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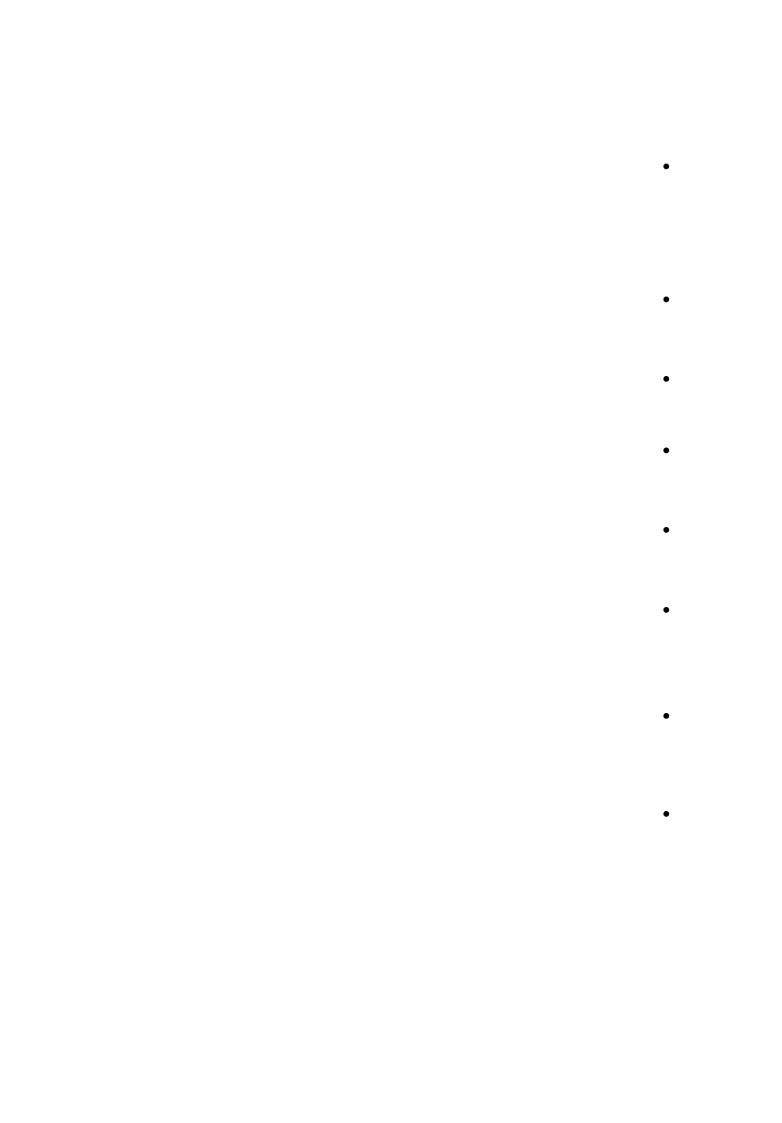


