



PATTERN OF SUBTROPICAL FRUITS PRODUCTION IN HIMACHAL PRADESH WITH SPECIAL REFERENCE TO KANGRA DISTRICT

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Introduction

The state of Himachal Pradesh is characterized by a significant number of opportunities in high value commodities. The state's agriculture is dominated by high value horticulture commodities, which account for about 44 percent of the cropped area and contribute about 48 percent of agricultural gross state domestic product (GSDP). Horticulture in Himachal Pradesh has been responsible for many of the positive outcomes in employment, wages, and in turn, poverty reduction. Notwithstanding the significant potential of horticulture production in Himachal Pradesh to contribute to higher economic growth and poverty reduction objectives, the state faces a number of sectoral, institutional and policy challenges which need to be addressed systematically if the potential is to be realized and translated into a sustainable development impact.

The rich diversity of agro climatic conditions, the geographical variations and altitude differences coupled with fertile deep drained soils favour the cultivation of temperate and subtropical fruits in Himachal. The region is also suitable for cultivation of ancillary horticulture product like flowers mushroom honey and hobbles. The suitability of Himachal has resulted in shifting of land use pattern from agriculture to fruit crops in the past few decades the area under fruits which was 792 hectares in 1951 with Total production of 1200 tonnes increased to 226799 hectares during 2015-16.

Himachal Pradesh is the North western mountainous state of India. Its altitude ranges from 350 metres to 6975 metres above mean sea level. Based on altitude, rainfall, temperature, humidity and topography, the entire state is divided into four agroclimatic zones and for administrative convenience, the entire state was reorganized into 12 districts in 1972. Kangra district is one of the most populated and largest district of this state. Kangra district is situated in Western Himalayan region The entire district is surrounded by Shivalik hills and is located at an altitude varying between 650 to 1800 m above the mean sea level. It has considerable diversity so far, its soils, physiographic conditions and land use pattern, cropping system are concerned. The climatic condition of his district is apt for growing the sub-tropical fruits.

The present paper is an attempt to study the cultivation of subtropical fruits in the District of Kangra of Himachal Pradesh, in context to area and production. The present study is entirely based on secondary sources of data. The secondary data pertaining to area and production of Sub-tropical Fruits have been collected from Directorates of Land Records, Horticulture and Agriculture, Himachal Pradesh for the period 2006-07 to 2018-19. The spatial-temporal variations in pattern of area and production have been shown with the help of tables and the trends in area and production have been analysed with the aid of CAGR.



Block wise Area under Citrus Fruits in Kangra District

A cursory glance on table 1.1 reveals that area under citrus fruits has increased from 9248 hectares to 10629 hectares during the period 2006-07 to 2018-19 with 1.08 annual growth rates in Kangra district. The maximum area under citrus fruit is in Indora block (3664 hectare) followed by Dehara (1275 hectare), Fatehpur (803 hectare), Nurpur (767 hectare) and Paragpur (698 hectare). Except Nagrota Bagwan block, all blocks have shown positive growth in area under citrus fruits. The percentage share of area under citrus fruits to total area of citrus in Kangra district, in Baijnath, Nagrota bagwan, Kangra, Dehara and Indora was 3.53, 3.67, 4.70, 12.16 and 39.51 percent in the year 2006-07 which was decrease to 3.49, 2.69, 4.55, 12.00 and 34.47 percent in the year 2018-19 respectively. The rest of the blocks like Panchrukhi, Lamba Gaon, Bhawarna, Paragpur, Rait, Nagrota surain, Nurpur, Fatehpur and Sulah, the percentage to total area in the Kangra was 1.60, 4.10, 4.33, 6.37, 0.15, 5.57, 5.47, 7.07, and 0.43 percent in the year 2006-07 where as it increase to 1.90, 4.31, 4.60, 6.57, 2.51, 6.53, 7.22, 7.55 and 1.00 percent in the year 2018-19 to total area under citrus plants in Kangra District respectively. The percentage share of Dharamshala Block also show increasing trend.

