

AGRICULTURE STATISTICS 2007



Volume I

**DEPARTMENT OF AGRICULTURE
MINISTRY OF AGRICULTURE
ROYAL GOVERNMENT OF BHUTAN
THIMPHU**

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སོན་མ་ལྷན་ཁག།
བཀྲ་ཤིས་ཚེ་ས་ཇོང་།
ཐིམ་ཕུ།



DEPARTMENT OF AGRICULTURE
Royal Government of Bhutan
Ministry of Agriculture
Tashichhodzong, Thimphu

Foreword

This is the annual publication of Agriculture statistics containing data on area and production of crops for the year 2007. We hope that the data will provide better understanding of the sector to make informed decisions and plan programs for rural development. The national agriculture survey is challenging given resources and time, we do not claim that the data are as accurate as they should be. We hope to improve the data collection procedures as we progress.

The data are presented in two volumes. Volume-I contains brief description of objective, survey design, methodology, coverage and the limitation. Volume-II is an annex to Volume I that presents data by gewogs in sub-volumes

The Department of Agriculture would like to extend appreciation to all agencies particularly the dzongkhags and gewogs for their support and cooperation in bringing out this publication.

I would also like to extend appreciation to all colleagues in the department for bringing out this publication.

Chencho Norbu

DIRECTOR

Date: 5th January 2009

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1. Introduction

This publication of agriculture statistics 2007 features area, production and yield of main field crops and horticultural crops. The publication also provides secondary information on agriculture commodities and infrastructure related information in the agriculture sector.

1.1 Objectives

The main objectives of the survey are:

- To establish reliable information on crop production and land use for planning and monitoring of agriculture development programmes.
- To generate data needed for preparation of the plans, programs and to assess the trends in crop production and land use.
- To initiate development of time series data.
- Strengthen agriculture information database

1.2 Survey Methodology

Sampling design

The survey adopted a Linear Systematic Sampling scheme without replacement for the sample selection. All the 205 Geogs in the country served as the domain for the sample survey. All the Geogs were included in the sample survey in order to cover different ecological resources endowment, and development stages. A household is the lowest sampling unit. The rural farming households of each Geog served as the sampling frame from which a 10 percent sample was chosen uniformly from all Geogs irrespective of the sizes and economic activities undertaken. No further stratification was adopted.

Scope and coverage

The survey is focused on the rural farming households. Information Management Section (IMS), DoA took the lead in preparing of questionnaires and co-ordinating the survey. Attempts were made to cover all 205 geogs in the country.

The survey covered 6,117 rural households out of 64,815 households in the country. There were some absentees or non response due to problems with the listings and farmers away on pilgrimage and on holidays. The definition of the household in this survey is having registered and cultivated land and residing in the village. The publication has not presented figures for less than 3 samples.

Sampling Procedures

The Information Management Section (IMS), DoA in consultation with the DAOs and extension agents selected the sample households based on household lists maintained in the geog centres. The sample was drawn randomly from the household list submitted by the extension staff using Linear Systematic Sampling scheme to identify the required 10 % sample. This sample list was distributed to the enumerators for identification and interview. In the event that the sampled farmer was not available for interview after repeated visit, then the next farmer from the same locality was selected.

1.3 Field Operation

Prior to the survey, all the Geog Agriculture Extension Agents were trained on the content of questionnaire, methodology and sample list. The survey questionnaires were also distributed along with the sample lists. The work plan was discussed and the enumeration was conducted from December 2007 till March 2008.

1.4 Data Editing, Processing, Validation and Analysis

The following steps were followed for processing the data:

1. Inconsistencies at geog level were eliminated by the extension workers by comparing the yield from the annual crop cut and annual statistics.
2. Data that had extreme values as reported by the farmers were compared by our field staff and those that showed large differences were deleted.
3. Data reported in local units were converted to standard measurement units. Farmers use local measurement units that differ from place to place. Instead of reporting in Kg and Acre farmers report in langdo, bags, baskets, etc.
4. All ADAOs of 20 Dzongkhags were trained on the operation of the database and analysis in May 2008 in Paro. Thereafter analysis was done by the ADAOs in their respective Dzongkhags. The data was submitted by DAOs by July 2008.
5. IMS, DoA conducted the workshop to reconcile and validate the data submitted by DAOs. The workshop was attended by concern agriculture geog staff, ADAOs and DAOs. This exercise was completed in September 2008. The first draft report was presented to the department for further reviews and formal endorsement.
6. The DoA endorsed the draft report in November 2008.

1.5 Limitations of the survey

Some of the limitations of the survey are as follows:

- The respondents are farmers with diverse social and educational background. Therefore, response errors are likely to be high although various techniques were used to get accurate responses.
- The respondents do not maintain farm records, costs of production, inputs etc.
- Tendency to underreport is noticed as there is a notion of higher taxation if accurate figures of production are reported.
- As 10 percent sample were taken from all the Geogs irrespective of their size, the estimates for certain crops with small number of households in a gewogs will have to be taken with caution as the sample size will be too low to provide reliable estimates.

