



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2017; 3(7): 336-340  
www.allresearchjournal.com  
Received: 28-05-2017  
Accepted: 29-06-2017

**Farouq Ahmad Dar**  
Asst. Lect. Department of  
Geography, GDC Poonch,  
Jammu and Kashmir, India

## **Production of fresh and dry fruits, a district wise analysis in Jammu and Kashmir**

**Farouq Ahmad Dar**

### **Abstract**

Horticulture is the branch of agriculture that deals with the art, science, technology and business of growing plants. It is the study of plants. It includes the cultivation of fruits, vegetables, nuts, seeds, medicinal plants, mushrooms, algae, flowers, trees and plants. Horticulturists use their knowledge and technology to improve the plant growth, yields, quality, and nutritional value, resistance to insects, diseases and environmental stresses.

Horticulture has emerged as a growth oriented sector for agriculture which offers a wide range of opportunities for crop diversification. In the state of Jammu and Kashmir, every district have some comparative benefits and advantages in some specific fruits which is the result of different relief and topography like soil fertility, soil matter, different geographic and environmental conditions. The aim of the present paper is to analyze the district wise production of major fresh and dry fruits in Jammu and Kashmir.

**Keywords:** Horticulture sector, topography, technology, districts, dry fruits, fresh fruits

### **Introduction**

Jammu and Kashmir is northern most state of India. It is located mostly in the Himalayan mountains and shares borders with the state of Himachal Pradesh and Punjab to the south. It has an extent of 32°15'-37°05' N latitude and 72°35'-83°20' E longitude. It has a total area of 2,22,236 Sq. Km, out of which 78,114 Sq. Km is under the administration of Pakistan, 5,150 Sq. Km is handed over by Pakistan to China and 37,558 Sq. Km is under the administration of China. In terms of area, it ranks 5<sup>th</sup> and is one of the largest state of India. Total population of Jammu and Kashmir state is 14,280,373 (2017). In terms of population it ranks 19<sup>th</sup> all over the India. The state consists of three divisions Jammu, Kashmir and Ladakh. The state comprises of total 22 districts, 10 each in Jammu and Kashmir divisions and 2 in Ladakh division. The main Kashmir valley is 100 Km (62 Sq. Miles) wide and 15,520.3 Sq. Km (5,992.4 Sq. Miles) in area. This densely and beautiful valley has an average height of 1850 meters (60,70ft) above sea-level and the Pir Panjal range has an average elevation of 5,000 meters (16,000ft). The state has two capitals- Jammu is the winter capital and Srinagar is the summer capital. (Hussain Majid: "Geography of Jammu and Kashmir").

### **Districts of Jammu and Kashmir**

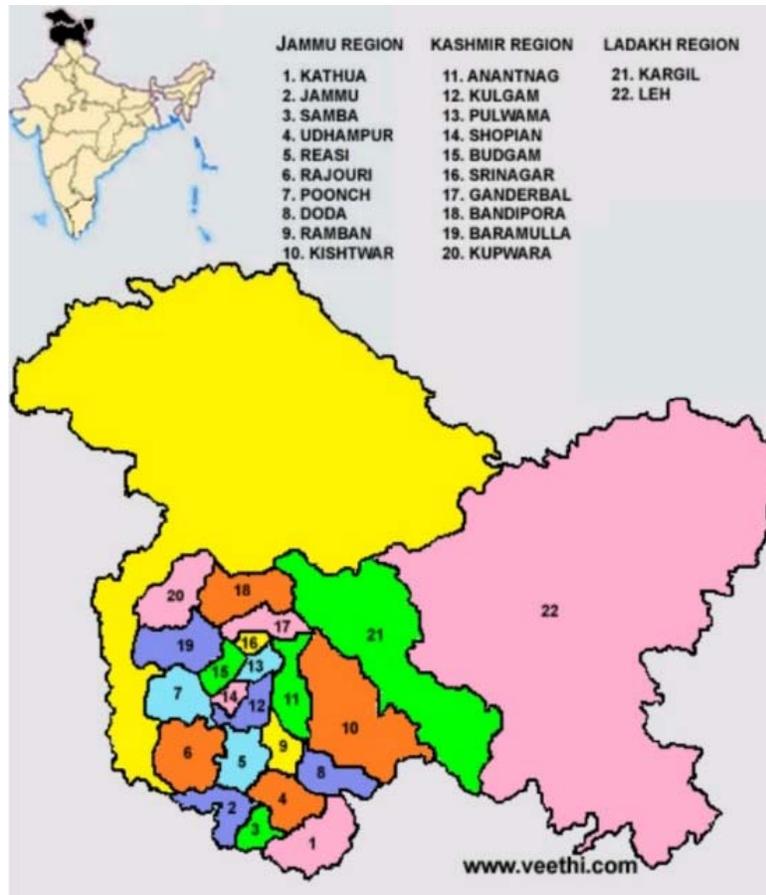
Agriculture is the main occupation of the people of Jammu and Kashmir. About 70% of total population of state depends directly or indirectly on agriculture. Those who are working in other industries also depend on agriculture for the requirement of raw material for their production. All other industries are dependent on agriculture.