Block wise area under citrus fruit in Kangra District (in hectare) Table No. 1.1

Years	Baijnath	Panchrukhi	Lamba Gao	Bhawarna	Nagrota bagwan	Kangra	Dehara	Paragpur	Rait	Nagrota surain	Indora	Nurpur	Fatehpur	Sulah	D/Shala	Total
2006-2007	326	148	379	400	339	435	1125	589	141	515	3654	506	651	40	0	9248
2007-2008	331	150	388	406	343	438	1177	599	149	544	3718	516	665	41	0	9465
2008-2009	333	150	381	381	325	444	1206	604	154	555	3728	518	680	58	0	9517
2009-2010	338	149	385	409	311	448	1219	608	169	567	3760	562	692	64	0	9681
2010-2011	343	151	389	418	313	453	1225	611	180	568	3767	563	701	69	0	9751
2011-2012	344	157	402	421	321	460	1231	618	188	576	3770	563	705	71	0	9827
2012-2013	349	167	411	430	305	452	1204	622	193	595	3784	580	717	77	36	9922
2013-2014	340	163	422	450	268	455	1217	618	197	595	3789	624	717	79	40	9974
2014-2015	361	183	444	470	284	476	1219	650	221	616	3827	644	739	91	45	10270
2015-2016	365	190	447	465	275	461	1242	660	224	686	3648	738	766	99	51	10317
2016-2017	370	196	449	473	278	465	1259	677	254	689	3676	745	787	105	56	10479
2017-2018	370	200	453	486	287	478	1269	687	261	693	3669	760	794	110	64	10581
2018-2019	371	202	458	489	286	484	1275	698	267	694	3664	767	803	106	65	10629
CAGR (%)	1.00	2.42	1.47	1.56	1.30	0.82	0.97	1.31	5.03	2.32	0.02	3.25	1.63	7.78	8.81	1.08



Block wise Area under Kinnow/Santra in Kangra District (H.P.)

Table 1.2 present the block wise area under Kinnow/Santra in Kangra district from 2006-07. It may be observed from the table that the maximum area under Kinnow/Santra is in Indora block (3005 hectare) of Kangra district followed by Fatepur (608 hectare), Nurpur(558 hectare) , Dehra (362 hectare) and Nagrota surain (330 hectare) in 2018-2019. But the highest growth was observed in Rait block (9.99 percent) and except Kangra block, Nagrota bagwan block and Indora block all blocks have positive growth in area under Kinnow/Santra. At overall level in Kangra district the growth rate was 0.43 percent annually during the references period of study. The percentage share of the area under kinnow/santra in Bhawarana, Nagrota Bagwan, Kangara and Indpra was 2.46,1.59,2.01 and 57.59 percent to total are in the Kangara district in the year 2006-07 which was decreased to 2.37,0.79,1.89 and 52.46 percent in the year 2018-19 respectively. The remain block I.e. Bajnath, Panchrukhi, Lamba gaon, Dehara, Pragpur, Rait, Nagrota surian, Nurpur, Fatehpur and Sulah, the percentage share was 1.72,0.78,1.94,5.21,3.36,0.37,4.39,7.90,10.54 and 0.15 percent to total area in district Kangara under Kinnow/santra plants in the year 2066-7 which increase to 1.73,0.80,2.09,6.32,3.68,1.20,5.76,9.74,10.61 and 0.23 percent in the year 2018-19 respectively

Block wise area under orange / kinnow / santara in Kangra District (in hectare) Table No. 1.2