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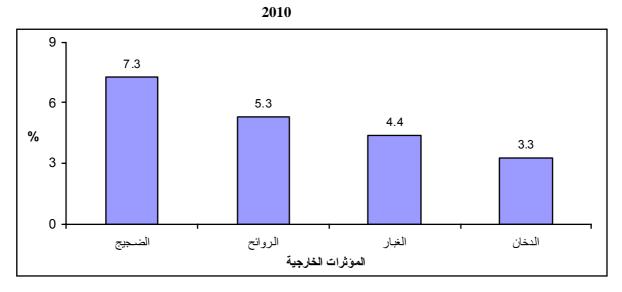
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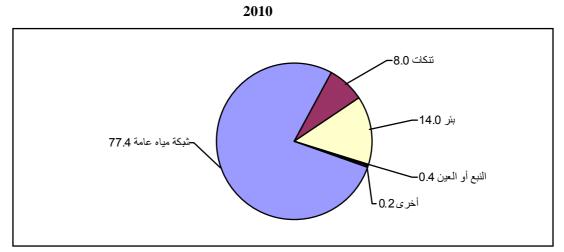
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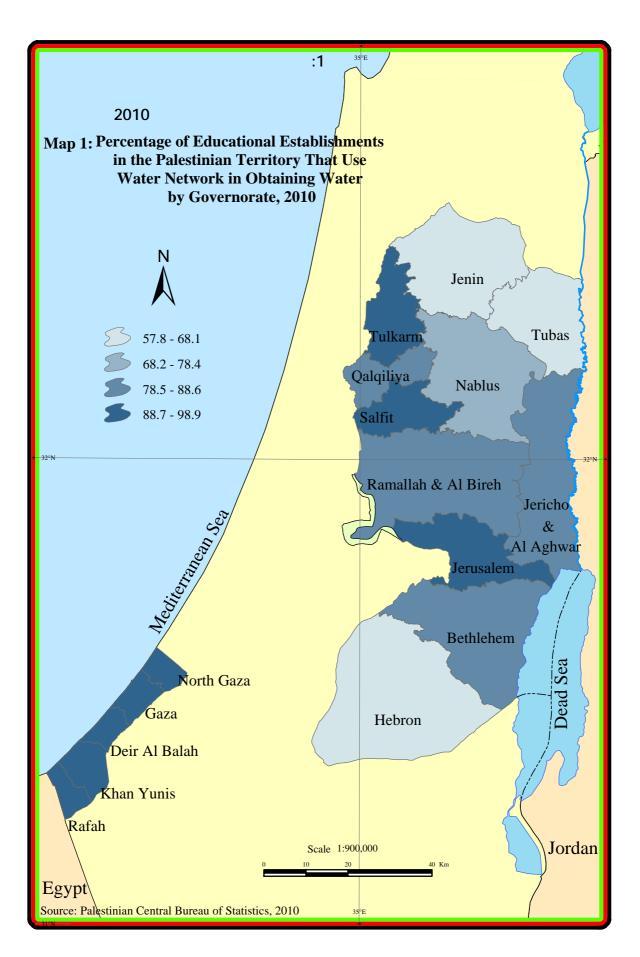
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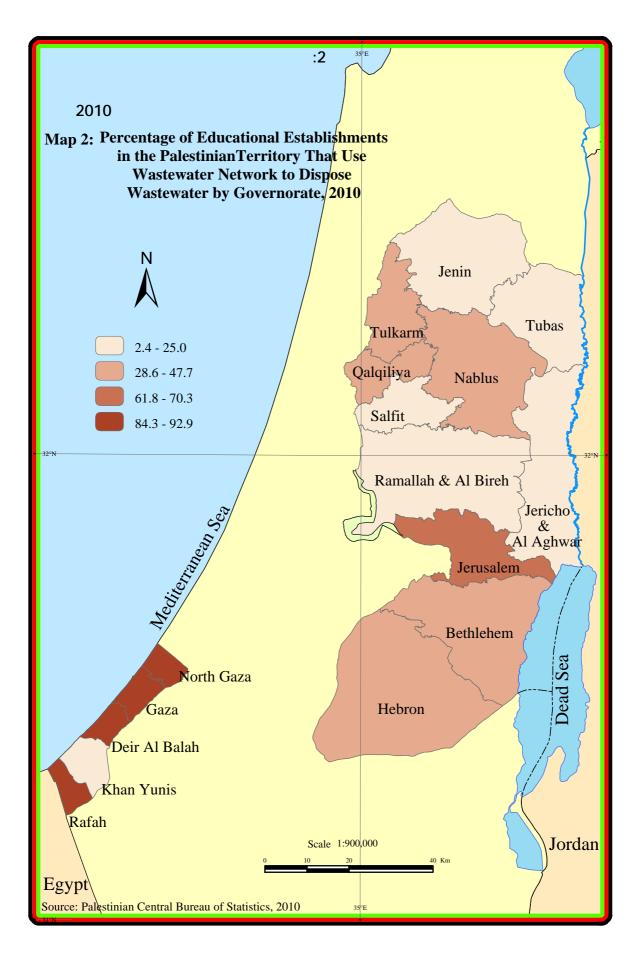
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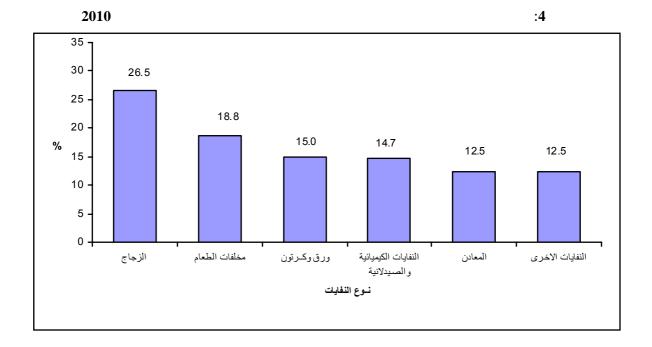
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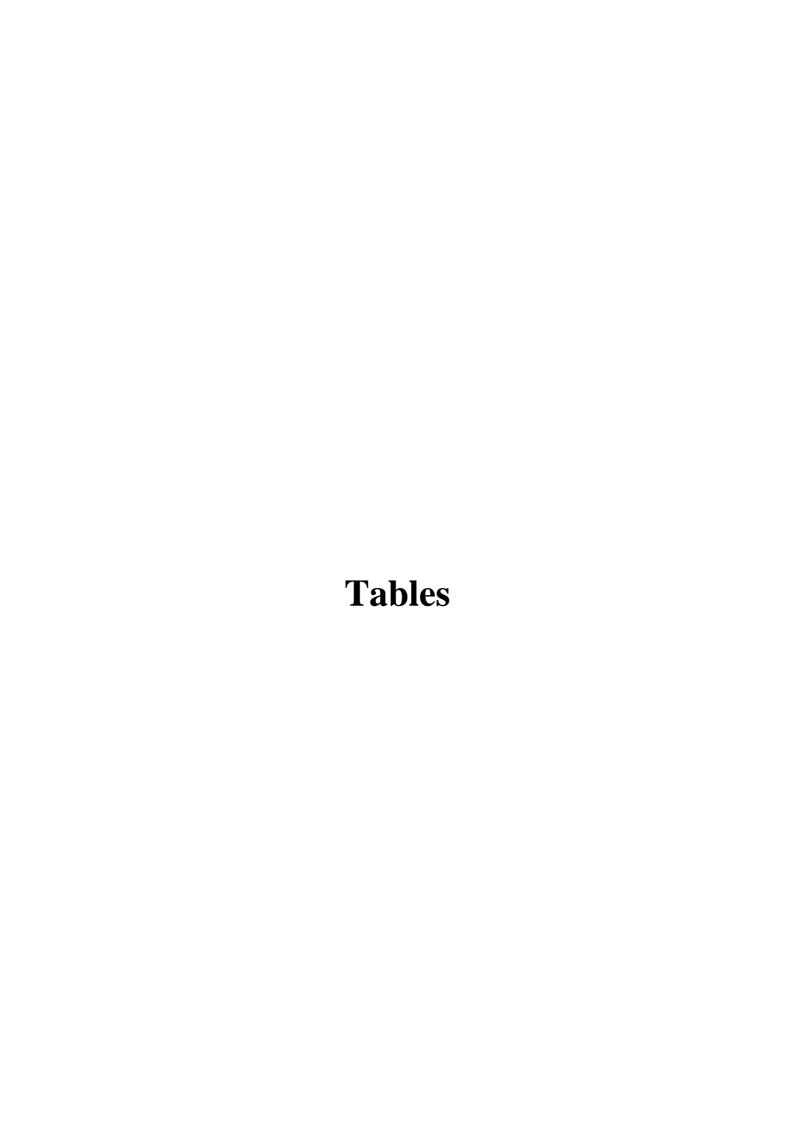
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Table 1: Main Selected Indicators about the Activity of the Educational Establishments in the West Bank from Environmental Sides, 2010

Indicator	2010	
Percent of Educational Establishments:		:
Exposure to Noise Sometimes	4.4	
Exposure to Noise Very Often	2.9	
Exposure to Smell Sometimes	3.3	
Exposure to Smell Very Often	2.0	
Exposure to Dust Sometimes	2.6	
Exposure to Dust Very Often	1.8	
Exposure to Smoke Sometimes	2.2	
Exposure to Smoke Very Often	1.1	
Connected to Water Public Network	77.4	
Connected to Wastewater network	31.7	
Monthly Average of Quantity of Consumed water by each educational establishment in cubic meter	56.5	
Monthly Amount of Consumed Water in Cubic Meter	104,231	
Daily Average of Generated Waste in each educational establishment (kg / day)	30.0	(/)
Daily Amount of Generated Waste in the Educational Establishment (kg / day)	54,722	(/)

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2010 Table 2: Percentage Distribution of Educational Establishments in the Palestinian Territory by Exposure to Noise and Governorate, 2010

	Exposure to Noise					
Governorate	Total	No	Seldom	Sometimes	Very Often	
West Bank (2010)	100	88.8	3.9	4.4	2.9	(2010)
Jenin	100	91.4	3.7	3.0	1.9	
Tubas	100	91.1	3.8	3.6	1.5	
Tulkarm	100	90.0	4.1	2.8	3.1	
Nablus	100	88.2	4.3	4.6	2.9	
Qalqiliya	100	88.7	3.7	4.6	3.0	
Salfit	100	87.3	4.7	5.6	2.4	
Ramallah and Al-Bireh	100	88.8	4.2	4.3	2.7	
Jericho and Al Aghwar	100	85.2	3.3	5.9	5.6	
Jerusalem	100	88.2	3.3	4.7	3.8	
Bethlehem	100	88.4	3.8	5.2	2.6	
Hebron	100	87.9	3.8	5.0	3.3	
Gaza Strip (2008)	100	55.2	11.3	19.7	13.8	(2008)
North Gaza	100	53.6	18.2	18.4	9.8	
Gaza	100	55.3	10.4	19.7	14.6	
Deir AL-Balah	100	66.0	7.9	20.6	5.5	
Khan Yunis	100	56.2	8.1	20.3	15.4	
Rafah	100	59.7	7.1	13.6	19.6	