Horticulture in recent years has emerged as an important sector and growing sub sector of the Jammu and Kashmir. It is known as backbone of the state economy. The estimated percentage contribution of horticulture and allied sector to state gross domestic product is about 21.89% for 2016-17 year (Economic survey 2015-16 J&K state).

The state provides a wide range of opportunities to the farmers for the cultivation of horticultural crops such as apple, apricot, cherry, pear, peach, walnut, almond, mango and guava etc.

**Correspondence**  
**Farouq Ahmad Dar**  
Asst. Lect. Department of  
Geography, GDC Poonch,  
Jammu and Kashmir, India

## Jammu and Kashmir Map



### Research methodology

The present study is based on the secondary data. The main sources of data collection include Economic survey, statistical digest, government official records, books, magazines, articles and Journals. The data has been analyzed, arranged and interpreted through tabulation and simple percentage method.

### Objectives of the study

The present study has certain specific objectives.

1. To analyze the district wise production of major fresh and dry fruits in J&K state.
2. To examine scientific tools to increase the production.
3. To give some suggestions for increasing the production of horticulture sector.

### Result and Discussion

Apple and walnut are the major products of Jammu and Kashmir state, about 75% of apple and 90% of walnut production in India comes from Jammu and Kashmir. Apple is an extremely important source of nutritive diet. This provides a major source of income and employment in Kashmir valley. The production of apple and walnut and its marketing all over the country as well as abroad has been promoted directly or indirectly by several Govt. initiated programmes and policies, for example price policy, credit policy, Quality control and outright purchase etc. most of the land available for horticulture is in Budgam, Shopian, Anantnag, Pulwama, Kupwara and Kulgam. In the Jammu and Kashmir state, different regions and areas have

dominance of some specific horticulture fruits which is the result of varying topography, soil matter, soil fertility, soil salinity, different environmental and geographical conditions which result in diversification of horticulture fruits among different regions and districts (Lone and Sen, 2014) [2].

The area under horticulture crops in the state has been expanding as compared to the area under agriculture. According to the horticulture department, the area under major horticulture produce was 2.83 lakh hectares during 2006-07 in the state which increased to 3.25 lakh hectare in 2010-11. (Directorate of horticulture, J&K) [8].

The state is blessed with vast potential for all kinds of fruits. Apple, Walnut, Cherry and Almond etc. are major fruits grown in the state. As per horticulture census 1999-2000, about 55% of the area is covered under Apple. It is important in terms of production and provides the maximum marketable surplus. During the year 2014-15, seasonal variations coupled with floods of September, 2014 resulted in loss to the horticulture industry. However, the increased production yielded some good results and export worth Rs. 4500.00 crore was reported in 2014-15 as against Rs 5000.00 crores during 2013-14. 14.79 lakh (Mts) of fresh and dry fruits was exported during the year 2015-16 valuing of Rs 6000.00 Crores. (Economic survey of Jammu and Kashmir State 2015-16) [12].