Years	Bajnath	Panchrukhi	Lamba	Bhawarna	Nagrota bagwan	Kangra	Dehara	Paragpur	Rait	Nagrata surain	Indora	Nurpur	Fatehpur	Sulah	D/shala	Total
2006-2007	93	42	105	133	86	109	282	182	20	238	3119	428	571	8	0	5416
2007-2008	94	42	111	133	87	110	300	186	24	251	3180	438	579	9	0	5544
2008-2009	95	41	110	134	78	112	306	187	26	256	3186	439	581	10	0	5561
2009-2010	97	41	111	131	76	111	327	187	31	264	3118	472	588	11	0	5565
2010-2011	98	40	112	135	78	113	330	189	38	265	3219	473	589	11	0	5690
2011-2012	98	40	112	134	78	115	341	190	40	271	3200	470	587	11	0	5687
2012-2013	98	41	114	134	69	109	340	191	48	273	3206	475	589	12	17	5716
2013-2014	93	40	114	134	50	110	348	189	48	273	3206	475	589	12	17	5698
2014-2015	97	44	118	138	50	115	353	193	48	277	3224	480	597	13	17	5764
2015-2016	97	44	120	140	43	108	354	210	65	331	3037	555	604	13	15	5736
2016-2017	99	45	119	140	44	107	362	210	67	332	3040	558	614	13	16	5766
2017-2018	99	45	119	138	46	106	358	211	68	332	3017	558	615	13	18	5743
2018-2019	99	46	120	136	45	108	362	211	69	330	3005	558	608	13	18	5728
CAGR (%)	0.48	0.70	1.03	0.17	-4.86	0.07	1.94	1.14	9.99	2.55	-0.29	2.06	0.48	3.81	0.82	0.43



Block wise Area under Mango in District Kangra

The block wise area under Mango in district Kangra during 2006-07 to 2018-19 is given in table 1.3. It may be observed that Indora block has the maximum area under mango cultivation. The percentage share of the area under mango in Indora block to area of the Kangra district is 31.66 percent in the year 2018-19. In Kangra district total area under mango increased 20891 hectares to 21392 hectares during 2006-07 to 2018-19 with the growth rate of 0.18 percent. There is very little trends in the table area under mango in district Kangra. All the blocks in district Kangre shows the positive growth rate but except Baijnath and Rait blocks. The area under mango in Bajnath, Bhawarna, Dehra, Rait and Nurpur was 1.77, 2.14, 7.18,3.27 and 17.79 percent in 2006-07 which decrease to 1.71,2.11,7.11,2.11 and 17.61 percent to total area in Kangra district under Mango in the year 2018-19 respectively.

Block wise area under Mango in Kangra District (in hectare) (Table 1.3)

Years	Baijnath	Panchrukhi	Lamba Gaon	Bhawarna	Nagrota Bagwan	Kangra	Dehra	Paragpur	Rait	Nagrota Surian	Indora	Nurpur	Fatehpur	Sulah	Dharmshala	Total
2006-07	370	291	1123	447	781	660	1501	1888	683	1852	6740	3717	628	210	0	20891
2007-08	378	297	1140	456	787	669	1531	1898	713	1915	6808	3744	670	239	0	21245
2008-09	360	291	1135	453	788	671	1518	1895	709	1909	6800	3728	648	242	0	21147
2009-10	351	291	1131	444	779	677	1514	1882	763	1901	6781	3755	638	237	0	21144
2010-11	338	293	1115	427	773	681	1532	1884	768	1895	6755	3726	641	237	0	21065
2011-12	370	299	1112	438	781	686	1524	1880	770	1890	6698	3710	645	245	0	21048
2012-13	382	314	1134	445	792	691	1436	1890	594	1895	6706	3720	650	261	50	20960
2013-14	362	324	1126	449	798	692	1454	1875	598	1895	6706	3720	650	261	53	20963
2014-15	362	324	1173	449	799	693	1501	1922	598	1942	6753	3767	651	261	53	21248
2015-16	363	325	1173	449	799	693	1513	1937	598	1942	6753	3767	651	270	53	21286
2016-17	363	327	1175	452	804	695	1519	1947	599	1944	6760	3769	665	274	52	21345
2017-18	364	327	1173	456	801	703	1515	1932	601	1944	6763	3769	673	279	59	21359
2018-19	366	331	1165	451	810	713	1521	1942	593	1944	6773	3767	680	276	60	21392
CAGR (%)	-0.08	1.00	0.28	0.07	0.28	0.60	0.10	0.22	-1.08	0.37	0.04	0.10	0.61	2.12	2.64	0.18



