

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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Appendix Table 1. Consumers Unit and Man Equivalent index

Age of Family member (Years)	Consumer unit		Man equivalent index	
	Male	Female	Male	Female
Aged > 60	0.90	0.70	0.50	0.50
Adult (16-59)	1.00	0.80	1.00	1.00
Youth (10-15)	0.80	0.75	0.50	0.50
Children(0-9)	0.50	0.50	-	-

Source ; (EAD, 1984)

Appendix Table 2. Estimation of consumption expenditure requirements

*** Constraint Least Square Estimates**

F-Test (120, 1)	32.29
Significance of F-test0000
R-Squared18665
Adjusted R-squared18665

Variable	Coefficient	Std. Error	T-ratio (Sig. Lvl)	Mean of X	Std. Dev. of X
One	4025	.8353E-06	*****(.0000)	1.0000	.0000
Inc.	.1127	.1067E-01	10.51(.0000)	9061.8	8389.4
Sigma	1470	94.13	15.62(.0000)		

* Inc. = Income

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Appendix Table 3. Minimum consumption in NRs. (Basic needs) per household by farm size.

Year	Group I	Group II	Group III	Group IV
1	12357	16125	17227	18515
2	12480	16286	17399	18700
3	12605	16448	17573	18877
4	12731	16612	17748	19065
5	12858	16778	17925	19256
6	12986	16945	18104	19448
7	13116	17114	18285	19642
8	13247	17285	18467	19838
9	13379	17458	18651	20036
10	13512	17632	18837	20236
11	13647	17808	19025	20438
12	13783	17986	19215	20642
13	13921	18165	19407	20848
14	14060	18346	19601	21056
15	14200	18529	19797	21266
16	14342	18714	19994	21478
17	14485	18901	20193	21692
18	14629	19090	20394	21908
19	14775	19280	20597	22127
20	14922	19473	20802	22348

* Total consumption requirement per household is calculated by estimating consumption per man unit multiplied by Man equivalent index per family. The consumption requirements over the planning horizon is based on the growth of family members (consumption man units).

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Table 4. Land and Labor use in different farm groups over the planning period in Sankhu (study site II).

Items	Farm size Class							
	I		II		III		IV	
Land (ropani)	6.62		15.58		26.72		46.09	
Family labor(man days)								
Year								
-----	Peak	Slack	Peak	Slack	Peak	Slack	Peak	Slack
1	207	622	216	648	225	674	250	749
2	209	628	218	654	227	681	252	756
3	211	634	220	661	229	687	254	764
4	213	640	222	668	231	694	256	772
5	215	646	224	674	233	701	258	780
6	217	652	226	681	235	708	261	787
7	219	659	228	688	237	715	263	795
8	291	666	230	695	239	723	266	803
9	223	672	232	702	241	730	269	811
10	225	679	234	709	243	737	272	819
11	227	686	236	716	245	774	275	828
12	229	692	238	723	247	752	278	836
13	231	679	240	730	249	759	281	844
14	233	706	242	745	251	767	284	852
15	235	713	244	753	254	775	287	861
16	237	720	246	760	257	783	290	870
17	239	727	248	768	260	790	293	878
18	241	735	250	775	263	798	296	887
19	243	742	252	783	266	806	299	896
20	245	750	254	790	269	814	302	905

*Peak season = June, July, middle of November to middle of December

*Slack season = All other 9 months which are not included in peak season

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Appendix Table 5. Land and Labor use in different farm groups over the planning period at study site I (Patlekhet site).

Items	Farm size Class							
	I		II		III		IV	
Land(ropani)	6.25		17.20		26.61		41.08	
Family labor(man days)								
Year	Peak	Slack	Peak	Slack	Peak	Slack	Peak	Slack
1	204	612	231	693	265	795	335	1003
2	206	618	233	700	268	803	338	1013
3	208	624	235	707	271	811	341	1023
4	210	630	237	714	274	819	344	1033
5	212	636	239	720	277	827	347	1044
6	214	642	241	728	280	835	350	1054
7	216	648	243	735	283	844	353	1065
8	218	655	245	743	239	853	357	1075
9	221	667	247	750	286	861	361	1086
10	223	674	249	758	289	869	364	1100
11	225	680	251	766	292	887	368	1108
12	227	687	253	773	295	896	372	1119
13	230	694	255	781	301	905	375	1130
14	232	701	257	789	304	914	379	1141
15	234	708	259	797	307	923	383	1153
16	237	715	261	804	310	932	386	1164
17	239	722	263	813	313	942	390	1176
18	241	729	265	821	316	951	394	1188
19	244	737	267	829	310	960	398	1199
20	246	743	269	837	321	970	402	1211

*Peak season = June, July, middle of November to middle of December

*Slack season = All other 9 months which are not included in peak season

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Appendix Table 6. Gross margin and labor Use in existing orange production (on per tree basis)

Year	Yield (kg/tree)	Gross revenue (NRs./tree)	Input costs (NRs./tree)	Labor Use (M days/tree)	Gross margin (NRs./tree)
1	0	0	13	0.42	-13
2	0	0	5.5	0.15	-5.5
3	0	0	6	0.16	-6.0
4	0	0	8	0.17	-8.0
5	0	0	9	0.19	-9.0
6	3	21	10.75	0.21	10.25
7	7	49	12	0.23	37
8	13	91	16.5	0.27	74.5
9	19	133	20	0.28	113
10	23	161	20	0.28	141
11	25	175	20	0.28	155
12	27	189	20	0.28	169
13	28	196	20	0.28	176
14	26.5	187.6	20	0.28	167.6
15	26	182	20	0.28	162
16	25.4	177.8	20	0.28	157.8
17	24.8	173.6	18	0.25	146.5
18	24.5	171.5	18	0.25	157
19	24	168	18	0.25	150
20	23.5	164.5	18	0.25	143

* Price = NRs 7/kg of fruits.