Table 1: Paddy Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	62	146	2,363
Chhukha	2,806	2,567	915
Dagana	6,932	6,807	982
Gasa	13	14	1,066
Ha	328	271	826
Lhuentse	2,675	5,272	1,971
Mongar	1,733	2,073	1,196
Paro	2,904	5,383	1,853
Pemagatshel	1,011	812	804
Punakha	7,156	10,652	1,488
SamdrupJongkhar	4,073	3,708	910
Samtse	11,544	9,662	837
Sarpang	8,305	6,238	751
Thimphu	730	1,193	1,634
Trashi Yangtse	2,041	2,570	1,259
Trashigang	2,552	3,096	1,213
Trongsa	1,786	1,756	983
Tsirang	4,976	4,602	925
Wangdue	3,926	5,824	1,483
Zhemgang	2,012	1,793	891
Total	67,564	74,438	1,102

Table 2: Maize Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	5,746	6,805	1,184
Dagana	10,066	7,737	769
Gasa	0.09	0.07	778
Ha	683	282	413
Lhuentse	3,828	4,273	1,116
Mongar	7,229	8,599	1,190
Paro	248	102	410
Pemagatshel	4,612	4,763	1,033
Punakha	513	467	911
Samdrup Jongkhar	5,209	4,363	838
Samtse	11,133	9,460	850
Sarpang	7,886	4,991	633
Trashi Yangtse	137	159	1,159
Trashigang	3,370	1,640	487
Trongsa	1,182	1,276	1,079
Tsirang	6,428	4,607	717
Wangdue	404	352	873
Zhemgang	2,328	1,916	823
Total	71,002	61,789	870

Table 3: Wheat Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	1,233	551	447
Chhukha	1,677	962	573
Dagana	594	269	453
Gasa	17	7	423
Ha	1,112	613	551
Mongar	1,087	400	368
Paro	1,339	922	688
Pemagatshel	119	88	737
Punakha	1,900	1,140	600
SamdrupJongkhar	320	165	515
Samtse	2,523	1,408	558
Sarpang	483	184	382
Trashigang	1,004	431	429
Trongsa	681	380	558
Tsirang	315	90	287
Wangdue	1,552	819	528
Zhemgang	693	319	460
Total	16,982	8,879	523

Table 4: Barley Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	907	531	585
Chhukha	203	137	675
Dagana	73	35	480
Gasa	5	3	627
Ha	245	116	472
Mongar	1,889	866	458
Paro	310	213	687
Pemagatshel	670	373	558
Punakha	251	119	472
Samdrup Jongkhar	1,007	547	544
Samtse	1091	499	458
Tsirang	334	141	421
Trashigang	1,365	442	323
Trashigang	291	289	994
Wangdue	762	393	516
Zhemgang	296	132	445
Total	9,698	4,835	498

Table 5: Foxtail Millet Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	211	67	317
Dagana	140	29	209
Paro	204	96	472
Pemagatshel	696	217	312
Samtse	978	404	413
Sarpang	379	100	265
Tsirang	151	40	262
Zhemgang	607	149	245
Total	3,367	1,103	327

Table 6: Finger Millet Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	2,216	1,085	490
Dagana	2,388	1,082	453
Ha	106	27	255
Lhuentse	687	263	383
Pemagatshel	794	339	427
Samdrup Jongkhar	375	110	294
Samtse	5,239	1,894	362
Sarpang	3,036	1,580	520
Trashi Yangtse	800	484	606
Trashigang	246	96	392
Tsirang	1,601	507	316
Wangdue	87	56	648
Zhemgang	544	151	278
Total	18,119	7,676	424

Table 7: Sweet Buckwheat Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	585	273	467
Chhukha	1,517	618	407
Dagana	1,187	374	315
Ha	447	228	510
Mongar	1,850	484	262
Paro	238	107	450
Pemagatshel	1,108	288	260
Punakha	83	39	466
Samdrup Jongkhar	1,937	756	390
Samtse	2,090	715	342
Sarpang	735	183	249
Trashi Yangtse	194	185	952
Trashigang	744	191	257
Trongsa	366	222	607
Tsirang	450	144	321
Wangdue	179	36	202
Zhemgang	131	71	543
Total	13,841	4,914	355

Table 8: Bitter Buckwheat Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	146	71	486
Chhukha	513	372	725
Dagana	535	199	372
Ha	501	231	461
Mongar	494	150	303
Paro	270	185	684
Pemagatshel	1,185	458	386
Punakha	424	178	421
Samdrup Jongkhar	480	171	356
Samtse	254	75	297
Sarpang	269	85	317
Trashi Yangtse	388	182	468
Trashigang	690	209	303
Trongsa	688	270	392
Tsirang	74	14	196
Wangdue	652	224	344
Zhemgang	297	116	389
Total	7,859	3,191	406

Table 9: Bean Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	1,201	647	539
Chhukha	190	165	872
Dagana	393	243	617
Ha	33	26	804
Lhuentse	47	24	505
Mongar	846	598	707
Paro	435	563	1,296
Pemagatshel	202	136	672
Punakha	249	483	1,941
Samtse	422	222	526
Sarpang	140	107	764
Trashigang	99	111	1,116
Trashigang	14	12	875
Tsirang	276	373	1,355
Wangdue	79	141	1,780
Zhemgang	123	96	779
Total	4,747	3,946	831

Table 10: Rajma Bean Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	233	184	789
Dagana	877	398	454
Lhuentse	558	199	357
Mongar	533	220	412
Pemagatshel	449	182	406
Samtse	161	72	445
Sarpang	62	21	335
Trashigang	28	4	149
Trashigang	871	329	377
Tsirang	440	311	707
Zhemgang	156	69	444
Total	4,367	1,988	455

Table 11: Mung Bean Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	149	63	422
Dagana	521	330	632
Mongar	789	378	479
Pemagatshel	167	81	485
Samtse	134	107	796
Trashigang	50	39	779
Tsirang	163	132	808
Zhemgang	50	23	464
Total	2,024	1,153	569

Table 12: Other Pulses Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	485	182	375
Dagana	381	123	322
Mongar	128	32	248
Pemagatshel	148	53	361
Samtse	1,173	278	237
Sarpang	670	245	365
Trashigang	53	15	290
Tsirang	517	251	486
Total	3,555	1,179	332