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Table 3: Percent of Educational Establishments Exposed to Noise Sometimes or Very Often in the Palestinian Territory by the Source of Noise and Governorate, 2010

Sources of Noise													
Governorate	Others	Settlements	Israeli Military Activities	Residential Buildings	Waste Container	Dump Site	Unpaved Roads	Industrial Activities	Commercial Activities	Construction	Queries & Stone Cutting	Main Road	
West Bank (2010)	4.5	3.7	7.6	12.5	5.6	0.8	4.0	4.1	8.4	11.1	2.4	35.3	(2010)
Jenin	3.5	1.4	2.8	16.1	7.7	0.0	7.0	1.4	7.7	9.1	2.1	41.3	
Tubas	0	7.4	14.8	7.4	0.0	0.0	0.0	3.7	18.5	0.0	0.0	48.1	
Tulkarm	4.5	2.7	7.3	10.9	5.5	0.9	2.7	4.5	10.9	9.1	1.8	39.1	
Nablus	2.4	3.5	7.1	11.4	4.7	8.0	3.5	4.3	8.2	14.1	1.2	38.8	
Qalqiliya	4.3	5.8	13.0	8.7	2.9	0.0	2.9	2.9	7.2	14.5	4.3	33.3	
Salfit	4.8	9.5	9.5	12.7	9.5	0.0	1.6	0.0	6.3	7.9	6.3	31.7	
Ramallah and Al-Bireh	4.4	3.9	5.9	9.8	4.9	1.0	2.4	4.9	5.9	13.7	2.0	41.5	
Jericho and Al Aghwar	0	5.1	12.8	15.4	5.1	0.0	5.1	2.6	15.4	10.3	0.0	28.2	
Jerusalem	6.3	1.9	8.7	16.5	6.8	1.5	4.4	2.9	11.2	9.2	1.0	29.6	
Bethlehem	6.9	5.5	9.7	13.8	3.4	0.7	2.1	3.4	5.5	13.8	1.4	33.8	
Hebron	4.8	3.6	7.2	12.1	6.0	1.0	5.2	6.0	8.3	10.1	4.0	31.8	
Gaza Strip (2008)	43.0	23.5	79.6	21.1	9.5	19.2	22.3	46.0	36.6	40.7	47.7	46.1	(2008)
North Gaza	21.9	40.0	83.1	31.1	15.7	28.0	28.9	18.8	29.0	14.7	16.7	39.5	
Gaza	57.5	0.0	64.0	21.9	11.6	17.7	24.8	51.7	31.2	48.4	65.5	51.9	
Deir AL-Balah	30.4	0.0	100	11.9	9.0	0.0	8.8	39.9	51.2	0.0	0.0	36.8	
Khan Yunis	36.2	0.0	93.8	13.8	3.9	11.6	16.5	36.3	35.0	100	40.9	41.4	
Rafah	12.4	0.0	83.5	24.6	0.0	19.1	16.7	55.5	61.1	17.9	60.4	47.7	

2010 Table 4: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Distance Between the Source of Noise and

Educational Establishment and Governorate, 2010

Governorate	Total	500 More than 500 Meters	500 - 251	250 - 100	100 Less than 100 Meters	
West Bank (2010)	100	3.8	6.9	7.9	81.4	(2010)
Jenin	100	1.6	5.1	2.9	90.4	
Гubas	100	11.1	11.1	0.0	77.8	
Гulkarm	100	6.4	1.8	8.3	83.5	
Nablus	100	3.7	7.2	4.8	84.3	
Qalqiliya	100	5.9	5.9	4.4	83.8	
Salfit	100	9.6	9.7	9.7	71.0	
Ramallah and Al-Bireh	100	4.4	7.0	10.0	78.6	
Jericho and Al Aghwar	100	2.6	5.3	5.3	86.8	
lerusalem	100	2.0	4.9	8.9	84.2	
Bethlehem	100	3.0	10.2	8.0	78.8	
Hebron	100	3.2	8.0	10.4	78.4	
Gaza Strip (2008)	100	12.4	7.1	12.9	67.6	(2008)
North Gaza	100	12.5	13.1	19.1	55.3	
Gaza	100	13.8	6.1	13.2	66.9	
Deir AL-Balah	100	10.0	6.0	7.5	76.5	
Khan Yunis	100	7.1	4.5	9.7	78.7	
Rafah	100	8.3	5.1	12.8	73.8	

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Table 5: Percentage Distribution of Educational Establishments in the Palestinian Territory by Exposure to Smell and Governorate, 2010

	Exposure to Smell			T		
Governorate	Total	No	Seldom	Sometimes	Very Often	
West Bank (2010)	100	91.7	3.0	3.3	2.0	(2010)
Jenin	100	94.4	2.6	1.7	1.3	
Tubas	100	93.3	3.0	2.4	1.3	
Tulkarm	100	91.7	3.4	2.6	2.3	
Nablus	100	91.6	3.1	3.6	1.7	
Qalqiliya	100	92.8	2.8	2.6	1.8	
Salfit	100	90.2	3.7	4.9	1.2	
Ramallah and Al-Bireh	100	91.4	3.0	3.4	2.2	
Jericho and Al Aghwar	100	88.2	2.7	4.7	4.4	
Jerusalem	100	91.1	2.2	4.1	2.6	
Bethlehem	100	91.5	3.6	2.9	2.0	
Hebron	100	91.0	3.3	3.8	1.9	
Gaza Strip (2008)	100	63.7	11.7	12.0	12.6	(2008)
North Gaza	100	58.4	14.4	14.6	12.6	
Gaza	100	63.1	11.9	10.1	14.9	
Deir AL-Balah	100	68.9	10.8	19.7	0.6	
Khan Yunis	100	63.3	8.1	17.9	10.7	
Rafah	100	68.7	3.6	14.6	13.1	

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Table 6: Percent of Educational Establishments Exposed to Smell Sometimes or Very Often in the Palestinian Territory by the Source of Smell and Governorate, 2010