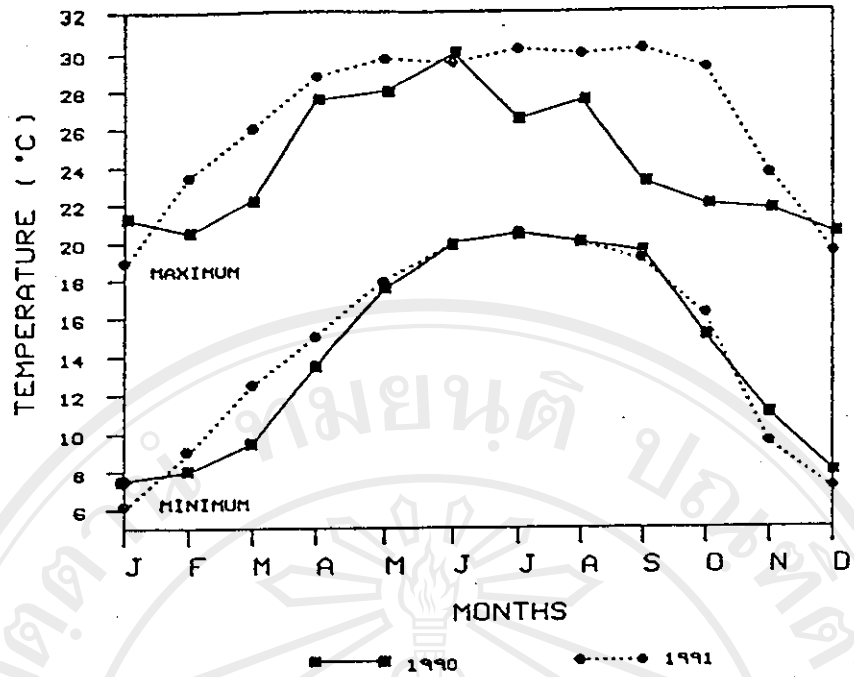
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Appendix Table 7. Matrix Ranking for Citrus fruit against Other production systems

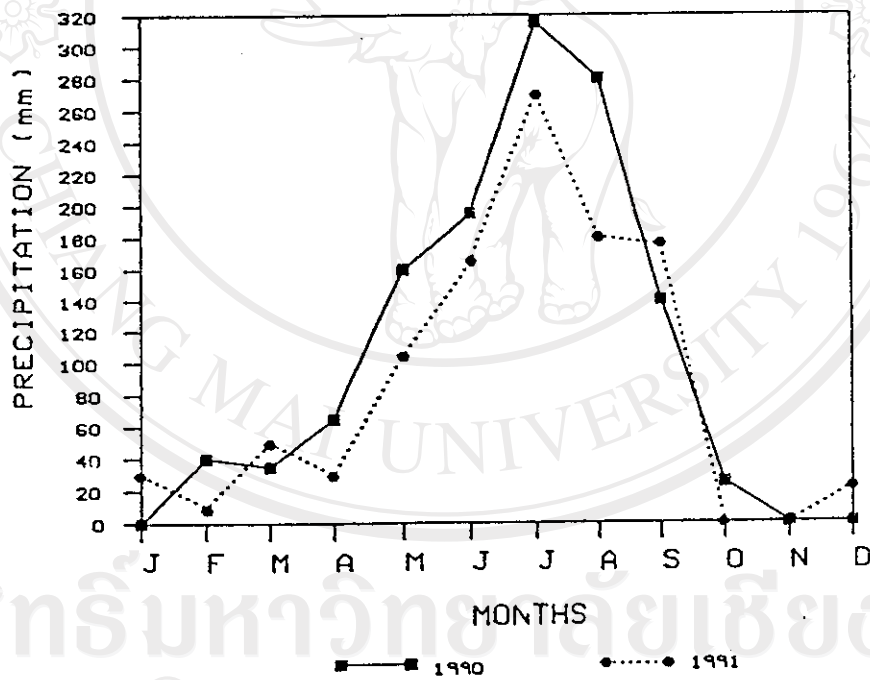
Items	Citrus Fruits	Livestock	Maize	Wheat	Mustard
Income	1	2	4	5	3
Less Labor Requirement	2	4	5	3	1
Easy to get credit	1	2	3	3	3
Techn. Knowledge	5	4	1	3	2
Market	1	2	4	5	3
Social & Environ. benefits	1	3	4	5	2
Over all preference Total	1	3	5	4	2

Note : The rank 1 is the most preferred followed by 2,3,4 and 5 is the least preferred one.

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APPENDIX FIGURE 1 . Monthly temperature distribution for Bela, 1990 & 1991.



APPENDIX FIGURE 1 Monthly rainfall distribution for Bela, 1990 & 1991.

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Source: ICIMOD, 1993

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