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1,105,146	1,207,061		
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85,254                      841,212 :                      926,466                      2010/2009

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26,678                      100,579                      127,257

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516,727                      557,272

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# Tables



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**Table 1: Selected Agricultural Indicators in the Palestinian Territory by Region, 2009/2010**

Indicator	Region			
	Gaza Strip	West Bank	Palestinian Territory	
Number of Agricultural Holdings	20,402	90,908	<b>111,310</b>	
Number of Agricultural Holders	20,108	89,996	<b>110,104</b>	
Area of Agricultural Holdings (Dunum)	101,915	1,105,146	<b>1,207,061</b>	( )
Cultivated Area of Fruit Trees (Dunum)	40,545	516,727	<b>557,272</b>	( )
Cultivated Area of Vegetables (Dunum)	26,678	100,579	<b>127,257</b>	( )
Cultivated Area of Field Crops (Dunum)	18,032	223,905	<b>241,937</b>	( )
Number of Cattel (Head)	9,635	24,462	<b>34,097</b>	( )
Number of Sheep (Head)	61,403	506,884	<b>568,287</b>	( )
Number of Goats (Head)	12,150	207,935	<b>220,085</b>	( )
Number of Broilers (Bird)	7,556,507	25,714,102	<b>33,270,609</b>	( )
Number of Layers (Bird)	311,280	1,290,661	<b>1,601,941</b>	( )
Number of Beehives	9,176	29,040	<b>38,216</b>	
Number of Paid Permanent Employee	2,969	12,731	<b>15,700</b>	
Number of holdings which have fishery	230	242	<b>472</b>	
Number of holdings which the income from it is composed the main income of the Household	5,583	15,494	<b>21,077</b>	
Number of holdings were constrained by the Expansion and annexation wall in using agricultural holding parcels	9	7,826	<b>7,835</b>	
Number of holdings were constrained by the settlements in using agricultural holding parcels	44	12,753	<b>12,797</b>	
Number of holdings were constrained by the Closed military areas in using agricultural holding parcels	339	7,632	<b>7,971</b>	
Number of holdings were constrained by the Military Barriers in using agricultural holding parcels	15	7,277	<b>7,292</b>	

**Table 2: Number of Agricultural Holdings in the Palestinian Territory by Type of Agricultural Holdings and Governorate, 2009/2010**

Governorate	Total	Mixed	Animal	Plant	
<b>Palestinian Territory</b>	<b>111,310</b>	<b>17,894</b>	<b>14,241</b>	<b>79,175</b>	
<b>West Bank</b>	<b>90,908</b>	<b>14,763</b>	<b>10,879</b>	<b>65,266</b>	
Jenin	14,662	2,629	1,521	10,512	
Tubas	2,834	683	437	1,714	
Tulkarm	8,035	896	544	6,595	
Nablus	13,450	2,422	1,307	9,721	
Qalqiliya	4,929	817	411	3,701	
Salfit	4,686	497	210	3,979	
Ramallah & Al-Bireh	10,543	1,071	656	8,816	
Jericho & Al Aghwar	1,612	210	804	598	
Jerusalem	2,983	250	965	1,768	
Bethlehem	7,406	1,293	1,198	4,915	
Hebron	19,768	3,995	2,826	12,947	
<b>Gaza Strip</b>	<b>20,402</b>	<b>3,131</b>	<b>3,362</b>	<b>13,909</b>	
North Gaza	4,807	621	1,101	3,085	
Gaza	2,869	333	616	1,920	
Deir Al- Balah	3,071	499	534	2,038	
Khan Yunis	6,126	1,094	631	4,401	
Rafah	3,529	584	480	2,465	



**Table 3: Number of Agricultural Holders in the Palestinian Territory by Age Group and Governorate, 2009/2010**

Governorate	Total	Age Group					39 - 30	29 - 15	
		Not Applicable	Not Stated	98-60	59 - 50	49 - 40			
<b>Palestinian Territory</b>	<b>110,104</b>	<b>94</b>	<b>120</b>	<b>28,309</b>	<b>25,830</b>	<b>31,459</b>	<b>19,073</b>	<b>5,219</b>	
<b>West Bank</b>	<b>89,996</b>	<b>91</b>	<b>111</b>	<b>23,260</b>	<b>21,032</b>	<b>25,974</b>	<b>15,548</b>	<b>3,980</b>	
Jenin	14,396	13	13	3,837	3,200	4,247	2,534	552	
Tubas	2,822	3	6	694	582	779	602	156	
Tulkarm	8,042	3	9	2,139	1,966	2,427	1,228	270	
Nablus	13,304	8	16	3,342	3,041	4,071	2,288	538	
Qalqiliya	4,780	5	6	1,132	1,167	1,430	842	198	
Salfit	4,601	1	8	1,153	1,095	1,426	770	148	
Ramallah & Al-Bireh	10,692	10	7	2,887	2,827	2,968	1,638	355	
Jericho & Al Aghwar	1,526	18	8	263	268	402	374	193	
Jerusalem	3,015	3	17	842	683	728	518	224	
Bethlehem	7,124	8	9	2,006	1,667	1,900	1,186	348	
Hebron	19,694	19	12	4,965	4,536	5,596	3,568	998	
<b>Gaza Strip</b>	<b>20,108</b>	<b>3</b>	<b>9</b>	<b>5,049</b>	<b>4,798</b>	<b>5,485</b>	<b>3,525</b>	<b>1,239</b>	
North Gaza	4,628	2	4	1,083	1,041	1,299	862	337	
Gaza	3,099	1	-	876	768	781	501	172	
Deir Al- Balah	2,900	-	-	746	724	814	480	136	
Khan Yunis	6,176	-	4	1,604	1,512	1,694	1,026	336	
Rafah	3,305	-	1	740	753	897	656	258	

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جدول 4: مساحة الحيازات الزراعية في الأراضي الفلسطينية حسب نوع استخدام الارض والمحافظة، كما هو الحال في 2010/10/01

Table 4: Area of Agricultural Holdings in the Palestinian Territory by Type of Land Use and Governorate, As in 01/10/2010