	Sourc	es of Sme												
Governorate	Others	Settlements	Israeli Military Activities	Wastewater	Residential Buildings	Waste Container	Dump Site	Unpaved Roads	Industrial Activities	Commercial Activities	Construction	Queries & Stone Cutting	Main Road	
West Bank (2010)	3.1	2.7	3.8	12.8	12.5	26.6	4.2	2.9	4.5	6.3	3.1	1.2	16.3	(2010)
Jenin	7.9	0.0	1.1	11.2	14.6	32.6	5.6	1.1	2.2	2.2	1.1	1.1	19.1	
Tubas	5.0	0.0	5.0	10.0	20.0	25.0	0.0	0.0	10.0	15.0	0.0	0.0	10.0	
Tulkarm	7.6	2.2	4.3	9.8	14.1	21.7	6.5	2.2	12.0	7.6	1.1	2.2	8.7	
Nablus	1.1	1.7	2.8	11.0	15.5	21.0	5.0	3.9	4.4	7.2	3.3	1.1	22.1	
Qalqiliya	5.0	7.5	7.5	20.0	15.0	20.0	7.5	2.5	5.0	2.5	0.0	0.0	7.5	
Salfit	2.1	10.6	0.0	12.8	8.5	34.0	0.0	4.3	2.1	6.4	2.1	2.1	14.9	
Ramallah and Al-Bireh	1.8	3.0	3.7	14.6	12.8	22.6	4.3	1.2	5.5	6.7	4.9	0.6	18.3	
Jericho and Al Aghwar	0.0	9.7	3.2	19.4	3.2	22.6	3.2	6.5	0.0	12.9	6.5	0.0	12.9	
Jerusalem	1.2	3.7	5.6	10.5	11.1	29.6	3.7	3.1	2.5	9.9	4.3	1.2	13.6	
Bethlehem	3.3	1.1	4.3	19.6	8.7	23.9	4.3	5.4	3.3	4.3	6.5	1.1	14.1	
Hebron	3.2	1.7	4.1	12.0	12.0	30.6	3.5	2.9	4.4	4.7	2.0	1.5	17.5	
Gaza Strip (2008)	21.7	0.0	10.5	40.6	13.6	54.8	74.6	15.0	30.2	18.8	10.8	13.2	16.0	(2008)
North Gaza	27.8	0.0	16.2	67.3	14.9	65.3	89.4	17.3	0.0	24.4	0.0	16.7	14.4	
Gaza	17.7	0.0	15.3	38.7	13.4	56.7	73.0	19.0	32.7	13.4	6.6	18.7	19.4	
Deir AL-Balah	60.7	0.0	0.0	10.0	10.8	37.3	33.3	3.4	43.4	11.3	0.0	0.0	12.3	
Khan Yunis	12.5	0.0	0.0	44.9	10.4	50.7	46.5	9.9	9.1	32.3	100	11.4	15.1	
Rafah	24.8	0.0	0.0	30.9	20.8	62.7	78.7	6.6	55.5	23.9	17.9	0.0	9.6	

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Table 7: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Distance Between the Source of Smell and Educational Establishment and Governorate, 2010

The Distance Between the Source of Smell and Educational Establishment Governorate 500 100 500 - 251 250 - 100 Total More than 500 Meters Less than 100 Meters West Bank (2010) 100 4.0 5.3 (2010) 6.6 84.1 2.3 87.5 Jenin 100 5.7 4.5 Tubas 100 5.0 0.0 10.0 85.0 Tulkarm 100 12.2 3.3 8.9 75.6 Nablus 100 2.8 6.7 4.5 86.0 Qalqiliya 100 10.0 5.0 2.5 82.5 Salfit 100 6.3 4.3 6.4 83.0 Ramallah and Al-Bireh 100 3.8 8.2 7.5 80.5 Jericho and Al Aghwar 88.5 100 3.8 7.7 0.0 Jerusalem 100 1.2 5.0 7.5 86.3 Bethlehem 89.7 100 1.2 3.4 5.7 Hebron 100 3.2 5.0 8.2 83.6 Gaza Strip (2008) (2008)100 9.5 7.7 14.0 68.8 100 North Gaza 11.7 15.2 17.6 55.5 Gaza 100 5.8 6.9 15.2 72.1 Deir AL-Balah 100 1.0 8.3 6.3 84.4 100 Khan Yunis 6.9 4.7 12.3 76.1 Rafah 100 9.1 3.1 13.5 74.3

2010 Table 8: Percentage Distribution of Educational Establishments in the Palestinian Territory by Exposure to Dust and Governorate, 2010

0	Exposure to Dust		1	T.		
Governorate	Total	No	Seldom	Sometimes	Very Often	
West Bank (2010)	100	93.0	2.6	2.6	1.8	(2010)
Jenin	100	95.4	1.8	1.7	1.1	
Tubas	100	95.5	2.4	1.3	0.8	
Tulkarm	100	93.1	2.6	2.6	1.7	
Nablus	100	92.6	2.1	3.5	1.8	
Qalqiliya	100	93.2	2.4	2.5	1.9	
Salfit	100	92.9	2.8	3.1	1.2	
Ramallah and Al-Bireh	100	92.7	3.1	2.0	2.2	
Jericho and Al Aghwar	100	92.0	2.3	2.1	3.6	
Jerusalem	100	92.8	2.6	2.9	1.7	
Bethlehem	100	92.1	3.4	2.6	1.9	
Hebron	100	92.4	2.8	2.9	1.9	
Gaza Strip (2008)	100	63.5	14.2	12.1	10.2	(2008)
North Gaza	100	60.5	17.0	14.8	7.7	
Gaza	100	62.2	14.7	9.2	13.9	
Deir AL-Balah	100	72.1	14.3	12.2	1.4	
Khan Yunis	100	64.2	6.8	21.4	7.6	
Rafah	100	69.5	8.3	14.8	7.4	

2010 :9

Table 9: Percent of Educational Establishments Exposed to Dust Sometimes or Very Often in the Palestinian Territory by the Source of Dust and Governorate, 2010

	Source	es of Dust											
Governorate	Others	Settlements	Israeli Military Activities	Residential Buildings	Waste Container	Dump Site	Unpaved Roads	Industrial Activities	Commercial Activities	Construction	Queries & Stone Cutting	Main Road	
West Bank (2010)	4.3	2.0	4.3	6.9	8.1	1.8	16.7	3.3	3.9	13.6	3.7	31.4	(2010)
Jenin	7.2	0.0	1.2	6.0	9.5	0.0	25.0	0.0	4.8	7.1	2.4	36.9	
Tubas	9.1	0.0	18.2	18.2	0.0	0.0	18.2	9.1	9.1	0.0	0.0	18.2	
Tulkarm	5.1	2.5	3.8	6.3	8.8	1.3	15.0	6.3	6.3	11.3	2.5	31.3	
Nablus	2.3	1.1	4.5	8.5	5.1	1.1	16.4	5.1	4.5	15.8	2.8	32.8	
Qalqiliya	2.5	7.5	12.5	2.5	5.0	0.0	17.5	0.0	2.5	12.5	5.0	32.5	
Salfit	9.1	9.1	6.1	9.1	15.2	0.0	6.1	0.0	3.0	9.1	3.0	30.3	
Ramallah and Al-Bireh	4.1	2.5	2.5	6.6	8.2	2.5	8.2	4.9	3.3	18.9	1.6	36.9	
Jericho and Al Aghwar	0	5.3	15.8	10.5	0.0	0.0	21.1	0.0	5.3	15.8	0.0	26.3	
Jerusalem	3.6	2.7	3.6	7.2	12.6	3.6	13.5	1.8	6.3	17.1	3.6	24.3	
Bethlehem	6	2.4	7.1	4.8	8.3	2.4	19.0	0.0	2.4	16.7	3.6	27.4	
Hebron	4.1	0.7	2.7	6.9	7.9	2.4	19.9	4.1	2.4	11.3	6.2	31.3	
Gaza Strip (2008)	15.4	0.0	31.1	3.8	17.0	36.9	58.1	24.4	12.4	29.8	35.1	26.4	(2008)
North Gaza	1.7	0.0	43.0	4.3	16.7	36.3	49.7	35.9	6.0	44.1	33.3	20.9	
Gaza	18.7	0.0	25.6	4.8	19.6	32.1	67.7	26.7	13.6	24.3	37.4	30.3	
Deir AL-Balah	30.4	0.0	24.0	1.1	4.4	0.0	47.9	0.0	16.3	0.0	0.0	25.3	
Khan Yunis	6.3	0.0	37.1	1.5	24.1	23.3	49.0	36.3	12.6	100	29.5	28.2	
Rafah	24.8	0.0	0.0	5.8	0.0	64.3	50.0	11.0	14.9	17.9	60.4	17.0	