In Jammu and Kashmir State, district wise estimated area under major horticulture crops and their production has shown in Table 1.a and 1.b

**Table 1.a:** District wise estimated area under major horticulture crops J&K 2016-17 (Area in Hectares).

S.No	Kind of Fruit	Districts																				Area in hec				
		Sgr.	Gdhl	Bdgm.	Bla.	Bndpr	Kup.	Angt.	Kul.	Shpn.	Pul	Leh	Kirgl	Total Kmr.	Jmu	Samba	Kathua	Udhmr	Reasi	Doda	Ksht	Rmbn	Raj	Ponch	Total Jmm	Total J&K
1	Apple	1470	7310	13015	25203	6174	19107	17062	18207	21663	14290	798	526	144825	0	0	810	1230	1101	5913	2880	2840	1281	2091	18146	162971
2	Pear	290	381	1550	660	143	478	1098	943	396	960	3	30	6932	0	17	731	726	307	1399	264	708	1675	1773	7600	14532
3	Apricot	34	119	27	121	37	58	254	111	44	113	792	1514	3224	0	0	38	275	72	291	655	385	508	675	2899	6123
4	Peach	103	169	3	56	42	41	259	131	25	76	4	7	916	16	22	83	280	73	100	166	99	275	585	1699	2615
5	Plum	80	262	454	0	20	46	220	155	36	99	1	1	1373	0	28	72	109	90	101	210	78	580	1397	2665	4038
6	Cherry	475	1078	16	212	52	113	167	38	608	65	1	10	2835	0	0	0	0	0	0	0	0	0	0	0	2835
7	Grapes	0	188	1	16	9	2	0	4	0	1	2	5	228	23	14	16	13	23	0	0	0	4	0	93	321
8	Litchi	0	0	0	0	0	0	0	0	0	0	0	0	0	343	40	371	96	90	0	0	0	0	0	940	940
9	Citrus	0	0	0	11	0	3	0	0	0	0	0	0	14	2400	1480	3038	1640	1882	36	0	80	3580	406	14542	14556
10	Olive	0	0	0	10	0	7	0	0	0	0	0	0	17	0	0	0	15	18	241	0	11	31	13	329	346
11	Mango (G)	0	0	0	0	0	0	0	0	0	0	0	0	0	4850	1285	3956	1050	918	0	0	0	680	0	12739	12739
12	Mango (D)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Ber	0	0	0	0	0	0	0	0	0	0	0	0	0	2677	1208	743	0	118	0	0	0	630	0	5376	5376
14	Anola	0	0	0	0	0	0	0	0	0	0	0	0	0	620	395	593	224	111	0	0	0	44	0	1987	1987
15	Guava	0	0	0	0	0	0	0	0	0	0	0	0	0	675	333	562	385	205	0	0	0	320	0	2480	2480
16	Kiwi.	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	2	3