Area in Dunums

Governorate	Total	Type of Land Use								
		Cultivated Area					Un Cultivated Area			
		Total	Nurseries	Land Under Temporarily Fallow	Wooded Land	Cultivated Land	Total	* Other Land*	( ) Permanent Meadows and Pastures	Buildings Used for Holdings Purposes
<b>Palestinian Territory</b>	<b>1,207,060.97</b>	<b>1,029,279.82</b>	<b>495.84</b>	<b>68,161.30</b>	<b>3,452.26</b>	<b>957,170.42</b>	<b>177,781.15</b>	<b>9,063.33</b>	<b>161,246.06</b>	<b>7,471.76</b>
<b>West Bank</b>	<b>1,105,146.14</b>	<b>934,932.53</b>	<b>395.18</b>	<b>49,267.09</b>	<b>3,347.73</b>	<b>881,922.53</b>	<b>170,213.61</b>	<b>7,633.11</b>	<b>156,916.78</b>	<b>5,663.72</b>
Jenin	208,351.83	189,218.21	53.10	3,357.03	381.78	185,426.30	19,133.62	870.39	17,282.49	980.74
Tubas	70,775.50	64,095.66	0.00	2,373.15	12.87	61,709.64	6,679.84	82.70	6,298.73	298.41
Tulkarm	98,355.05	88,045.17	57.32	2,429.18	47.47	85,511.20	10,309.88	474.20	9,443.60	392.08
Nablus	160,056.53	131,794.52	62.90	7,853.93	372.79	123,504.90	28,262.01	907.09	26,579.65	775.27
Qalqiliya	76,416.45	59,924.81	11.61	4,421.81	243.17	55,248.22	16,491.64	1,104.48	15,047.22	339.94
Salfit	54,652.47	47,187.50	0.08	737.66	89.40	46,360.36	7,464.97	87.14	7,250.62	127.21
Ramallah & Al-Bireh	113,643.26	90,195.40	42.71	3,609.29	195.86	86,347.54	23,447.86	203.53	22,841.63	402.70
Jericho & Al Aghwar	40,212.19	37,875.15	7.20	4,107.08	227.45	33,533.42	2,337.04	542.92	1,358.05	436.07
Jerusalem	19,249.53	14,360.83	85.50	1,233.04	66.70	12,975.59	4,888.70	255.37	4,385.95	247.38
Bethlehem	52,909.90	39,778.29	9.56	5,528.63	464.68	33,775.42	13,131.61	332.15	12,459.89	339.57
Hebron	210,523.43	172,456.99	65.20	13,616.29	1,245.56	157,529.94	38,066.44	2,773.14	33,968.95	1,324.35
<b>Gaza Strip</b>	<b>101,914.83</b>	<b>94,347.29</b>	<b>100.66</b>	<b>18,894.21</b>	<b>104.53</b>	<b>75,247.89</b>	<b>7,567.54</b>	<b>1,430.22</b>	<b>4,329.28</b>	<b>1,808.04</b>
North Gaza	20,523.56	19,091.40	25.05	6,259.48	12.72	12,794.15	1,432.16	52.48	913.16	466.52
Gaza	15,582.98	14,984.69	9.35	4,009.62	1.78	10,963.94	598.29	92.63	224.68	280.98
Deir Al- Balah	18,647.81	17,422.16	20.25	2,950.10	26.40	14,425.41	1,225.65	128.98	847.67	249.00
Khan Yunis	29,339.40	26,954.83	36.55	3,143.97	44.97	23,729.34	2,384.57	801.38	1,153.57	429.62
Rafah	17,821.08	15,894.21	9.46	2,531.04	18.66	13,335.05	1,926.87	354.75	1,190.20	381.92

Other Land\*: include pools, corridors, non-arable land, and non-covered folds

أخرى\*: تشمل طرق وممرات وبيرك وأراضي غير قابلة للزراعة وحظائر غير مسقوفة

2010/2009

**Table 5: Cultivated Area of Horticulture Trees, Vegetables and Field Crops in the  
Palestinian Territory by Governorate, 2009/2010**

Area in dunums

Governorate	Total	Field Crops	Vegetables	Horticulture Trees	
<b>Palestinian Territory</b>	<b>926,466.28</b>	<b>241,937.37</b>	<b>127,256.73</b>	<b>557,272.18</b>	
<b>West Bank</b>	<b>841,211.83</b>	<b>223,905.50</b>	<b>100,579.18</b>	<b>516,727.15</b>	
Jenin	177,908.17	55,366.29	19,186.20	103,355.68	
Tubas	65,087.52	34,787.53	20,319.87	9,980.12	
Tulkarm	78,554.21	3,548.88	8,475.26	66,530.07	
Nablus	121,305.03	27,285.78	11,353.59	82,665.66	
Qalqiliya	56,311.07	7,136.01	2,954.93	46,220.13	
Salfit	39,567.37	631.42	413.82	38,522.13	
Ramallah & Al-Bireh	66,523.58	6,618.02	1,925.16	57,980.40	
Jericho & Al Aghwar	36,277.68	2,971.19	26,299.34	7,007.15	
Jerusalem	10,739.15	1,713.73	758.04	8,267.38	
Bethlehem	31,941.57	4,702.78	1,583.80	25,654.99	
Hebron	156,996.48	79,143.87	7,309.17	70,543.44	
<b>Gaza Strip</b>	<b>85,254.45</b>	<b>18,031.87</b>	<b>26,677.55</b>	<b>40,545.03</b>	
North Gaza	15,378.41	2,379.77	6,652.25	6,346.39	
Gaza	11,324.63	897.36	1,238.33	9,188.94	
Deir Al-Balah	15,493.46	2,670.57	3,530.08	9,292.81	
Khan Yunis	26,562.06	9,024.85	7,386.71	10,150.50	
Rafah	16,495.89	3,059.32	7,870.18	5,566.39	

**Table 6 :Number Horticulture Trees in the Palestinian Territory by Type of Crop and region,  
As in 01/10/2010**

Type of Crop	Gaza Strip	West Bank	Palestinian Territory	
Olive	470,488	7,125,955	7,596,443	
Grape	205,550	1,243,712	1,449,262	
Almond	18,611	457,976	476,587	
Peach	13,816	163,078	176,894	( )
Plum	395	83,519	83,914	
Lemon	198,790	119,428	318,218	
Orange	209,734	100,030	309,764	
Other Citrus	89,562	115,759	205,321	
Banana	76	102,698	102,774	
Date	46,447	74,960	121,407	
Fig	11,699	44,455	56,154	
Aloe	1,008	4,646	5,654	
Loquat	661	4,397	5,058	
Guava	35,782	59,623	95,405	
Apple	12,350	32,952	45,302	
Apricot	4,204	42,613	46,817	
Cherry	5	26,850	26,855	
Pears	19	14,346	14,365	
Pomegranate	2,874	32,142	35,016	
Others	10,200	103,434	113,634	
<b>Total</b>	<b>1,332,271</b>	<b>9,952,573</b>	<b>11,284,844</b>	

**Table 7: Number of Livestock in the Palestinian Territory by Type and Governorate, as in 01/10/2010**

Governorate	Type			
	Camels	Sheep	Goats	Cattle
<b>Palestinian Territory</b>	<b>1,525</b>	<b>220,085</b>	<b>568,287</b>	<b>34,097</b>
<b>West Bank</b>	<b>750</b>	<b>207,935</b>	<b>506,884</b>	<b>24,462</b>
Jenin	22	17,583	58,646	4,798
Tubas	49	12,486	45,991	2,060
Tulkarm	-	3,071	17,166	1,078
Nablus	22	16,970	77,575	4,438
Qalqiliya	6	3,688	18,007	923
Salfit	4	3,919	8,438	423
Ramallah & Al-Bireh	45	21,904	35,025	580
Jericho & Al Aghwar	14	26,450	32,747	870
Jerusalem	89	26,427	32,543	379
Bethlehem	259	25,915	34,324	467
Hebron	240	49,522	146,422	8,446
<b>Gaza Strip</b>	<b>775</b>	<b>12,150</b>	<b>61,403</b>	<b>9,635</b>
North Gaza	144	4,225	18,806	3,984
Gaza	288	2,954	11,460	789
Deir Al-Balah	60	996	8,705	898
Khan Yunis	132	2,416	14,052	856
Rafah	151	1,559	8,380	3,108