Table 13: Mustard Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	137	25	186
Chhukha	1,540	401	260
Dagana	1,229	281	229
Gasa	2	1	276
Ha	278	73	263
Lhuentse	1,054	235	223
Mongar	398	126	317
Paro	298	102	343
Pemagatshel	561	197	351
Punakha	1,072	222	207
SamdrupJongkhar	1,061	210	198
Samtse	1,382	408	295
Sarpang	2,280	386	169
Trash Yangtse	65	24	365
Trashigang	818	159	194
Trongsa	348	84	243
Tsirang	994	253	255
Wangdue	352	107	303
Zhemgang	435	91	210
Total	14,305	3,385	237

Table 14: Soya Bean Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	263	76	291
Dagana	262	78	297
Lhuentse	1,402	276	197
Mongar	529	120	227
Pemagatshel	580	283	489
Punakha	8	7	876
Samdrup Jongkhar	62	34	550
Samtse	486	111	228
Sarpang	52	14	268
Trashi Yangtse	432	158	366
Trashigang	372	198	532
Zhemgang	143	57	403
Total	4,589	1,413	308

Table 15: Peas Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	16	18	1,150
Chhukha	114	181	1,587
Dagana	22	12	537
Ha	298	340	1,142
Lhuentse	39	33	848
Mongar	155	108	699
Paro	295	357	1,211
Pemagatshel	70	44	633
Punakha	226	405	1,789
Sarpang	37	27	717
Trashigang	15	13	880
Tsirang	158	104	656
Wangdue	29	29	987
Total	1,514	1,714	1,132

Table 16: Garlic Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	11	2	206
Chhukha	117	17	149
Dagana	108	54	505
Ha	9	5	499
Lhuentse	90	46	514
Mongar	140	52	375
Pemagatshel	105	41	389
Punakha	46	22	478
Samtse	99	13	127
Sarpang	40	31	768
Thimphu	4	1	337
Trashi Yangtse	108	75	698
Trashigang	207	149	721
Trongsa	30	21	707
Tsirang	68	37	540
Wangdue	30	32	1,062
Zhemgang	48	23	476
Total	1,259	622	494

Table 17: Ginger Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	543	1,446	2,663
Dagana	194	228	1,175
Mongar	162	349	2,158
Pemagatshel	234	254	1,083
Punakha	22	12	545
SamdrupJongkhar	641	995	1,551
Samtse	2,411	5,259	2,182
Sarpang	525	707	1,349
Trashigang	79	63	736
Trongsa	7	8	1,206
Tsirang	158	458	2,906
Wangdue	26	31	1,225
Zhemgang	98	59	603
Total	5,098	9,870	1,936

Table 18: Cardamom Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Chhukha	1,561	564	361
Dagana	2,337	564	241
Ha	606	159	262
Pemagatshel	43	14	333
Samtse	3,686	763	207
Tsirang	146	57	390
Total	8,379	2,121	253

Table 19: Asparagus Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Ha	2	4	1,800
Mongar	37	4	108
Paro	1,097	1,064	970
Trashi Yangtse	29	27	929
Tsirang	16	12	718
Total	1,181	1,110	940

Table 20: Chili Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	24	18	767
Chhukha	116	210	1,810
Dagana	236	192	814
Gasa	1	1	1,116
Ha	18	48	2,600
Lhuentse	173	250	1,444
Mongar	645	726	1,126
Paro	522	1,390	2,664
Pemagatshel	234	233	996
Punakha	423	942	2,230
Samdrup Jongkhar	323	407	1,261
Samtse	270	108	402
Sarpang	209	187	896
Thimphu	157	430	2,745
Trashi Yangtse	359	754	2,100
Trashigang	598	816	1,363
Trongsa	185	323	1,746
Tsirang	302	373	1,233
Wangdue	343	838	2,439
Zhemgang	150	122	810
Total	5,288	8,368	1,583

Table 21: Cabbage Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	61	248	4,064
Chhukha	123	279	2,276
Dagana	71	73	1,023
Gasa	0.39	0.33	838
Ha	183	353	1,932
Lhuentse	103	155	1,513
Mongar	219	426	1,943
Paro	182	1,106	6,091
Pemagatshel	232	387	1,670
Punakha	11	40	3,531
Samdrup Jongkhar	71	96	1,351
Samtse	175	105	598
Sarpang	46	75	1,615
Thimphu	93	105	1,131
Trashigang	108	242	2,239
Trashigang	219	306	1,393
Trongsa	83	161	1,949
Tsirang	83	161	1,176
Wangdue	42	112	2,667
Zhemgang	46	55	1,214
Total	2,184	4,462	2,043

Table 22: Cauliflower Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	30	36	1,200
Dagana	41	34	831
Ha	3	4	1,200
Lhuentse	46	56	1,215
Mongar	35	84	2,400
Pemagatshel	53	43	810
Sarpang	98	51	520
Trash Yangtse	50	113	2,236
Trashigang	56	47	837
Trongsa	67	48	724
Tsirang	66	91	1,378
Wangdue	8	19	2,457
Zhemgang	29	24	803
Total	582	649	1,115

Table 23: Carrot Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	15	77	5,100
Chhukha	106	197	1,861
Dagana	8	10	1,333
Ha	20	27	1,386
Paro	57	194	3,401
Punakha	20	31	1,517
Samtse	21	7	322
Sarpang	2	1	733
Trashigang	19	9	490
Trongsa	30	36	1,196
Tsirang	23	34	1,455
Wangdue	16	42	2,638
Zhemgang	6	4	711
Total	342	668	1,955

Table 24: Radish Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	20	124	6,200
Chhukha	152	355	2,328
Dagana	260	336	1,292
Gasa	2.23	2.26	1,014
Ha	213	1,362	6,410
Lhuentse	125	224	1,788
Mongar	395	1,161	2,939
Paro	165	652	3,960
Pemagatshel	330	577	1,749
Punakha	173	521	3,020
Samdrup Jongkhar	147	724	4,927
Samtse	311	286	919
Sarpang	204	247	1,210
Thimphu	44	256	5,811
Trashi Yangtse	103	270	2,626
Trashigang	279	650	2,329
Trongsa	143	448	3,142
Tsirang	237	552	2,330
Wangdue	236	1,656	7,023
Zhemgang	112	136	1,217
Total	3,649	10,539	2,888