17	Papaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Strawbery	27	20	0	118	2	0	0	0	0	4	0	3	174	0	0	0	0	0	0	0	0	0	0	0	174
19	Pomegranate	0	11	0	0	1	0	0	0	0	1	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13
20	Louqat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Quince	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Other Fresh	183	112	91	51	6	11	273	234.00	164	6	0	0	1131	686	187	1318	777	371	369	38	1142	1356	2197	8441	9572
<b>Total Fresh</b>		<b>2662</b>	<b>9650</b>	<b>15156</b>	<b>26458</b>	<b>6486</b>	<b>19866</b>	<b>19334</b>	<b>19823</b>	<b>22936</b>	<b>15616</b>	<b>1600</b>	<b>2095</b>	<b>161682</b>	<b>12290</b>	<b>5009</b>	<b>12331</b>	<b>6820</b>	<b>5379</b>	<b>8451</b>	<b>4213</b>	<b>5343</b>	<b>10965</b>	<b>9137</b>	<b>79938</b>	<b>241620</b>
<b>B</b>	<b>Dry Fruits</b>																									
1	Walnut	222	5302	3991	3114	1238	8787	14393	5781	3280	4849	49	15	51021	0	0	3271	4640	2706	6480	4650	5210	4370	6991	38318	89339
2	Pecanut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	50	6	21	0	0	165	128	414	414
3	Almond	469	43	1467	258	8	13	30	2	15	4668	2	2	6977	0	0	12	19	20	67	0	1	11	0	130	7107
4	Other Dry	0	1	0	30	0	2	11	0	0	0	0	0	43	0	0	0	0	0	0	0	0	5	0	5	48
<b>Total Dry</b>		<b>691</b>	<b>5346</b>	<b>5458</b>	<b>3402</b>	<b>1246</b>	<b>8802</b>	<b>14434</b>	<b>5783</b>	<b>3295</b>	<b>9517</b>	<b>51</b>	<b>17</b>	<b>58041</b>	<b>0</b>	<b>0</b>	<b>3327</b>	<b>4709</b>	<b>2732</b>	<b>6568</b>	<b>4650</b>	<b>5211</b>	<b>4551</b>	<b>7119</b>	<b>38867</b>	<b>96908</b>
<b>Grand Total</b>		<b>3352</b>	<b>14996</b>	<b>20614</b>	<b>29859</b>	<b>7732</b>	<b>28668</b>	<b>33768</b>	<b>25606</b>	<b>26231</b>	<b>25133</b>	<b>1651</b>	<b>2112</b>	<b>219723</b>	<b>12290</b>	<b>5009</b>	<b>15658</b>	<b>11529</b>	<b>8111</b>	<b>15019</b>	<b>8863</b>	<b>10554</b>	<b>15516</b>	<b>16256</b>	<b>118805</b>	<b>338528</b>