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**Table 8: Number of the Raised Poultry Per Year in the Palestinian Territory by Type and Governorate, 2009/2010**

Governorate	Type النوع			
	Turkey	Broilers Mothers	Layers	Broilers
<b>Palestinian Territory</b>	<b>533,130</b>	<b>402,623</b>	<b>1,601,941</b>	<b>33,270,609</b>
<b>West Bank</b>	<b>498,460</b>	<b>379,833</b>	<b>1,290,661</b>	<b>25,714,102</b>
Jenin	209,440	135,923	272,875	5,070,670
Tubas	18,000	-	28,610	825,950
Tulkarm	146,400	27,000	223,422	2,719,565
Nablus	16,650	10,000	77,165	5,868,469
Qalqiliya	4,500	-	159,531	1,379,499
Salfit	-	-	22,700	352,200
Ramallah & Al-Bireh	-	4,160	276,899	1,408,999
Jericho & Al Aghwar	-	168,000	960	808,000
Jerusalem	-	13,400	41,797	211,550
Bethlehem	420	5,300	50,490	907,440
Hebron	103,050	16,050	136,212	6,161,760
<b>Gaza Strip</b>	<b>34,670</b>	<b>22,790</b>	<b>311,280</b>	<b>7,556,507</b>
North Gaza	3,920	7,290	106,064	1,709,915
Gaza	3,000	500	74,856	466,120
Deir Al-Balah	7,000	2,000	26,150	1,111,550
Khan Yunis	20,600	5,500	91,210	2,636,942
Rafah	150	7,500	13,000	1,631,980

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**Table 9: Number of the Beehives in the Palestinian Territory by Type of Beehives and Governorate, as in 01/10/2010**

Governorate	Type of Beehives		
	Total	Modern Beehives	Traditional Beehives
<b>Palestinian Territory</b>	<b>38,216</b>	<b>35,494</b>	<b>2,722</b>
<b>West Bank</b>	<b>29,040</b>	<b>27,451</b>	<b>1,589</b>
Jenin	3,540	3,111	429
Tubas	2,941	2,916	25
Tulkarm	3,383	3,323	60
Nablus	3,778	3,558	220
Qalqiliya	3,403	3,319	84
Salfit	1,818	1,776	42
Ramallah & Al-Bireh	2,699	2,453	246
Jericho & Al Aghwar	2,975	2,910	65
Jerusalem	418	378	40
Bethlehem	1,011	839	172
Hebron	3,074	2,868	206
<b>Gaza Strip</b>	<b>9,176</b>	<b>8,043</b>	<b>1,133</b>
North Gaza	2,937	2,889	48
Gaza	556	528	28
Deir Al-Balah	1,211	1,107	104
Khan Yunis	3,840	2,987	853
Rafah	632	532	100

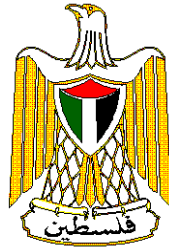
**Table 10: Number of Agricultural Employees in the Palestinian Territory by Type of Employee, Sex and Governorate, 2009/2010**

Governorate	Total	Paid Permanent Employee			Unpaid Household Members				
		Total	Females	Males	Total	Temporary Employee		Permanent Employee	
						إناث Females	ذكور Males	إناث Females	ذكور Males
<b>Palestinian Territory</b>	<b>292,031</b>	<b>15,700</b>	<b>2,731</b>	<b>12,969</b>	<b>276,331</b>	<b>53,672</b>	<b>87,767</b>	<b>41,038</b>	<b>93,854</b>
<b>West Bank</b>	<b>245,469</b>	<b>12,731</b>	<b>2,613</b>	<b>10,118</b>	<b>232,738</b>	<b>52,149</b>	<b>79,757</b>	<b>36,372</b>	<b>64,460</b>
Jenin	37,646	1,944	371	1,573	35,702	9,848	15,254	3,714	6,886
Tubas	7,955	1,160	342	818	6,795	1,143	2,103	1,305	2,244
Tulkarm	18,042	1,021	138	883	17,021	3,596	5,907	2,104	5,414
Nablus	39,223	1,629	370	1,259	37,594	12,558	17,211	3,054	4,771
Qalqiliya	13,040	546	155	391	12,494	2,042	3,579	2,248	4,625
Salfit	11,569	142	38	104	11,427	4,204	6,312	317	594
Ramallah & Al-Bireh	31,415	1,876	454	1,422	29,539	7,387	10,793	4,241	7,118
Jericho & Al Aghwar	4,734	941	242	699	3,793	291	583	1,116	1,803
Jerusalem	6,806	320	43	277	6,486	1,207	1,933	1,122	2,224
Bethlehem	15,760	413	71	342	15,347	2,135	4,529	2,875	5,808
Hebron	59,279	2,739	389	2,350	56,540	7,738	11,553	14,276	22,973
<b>Gaza Strip</b>	<b>46,562</b>	<b>2,969</b>	<b>118</b>	<b>2,851</b>	<b>43,593</b>	<b>1,523</b>	<b>8,010</b>	<b>4,666</b>	<b>29,394</b>
North Gaza	10,633	1,011	37	974	9,622	302	1,532	1,091	6,697
Gaza	6,529	448	15	433	6,081	111	1,057	368	4,545
Deir Al-Balah	6,386	695	23	672	5,691	115	1,211	437	3,928
Khan Yunis	15,027	501	31	470	14,526	767	2,763	1,724	9,272
Rafah	7,987	314	12	302	7,673	228	1,447	1,046	4,952



**Table 11: Number of Agricultural Holdings Using of Agricultural Practices in the Palestinian Territory by Type of Agricultural Practices and Governorate, 2009/2010**

Governorate	Vaccination Animals against Epidemiological Diseases	Biological Control	Pesticides	Chemical Fertilizers	Organic Fertilizers	Treated and Improved Assets (Seeds, Transplants, Tubers)	المحافظة
<b>Palestinian Territory</b>	<b>27,417</b>	<b>17,834</b>	<b>48,276</b>	<b>33,746</b>	<b>63,003</b>	<b>24,395</b>	
<b>West Bank</b>	<b>21,876</b>	<b>12,664</b>	<b>35,665</b>	<b>21,133</b>	<b>49,477</b>	<b>17,853</b>	
Jenin	3,547	1,676	6,680	4,330	8,571	3,467	
Tubas	1,006	697	1,486	1,113	1,668	1,188	
Tulkarm	1,211	1,382	4,626	2,742	5,370	1,529	
Nablus	3,023	3,672	4,214	2,463	7,596	1,749	
Qalqiliya	994	196	3,011	1,774	3,183	1,385	
Salfit	519	146	2,102	1,259	2,850	580	
Ramallah & Al-Bireh	1,277	940	1,597	1,108	5,087	1,122	
Jericho & Al Aghwar	906	462	699	590	714	554	
Jerusalem	1,070	60	553	387	1,244	388	
Bethlehem	2,210	926	2,535	1,112	3,206	1,256	
Hebron	6,113	2,507	8,162	4,255	9,988	4,635	
<b>Gaza Strip</b>	<b>5,541</b>	<b>5,170</b>	<b>12,611</b>	<b>12,613</b>	<b>13,526</b>	<b>6,542</b>	
North Gaza	1,536	1,366	2,569	2,485	2,609	1,229	
Gaza	753	301	1,716	1,655	1,737	536	
Deir Al-Balah	897	968	2,111	2,060	2,140	1,014	
Khan Yunis	1,481	1,483	3,934	4,148	4,593	2,397	
Rafah	874	1,052	2,281	2,265	2,447	1,366	