2010 :10

Table 10: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Distance Between the Source of Dust and Educational Establishment and Governorate, 2010

Governorate		The Distance Between the S	Source of Dust and E	ducational Establishr		
	Total	500 More than 500 Meters	500 - 251	250 - 100	100 Less than 100 Meters	
West Bank (2010)	100	3.6	6.5	6.7	83.2	(2010)
Jenin	100	2.5	3.7	1.2	92.6	
Tubas	100	9.1	9.1	9.1	72.7	
Tulkarm	100	5.1	3.8	10.1	81.0	
Nablus	100	2.4	8.0	5.7	83.9	
Qalqiliya	100	7.5	2.5	5.0	85.0	
Salfit	100	9.1	0.0	9.1	81.8	
Ramallah and Al-Bireh	100	4.2	8.5	4.2	83.1	
Jericho and Al Aghwar	100	0.0	7.1	14.3	78.6	
Jerusalem	100	0.9	10.9	7.3	80.9	
Bethlehem	100	3.7	5.0	7.5	83.8	
Hebron	100	3.8	6.2	8.0	82.0	
Gaza Strip (2008)	100	10.6	7.9	13.3	68.2	(2008)
North Gaza	100	10.3	17.7	20.8	51.2	
Gaza	100	6.5	5.8	14.4	73.3	
Deir AL-Balah	100	10.5	6.0	6.3	77.2	
Khan Yunis	100	8.3	3.5	12.4	75.8	
Rafah	100	0.0	5.8	9.2	85.0	

:11 Table 11: Percentage Distribution of Educational Establishments in the Palestinian Territory by Exposure to Smoke and Governorate, 2010

Carramanata	Exposure to Smoke		1			
Governorate	Total	No	Seldom	Sometimes	Very Often	
West Bank (2010)	100	94.5	2.2	2.2	1.1	(2010)
Jenin	100	96.4	2.2	1.0	0.4	
Tubas	100	95.5	0.9	2.8	0.8	
Tulkarm	100	93.9	2.4	2.2	1.5	
Nablus	100	94.8	1.8	2.7	0.7	
Qalqiliya	100	94.8	2.2	1.8	1.2	
Salfit	100	94.7	1.8	3.2	0.3	
Ramallah and Al-Bireh	100	94.1	2.3	2.2	1.4	
Jericho and Al Aghwar	100	93.4	1.5	2.4	2.7	
Jerusalem	100	94.6	1.7	2.7	1.0	
Bethlehem	100	94.1	3.1	1.8	1.0	
Hebron	100	93.9	2.5	2.3	1.3	
Gaza Strip (2008)	100	72.2	11.3	10.0	6.5	(2008)
North Gaza	100	70.7	14.4	11.3	3.6	
Gaza	100	70.6	10.7	8.9	9.8	
Deir AL-Balah	100	76.6	16.5	6.8	0.1	
Khan Yunis	100	71.1	6.5	19.2	3.2	
Rafah	100	84.8	1.9	8.4	4.9	

2010 :12

Table 12: Percent of Educational Establishments Exposed to Smoke Sometimes or Very Often in the Palestinian Territory by the Source of Smoke and Governorate, 2010

	Source	es of Smo											
Governorate	Others	Settlements	Israeli Military Activities	Residential Buildings	Waste Container	Dump Site	Unpaved Roads	Industrial Activities	Commercial Activities	Construction	Queries & Stone Cutting	Main Road	
West Bank (2010)	4.2	3.2	6.1	12.0	22.6	4.0	4.9	4.5	4.9	4.0	1.5	28.2	(2010)
Jenin	4.8	0.0	2.4	17.1	26.8	0.0	4.9	0.0	2.4	0.0	0.0	41.5	
Tubas	10.5	10.5	10.5	15.8	15.8	0.0	5.3	5.3	15.8	0.0	0.0	10.5	
Tulkarm	5.6	2.8	5.6	12.7	23.9	5.6	4.2	8.5	8.5	2.8	2.8	16.9	
Nablus	2.7	1.8	7.1	9.7	19.5	4.4	8.0	6.2	5.3	3.5	1.8	30.1	
Qalqiliya	3.7	7.4	18.5	7.4	22.2	3.7	0.0	3.7	3.7	3.7	0.0	25.9	
Salfit	3.7	14.8	7.4	18.5	18.5	0.0	3.7	0.0	3.7	7.4	0.0	22.2	
Ramallah and Al-Bireh	4.8	2.9	3.8	10.5	14.3	4.8	2.9	7.6	5.7	6.7	1.0	35.2	
Jericho and Al Aghwar	0	5.9	5.9	11.8	23.5	5.9	5.9	0.0	11.8	5.9	0.0	23.5	
Jerusalem	4.4	3.4	7.9	7.9	28.1	4.5	3.4	3.4	6.7	6.7	1.1	22.5	
Bethlehem	9.6	1.9	5.8	7.7	21.2	1.9	7.7	1.9	1.9	5.8	3.8	30.8	
Hebron	2.8	2.3	5.0	14.9	26.1	4.5	5.0	3.6	2.3	2.3	1.8	29.7	
Gaza Strip (2008)	10.4	0.0	26.8	5.8	34.9	45.3	14.4	19.4	8.5	9.5	21.6	18.1	(2008)
North Gaza	1.7	0.0	43.7	3.6	42.8	31.8	12.6	9.4	6.0	14.7	16.7	11.0	
Gaza	15.5	0.0	20.5	8.5	35.9	47.3	22.2	24.1	7.8	4.5	37.4	18.8	
Deir AL-Balah	0	0.0	19.0	2.8	15.9	0.0	0.0	0.0	11.3	0.0	0.0	26.5	
Khan Yunis	12.5	0.0	24.7	2.9	42.3	23.3	2.1	27.2	7.1	100	11.4	15.1	
Rafah	0	0.0	0.0	5.8	17.9	71.5	16.7	11.0	14.9	0.0	0.0	21.6	

2010 :13

Table 13: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Distance Between the Source of Smoke and Educational Establishment and Governorate, 2010