Source: Directorate of Horticulture, Jammu and Kashmir

**Table 1.b:** District Wise production under major horticulture crops in J&K state for the year 2016-17 (production in MTS)

S.No	Kind of Fruit	Districts																				(Production in Mts)				
		Sgr.	Gudbl	Bud.	Bla.	Bndpr	Kup.	Angt.	Kul.	Shpn.	Pul	Leh	Kargil	Total Kmr.	Jmu	Samba	Kathua	Udhmr	Reasi	Doda	Kshtr	Rmbn	Raj	Ponch	Total J&K	
1	Apple	17064	59768	132329	380005	64834	257072	188148	207259	237001	139288	4327	1317	1688413	0	0	1589	2800	1794	14927	6100	7300	1602	2309	38421	1726834
2	Pear	1782	3544	14045	9277	1261	3837	5048	7445	3177	8640	9	7	58072	0	22	2648	3300	998	5274	515	1700	11000	4800	30257	88329
3	Apricot	31	506	106	431	85	357	752	460	62	900	1923	3775	9387	0	0	47	470	101	423	1200	610	760	600	4211	13598
4	Peach	282	645	0	377	59	303	529	706	38	657	7	5	3609	47	60	114	390	137	225	300	179	540	620	2612	6221
5	Plum	214	1611	1368	0	19	327	606	789	45	891	1	0	5872	0	75	92	175	180	138	350	130	1350	1750	4240	10112
6	Cherry	1484	2372	0	1286	42	712	262	105	1453	558	2	6	8282	0	0	0	0	0	0	0	0	0	0	0	8282
7	Grapes	0	358	0	103	10	5	0	5	0	0	9	5	495	70	22	28	22	2	0	0	0	9	0	153	648
8	Litchi	0	0	0	0	0	0	0	0	0	0	0	0	0	1100	69	822	160	164	0	0	0	0	0	2315	2315
9	Citrus	0	0	0	1	0	0	0	0	0	0	0	0	1	5612	2900	7417	6250	1731	44	0	62	9500	675	34191	34192
10	Olive	0	0	0	1	0	190	0	0	0	0	0	0	191	0	0	0	0	6	25	0	2	0	0	33	224
11	Mango (G) st.	0	0	0	0	0	0	0	0	0	0	0	0	0	11000	2200	5895	2800	1205	0	0	0	1050	0	24150	24150
12	Mango (D)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Ber	0	0	0	0	0	0	0	0	0	0	0	0	0	3800	4200	1720	0	109	0	0	0	950	0	10779	10779
14	Anola	0	0	0	0	0	0	0	0	0	0	0	0	0	1350	670	888	370	78	0	0	0	140	0	3496	3496
15	Guava	0	0	0	0	0	0	0	0	0	0	0	0	0	1600	1350	1387	1650	816	0	0	0	2350	0	9153	9153
16	Kiwi.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Papaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Strawbery	341	2	0	43	1	0	0	0	0	0	0	1	388	0	0	0	0	0	0	0	0	0	0	0	388
19	Pomegranate	0	2	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20	Louqat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Quince	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Other Fresh	1180	771	731	156	2	1182	287	1136	288	117	0	0	5850	1850	375	3360	0	572	717	45	810	5200	1850	14779	20629
<b>Total Fresh</b>		<b>22378</b>	<b>69580</b>	<b>148579</b>	<b>391680</b>	<b>66314</b>	<b>263985</b>	<b>195632</b>	<b>217905</b>	<b>242064</b>	<b>151051</b>	<b>6279</b>	<b>5115</b>	<b>1780561</b>	<b>26429</b>	<b>11943</b>	<b>26007</b>	<b>18387</b>	<b>7893</b>	<b>21773</b>	<b>8510</b>	<b>10793</b>	<b>34451</b>	<b>12604</b>	<b>178790</b>	<b>1959351</b>
<b>B</b>	<b>Dry Fruits</b>																									
1	Walnut	606	11155	14198	9956	2463	37423	41763	25259	12924	18184	109	12	174053	0	0	11404	9910	6965	22548	12000	7000	7900	14500	92227	266280
2	Pecanut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	2	1	0	0	0	62	8	86	86
3	Almond	58	19	1486	553	8	0	12	1	36	4180	1	1	6355	0	0	3	1	1	0	0	0	0	0	5	6360
4	Other Dry	0	0	0	1	0	3	1	0	0	0	0	0	5	0	0	0	1695	0	0	0	1200	3	0	2898	2903
<b>Total Dry</b>		<b>664</b>	<b>11174</b>	<b>15684</b>	<b>10510</b>	<b>2471</b>	<b>37426</b>	<b>41776</b>	<b>25260</b>	<b>12960</b>	<b>22364</b>	<b>111</b>	<b>13</b>	<b>180413</b>	<b>0</b>	<b>0</b>	<b>11420</b>	<b>11608</b>	<b>6967</b>	<b>22548</b>	<b>12000</b>	<b>8200</b>	<b>7965</b>	<b>14508</b>	<b>95216</b>	<b>275629</b>
<b>Grand Total</b>		<b>23042</b>	<b>80754</b>	<b>164263</b>	<b>402190</b>	<b>68785</b>	<b>301411</b>	<b>237407</b>	<b>243165</b>	<b>255024</b>	<b>173415</b>	<b>6389</b>	<b>5129</b>	<b>1960974</b>	<b>26429</b>	<b>11943</b>	<b>37427</b>	<b>29995</b>	<b>14860</b>	<b>44321</b>	<b>20510</b>	<b>18993</b>	<b>42416</b>	<b>27112</b>	<b>274006</b>	<b>2234980</b>