Block wise area under Litchi in Kangra district : Table 1.4 present the block wise area under litchi in Kangra district. The data reveals that the area of litchi has been increased from 2629 hectares to 3311 hectares during the period of 2006-07 to 2018-19 with the growth rate of 1.79 per cent annually. The maximum area under litchi was observed in Sulah (492 hectares) followed by Bhawarna (486 hectares) Nagarota Bagwa, (473 hectares) and Panchrukhi (350 hectares) in 2018-19. Further table shows that expect Rait block all blocks have positive annual growth rate in area under litchi cultivation. The area under litchi orchard in Lamba gaon, Dehra, Paragpur, Nagrota Surian, Indora, Nurpur and Fatehpur was 2.32,6.43,1.60,1.22,4.07,1.94 and 0.34 percent in 2006-07 which was increase to 3.55,7.43,2.54,4.50,2.81 and 1.24 percent to total area of Litchi in Kangra district in the year 2018-19 respectively. The rest of blocks that is Baijnath, Panchrukhi , Bhawaran, Nagrota bagwan, Kangra, Rait and Sulah, the percentage share the total area under litchi plants in kangara district was 4.60,10.88,16.70,15.90,8.67,9.97 and 15.37 percent in the year 2006-07 where as it decrease to 4.47,10.57,14.68,14.29,8.03,7.13 and 14.86 in the year 2018-19 respectively. The area under litchi plants also show increasing trends in Dharmshala block.



Block wise area under litchi in Kangra District (in hectare) (Table 1.4)

Years	Bajnath	Panch rukhi	Lamba Gaon	Bhawarna	Nagrota Bagwan	Kangra	Dehra	Parag pur	Rait	Nagrota Surian	Indora	Nurpur	Fateh pur	Sulah	D/Shala	Total
2006-07	121	286	61	439	418	228	169	42	262	32	107	51	9	404	0	2629
2007-08	127	292	69	445	424	234	175	48	268	39	109	56	14	412	0	2712
2008-09	130	296	72	448	422	236	180	55	272	44	110	58	14	420	0	2757
2009-10	134	303	80	456	422	238	189	56	271	45	106	63	14	429	0	2806
2010-11	130	304	82	461	422	243	190	56	272	46	105	62	14	431	0	2818
2011-12	134	317	90	466	429	245	198	60	295	48	108	65	17	440	0	2912
2012-13	142	328	97	478	446	240	201	65	220	58	116	69	20	465	57	3002
2013-14	135	334	98	475	446	242	208	67	222	60	117	76	20	467	58	3025
2014-15	143	345	105	482	453	249	216	75	230	67	125	84	28	474	66	3142
2015-16	143	345	105	482	453	249	216	75	230	67	125	84	28	474	66	3142
2016-17	144	345	109	490	464	254	231	80	237	70	134	85	34	489	65	3231
2017-18	148	345	113	492	469	265	245	89	238	71	144	91	35	491	67	3303
2018-19	148	350	111	486	473	266	246	84	236	70	149	93	41	492	66	3311
CAGR (%)	1.56	1.57	4.71	0.79	0.96	1.19	2.93	5.48	-0.80	6.21	2.58	4.73	12.37	1.53	2.12	1.79