Governorate		The Distance Between the So	ource of Smoke and	Educational Establish		
	Total	500 More than 500 Meters	500 - 251	250 - 100	100 Less than 100 Meters	
West Bank (2010)	100	4.0	5.9	6.4	83.7	(2010)
Jenin	100	4.9	4.9	0.0	90.2	
Tubas	100	15.7	5.3	5.3	73.7	
Tulkarm	100	8.6	4.3	10.0	77.1	
Nablus	100	2.7	8.0	4.5	84.8	
Qalqiliya	100	11.1	3.7	3.7	81.5	
Salfit	100	11.1	3.7	11.1	74.1	
Ramallah and Al-Bireh	100	4.9	7.8	5.9	81.4	
Jericho and Al Aghwar	100	0.0	8.4	8.3	83.3	
Jerusalem	100	2.3	9.2	8.0	80.5	
Bethlehem	100	0.0	4.0	8.0	88.0	
Hebron	100	1.8	4.1	6.4	87.7	
Gaza Strip (2008)	100	6.0	7.7	14.1	72.2	(2008)
North Gaza	100	6.9	15.9	20.6	56.6	
Gaza	100	6.4	5.2	15.5	72.9	
Deir AL-Balah	100	6.7	8.5	7.0	77.8	
Khan Yunis	100	6.9	4.0	8.7	80.4	
Rafah	100	0.0	0.9	9.9	89.2	

2010

Table 14: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Main Source of Obtaining Water in the Educational Establishment and Governorate, 2010

Covernante	The Main Source of	Obtaining Water		T	1		
Governorate	Total	Others	Spring	Water Well	Water Tanks	Water Network	
West Bank (2010)	100	0.2	0.4	14.0	8.0	77.4	(2010)
Jenin	100	0.0	0.4	17.7	16.5	65.4	
Tubas	100	2.2	0.0	17.8	22.2	57.8	
Tulkarm	100	0.0	0.7	3.5	2.1	93.7	
Nablus	100	0.0	0.7	12.7	10.2	76.4	
Qalqiliya	100	0.0	0.0	9.7	4.2	86.1	
Salfit	100	0.0	0.0	6.2	1.6	92.2	
Ramallah and Al-Bireh	100	0.3	0.4	9.9	2.0	87.4	
Jericho and Al Aghwar	100	0.0	3.7	0.0	14.8	81.5	
Jerusalem	100	0.0	0.0	3.7	2.6	93.7	
Bethlehem	100	0.0	0.6	11.0	2.4	86.0	
Hebron	100	0.3	0.2	23.8	10.5	65.2	
Gaza Strip (2008)	100	0.5	0.0	1.1	4.1	94.3	(2008)
North Gaza	100	0.8	0.0	0.7	2.8	95.7	
Gaza	100	0.3	0.0	0.9	4.4	94.4	
Deir AL-Balah	100	0.0	0.0	2.0	4.6	93.4	
Khan Yunis	100	1.3	0.0	3.9	4.5	90.3	
Rafah	100	0.0	0.0	0.1	1.0	98.9	

2010
Table 15: Monthly Average Quantity of Consumed Water in the Educational Establishments, and the Total Amount of Water Consumed in the Educational Establishments in the West Bank by Governorate, 2010

Governorate	Monthly Amount of Consumed Water in Cubic Meter	Monthly Average of Quantity of Consumed Water in Cubic Meter
West Bank	104,231.0	56.5
Jenin	8,425.0	37.3
Tubas	1,564.0	38.2
Tulkarm	9,323.0	64.7
Nablus	12,544.0	48.1
Qalqiliya	4,424.0	63.2
Salfit	3,144.0	52.4
Ramallah and Al-Bireh	18,799.0	83.2
Jericho and Al Aghwar	911.0	35.0
Jerusalem	15,663.0	84.2
Bethlehem	8,652.0	60.1
Hebron	20,782.0	45.0

2010

Table 16: Percentage Distribution of Educational Establishments in the Palestinian Territory by Wastewater Disposal Method in the Educational Establishment and Governorate, 2010

	Wastewater	Disposal Method				
Governorate	Total	Other	Tight Cesspit	Porous Cesspit	Wastewater Network	
West Bank (2010)	100	0.6	15.7	52.0	31.7	(2010)
Jenin	100	0.0	26.5	61.1	12.4	
Tubas	100	0.0	39.0	58.6	2.4	
Tulkarm	100	2.1	16.7	48.6	32.6	
Nablus	100	0.4	11.5	40.6	47.5	
Qalqiliya	100	1.4	18.6	51.4	28.6	
Salfit	100	0.0	28.3	60.0	11.7	
Ramallah and Al-Bireh	100	0.4	20.8	55.3	23.5	
Jericho and Al Aghwar	100	3.9	30.8	61.5	3.8	
Jerusalem	100	1.1	4.3	32.8	61.8	
Bethlehem	100	0.0	11.8	56.3	31.9	
Hebron	100	0.4	10.6	57.8	31.2	
Gaza Strip (2008)	100	0.0	4.0	19.1	76.9	(2008)
North Gaza	100	0.0	0.7	7.3	92.0	
Gaza	100	0.0	0.0	7.1	92.9	
Deir AL-Balah	100	0.0	4.0	11.7	84.3	
Khan Yunis	100	0.0	17.9	70.9	11.2	
Rafah	100	0.0	2.2	9.6	88.2	

()

2010

Table 17: Percentage Distribution of Educational Establishments which have Porous Cesspit and Water Well in the Palestinian Territory by the Distance Between the Water Well and Porous Cesspit (Meter) in the Educational Establishment and Governorate, 2010

		The Distance B	etween the Water W	() ell and Porous Cessp	it (Meter)		
Governorate	Total	75 More Than 75	75 - 46	45 - 16	15 15 and Less	Existence of Porous Cesspit and Water Well	
West Bank (2010)	100	13.0	17.8	46.4	22.8	9.9	(2010)
Jenin	100	10.5	21.9	41.1	26.5	12.8	
Tubas	100	24.4	7.3	36.6	31.7	19.5	
Tulkarm	100	16.7	16.7	59.4	7.2	2.8	
Nablus	100	4.4	20.1	46.7	28.8	10.3	
Qalqiliya	100	4.3	19.6	60.9	15.2	5.7	
Salfit	100	15.2	15.3	28.8	40.7	5.0	
Ramallah and Al-Bireh	100	8.1	11.5	68.4	12.0	7.5	
Jericho and Al Aghwar	100	0.0	20.8	62.5	16.7	0.0	
Jerusalem	100	4.3	7.4	55.9	32.4	1.6	
Bethlehem	100	13.6	18.0	59.4	9.0	4.9	
Hebron	100	21.4	20.5	29.6	28.5	17.3	
Gaza Strip (2008)	100	4.2	5.7	21.0	69.1	1.6	(2008)
North Gaza	100	50.0	50.0	0.0	0.0	0.7	
Gaza	100	4.3	6.2	16.6	72.9	0.9	
Deir AL-Balah	100	0.0	13.2	0.0	86.8	1.9	
Khan Yunis	100	4.3	4.2	31.0	60.5	3.9	
Rafah	100	0.0	0.0	12.8	87.2	1.1	