# **Palestinian National Authority**

**Palestinian Central Bureau  
of Statistics**

**Ministry of Agriculture**

**Agriculture Census 2010**



**Press Conference on the Final Results**

**November, 2011**

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## **Important Remarks**

**Based on the definition of ‘agricultural holding’ used in the collection of data for the agricultural census, the following remarks should be taken into consideration:**

1. Data were not collected for cultivated areas where the total surface area was less than one dunum for open cultivated areas, or less than half a dunum for protected cultivated areas.
2. Areas that had not been cultivated or serviced (by plowing, pruning, spraying, etc., for five years or more) were not calculated as part of the total area of cultivated land.
3. Data were not collected for any livestock that did not meet the conditions for a livestock holding: The holder should have any number of cattle or camels, at least five head of sheep, goats, or pigs, at least 50 poultry birds (layers and broilers), or 50 rabbits, or other poultry like turkeys, ducks, fer, or a mixture of them, or at least three beehives controlled by the holder.
4. The area of cultivated land differs from the total area cultivated with tree horticulture, vegetables, and field crops according to the pattern of agriculture at governorate level in terms of permanent and temporary crops so that:
  - The cultivated land area could be greater than the total area cultivated with tree horticulture, vegetables, and field crops according to the scattered cultivation of permanent crops, concentrated according to the standard area for each type of tree.
  - The cultivated land area could be less than the total area cultivated with tree horticulture, vegetables, and field crops according to repeated cultivation in parcels on the basis of seasonal cultivation.



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## **Introduction**

Modern and accurate statistics are essential to establish national policies at all levels. Accordingly, the PCBS has striven since its establishment to collect and disseminate official statistics which meet international standards and concepts and are in accordance with Palestinian national requirements. In this regard, PCBS has conducted population, social and economic surveys, plus two censuses on population, housing and establishments in 1997 and 2007, in addition to developing various administrative records. In order to provide comprehensive statistics in all domains, PCBS launched the first census on agriculture in 2010 in the Palestinian Territory in cooperation with the Ministry of Agriculture and the Union of Agricultural Work Committees.

The PCBS mandate is to develop and maintain the Palestinian National Statistics System based on professional principles and responsive to the needs of users, and capable of providing accurate, neutral, comprehensive and high quality official statistics which meet international standards in all areas. This should improve the capacity building of Palestinian national establishments in economic, social and environmental development and enhance the establishment of better developmental policies. The provision of statistical data will assist in planning at every level, in addition to developing and unifying standards and concepts of economic, social, population and geographic domains.

From the initial planning phase of the agriculture census, PCBS has sought full coordination and consultation with stakeholders to identify needs in agriculture-related statistics necessary for the development of this sector, and also to mobilize all partners to participate in the implementation of this first-ever census. Activities included bilateral consultation meetings, seminars, and workshops with public and private sectors and civil society institutions to ensure that the output of the agriculture census reflects national priorities and is comparable internationally.

We are pleased to release this press conference which contains the final results of the agriculture census 2010 in the Palestinian Territory. The press conference consists of three chapters arranged in a manner that displays the results easily. It also provides the data user with comprehensive documentation of the agriculture census implementation procedures.

The first chapter displays the main results of the census. The second chapter displays the census methodology followed in the planning and conducting of the census, including the census questionnaire and study population: it also documents the field work including the training, data collection and processing, plus evaluation of the quality of the statistical data collected. The third chapter describes the scientific terms and concepts adopted in the census. It is hoped that this census will provide the data necessary to build and develop the agricultural sector and to assist policy and decision makers in the process of national development.

**November, 2011**

**Ola Awad  
President of PCBS**



## Chapter One

### Final Results

The final results of the agriculture census 2010 include the number of agricultural holdings, classified according to the type of holding (plant, animal, and mixed); the area of land cultivated during the agricultural year 2009/2010 from 01 October 2009 to 30 September 2010; the number of domestic livestock (cattle, goats, sheep, camels, and poultry farms) on the enumeration day 01 October 2010; the agricultural labor force and its distribution according to sex and age; and finally, agricultural machinery and practices.

#### **About 71% of agricultural holdings are plant holdings:**

The results indicated that during the agricultural year 2009/2010 there were 111,310 agricultural holdings in the Palestinian Territory: 90,908 in the West Bank and 20,402 in the Gaza Strip. Plant holdings were the most common type with 79,175, equivalent to 71.1% of the total number of agricultural holdings in the Palestinian Territory: 82.4% in the West Bank and 17.6% in the Gaza Strip. There were 17,894 mixed holdings in the Palestinian Territory: 82.5% in the West Bank and 17.5% in the Gaza Strip. There were 14,241 animal holdings in the Palestinian Territory: 76.4% in the West Bank and 23.6% in the Gaza Strip.

#### **Around 29% of agricultural holders aged 40-49 years:**

The results indicated that there were 110,104 agricultural holders in the Palestinian Territory, with 28.6% of them in the 40-49 year age group during the agricultural year 2009/2010: this age group made up 28.9% of all agricultural holders in the West Bank and 27.3% in the Gaza Strip.

#### **About 79% of agricultural holdings cultivated with permanent and temporary crops:**

In the agricultural year 2009/2010, the total area of agricultural holdings in the Palestinian Territory was 1,207,061 dunums: 1,105,146 dunums in the West Bank and 101,915 dunums in the Gaza Strip. Based on land use, the total area of cultivated land, including land under permanent and temporary crops, nurseries, temporarily fallow, and forests, amounted to 1,029,280 dunums, which is equivalent to 85.3% of the total area of agricultural holdings in the Palestinian Territory: 90.8% in the West Bank and 9.2% in the Gaza Strip. The non-cultivated area of land, which includes buildings used for the purposes of the holding, permanent meadows and pastures (permanent fallow), pools, corridors, non-arable land, and non-covered folds, amounted to 177,781 dunums, which is equivalent to 14.7% of the total area of agricultural holdings in the Palestinian Territory: 95.7% in the West Bank and 4.3% in the Gaza Strip.

Results also indicated that the total cultivated land area in the Palestinian Territory during the agricultural year 2009/2010 was 957,170 dunums: 92.1% in the West Bank and 7.9% in the Gaza Strip as on 01 October 2010.

**About 926 thousand dunums are cultivated with tree horticulture, vegetables and field crops in the Palestinian Territory; 19% of them in Jenin governorate:**

During the agricultural year 2009/2010, the total area cultivated with tree horticulture, vegetables, and field crops in the Palestinian Territory was 926,466 dunums: 841,212 dunums in the West Bank and 85,254 dunums in the Gaza Strip. Jenin governorate has the highest amount of cultivated land, constituting 19.2% of the total cultivated area in the Palestinian Territory.

**About 33% of the area cultivated with field crops was in Hebron governorate:**

The total area cultivated with field crops in the Palestinian Territory during the agricultural year 2009/2010 was 241,937 dunums: 223,906 dunums in the West Bank and 18,032 dunums in the Gaza Strip. Hebron governorate had the greatest amount of cultivated land, with 32.7% of the total area cultivated with field crops in the Palestinian Territory.