Table 25: Turnip Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	200	1,009	5,037
Chhukha	138	621	4,503
Dagana	77	64	834
Gasa	1	1	822
Ha	527	5,297	10,047
Mongar	33	18	558
Paro	552	2,614	4,738
Punakha	44	98	2,224
Samtse	3	2	558
Thimphu	105	823	7,802
Trashigang	23	21	905
Trongsa	80	169	2,129
Tsirang	77	205	2,660
Tsirang	25	53	2,147
Wangdue	828	4,081	4,928
Zhemgang	16	28	1,805
Total	2,729	15,104	5,534

Table 26: Tomato Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	5	1	217
Dagana	72	43	593
Mongar	15	11	750
Paro	107	269	2,503
Pemagatshel	19	9	460
Punakha	84	145	1,720
Samtse	214	109	509
Sarpang	121	180	1,488
Trashi Yangtse	25	9	384
Trashigang	78	42	539
Trongsa	6	5	917
Tsirang	51	48	942
Wangdue	59	60	1,012
Zhemgang	44	19	441
Total	901	951	1,056

Table 27: Potato Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	1,060	6,901	6,508
Chhukha	874	4,887	5,591
Dagana	780	2,687	3,444
Gasa	4	6	1,488
Ha	510	3,621	7,104
Lhuentse	303	467	1,542
Mongar	1,449	3,449	2,379
Paro	1,407	7,445	5,290
Pemagatshel	964	2,856	2,962
Punakha	176	502	2,851
Samdrup Jongkhar	756	1,402	1,854
Samtse	731	1,199	1,641
Sarpang	206	223	1,082
Thimphu	577	2,667	4,621
Trashi Yangtse	23	62	2,678
Trashigang	2,151	6,815	3,168
Trongsa	261	1,021	3,914
Tsirang	741	2,372	3,200
Wangdue	1,658	12,326	7,434
Zhemgang	149	226	1,517
Total	14,782	61,133	4,136

Table 28: Brinjal Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Dagana	27	14	508
Lhuentse	24	29	1,183
Mongar	87	101	1,159
Paro	5	12	2,485
Pemagatshel	95	77	817
Samtse	155	83	534
Sarpang	72	98	1,358
Trashigang	62	63	1,009
Trashigang	30	13	434
Trongsa	15	36	2,408
Tsirang	32	24	748
Wangdue	32	30	946
Zhemgang	81	65	795
Total	718	644	897

Table 29: Green Leaves Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	30	30	1,016
Chhukha	161	348	2,158
Dagana	208	320	1,539
Gasa	0.85	0.52	609
Ha	23	55	2,383
Lhuentse	77	98	1,276
Mongar	198	256	1,296
Paro	104	142	1,366
Pemagatshel	146	165	1,131
Punakha	87	184	2,114
Samdrup Jongkhar	115	298	2,583
Samtse	393	405	1,031
Sarpang	183	251	1,376
Thimphu	42	143	3,433
Trashigang	74	109	1,461
Trashigang	179	215	1,196
Trongsa	51	100	1,940
Tsirang	229	372	1,627
Wangdue	66	87	1,323
Zhemgang	113	116	1,023
Total	2,480	3,694	1,490

Table 30: Broccoli Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Bumthang	9	7	754
Chhukha	4	4	988
Dagana	26	44	1,687
Mongar	71	41	579
Paro	4	2	560
Pemagatshel	13	23	1,700
Punakha	27	30	1,087
Trashigang	44	38	873
Trongsa	8	8	1,000
Samtse	161	80	497
Sarpang	128	182	1,418
Wangdue	3	2	750
Zhemgang	22	13	582
Total	520	473	910

Table 31: Cucumber and Pumpkin Production

Dzongkhag	Cucumber Production (MT)	Dzongkhag	Pumpkin Production (MT)
Lhuentse	171	Bumthang	22
Pemagatshel	184	Lhuentse	278
Samtse	203	Pemagatshel	472
Sarpang	166	Samtse	444
Trashi Yangtse	166	Sarpang	442
Trashigang	534	Trashi Yangtse	752
Wangdue	127	Trashigang	891
Zhemgang	147	Wangdue	139
Total	1,700	Zhemgang	255
		Total	3,696

Table 32: Squash and Gourds Production

Dzongkhag	Squash Production (MT)	Dzongkhag	Gourds Production (MT)
Pemagatshel	772	Pemagatshel	23
Samtse	696	Samtse	147
Sarpang	516	Sarpang	152
Trashi Yangtse	246	Trashi Yangtse	7
Trashigang	419	Trashigang	51
Wangdue	63	Wangdue	39
Zhemgang	146	Total	418
Total	2,858		

Table 33: Sweet Potato Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Pemagatshel	87	84	965
Punakha	55	79	1,430
Samtse	194	119	611
Sarpang	76	34	451
Trashigang	22	24	1,086
Trashigang	10	2	200
Tsirang	128	49	385
Trongsa	18	11	592
Zhemgang	127	76	597
Total	719	478	665

Table 34: Tapioca Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Pemagatshel	474	932	1,966
Samtse	564	439	778
Sarpang	509	569	1,117
Tsirang	139	118	848
Zhemgang	89	49	552
Total	1,775	2,106	1,186

Table 35: Collocacia Harvested Area, Production and Yield (Kg/acre)

Dzongkhag	Area (Acres)	Production (MT)	Yield
Pemagatshel	88	124	1,406
Samtse	95	66	701
Sarpang	107	117	1,097
Zhemgang	89	55	618
Total	379	362	957