Source: Directorate of Horticulture, Jammu and Kashmir

The table 1.a and 1.b depicts that the estimated area under fresh fruits for the year 2016-17 such as Apple is 162971 hectares, pear (14532) hectares and Apricot (6123) hectares respectively. Similarly the estimated area under dry fruits such as walnut (89339) hectares, peanut (414) hectares and Almond (7107) hectares of land respectively. The total production of fresh fruits in the state of Jammu and Kashmir for the year 2016-17 such as Apple (1726834 Mts), Pear (88329 Mts), Apricot (13598 Mts) and Peach (622 Mts) respectively. The dry fruit production such as walnut (266280 Mts), Peanut (86Mts) and Almond (6360 Mts) respectively. The total fresh fruit production of Jammu and Kashmir state for the year 2016-17 is 195935 (Mts). The total production of dry fruits is 275629 (Mts). In terms of production of Apple Baramulla (38005 Mts), Shopian (237001 Mts) and Budgam (132329 Mts) ranks First, Second, and Third respectively. Similarly in terms of production of walnut Anantnag (41763 Mts), Kupwara (37423 Mts) and Kulgam (25259 Mts) ranks First, Second and Third respectively. (Directorate of horticulture J&K). Area under fruits in Jammu And Kashmir State has increased from 2.95 lakh hectares in 2007-08 to 3.38 lakh hectares in 2015-16. The production is increased from 16.36 lakh (Mts) in 2007-08 to 24.94 Lakh (Mts) in 2015-16.

### Conclusion and Suggestions

It has been concluded that the crop diversification has taken place more in the Kashmir division in some districts like Budgam, Shopian, Srinagar, Baramulla and Pulwama which may attributed to the less average farm size than that of the state. The production of major fruit is concentrated to few districts which have locked the horticulture sector at low level of equilibrium. The horticulture sector is mainly concentrated towards few major fruits and their production. Over the last few years, Apple production and productivity both have increased. According to my survey, it is quite possible to expand its production and its yield, if certain steps will be taken into consideration such as marketing of fruits, use of improved pesticides, fertilizers, irrigation and well machinery etc. there are the major problems and hindrances also in the way of fresh and dry fruits in some districts. The department of horticulture are not keenly watching the fresh and dry fruit fields neither informing the people about the latest technology nor trained the cultivators to improve the production and productivity.

To enhance the growth of horticulture sector diversification should be the main focus in all the districts of the Jammu and Kashmir state. However, state should not follow a uniform policy for all the districts due to some physiographic conditions and should take help from some experts in this regard.

The state government should provide infrastructure to the private investors to set up agriculture and biotechnology research institutes for promotion of horticulture and agriculture sectors. Proper marketing and storage facilities should be provide to the fruit growers in the state. The production of fruits should be based on the new high yielding varieties (HYVS) and comparative advantage.

### References

1. Department of Horticulture. J&K. Srinagar, India. 1-2.
2. Lone AL, Sen V. Horticulture Sector in Jammu and Kashmir economy, European Academic Journal. 2014, 2(2).

3. Digest of statistics. Directorate of economics and Statistics. Govt. of J&K, India. 2012-13.
4. Rather NA, Reshi AAR, Mir MM. An analytical study on production and export of fresh and dry fruits in J&K, international Journal of scientific and research publications. 2013, 3(2).
5. Greater Kashmir. Population of Kashmir associated with fruit industry. 2013.
6. Hussain Majid. Geography of Jammu and Kashmir 5<sup>th</sup> Ed. Rajesh publications, New Delhi. 2006.
7. Kothari CR. Research Methodology: Methods and Techniques 2<sup>nd</sup> revised Ed. New Age international Pvt. Limited New Delhi. 2006.
8. Directorate of horticulture. J&K Govt., India.
9. Deodhar Stish Y, Landes Maurice, Krissoff Barry. Prospectus of India's emerging Apple market. DIANE publisher U.S.A. 2006.
10. Annual report. Department of agriculture and Cooperation, Ministry of Agriculture, Govt. of India. 2016-17.
11. Govt. of Jammu and Kashmir. Economic survey, Directorate of Economics and statistical planning. 2014-15.
12. Govt. of Jammu and Kashmir. Economic survey, Directorate of Economics and statistical planning. 2015-16.