**About 21% of the area cultivated with vegetables was in Jericho and Al-Aghwar Governorate:**

The total area cultivated with vegetables in the Palestinian Territory during the agricultural year 2009/2010 was 127,257 dunums: 100,579 dunums in the West Bank and 26,678 dunums in the Gaza Strip. Jericho and Al-Aghwar governorate had the greatest amount with 20.7% of the total area cultivated with vegetables in the Palestinian Territory.

**About 19% of the area cultivated with tree horticulture was in Jenin governorate:**

The total area cultivated with tree horticulture in the Palestinian Territory during the agricultural year 2009/2010 was 557,272 dunums: 516,727 dunums in the West Bank and 40,545 dunums in the Gaza Strip. Jenin governorate had the greatest amount with 18.5% of the total area cultivated with tree horticulture in the Palestinian Territory.

**Olive trees represent about 67% of the total number of horticultural trees:**

The number of horticultural trees in the Palestinian Territory totaled 11,284,844 trees, of which 88.2% in the West Bank and 11.8% in the Gaza Strip. Olive trees had the greatest amount with 67.3% of the total number of horticultural trees in the Palestinian Territory, while this percentage was 71.6% of the total number of horticultural trees in the West Bank and 35.3% of the total number of horticultural trees in the Gaza Strip.

**Livestock:**

**Hebron had greatest number of cattle, Jerusalem the least:**

The number of cattle in the Palestinian Territory totaled 34,097, of which 71.7% were in the West Bank and 28.3% in the Gaza Strip. Hebron governorate had the highest number of cattle with 24.8% of the total cattle in the Palestinian Territory, while Jerusalem had the lowest with 1.1% on 01 October 2010.

**About 26% of sheep in the Palestinian Territory were raised in Hebron governorate:**

The number of sheep in the Palestinian Territory totaled 568,287, of which 89.2% were in the West Bank and 10.8% in the Gaza Strip. The highest number of sheep was in Hebron with 25.8% of all sheep in the Palestinian Territory on 01 October 2010.

**The highest percentage of goats in Hebron governorate:**

The number of goats in the Palestinian Territory was 220,085, of which 94.5% were in the West Bank and 5.5% in the Gaza Strip. The highest number of goats was in Hebron with 22.5% of all goats in the Palestinian Territory on 01 October 2010.

**About 19% of camels in the Palestinian Territory were raised in Gaza governorate:**

There were 1,525 camels in the Palestinian Territory, of which 49.2% were in the West Bank and 50.8% in the Gaza Strip. Gaza governorate had the highest percentage of camels with 18.9% of all camels in the Palestinian Territory on 01 October 2010.

**Poultry farms:**

During the 2009/2010 agricultural year, there were 402,623 mothers of broiler birds in the Palestinian Territory, 33,270,609 broilers, and 1,601,941 layers. There were also 533,130 turkeys.

**About 10% of beehives in the Palestinian Territory were located in Khan Younis governorate:**

There were 38,216 beehives in the Palestinian Territory, of which 76.0% were in the West Bank and 24.0% in the Gaza Strip. Khan Younis governorate had 10.0% of all the beehives in the Palestinian Territory on 01 October 2010.

**Agricultural labor:**

There were 292,031 employees in agricultural holdings in the Palestinian Territory: 94.6% of them unpaid family members and 5.4% permanent paid employees during the agriculture year 2009/2010.

**Agricultural practices:**

Results indicated that 64.9% of all plant and mixed holdings in the Palestinian Territory used organic fertilizers: 34.8% used chemical fertilizers, 49.7% used agricultural pesticides, 25.1% used improved plant assets (seeds, transplants, and tubers), and 18.4 % used integrated pest management. The results also indicated that 85.3% of all animal and mixed holdings in the Palestinian Territory vaccinated animals against epidemic diseases.

**About 51% of holdings with a fishery found in the West Bank:**

There were 472 holdings with a fishery in the Palestinian Territory: 51.3% in the West Bank and 48.7% in the Gaza Strip during the agricultural year 2009/2010.

**About 74% of holdings whose income constitutes the main household income found in the West Bank:**

There were 21,077 holdings whose income constituted the main source of income to the household: 73.5% in the West Bank and 26.5% in the Gaza Strip during the agricultural year 2009/2010.

**Settlements biggest obstacle to use agricultural holdings parcels:**

Data indicated that 7,835 of the agricultural holdings in the West Bank were constrained in using agricultural holdings parcels due to the expansion and annexation wall, and 12,797 holdings were constrained in using agricultural holdings parcels by settlements, and 7,292 holdings were constrained in using agricultural holdings parcels by military barriers, while 7,971 holdings in the Palestinian Territory constrained in using agricultural holdings parcels by land being in closed military areas.

## **Methodology and Data Quality**

### **2.1 Objectives of the Agricultural Census**

The agricultural census aims to achieve three main objectives:

1. To provide data on the structure of the agricultural sector as the basis for efficient utilization of agricultural resources and the projection of related indicators to develop and make optimal use of agricultural resources. In addition, data provide a benchmark for setting estimations for subsequent years of the agricultural census.
2. To build a sampling frame as the basis for future agriculture-related surveys on different holdings in the Palestinian Territory, including periodic surveys of agricultural holdings, livestock, gardening, and farm management.
3. To provide basic and detailed data on the characteristics of the agricultural sector to meet the needs of ministries for planning and monitoring. Such data also contribute to regional planning, best distribution of resources, and meet the needs of the private sector.

The rationale for the implementation of an agricultural census is as follows:

1. To meet the growing demand for up-to-date and reliable statistical indicators by users concerning the agricultural sector in the Palestinian Territory. Such statistics are necessary for the planning and monitoring of agriculture-related programs by governmental and private institutions.
2. To provide relevant statistics to ensure the optimal use of land and contribute to food security and self reliance in the Palestinian Territory.
3. To monitor the changes affecting agricultural land in the Palestinian Territory as a result of continuous Israeli aggression, confiscation of land, isolation of the population, and the building of the annexation and expansion wall.
4. To conduct an agricultural census every ten years according to the General Statistics Law No. 4 of 2000.

### **2.2 Census Characteristics**

#### **1. Geographical coverage**

The agricultural census is a comprehensive enumeration that covers all of the Palestinian Territory, including rural and urban areas and refugee camps.

#### **2. Time reference point**

The time assigned to the census data was midnight on 30 September 2010 to 01 October 2010 and this is the time on which most of the census data are based. The reference night is referred to as the reference day of 01 October 2010. The time reference point covers data related to permanent crops, buildings, and livestock. Some census data are attributed to a specific reference period that includes information on a previous period of time, which is the census reference year representing a period of 12 months starting from 01 October 2009 to 30 September 2010. The reference year is the agricultural year for the data related to temporary crops and the use of agricultural materials and machinery.



### **3. Count period**

The collection of data on agricultural holdings within a specified period is called the count period and depends on a number of logistical issues. The count period of the agricultural census 2010 was the morning of 02 October 2010 to 14 November 2010 in the West Bank and the morning of 10 January 2011 to 20 February 2011 in the Gaza Strip.