Table 36: Apple total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Bumthang	14,489	10,940	279	26
Chhukha	6,433	5,749	152	27
Dagana	1,262	987	3	3
Gasa	35	12	0.18	15
Ha	37,762	27,259	809	30
Lhuentse	4,353	654	5	7
Mongar	2,976	2,005	36	18
Paro	214,060	163,903	3,566	22
Pemagatshel	829	415	4	10
Punakha	900	766	8	10
Thimphu	65,959	54,839	2,099	38
Trashi Yangtse	1,102	504	9	19
Trashigang	17,186	8,342	49	6
Wangdue	3,530	2,125	54	25
Zhemgang	1,910	449	1	3
Total	372,785	278,950	7,076	25

Table 37: Mandarin total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	400,890	277,835	5,264	19
Dagana	532,059	332,710	17,455	52
Ha	2,465	340	7	22
Lhuentse	22,533	8,999	325	36
Mongar	94,768	38,676	1,572	41
Pemagatshel	479,090	267,010	11,765	44
Punakha	31,752	21,331	545	26
Samdrup Jongkhar	218,659	100,834	3,117	31
Samtse	364,261	278,426	7,862	28
Sarpang	544,120	352,005	12,746	36
Trashigang	21,184	12,566	420	33
Trashigang	43,911	22,497	631	28
Trongsa	18,335	4,615	258	56
Tsirang	237,998	154,181	6,494	42
Wangdue	15,804	10,421	261	25
Zhemgang	224,381	132,981	3,349	25
Total	3,252,210	2,015,426	72,071	36

Table 38: Mango total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Dagana	7,048	2,667	161	60
Mongar	23,474	8,010	131	16
Pemagatshel	6,069	1,824	11	6
Punakha	5,704	2,142	36	17
Samdrup Jongkhar	9,424	1,462	16	11
Samtse	5,505	2,349	124	53
Sarpang	11,210	7,573	129	17
Trashigang	151	62	1	14
Trashigang	4,773	1,035	27	26
Tsirang	2,394	962	28	29
Wangdue	886	193	1	4
Zhemgang	11,743	565	6	10
Total	88,381	28,843	670	23

Table 39: Pear total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	4,045	2,791	242	87
Dagana	5,377	4,593	474	103
Gasa	22	17	0.48	28
Lhuentse	5,027	1,583	39	24
Mongar	9,865	6,659	224	34
Paro	1,105	668	16	24
Pemagatshel	4,566	2,369	98	41
Punakha	5,276	3,079	97	32
Samdrup Jongkhar	5,206	2,234	141	63
Samtse	7,183	4,710	183	39
Sarpang	3,372	2,552	51	20
Thimphu	2,074	1,917	58	30
Trashigang	1,329	904	25	27
Trashigang	10,057	5,596	165	29
Trongsa	867	695	42	60
Tsirang	5,107	5,095	224	44
Wangdue	2,409	1,388	40	29
Zhemgang	2,288	1,904	83	44
Total	75,175	48,753	2,203	45

Table 40: Peach total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	4,065	3,075	106	34
Dagana	4,189	3,453	178	52
Gasa	13	7	0.38	54
Ha	1,598	1,115	27	24
Lhuentse	5,352	2,341	66	28
Mongar	13,653	11,560	383	33
Paro	4,028	2,510	78	31
Pemagatshel	7,974	6,768	306	45
Punakha	3,338	2,569	72	28
SamdrupJongkhar	7,775	6,039	351	58
Samtse	5,867	5,626	197	35
Sarpang	5,960	4,884	340	70
Thimphu	2,144	1,715	57	33
Trashi Yangtse	5,584	5,066	345	68
Trashigang	10,303	8,411	253	30
Trongsa	2,649	2,051	82	40
Tsirang	4,123	3,461	124	36
Wangdue	3,194	1,951	64	33
Zhemgang	3,866	2,905	107	37
Total	95,677	75,509	3,136	42

Table 41: Plum total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Dagana	1,205	878	26	30
Lhuentse	3,864	1,712	33	19
Mongar	6,308	4,157	169	41
Paro	455	0	0	0
Pemagatshel	3,958	2,725	154	57
Punakha	2,768	2,494	78	31
SamdrupJongkhar	8,406	1,960	68	34
Sarpang	2,331	2,032	140	69
Trashi Yangtse	3,394	2,894	78	27
Trashigang	4,676	3,310	92	28
Trongsa	859	686	29	42
Tsirang	3,168	2,965	146	49
Wangdue	332	116	2	21
Zhemgang	1,345	949	25	26
Total	43,068	26,880	1,039	39

Table 42: Walnut total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Bumthang	376	256	2	8
Chhukha	730	548	12	23
Gasa	4	0	0	0
Ha	3,605	1,305	16	12
Lhuentse	4,332	647	4	6
Mongar	9,909	2,261	64	28
Paro	4,041	1,834	136	74
Pemagatshel	9,043	816	6	8
Punakha	8,523	3,338	48	14
Samdrup Jongkhar	1,563	0	0	0
Thimphu	5,277	5,040	100	20
Trashigang	6,196	3,050	98	32
Trashigang	17,897	6,842	305	45
Trongsa	3,228	21	0	20
Tsirang	1,190	52	1	25
Wangdue	4,052	472	9	19
Zhemgang	33,268	1,506	18	12
Total	113,233	27,988	820	29

Table 43: Areca nut total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	87,112	51,183	420	8
Dagana	26,167	20,410	225	11
Pemagatshel	32,683	9,542	241	25
Samdrup Jongkhar	99,994	47,596	513	11
Samtse	554,849	209,160	3,665	18
Sarpang	783,595	149,797	1,489	10
Zhemgang	12,821	2,139	15	7
Total	1,597,221	489,827	6,569	13