Block-wise Production Citrus in Kangra District

In Table 1.5 production of citrus in Kangra district is given. It is clear from the table that the production of citrus 8001 tonnes in the year 2006-07, increased 22184 tonnes in 2009-10 and once again declined 15951 in the year 2018-19. The annual growth rate was observed 5-45 per cent during the study period. The highest growth rate was observed in Nagrota Surian (28.20 percent) followed by Indora (21.76 percent), Sulah (14.14 percent), Bajjnath (10.82 percent), Panchrukthi (4.39 percent) Pargpur (3.49 percent) and Kangra (0.11 percent) during this period and rest of the blocks, shown negative growth rate



during this study period of time. The block Dehra has about 23.25 percent share in total citrus fruits in the Kangra district during the year 2006-07, which decreased to 4.18 percent in the year 2018-19. But in case of Baijnath, Nagrota Surian, Indora, Nurpur and Sulah blocks the percentage share in total citrus production in Kangra district was increased from 1.40, 0.70, 4.96, 0.00 and 3.18 percent in the year 2006-07 to 2.67, 8.87, 32.19, 22.64 and 3.80 percent in the year 2018-19. In Daharmsala block the percentage share was 0.74 percent in the year 2013-14 which decreased to 0.38 percent in the year 2018-19.

Block wise production of citrus fruits in Kangra District (in tonnes) (Table 1.5)

Years	Baij nath	Panch rukhi	Lamba gao	Bhawarna	Nagrota bagwan	Kangra	Dehara	Parag nur	Rait	Nagrata surain	Indora	Nurpur	Fatch pur	Sulah	shala	Total
2006-2007	112	207	728	200	305	1200	1860	352	240	56	397	0	2253	91	0	8001
2007-2008	278	326	841	249	94	1539	784	474	163	101	4910	5012	3212	285	0	18268
2008-2009	474	237	769	344	190	1300	1335	376	233	237	6440	4543	2134	123	0	18735
2009-2010	465	265	993	752	282	1214	1722	419	343	751	5758	7856	1257	107	0	22184
2010-2011	535	302	773	626	264	885	1607	305	316	208	6369	8021	1266	227	0	21704
2011-2012	415	194	895	589	311	910	1575	337	366	220	4473	5604	1238	232	0	17359
2012-2013	415	194	754	519	312	880	1599	346	351	224	3733	5470	1249	227	0	16273
2013-2014	358	174	655	430	253	844	1386	346	301	520	2465	3517	626	136	89	12100
2014-2015	365	174	667	430	277	974	1080	336	199	870	3009	3513	620	165	41	12720
2015-2016	441	268	792	430	190	1163	1295	366	375	1776	3209	4778	818	260	63	16224
2016-2017	409	234	715	307	70	889	1036	312	280	1595	4131	4999	824	215	41	16057
2017-2018	436	232	635	288	59	888	1030	319	141	1245	3589	4971	580	222	41	14676
2018-2019	426	362	129	111	65	1218	666	550	121	1415	5134	3611	1575	508	60	15951
CAGR (%)	10.82	4.39	-12.46	-4.43	-11.21	0.11	-7.60	3.49	-5.13	28.20	21.76	-3.70	-2.72	14.14	-6.48	5.45

Block wise production of Kinnow /Santra in Kangra District

In table 1.6 block wise production of Kinnow/Santra in Kangra district is shown. During the year 2006-07, there was 3258 tonnes production and in the year 2018-19 the production rose to 10379 tonnes. The production registered 9.32 percent growth per annum during the study period respectively. The negative growth rate shown in the blocks of Kangra district i.e. Bhawarna (10.11 percent), Dharamshala (8.16 percent), Sulah (8.05 percent), Fatehpur (7.59 percent), Lamba Gao (7.05 percent), Nurpur (4.91



percent) and Paragpur (1.14 percent), rest of the blocks have positive growth in the production of Kinnow/Santra. The highest growth rate observed in Nagrota Surian (30.60 percent) followed by Indora (26.47 percent), Rait (10.20 percent), Panchrukhi (9.87 percent), Kangra (8.57 percent), Dehra (4.26 percent), Nagrota Bagwan (2.09 percent) and Baijnath (1.92 percent) annually during the study period. In the year 2006-07 the maximum production was observed in Fatehpur (65.99 percent) but in the year 2018-19, highest production was found in Indora (47.15 percent) in Kangra district.