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Table 18: Percentage Distribution of Educational Establishments which have Porous Cesspit and Water Well in the Palestinian Territory by Location of Water Well and Porous Cesspit in the Educational Establishment and Governorate, 2010

	Location	of Water Well and Porous Co	esspit			
Governorate	Total	On the Same Level	Well Above Cesspit	Well Below Cesspit	Existence of Porous Cesspit and Water Well	
West Bank (2010)	100	25.9	61.3	12.8	9.9	(2010)
Jenin	100	23.8	56.6	19.6	12.8	
Tubas	100	17.1	80.5	2.4	19.5	
Tulkarm	100	31.1	52.2	16.7	2.8	
Nablus	100	36.9	55.4	7.7	10.3	
Qalqiliya	100	29.8	51.1	19.1	5.7	
Salfit	100	5.0	88.3	6.7	5.0	
Ramallah and Al-Bireh	100	38.5	54.8	6.7	7.5	
Jericho and Al Aghwar	100	29.2	37.5	33.3	0.0	
Jerusalem	100	33.8	51.5	14.7	1.6	
Bethlehem	100	36.1	57.9	6.0	4.9	
Hebron	100	12.0	72.3	15.7	17.3	
Gaza Strip (2008)	100	19.2	17.7	63.1	1.6	(2008)
North Gaza	100	50.0	0.0	50.0	0.7	
Gaza	100	20.7	0.0	79.3	0.9	
Deir AL-Balah	100	0.0	15.2	84.8	1.9	
Khan Yunis	100	24.9	27.1	48.0	3.9	
Rafah	100	0.0	11.0	89.0	1.1	

2010

Table 19: Percentage Distribution of Educational Establishments Which Did not Collect the Waste Daily in the Palestinian Territory by Periodicity of Waste Collection in Week in the Educational Establishment and Governorate, 2010

Governorate		daste Collection in Week in cas	4 -3	2 -1	Did not Collect the Waste Daily	
	Total	5 Times and More	3-4 Times	1-2 Times	Waste Daily	
West Bank (2010)	100	9.3	38.8	51.9	7.0	(2010)
Jenin	100	4.1	54.2	41.7	10.6	
Tubas	100	0.0	50.0	50.0	4.9	
Tulkarm	100	16.7	50.0	33.3	4.2	
Nablus	100	12.5	25.0	62.5	6.2	
Qalqiliya	100	0.0	33.3	66.7	4.3	
Salfit	100	16.6	41.7	41.7	20.0	
Ramallah and Al-Bireh	100	9.6	33.3	57.1	9.3	
Jericho and Al Aghwar	100	0.0	33.3	66.7	11.5	
Jerusalem	100	25.0	37.5	37.5	4.3	
Bethlehem	100	7.1	28.6	64.3	9.7	
Hebron	100	5.0	40.0	55.0	4.3	
Gaza Strip (2008)	100	59.2	20.2	20.6	63.3	(2008)
North Gaza	100	57.8	24.8	17.4	46.0	
Gaza	100	51.4	23.4	25.2	68.0	
Deir AL-Balah	100	63.0	17.8	19.2	63.2	
Khan Yunis	100	68.8	11.0	20.2	64.0	
Rafah	100	73.4	19.4	7.2	68.6	

2010

Table 20: Percentage Distribution of Educational Establishments in the Palestinian Territory by Package Method for Collected Waste in the Educational Establishment and Governorate, 2010

	Package	Method for Colle	ected Waste					
Governorate	Total	Normal Bags	Normal Plastic Boxes	Special Plastic Boxes	Carton Boxes	Metal Boxes	Special Bags	
West Bank (2010)	100	16.7	2.4	27.6	0.9	0.9	51.5	(2010)
Jenin	100	25.6	1.8	24.3	0.9	0.9	46.5	
Tubas	100	17.1	2.4	31.7	0.0	0.0	48.8	
Tulkarm	100	16.7	3.5	31.9	0.7	1.4	45.8	
Nablus	100	17.3	1.5	17.7	0.0	0.8	62.7	
Qalqiliya	100	12.8	2.9	42.9	1.4	1.4	38.6	
Salfit	100	15.0	3.3	31.7	0.0	1.7	48.3	
Ramallah and Al-Bireh	100	16.0	1.2	20.4	0.4	0.9	61.1	
Jericho and Al Aghwar	100	7.7	15.4	50.0	3.8	0.0	23.1	
Jerusalem	100	13.6	0.5	17.7	1.6	0.5	66.1	
Bethlehem	100	16.0	4.8	35.4	3.5	0.0	40.3	
Hebron	100	15.2	2.4	34.0	0.6	1.3	46.5	
Gaza Strip (2008)	100	9.3	12.2	57.5	0.8	6.1	14.1	(2008)
North Gaza	100	9.8	9.9	59.9	0.7	12.4	7.3	
Gaza	100	10.8	11.9	60.6	1.6	4.7	10.4	
Deir AL-Balah	100	3.5	21.5	59.4	0.0	4.0	11.6	
Khan Yunis	100	7.1	13.2	59.7	0.0	6.0	14.0	
Rafah	100	12.8	4.4	34.9	0.0	5.0	42.9	

2010

Table 21: Percentage Distribution of Educational Establishments in the Palestinian Territory by Responsibility of Waste Collection in the Educational Establishment and Governorate, 2010

Governorate		Responsibility of Wa	ste Collection in the Educational Esta	adiisnment	
	Total	Porter and Students	Students Only	Porter Only	
West Bank (2010)	100	35.7	0.8	63.5	(2010)
Jenin	100	25.6	0.9	73.5	
Tubas	100	39.0	0.0	61.0	
Tulkarm	100	11.8	0.0	88.2	
Nablus	100	30.0	0.0	70.0	
Qalqiliya	100	30.0	1.4	68.6	
Salfit	100	25.0	0.0	75.0	
Ramallah and Al-Bireh	100	49.1	0.9	50.0	
Jericho and Al Aghwar	100	69.2	0.0	30.8	
Jerusalem	100	34.4	1.6	64.0	
Bethlehem	100	46.5	0.7	52.8	
Hebron	100	42.2	1.1	56.7	
Gaza Strip (2008)	100	61.9	0.6	37.5	(2008)
North Gaza	100	79.0	0.7	20.3	
Gaza	100	54.6	0.8	44.6	
Deir AL-Balah	100	61.3	0.0	38.7	
Khan Yunis	100	63.4	0.7	35.9	
Rafah	100	65.1	0.0	34.9	

2010

Table 22: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Doer of Transporting Solid Waste which Generate by the Educational Establishment and Governorate, 2010