Table 44: Jack Fruit total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Dagana	1,421	1,034	170	165
Pemagatshel	2,816	1,751	91	52
Samdrup Jongkhar	4,608	1,350	214	158
Samtse	7,693	6,724	783	116
Sarpang	17,429	2,104	239	114
Trashi Yangtse	2,682	2,475	59	24
Tsirang	1,276	301	11	35
Zhemgang	2,571	2,393	459	192
Total	40,496	18,131	2,025	112

Table 45: Guava total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	4,705	3,269	77	24
Dagana	4,268	2,876	37	13
Mongar	12,295	10,559	372	35
Pemagatshel	11,704	8,654	160	19
Punakha	16,979	13,547	467	34
SamdrupJongkhar	8,112	6,712	196	29
Samtse	10,812	9,949	309	31
Sarpang	11,187	6,309	99	16
Trashi Yangtse	372	172	3	15
Trashigang	800	795	64	80
Trongsa	3,151	2,422	103	42
Tsirang	6,953	5,382	158	29
Wangdue	1,615	1,046	31	29
Zhemgang	8,401	6,618	139	21
Total	101,354	78,312	2,213	28

Table 46: Papaya total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Pemagatshel	1,229	527	4	8
Punakha	1,434	1,165	17	14
Samtse	5	2	0	6
Sarpang	8,653	6,322	128	20
Trashi Yangtse	1,970	1,270	34	27
Tsirang	2,088	1,042	24	23
Total	15,378	10,328	207	20

Table 47: Pomegranate total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Pemagatshel	999	666	7	10
Punakha	4,176	3,325	52	16
Samdrup Jongkhar	2,189	0	0	0
Trashi Yangtse	1,517	1,273	15	12
Trashigang	70	58	1	20
Trongsa	949	863	14	16
Tsirang	3,007	2,273	31	14
Total	12,906	8,457	120	14

Table 48: Persimmon total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Punakha	5,016	4,290	179	42
Trongsa	233	54,289	1,493	28
Wangdue	1,720	1,308	64	49
Zhemgang	843	674	17	26
Total	7,812	60,560	1,753	29

Table 49: Sugarcane total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	27,137	26,863	83	3
Dagana	18,880	12,134	83	7
Mongar	13,877	10,232	70	7
Pemagatshel	80,178	72,188	114	2
Punakha	59,134	57,494	195	3
Samdrup Jongkhar	33,873	18,595	82	4
Sarpang	128,922	109,949	178	2
Trashi Yangtse	1,530	1,193	8	7
Trongsa	101,473	100,913	151	2
Trashigang	64,477	27,779	95	3
Tsirang	102,385	92,622	374	4
Zhemgang	11,661	10,962	19	2
Total	643,527	540,922	1,453	3

Table 50: Banana total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	36,768	20,579	211	10
Dagana	56,353	26,758	398	15
Ha	3,596	2,515	15	6
Mongar	59,979	19,176	217	11
Pemagatshel	21,938	12,345	223	18
Punakha	10,204	4,694	50	11
SamdrupJongkhar	29,891	13,187	232	18
Samtse	111,587	52,416	887	17
Sarpang	172,747	50,313	780	15
Trashi Yangtse	13,106	11,588	121	10
Trashigang	40,651	12,749	118	9
Trongsa	5,669	3,618	54	15
Tsirang	114,849	27,504	513	19
Wangdue	3,838	650	6	9
Zhemgang	37,951	10,801	149	14
Total	719,126	268,892	3,974	15

Table 51: Tree Tomato total trees, bearing trees, Production and Yield (Kg/Tree)

Dzongkhag	Total Trees	Bearing Trees	Production (MT)	Yield
Chhukha	4,183	3,792	30	8
Dagana	4,651	3,749	31	8
Lhuentse	6,534	10,176	197	19
Mongar	12,619	10,609	107	10
Pemagatshel	7,840	5,181	37	7
Punakha	7,756	5,202	54	10
SamdrupJongkhar	7,028	5,647	29	5
Samtse	5,963	3,577	21	6
Sarpang	5,841	5,544	52	9
Trashi Yangtse	3,706	2,900	26	9
Trashigang	10,913	8,481	87	10
Trongsa	2,920	2,692	22	8
Tsirang	8,942	6,894	63	9
Wangdue	4,558	3,650	42	11
Zhemgang	3,560	2,964	27	9
Total	97,014	81,059	824	10

Table 52: Farm Roads Development financial year wise.

Dzongkhags	Plan	Spill over	Total	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	Total	on going
	Target (Km)	Km	Km	Km	Km	Km	Km	Km	Km	Km	Km
Bumthang	9.00	11.00	20.00	5.00	21.90	4.50	9.79	4.20	2.20	47.59	9.24
Chukha	15.00		15.00	0	3.50	7.38	0.00	9.13	3.30	23.31	6.00
Dagana	24.00	5.00	29.00	0	8.25	6.75	8.15	3.50	11.10	37.75	7.75
Gasa	14.00		14.00	0	0	2.00	2.08	2.71	0.00	6.79	1.80
Haa	5.00		5.00	0	0	4.50	8.90	0.00	7.00	20.40	8.50
Lhuentse	75.00	11.00	86.00	5.00	5.70	11.50	23.00	0.00	28.00	73.20	12.00
Mongar	13.00		13.00	5.00	7.00	5.20	13.70	9.93	23.70	64.53	18.80
Paro	42.00		42.00	0	7.52	14.15	7.50	0.00	13.00	42.17	3.50
Pemagatshel	18.00		18.00	0	17.62	0.00	0.00	11.60	11.56	40.78	23.62
Punakha	15.00		15.00	0	6.42	3.90	31.09	10.13	36.50	88.04	21.73
S/Jongkhar	97.00	12.00	109.00	0	8.10	11.40	2.00	5.00	22.10	48.60	8.70
Samtse	14.00		14.00	0	3.49	9.00	0	0.00	12.50	24.99	3.51
Sarpang	10.00		10.00	0	6.70	7.80	3.15	3.00	8.30	28.95	14.00
Tashigang	68.00		68.00	9.50	34.66	12.00	0.00	15.33	10.00	81.49	30.20
Thimphu	36.63		36.63	0	7.25	6.80	0	12.40	5.97	32.42	1.60
Trongsa	9.00		9.00	0	2.80	6.20	5.38	6.62	23.50	44.50	7.00
Tashiyangtse	45.00		45.00	4.00	8.50	0	10.00	0.30	4.50	27.30	18.44
Tsirang	10.00		10.00	0	2.00	8.00	2.96	5.00	3.50	21.46	3.50
W/phodrang	22.00		22.00	0	15.70	7.28	0.00	12.20	10.87	46.05	18.13
Zhemgang	17.00		17.00	0	5.91	2.00	4.10	3.50	0.00	15.51	31.00
Grand Total	558.63	39.00	597.63	28.50	173.02	130.36	131.80	114.55	237.60	815.82	249.02