Kangra

The block wise production of mango in Kangra district during 2006-07 to 2018-19 is given in table 1.7. It may be seen from the table that during the year 2006-07, there was 22840 tonnes production of mango, which declined to 16846 tonnes in the year 2018-19 with negative growth of 3.31 percent annually. In production, highest growth rate was observed in Nagrota Surian (24.36 percent) followed by Nagarota Bagwan (19.92 percent), Fatehpur (17.35 percent), Sulah (14.33 percent) and Kangra (13.87 percent) during the reference period respectively. The highest and negative growth seen in Nurpur block (-18.90) followed by Lamba Gaon (18.97) and Panchrukhi (4.86) percent annually. The table also revealed that the production of Mango was maximum, i.e.59.85 percent in the year 2006--07 in Nurpur block which was decreased to 5.32 percent in the year 2018-19, whereas it was lowest in Nagrota block 0.31 percent in the year 2006-07 and it was increased to 4.47 in the year 2018-19. In other blocks like Baijnath, Bhawarna, Kangra, Dehra, Pragpur, Rait, Nagrota Surian, Indora, Fatehpur and Sulah, the production was 0.46, 0.55, 0.88, 2.63, 0.66, 1.62, 0.87, 10.95, 0.39 and 0.44 percent to total production in Kangra district in the year 2006-07 and increased to 1.32, 2.02, 6.42, 14.46, 2.30, 3.62, 20.10, 26.80, 4.27 and 3.21 percent in the year 2018-19 respectively. The remaining other blocks like Panchrukhi, Lamba gaon, show the decreasing trend and percentage share of these two blocks to total production in Kangra was 3.94 and 16.46 percent in the year 2006-07 respectively. The percentage share of Dharamshala block was 3.02 percent in the year 2018-19.



Block wise Production of Mango in Kangra District (in tonnes) (Table 1.7)

Years	Baij nath	Panch rukhi	Lamba Gaon	Bhawar na	Nagrota	Kangra	Dehra	Parag pur	Rait	Nagrota Surian	Indora	Nurpur	Fateh pur	Sulah	Dharam shala	Total
2006-07	105	900	3760	125	71	200	600	150	370	199	2500	13670	90	100	0	22840
2007-08	110	628	3550	81	155	98	42	151	189	108	1800	11813	87	97	0	18909
2008-09	184	300	4060	180	263	220	200	180	334	168	2534	12068	190	147	0	21028
2009-10	180	240	2962	35	181	120	185	205	376	180	1205	7658	40	136	0	13703
2010-11	220	278	3251	67	398	208	238	216	584	288	1320	6585	48	634	0	14335
2011-12	220	278	5045	67	255	284	258	512	584	288	1198	6674	48	634	0	16345
2012-13	220	278	5248	150	260	250	350	426	595	355	5340	8598	150	630	0	22850
2013-14	198	263	3347	105	379	295	227	467	431	338	3284	2798	192	109	147	12580
2014-15	214	263	3297	105	360	400	735	278	580	2550	8100	5200	192	124	135	22533
2015-16	240	200	4000	500	850	500	520	450	850	2550	8200	5200	380	310	150	24900
2016-17	225	184	3746	426	718	415	426	389	732	2036	6656	4154	326	277	125	20835
2017-18	140	128	2510	270	545	250	340	215	450	1305	4005	2410	240	170	120	13098
2018-19	223	471	245	370	753	1082	2436	387	610	3386	4515	897	720	570	181	16846
CAGR (%)	5.97	-4.86	-18.97	8.71	19.92	13.87	7.56	7.56	3.92	24.36	4.65	-18.90	17.35	14.33	3.02	-3.31

