project; West area 19% East area 17%

JICA