Source: Engineering Division, DoA April 2008,

Table 53.1 Power Tiller Tracks constructed and completed in the Dzongkhags

Dzongkhag	Financial year wise							Total
	Km	(km) 02-03	(km) 03-04	(Km) 04-05	(Km) 05-06	(Km) 06-07	(Km) 07-08	(Km)
Trongsa	34.00	0	0	7.50	21.75	0.00		29.25
Haa	4.50	0	0	0	1.50	3.00		4.50
Paro	7.80	0	0	0.50	3.30	0.00		3.80
Mongar	75.37	0	0	0	4.87	14.10	16.30	35.27
Trashigang	39.80	0	0	0	4.00	0.00	5.40	9.40
Dagana	19.00	0	0	0	0	6.30	6.00	12.30
Lhuentse	35.00	0	0	2.00	8.00	2.00	3.00	15.00
Chukha	20.00	0	0	0	0	3.00	1.00	4.00
Wangduephodrang	19.00	0	0	0	0	1.13	3.00	4.13
T/yangtse	8.50	0	0	0	0	2.50		2.50
Zhemgang	12.00	0	0	0	0	6.00	2.00	8.00
Tsirang	37.80	0	0	0	0	19.20	6.00	25.20
Punakha	17.59	0	0	0	5.00	14.40		19.40
Pemagatshel	15.00	0	0	0	0	0.00		0.00
S/Jongkhar	11.80	0	0	0	0	0.00		0.00
Thimphu	2.00	0	0	0	0	0.00		0.00
Total	359.16	0.00	0.00	10.00	48.42	71.63	42.70	172.75

Source: Engineering Division, DoA April 2008

Table 54: Year wise Auction details of the Agriculture Commodities (MT)

Items	2004	2005	2006	2007
Potato	22,834.77	23,766.54	20,622.21	24,449.62
Apple	147.30	0.37	452.53	202.27
Orange	2,218.07	1.92	1,863.61	5,615.81
Other Fruits	1.88	0.00	0.31	1.07
Pulse/Spices	384.95	0.45	592.29	647.30
Vegetable	1,994.34	1.89	1,487.93	1,438.66
Total	27,581.31	23,771.16	25,018.89	32,354.73

Source: AMS, MoA compiled from FCB(s) of Phuntsholing, Gelephu, Sarpang, SamdrupJongkhar, Samtse

Table 55: Year wise Agriculture commodities exported (MT)

Items	2005	2006	2007
Apple	4,743.464	3,838.730	3,097.70
Mandarin	18,577.667	13,142.75	23,945.11
Mushroom	2.7326	1.674	2.97
Cardamom		310.96	640.00
Red Rice		89.72	94.04

Source: Bhutan Agriculture & Food Regulatory Authority, MoA

Table 57: Sale of Seeds and Planting materials Dzongkhag wise in 2007

Dzongkhag	Vegetable (MT)	Planting materials (Nos.)	Seeds of Cereals and grain legumes (MT)	Seed Potato (MT)
Thimphu	0.33	13,364	1.29	15.75
Paro	0.72	12,977	2.69	10.05
Ha	0.04	20	0.23	6.55
Chukha	0.32	10,407	4.25	21.05
Samtse	0.02	1,495	5.89	1.10
Punakha	0.13	2,932	4.70	4.00
Gasa		-	-	
Wangdue	0.01	32,800	3.40	20.55
Tsirang	0.09	5,595	9.64	5.00
Dagana	0.06	9,242	6.65	4.00
Bumthang	-	1,610	-	-
Trongsa	-	3,136	2.54	-
Zhemgang	0.28	32,246	2.31	16.45
Sarpang	0.18	13,571	33.36	1.10
Lhuentse	0.10	20,179	2.37	-
Mongar	0.20	22,543	4.47	3.20
Trashigang	0.03	9,659	7.22	9.32
Yangtse	0.22	36,556	1.07	-
Pemagatshel	0.03	2,337	7.29	2.50
S/Jongkhar	0.10	5,534	11.67	-
Exported	11.81		-	330.60
Total	14.65	236,203	111.01	451.22

Source: Druk Seed Corporation, Paro

Table 58: Sale of Butachlor 5% Granule and Chemical fertilizer in 2007

Dzongkhag	Butachlor 5% Granule (MT)	Chemical fertilizer (MT)
Thimphu	17.05	212.33
Paro	69.91	279.11
Ha	1.50	34.50
Chukha	6.13	222.32
Samtse	0.92	13.90
Punakha	35.03	153.35
Gasa		
Wangdue	54.91	537.93
Tsirang	4.91	24.15
Dagana	4.00	16.85
Bumthang	-	594.2
Trongsa	12.40	19.6
Zhemgang	1.93	8.7
Sarpang	6.47	32.05
Lhuentse	11.60	44.6
Mongar	2.70	114.3
Trashigang	12.27	685.7
Yangtse	15.80	117
Pemagatshel	7.29	72
S/jongkhar	1.20	23
Total	266.02	3,205.58