Block wise Production of Litchi in Kangra District

Table 1.8 present block wise production of litchi in Kangra district. It may be seen that production increased 2013 tonnes to 3817 tonnes during the 2006-07 to 2018-19 time period with the growth rate of 5-04 percent annually. During the year 2018-19, highest production observed in Kangra block followed by Sulah (560 tonnes), Indora (361 tonnes), Nagarota Bagwan (337 tonnes) and Bhawarna (302 tonnes). But the highest growth rate seen in Indora (38.98 percent) followed by Dehra (36.44), Nagarota Surian (21.85 percent) during the study period. In different blocks i.e. Bhawarana, Nagrota Bagwan , Kangra, Dehra, Nagarota Surian, Indora and sulah, the production of litchi was show increasing trends. The percentage share of these Blocks to total production was 5.96,2.63,10.43,0.25,1.04,0.25 and 8.94 percent in the year 2006-07 which increase 7.91, 8.83,17.29,7.44,7.18,9.46,and 14.67 percent in the year 2018-19 respectively. The other remain Blocks i.e. Baijnath , Panchrukhi, Lamba Gaon , Paragpur, Rait , Nurpur and Fatehpur show decreasing trends in Litchi Production. The percentage share of these blocks was 3.33,34.77,7.75,0.60,7.20 and 0.25 in the year 2006-07 and it was decrease 2.83,



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12.42,0.76,0.11,6.55,2.31 and 0.03 percent to total production in Kangra district in the year 2018-19 respectively.

Block wise Production of Litchi in Kangra District (in tonnes) (Table 1.8)

Years	Bajinath	Panchrukhi	LambaGao n	Bhawarna	Nagrota Bagwan	Kangra	Dehra	Parag pur	Rait	Nagrota Surian	Indora	Nur pur	Fateh pur	Sulah	Dharm shala	Total
2006-07	67	700	156	120	53	210	5	12	333	21	5	145	5	180	0	2013
2007-08	70	608	40	128	215	115	10	9	241	10	8	144	6	148	0	1752
2008-09	100	485	61	77	222	180	75	15	175	29	201	115	7	302	0	2044
2009-10	93	260	58	400	235	250	80	12	332	14	150	70	3	282	0	2239
2010-11	93	280	90	220	230	238	80	5	224	3	105	65	4	385	0	2022
2011-12	93	260	78	220	215	135	80	5	185	3	340	75	4	358	0	2051
2012-13	96	270	68	240	185	150	82	5	202	3	350	90	4	360	0	2105
2013-14	86	238	53	168	385	287	112	8	278	58	354	95	9	258	97	2486
2014-15	89	254	50	172	272	385	124	3	280	65	358	98	6	267	76	2499
2015-16	110	320	56	600	475	600	116	5	300	350	500	98	6	500	90	4120
2016-17	107	295	49	547	403	505	100	4	270	294	446	73	4	446	79	3622
2017-18	110	310	40	520	323	330	92	90	270	210	410	70	7	440	70	3292
2018-19	108	474	29	302	337	660	284	4	250	274	361	88	1	560	85	3817
CAGR (%)	3.74	-3.95	-12.14	7.36	15.29	9.21	36.44	-8.10	-2.18	21.85	38.98	-3.77	-11.64	9.12	-2.87	5.04

Conclusion

Horticulture development in Himachal Pradesh is an economic necessity because horticulture sector in the state has made remarkable contribution in the upliftment of the socio-economic condition of the farming community. Kangra district of Himachal Pradesh significantly contribute in the production of sub-tropical fruits in Himachal Pradesh. It is concluded from the entire analysis that all the sub-tropical fruits viz. Citrus, Mango, Kinnow and Litchi have shown increasing trend in their production. It is also evident that the area under these fruits have also increased during the study period.



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