### **4. Counting unit**

The statistical unit is the agricultural holding and it should be taken into consideration that common grazing lands, public parks, fisheries, and all land not part of an agricultural holding are not included in the agriculture census according to the recommendations of the Food and Agriculture Organization (FAO).

### **5. Census frame**

The frame of the agriculture census 2010 includes a complete record of holdings by households and collaborative institutions. The frame is prepared by listing all holders through visits to all households using maps to reach addresses.

### **6. Census periodicity**

The agriculture census should be conducted every ten years according to general statistics law no. (4) for year 2000.

## **2.3 Implementation of Agriculture Census**

The implementation period of the agriculture census usually takes three years from the preparatory stage until the dissemination of the detailed data. The agriculture census 2010 was conducted via various stages, which included the preparation process and all other relevant activities as follows:

1. The preparatory stage (02 January 2009 to 30 September 2010): This stage included issuance of the relevant official decisions and the formulation of organizational structures and agriculture census committees. Consultations were held with stakeholders and data users to pinpoint priorities and establish a national consensus on the census contents.
2. Field work stage: This was conducted from 02 October 2010 to 14 November 2010 in the West Bank and from 10 January 2011 to 20 February 2011 in the Gaza Strip. In this stage, area maps were updated during field work and agricultural holders and holdings were listed.
3. Data processing and dissemination: This stage started in November 2010 and will continue until the first quarter of 2012. This stage includes data editing, coding, entry, and the tabulation and dissemination of the results.

## **2.4 Questionnaires and Forms**

Two questionnaires were designed to collect data covered by the census. The first questionnaire was designed for the listing of households and agricultural holdings, while the second was related to the enumeration of agricultural holdings. Items and variables are as follows:

## **1. Household and agricultural holdings questionnaire**

It includes data of households and agricultural holdings, in addition to identification data, the building name or owner, type of building, current use of the building, the total number of housing units in the building, current use of housing unit, the name of the householder, number of household members (males, females), and number of holdings of the household.

## **2. Agricultural holdings enumeration questionnaire**

The enumeration questionnaire of agricultural holdings included the following:

### **Part one: Identification data**

Identification data included the enumeration area number, building, housing unit in the building, in addition to identification data on the holder and the respondent.

### **Part two: Holders and holding data**

Holders and holding data included data on the holder, such as legal status of the holder, age, sex, main occupation, holder's relationship to the householder, number of household members, education level, specialization, and data about the holding, including the holding type, the holding management method, and main purpose of production.

### **Part three: Land use**

This included the unit's address, total area, uncultivated area (buildings used for holding's purposes, buildings not used for holding's purposes, permanent meadows and pastures, other) and cultivated areas (area of cultivated land, forests, temporarily fallow, and nurseries), in addition to irrigation source and land tenure.

### **Part four: Crops /field crops, vegetables, horticultural trees**

This included the following:

- Questions related to the cultivation of field crops during the agricultural year: crop name, agricultural session, crop status, rain-fed area, irrigated area, method of irrigation, and harvested area.
- Questions related to the cultivation of vegetable crops during the agricultural year: crop name, agricultural session, crop status, uncovered area, method of irrigation, covered area, type of coverage, and harvested area.
- Questions related to the cultivation of horticultural trees during the agricultural year: crop name, method of farming, crop status, number and area of bearing trees and method of irrigation, number and area of non-bearing trees and method of irrigation, number and area of protected bearing trees and method of irrigation, number and area of protected non-bearing trees and method of irrigation.

### **Part five: Farm animals**

This included the following:

- Raising farm animals (cattle, sheep, goats, and camels): type and breed, address, type of rearing, the number according to sex and age group, the main purpose of raising the animals.

- Poultry farming: type, address, number of barns, area of barns, maximum production capacity, actual number on the enumeration day 01 October 2010, average number of cycles in barns per year, total number of poultry raised during 2009/2010.
- Number and type of domestic poultry, beehives, and Equines.

**Part six: Agricultural labor force**

This included data on the agricultural labor force in the agricultural holding: number of employees, status of employment, gender, and age.

**Part seven: Agricultural machinery and equipments**

This included questions on the use of agricultural machinery and equipment during the agricultural year.

**Part eight: Agricultural practices during the agricultural year**

This section included questions related to the use of the agricultural holding; the availability of brooders or fish breeding, benefits from land reclamation projects, construction of agricultural roads, or any other agricultural projects.

**2.5 Field Work**

The field work stage included the following activities:

**1. Training field workers and distributing them by work type:**

A training program was provided to all field workers recruited for the agriculture census 2010. The program included specific training sessions that covered concepts, definitions, interviewing, filling out of questionnaires, tasks and responsibilities of field workers, as well as a supervision and management reference.

**2. Update of maps**

The maps of the Population, Housing and Establishment Census 2007 were utilized to serve field work activities of the agriculture census 2010. Field workers were provided with detailed maps of the enumeration areas. Supervisors were assigned the responsibility to delineate the boundaries of the enumeration areas, while field workers were instructed to incorporate new buildings since 2007 accurately on the maps.

**3. Listing and enumerating the agricultural holdings**

The listing and enumeration of the agricultural holdings was implemented in the West Bank during the period 02 October 2010 to 14 November 2010 and in the Gaza Strip during the period 10 January to 20 February 2011. Enumerators visited each household and filled out the agricultural holding listing questionnaire. In cases where the household had more than one holding, the details of each holding were recorded in the corresponding questionnaire. Questionnaire data were edited in the field during the enumeration process by supervisors in each governorate.

#### **4. Re-interviewing**

Re-interviewing of households was conducted by census supervisors and team leaders in each governorate by conducting random visits to households in the enumeration areas and filling out part of the listing and enumeration questionnaires. Re-interviewing was conducted to ensure data quality and control of field work activities.

#### **5. Delivery of questionnaires**

The receipt of questionnaires from each field worker took place after completion of their enumeration area in the evening of 14 November 2010 in the West Bank and 20 February 2011 in the Gaza Strip. All of the questionnaires from each governorate were collected in the field work office and then sent to PCBS main premises in Ramallah for the West Bank and PCBS main office for the Gaza Strip.

#### **Receipt of questionnaires from the field**

After completing the enumeration stage, team leaders received all forms from enumerators (field workers), including the household and agricultural holdings listing questionnaires, holdings questionnaires, administrative forms, and maps of enumeration areas, as well as all cancelled or unused forms. Team leaders handed all questionnaires and administrative forms to supervisors who examined the forms technically and gave them to the census director in the governorate.

#### **Receipt of all relevant materials at the main premises of PCBS**

Receipt of all of the relevant census materials took place from 19 November 2010 and continued until 28 February 2011.

#### **2.6 Preliminary Results**

After completion of the enumeration process on 14 November 2010 in the West Bank, enumerators and team leaders, in conjunction with the census directors in the governorates, conducted a desk review and prepared the preliminary results in the field during the 16-18 November 2010 in the West Bank and from 20-24 February 2011 in the Gaza Strip.

The form of preliminary results received from the field included the number of households and the number of holdings by type in the enumeration area. These preliminary results were then checked to verify that they covered all of the enumeration areas listed in the main register. The data were entered electronically in order to obtain preliminary statistical tables on the Palestinian Territory and governorates. The statistical tables included the number of households and holdings and their types. The preliminary results were disseminated in the local mass media and on the official website of PCBS on 17 April 2011.