Source: Druk Seed Corporation, Paro

Table 59: Dzongkhag wise pesticides distribution for 2007-2008 (Kgs/Litres)

PRODUCTS	BUM-THANG	CHHU-KHA	DAGA-NA	HAA	LHUEN-TSE	MON-GAR	PUNA-KHA	PARO	PEMA-GATSHEL
I. INSECTICIDES									
1. Chlorpyrifos 20 EC	3.1	52.5	-	17.5	-	10	2.2	85.6	-
2. Cypermethrin 10 EC	20	54.6		27.5	20	5	13.5	325.5	63
3. Dimethoate 30 EC		152	28	12				23.1	56
4. Fenvelerate 0.4D	-	267	17	-	-	10	-	152	-
5. Malathion 5 D		52	37	33			23	10	20
6. Malathion 50 EC	0.8	3.5	2.5	3.5			165.3		
II. FUNGICIDES									
1. Calcium Hydroxide	-	-	-	-	-	-	15	-	-
2. Copper Sulphate	-	-	-	-	-	-	15	-	-
3. Captan 50 WP	-	-	-	-	-	-	-	-	-
4. Carbendazim 50 WP	40	3	-	47	-	5	-	-	-
5. Copper Oxide 50 WP	2	1	5	1			1	12	
6. Hexaconazole 5 EC	0.4	-	-	35.2	-	1	-	-	-
7. Mancozeb 75 WP	164	53		43.5	15	5		263	10
8. Ridomil 72 WP			0.2	0.1		1	2.4	1.7	
9. Tridimorph 80 EC									
10. Tricyclazole 75 WP		1.3	0.1						

PRODUCTS	BUM-THANG	CHHU-KHA	DAGA-NA	HAA	LHUEN-TSE	MON-GAR	PUNA-KHA	PARO	PEMA-GATSHEL
III. HERBICIDES									
1. Glyphosate 41 sl									
2. Metribuzim 70 WP	158			0.2				9.8	
IV. ROPDENTICIDES									
1. Zinc Phosphide 80 W		1.67	2.46	1.53	1		0.4	3.08	2
V. ACARICIDES									
1. Dicofal 18.5 EC	-	-	-	-	-	-	-	5	-
VI. NON-TOXIC									
1. Protein Hydrolysate	-	-	-	-	-	-	0.5	-	-
2. Sandovit		50	6	15			5	80	
3. TSO				217		210		2,377	
VII. BIOPESTICIDES									
1. Axadirachtin 0.3%	-	-	-	-	-	-	-	-	-
2 Pseudomas fluoresces	-	-	-	-	-	-	-	-	-
3. Trichoderma viride	-	-	-	-	-	-	-	-	-
4. Nim Oil									
TOTAL									

Source: NPPC, Semtokha

Table 59.1: Dzongkhag wise pesticides distribution for 2007-2008 (Kgs/Litres)

PRODUCTS	SAM-TSE	S/JONGKHAR	SAR-PANG	TSI-RANG	TRONG-SA	T/GANG	YANG-TSE	THIM- PHU	WANG-DUE	ZHEM-GANG
I. INSECTICIDES										
1. Chlorpyrifos 20 EC	-	-	20	-	-	0.1	-	64.5	-	2.5
2. Cypermethrin 10 EC	20	13	74	49		43		412.8	14	5.5
3. Dimethoate 30 EC		2.5	53	40		7.5		232.9	12.9	5
4. Fenvelerate 0.4D	5	-	40	-	45	8	-	543	-	280
5. Malathion 5 D	55			19	25		25	213	20	75
6. Malathion 50 EC			15			2.5		88.5	0.3	1
II. FUNGICIDES										
1. Calcium Hydroxide	10	5	-	-	-	-	-	7	-	-
2. Copper Sulphate	10	5	-	-	-	-	-	7	-	-
3. Captan 50 WP	-	-	-	-	-	-	-	13	-	-
4. Carbendazim 50 WP	11	-	-	-	-	-	-	117	0.5	-
5. Copper Oxide 50 WP			5.5	5				87.5		1
6. Hexaconazole 5 EC	-	-	-	0.1	-	-	-	19.6	-	-
7. Mancozeb 75 WP	30		85			50		676	23	2
8. Ridomil 72 WP		4	2					58.7	242	0.3
9. Tridimorph 80 EC										
10. Tricyclazole 75 WP			2	11	1			0.7	2.3	1
III. HERBICIDES										
1. Glyphosate 41 sl										
2. Metribuzim 70 WP								108.3	809	
Total										

PRODUCTS	SAM-TSE	S/JONGKHAR	SAR-PANG	TSH-RANG	TRONG-SA	T/GANG	YANG-TSE	THIM-PHU	WANG-DUE	ZHEM-GANG
IV. RODENTICIDES										
1. Zinc Phosphide 80 W			1.1	1.7	0.8	5		4.82	2.46	6.5
V. ACARICIDES										
1. Dicofal 18.5 EC	-	-	-	-	-	-		3	-	-
VI. NON-TOXIC										
1. Protein Hydrolysate	-	-	-	-	-	-	-	-	-	-
2. Sandovit	26			4		1		206	9	
3. TSO								5032		
VII. BIOPESTICIDES										
1. Axadirachtin 0.3%	-	-	-	-	-	-	-	10	-	-
2 Pseudomas fluoresces	-	-	-	-	-	-	-	10	-	-
3. Trichoderma viride	-	-	-	-	-	-	-	5	-	-
4. Nim Oil								29		
TOTAL										

Source: NPPC, Semtokha