#### **2.7 Data Processing**

Data processing included all activities that followed on from the field work, such as office editing of questionnaires, office coding, data-entry, and computer editing. This process started on 15 December 2010 according to the plan, which included training editors and coders and hiring 100 personnel, in addition to the supervision team.

Special data processing templates were developed and tested to capture the census data. The computer was used to enter the data relating to the households and holdings listing and the enumeration questionnaires.

Data editing, coding, entry, checking, and cleaning were finalized on 04 August 2011 in the West Bank and on 15 September 2011 in the Gaza Strip.

The technical team followed up the data processing, testing its accuracy and comparing it with the preliminary results and other data resources, in addition to preparing the tables and the report of the final results of the census in the Palestinian Territory.

### **2.8 Dissemination Plan**

A tabulation plan of the main reports was prepared related to the dissemination of the primary census results at national level, as well as in the West Bank and Gaza Strip separately and in each governorate, where the proposed tables were prepared. Reports of the main findings of the census are expected in the first quarter of 2012.

### **2.9 Data quality**

There are two types of error: statistical errors and non-statistical errors. Statistical errors occur in survey samples and not in censuses. These errors can easily be measured and the error rate can be estimated easily as well since it is an error in sampling. Non-statistical errors occur at any stage of the implementation of a survey or census. Therefore, a data quality system had to be established when conducting the agricultural census 2010 to achieve the highest level of data coverage and accuracy for the statistics produced to be utilized for planning, decision making, and research purposes. The impact of errors on data quality was minimized due to the high level of competency and professional performance of the well-trained fieldwork team, and also due to the existence of a quality control program to prevent or minimize errors as much as possible, find these errors when they occurred, and take the relevant procedures to correct them. A strict quality control system was established at all stages of the census, from the preparatory stage to the data processing and dissemination stage, to ensure that highly accurate data would be obtained. Quality control in the preparatory stage is crucial as it is succeeded by all census stages. Therefore, adequate time and appropriate procedures were taken into consideration at each stage to ensure high quality and authentic census data.

#### **Quality control mechanisms at the preparatory stage**

All necessary definitions and instructions were drawn up in the preparatory stage in line with international recommendations and the needs of data users. Questionnaires were designed properly to ensure the reliable transfer of instructions. Detailed maps were prepared and copied for each enumeration area in order to list every building, housing unit, and household and enumerate all the holdings of the household or any of its members. The records and questionnaires were drawn up to collect, enter and store data, and all questionnaires, forms, mechanisms, fieldwork and office review activities, printing of questionnaires, forms and

manuals were tested in the pilot census conducted one year prior to the main census. In addition, data-entry programs and electronic editing programs were selected and all coding manuals and tabulation and dissemination processes were reviewed in the preparatory stage. The number of personnel, the financial costs, and time schedule of activities were also estimated and prepared at this preparatory stage.

### **Quality control mechanisms at the implementation stage**

The most suitable personnel were selected from unemployed graduates. Field workers were selected from the relevant locality since they were familiar with their enumeration area and its buildings and households.

Training plans and programs were set up for all personnel. The census directors were selected from the Ministry of Agriculture offices in the governorates due to their considerable technical experience in the agricultural field. The assistants to census directors in governorates were selected from those who had significant technical and administrative experience at PCBS. Some supervisors who had participated as technical and field workers in the household surveys and the pilot agricultural census were selected from the Ministry of Agriculture and PCBS.

Field work mechanisms were set up to ensure the accuracy of data. A program of field visits was established with defined objectives to monitor the quality of data collected in each visit and field work review and processing regulations were established.

The direct interview method was adopted only where it was necessary to obtain the data from an adult agricultural holder or householder, or one of the household members, who had accurate data on the agricultural holding. In cases where the holder or appropriate individual was absent, the household was visited again at different times to obtain the data required.

All personnel were provided with instructions on how to perform field and office review of activities and of the work of their personnel, and how to review and correct errors.

Mechanisms were established to deal with non-respondents, especially in Jerusalem governorate and nearby localities. These mechanisms included field visits by members of central operations and sharing cases with official bodies to minimize the non-response rate.

### **Quality control mechanisms at the data processing stage**

This stage included editing, coding, data-entry and review processes, in addition to reviewing and checking all the previous processes for all the enumeration areas. Mechanisms and instructions were set up to check data consistency and field coding and to ensure that all enumeration areas and data of records and questionnaires on buildings, housing units, households, and individuals were electronically entered.

Instruction manuals for auditing, coding, checking data consistency, and discovering errors and correcting them were also drawn up. All the workers in editing and coding were drawn

from the best of the field workers who filled out the questionnaires for households and individuals. Work and training were centralized to unify the concepts and data checking processes and to overcome field differences between governorates. All questionnaires were edited in order and checked in terms of data consistency (100%), while the editing and coding were reviewed for 50% of the questionnaires to eliminate the individual differences of editors and to discover and correct errors.

All individuals who were to enter the data underwent an examination and the individuals with the best results were selected for training as data-entry operators on a unified data-entry process. During the first three days, all data entered by data-entry operators were reviewed and re-entered. Necessary corrections were performed and data-entry operators were informed about them. Data-entry operators with high rates of error were excluded and the best data-entry operators were selected based on quality and speed. Mechanisms were set up to ensure that data were entered in the proper manner. A comprehensive check was conducted when entering the identification data, in addition to a number range for each main question beyond which the computer would not accept further numbers, such as the type of holding, utility rights, all previously coded questions in the agricultural census questionnaire, and the type of the building in the holdings listing questionnaire. For remaining questions, a comprehensive check was performed again for the range of each question after the data-entry process, and also after extracting transcripts of errors resulting from data inconsistency.

### **Evaluation of data quality**

The evaluation of the agriculture census results by its error rates is considered an essential process to respond to questions regarding the comprehensiveness and accuracy of the census data. There are many methods and tools to evaluate the results of the census in terms of their content and comprehensiveness, including either one source of the data (the census data) or many resources.

The quality control program of the agricultural census 2010 comprised many methods to measure the comprehensiveness and quality of the data, to check the internal consistency of data, and compare the results with other resources. Cases with an uncertain response were coded and the number (9) was allocated according to the number of digits for each question if the correct response was uncertain, e.g., irrigation source, utility rights, etc.

## Chapter Three

### Concepts and Definitions

The agricultural census 2010 was based on Food and Agriculture Organization (FAO) recommendations to facilitate future comparisons with neighboring countries, taking into consideration the results of consultations with the main users. A specific definition for each variable in the census was prepared on the basis of international recommendations, while taking into consideration the special needs of Palestinian society.

#### **Agricultural Census:**

This is the total process of collecting, compiling, processing, analyzing, evaluating, and disseminating to provide statistical data on agricultural holdings, and the characteristics and agricultural applications in a specific reference period for all holdings within the country.

#### **Agricultural Holding:**

This is an economic unit of agricultural production under single management comprising all kept livestock and all land used totally or partially for agricultural production purposes, regardless of title, legal form, or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation, cooperative, or government agency. The land holdings may consist of one or more parcels located in one or more separate areas, or in one or more territorial or administrative divisions, providing the parcels share the same means of production, such as labor, farm buildings, machinery or draught animals.

#### **Plant Holding:**

The presence of cultivated or arable land area for any agricultural crops controlled by the holder, and must not be less than one dunum for an open cultivated area and half a dunum for a protected cultivated area.

#### **Animal Holding:**

The presence of animals controlled by the holder: the holder should have any number of cattle or camels, at least five head of sheep, goats, or pigs, at least 50 poultry birds (layers and broilers), or 50 rabbits, or other poultry like turkeys, ducks, fer, or a mixture of them, or at least three beehives controlled by the holder.

#### **Mixed Holding:**

If the holder has plant and animal holdings according to the Plant and Animal Holding definition, providing, both animal and plant activities, share the same production means, such as labor, farm buildings, machinery, or draught animals.

#### **Agricultural Holder:**

The holder is a civil or juridical person who exercises management control over the agricultural holding operation and takes major decisions regarding the holding and may



undertake all responsibilities directly, or delegate responsibilities related to day-to-day work management to a hired manager.

**Agricultural Year:**

The period covering first of October to the end of September of the following year.

**Age of the Holder:**

The completed age in years of the person enumerated, which is the difference between the date of birth and the survey reference period.

**Holding Area:**

This is obtained by adding together the area under each land use category. It is the area of all land making up the agricultural holding and includes all land operated by the holding without regard to title or legal form, therefore, land owned by members of a household but rented from others should not be included in the area of holding.

**Nurseries Area:**

This is an area where young plants, trees or vines are propagated for the purpose of transplanting. Plants in a nursery are not harvested and are therefore not included in the area (temporary crops) or current area (permanent crops). A nursery might be in the open or under protective cover. It may be used for the development of planting materials for the holding itself or for sale. Nurseries do not include seed fields and forest tree nurseries.

**Temporary Fallow Land:**

This includes uncultivated land during the agricultural year; this may be part of the holding crops rotation system or due to lack of water, or another reason. If the data were collected before cultivation had been completed, the land in question should be classified according to the crops grown on it.

**Land under Permanent Meadows and Pastures:**

This means land used permanently (for five years or more) for herbaceous forage crops. Permanent meadows and pastures on which trees and shrubs are grown should be recorded under this heading only if the growing of forage crops is the most important use of the area.

**Cultivated Woodland:**

This includes land used permanently (for five years or more) to grow forest. Permanent meadows and pastures on which trees and shrubs are grown should be recorded under this heading only if the growing of forest trees is the most important use of the area and it is used as a source for wood, or to protect land from erosion.

**Field Crops:**

This is a set of temporary crops that include cereals, such as wheat or barley, or legume crops such as chick peas and dry broad beans, or oil crops such as sunflower, sesame, peanuts, or tuber crops such as potatoes and onions, or medical crops such as anise, meramieh, and mint,

or spice crops such as cumin, anise and black cumin, or fodder crops such as clover, alfalfa, and sern.

**Vegetables:**

This is a set of temporary crops used primarily for fresh consumption, including fruit vegetables, such as pumpkins, eggplants, okra, maize, and green legumes, root vegetables such as carrots, radishes, and onions, and leafy vegetables such as lettuce and spinach, in addition to strawberries, water and muskmelon. Vegetables may be grown open or protected.

**Permanent Crops (Tree horticulture):**

A crop growth cycle of one year that does not require replanting after each season and present for the previous few years. For example, olive trees, citrus trees, and nuts. Permanent crops may exist in intensive agriculture or scattered agriculture, where the area planted with crops includes two types.

**Livestock:**

Refers to all animals kept or reared mainly for agricultural purposes, including cattle, buffaloes, sheep, goats, pigs, horses, mules, asses, camels, poultry, rabbits, bees, and other domesticated animals, as well as foxes, minks, etc.

**Poultry:**

Refers to all poultry kept for different purposes of production, such as to produce meat from broilers or eggs from layers, to produce meat from turkeys or any type of bird and rabbits.

**Mothers of Broilers:**

Refers to the chicks kept for producing fertilized eggs for hatching and producing broiler chicks.

**Broilers:**

Refers to the chicks kept to produce white meat for a maximum period of 50 days.

**Layers:**

Refers to the chicks kept for producing table eggs, usually for a maximum of 30 months.

**Permanent Agricultural Workers:**

A person whose services are utilized regularly and continuously during the agricultural year for agricultural work on the holding. Permanent agricultural workers work for at least eight months during the agricultural year.

**Occasional Agricultural Workers:**

A person who works one or more times during the agricultural year who is not expected to work regularly or continuously on the holding. Occasional agricultural workers work for less than eight months during the agricultural year.

**Unpaid Family Member:**

A person who works without pay in an economic enterprise operated by a related person living in the same household.

**Treated and Improved Assets (Seeds, Transplants, and Tubers):**

The origins of plants that have been improved through genetic cross-breeding or other assets to produce desirable genetic characteristics, such as resistance to disease, early production, or heavy production of field crops or vegetables. These may include seeds, transplants, and tubers.

**Chemical Fertilizers:**

This is fertilizer prepared from inorganic materials manufactured through an industrial process. Manufacturing may comprise mechanical enrichment, simple crushing, or more elaborate chemical transformation of one or more raw materials, and contains essential nutrients for plant growth, such as nitrogenous fertilizer, phosphate fertilizers, potassium fertilizers, and mixed fertilizers.

**Organic Fertilizers:**

This is fertilizer prepared from processed plant or animal material and/or unprocessed mineral materials (such as lime, rock or phosphate) containing at least five percent of combined plant nutrients. Organic fertilizers include organic material of animal origin, such as bone meal, fish meal, leather meal and blood.

**Pesticides:**

These are substances intended to prevent disease or control it in plants, animals and pests, including vectors of human and animal diseases, unwanted species of plant, or to control the behavior or physiology of pests or crops during production or storage. They include insecticides, herbicides, fungicides, acaricides, termiticides, rodenticides, and other substances.

**Integrated Pest Management:**

This is a system using a wide range of pest control methods: physical (burn and solar disinfection), biological (parasites and predators), chemical (chemical pesticides), and mechanical (tillage, hand hoeing and collection of insects). All of these are used in parallel against the pest while maintaining human health, the environment, and the safety of the agricultural product. It ensures the survival of pests without breaching the normal balance between pests and their vital enemies. Chemical control is the last option and is integrated with other methods of control, in addition to the use of chemical pesticides within standard procedures which safeguard public health, the environment, and the quality of agricultural products and ensures they are free from pesticide residues.

**Epidemiological Diseases:**

This is the sudden and unexpected increase in the number of infectious diseases included in the World Organization for Animal Diseases, such as brucellosis, foot-and-mouth, anthrax, avian flu, Newcastle?, pox and others.

**Fish Farming:**

This is the farming of aquatic organisms. In this context, farming refers to some intervention in the rearing process to enhance production, such as regular stocking, feeding, and protection from predators. Aquaculture normally involves rearing of organisms from fry, spat, or juveniles. Aquaculture may be carried out in ponds, paddy fields, lagoons, estuaries, irrigation canals or the sea, using structures such as cages and tanks. It may be in freshwater or saltwater.