	Doer of 1	Fransporting	the Waste				
Governorate	Total	Others	Private Contractor	UNRWA	Local Authority	The Educational Establishment	
West Bank (2010)	100	1.9	0.9	2.9	85.9	8.4	(2010)
Jenin	100	0.4	4.0	2.2	90.7	2.7	
Tubas	100	0.0	0.0	9.7	73.2	17.1	
Tulkarm	100	0.0	0.6	4.2	91.7	3.5	
Nablus	100	2.3	0.0	1.9	90.8	5.0	
Qalqiliya	100	0.0	0.0	0.0	98.6	1.4	
Salfit	100	0.0	0.0	0.0	96.7	3.3	
Ramallah and Al-Bireh	100	1.7	0.9	2.7	86.3	8.4	
Jericho and Al Aghwar	100	0.0	0.0	11.5	73.1	15.4	
Jerusalem	100	10.1	1.1	4.3	78.0	6.5	
Bethlehem	100	0.6	0.0	2.8	79.2	17.4	
Hebron	100	0.9	0.4	2.6	82.7	13.4	
Gaza Strip (2008)	100	0.4	1.2	19.8	77.3	1.3	(2008)
North Gaza	100	0.0	0.7	29.2	68.8	1.3	
Gaza	100	0.9	0.8	6.2	90.0	2.1	
Deir AL-Balah	100	0.0	6.0	53.9	40.1	0.0	
Khan Yunis	100	0.0	0.0	25.6	73.7	0.7	
Rafah	100	0.0	0.0	15.3	84.7	0.0	

2010

Table 23: Percentage Distribution of Educational Establishments in the Palestinian Territory by the Final Place and Periodicity of Final Disposal Waste in the Educational Establishment and Governorate, 2010

_		Periodicity of Fi	nal Waste Dispo	sal					
Governorate	Total	5 5 Times and More	4-3 3-4 Times	2-1 1-2 Times	Total	Disposed Randomly	Private Dumping Site	Local Authority Dumping site	
West Bank (2010)	100	34.8	29.6	35.6	100	1.4	24.1	74.5	(2010)
Jenin	100	30.6	32.7	36.7	100	0.5	25.2	74.3	
Tubas	100	39.0	29.3	31.7	100	4.9	19.5	75.6	
Tulkarm	100	37.5	38.9	23.6	100	0.0	25.0	75.0	
Nablus	100	42.0	26.5	31.5	100	0.8	18.8	80.4	
Qalqiliya	100	41.5	27.1	31.4	100	1.4	28.6	70.0	
Salfit	100	21.7	38.3	40.0	100	1.6	31.7	66.7	
Ramallah and Al-Bireh	100	18.6	30.1	51.3	100	3.1	25.7	71.2	
Jericho and Al Aghwar	100	42.3	23.1	34.6	100	11.6	26.9	61.5	
Jerusalem	100	39.3	30.1	30.6	100	1.1	30.6	68.3	
Bethlehem	100	32.0	22.2	45.8	100	0.0	30.6	69.4	
Hebron	100	39.0	28.3	32.7	100	1.7	19.3	79.0	
Gaza Strip (2008)	100	39.7	27.7	32.6	100	0.8	12.3	86.9	(2008)
North Gaza	100	50.2	30.0	19.8	100	1.3	16.4	82.3	
Gaza	100	29.0	29.5	41.5	100	0.5	8.0	91.5	
Deir AL-Balah	100	47.8	30.7	21.5	100	0.0	18.0	82.0	
Khan Yunis	100	44.6	20.9	34.5	100	2.2	15.9	81.9	
Rafah	100	51.8	25.3	22.9	100	0.0	11.8	88.2	

2010

Table 24: Daily Average of Generated Waste and Daily Amount of Generated Waste in the Educational Establishments in the Palestinian Territory by Governorate, 2010

Governorate	(/) Daily Amount of Generated Waste in the Educational Establishment (kg / day)	(/) Daily Average of Generated Waste in the Educational Establishment (kg / day)	
West Bank (2010)	54,722	30	(2010)
Jenin	6,062	27	
Tubas	1,394	34	
Tulkarm	4,750	33	
Nablus	8,399	32	
Qalqiliya	1,884	27	
Salfit	905	15	
Ramallah and Al-Bireh	9,653	43	
Jericho and Al Aghwar	1,299	50	
Jerusalem	6,328	34	
Bethlehem	4,142	29	
Hebron	9,906	21	
Gaza Strip (2008)	16,673	45	(2008)
North Gaza	3,216	31	
Gaza	6,748	33	
Deir AL-Balah	2,203	35	
Khan Yunis	2,804	33	
Rafah	1,702	27	

2010 :25

Table 25: Percentage Distribution of Educational Establishments in the Palestinian Territory by Type of Generated Solid Waste in the Educational Establishment and Governorate, 2010

Governorate	Total	Other Wastes	Metal	Glass	Chemical, Pharmaceutical Wastes	Paper and Cartoon	Food Wastes	
West Bank (2010)	100	8.4	4.4	4.7	1.3	42.4	38.8	(2010)
Jenin	100	8.0	3.4	2.7	1.4	44.1	40.4	
Tubas	100	14.0	1.1	1.1	1.1	44.6	38.1	
Tulkarm	100	12.2	3.2	3.2	1.8	42.0	37.6	
Nablus	100	7.8	5.1	5.2	1.4	41.3	39.2	
Qalqiliya	100	9.6	1.9	2.5	0.0	44.6	41.4	
Salfit	100	3.0	4.6	3.1	0.0	45.8	43.5	
Ramallah and Al-Bireh	100	7.7	4.8	4.9	1.4	41.4	39.8	
Jericho and Al Aghwar	100	7.3	13.0	7.2	2.9	37.7	31.9	
Jerusalem	100	7.9	5.4	5.4	0.5	42.1	38.7	
Bethlehem	100	8.1	3.3	4.5	1.8	43.1	39.2	
Hebron	100	8.7	4.5	6.0	1.5	42.2	37.1	
Gaza Strip (2008)	100	4.2	1.7	1.9	0.9	77.6	13.7	(2008)
North Gaza	100	3.5	0.4	2.1	0.2	77.8	16.0	
Gaza	100	4.6	2.1	2.1	1.3	75.5	14.4	
Deir AL-Balah	100	3.6	2.5	1.3	0.0	84.8	7.8	
Khan Yunis	100	3.5	1.8	2.4	0.8	77.7	13.8	
Rafah	100	5.1	1.2	0.6	1.9	75.7	15.5	

2010

Table 26: Percentage Distribution of Educational Establishments in the Palestinian Territory by Type of Separated Waste in the Educational Establishment and Governorate, 2010

Governorate	Total	Other Wastes	Metal	Glass	Chemical, Pharmaceutical Wastes	Paper and Cartoon	Food Wastes	
West Bank (2010)	100	12.5	12.5	26.5	14.7	15.0	18.8	(2010)
Jenin	100	27.2	0.0	0.0	0.0	29.8	43.0	
Tubas	100	0.0	0.0	0.0	0.0	39.0	61.0	
Tulkarm	100	23.2	0.0	0.0	0.0	39.9	36.9	
Nablus	100	17.3	22.0	0.0	16.0	20.5	24.2	
Qalqiliya	100	0.0	0.0	0.0	0.0	38.2	61.8	
Salfit	100	27.5	18.4	0.0	27.6	11.0	15.5	
Ramallah and Al-Bireh	100	15.1	9.4	34.8	13.5	12.6	14.6	
Jericho and Al Aghwar	100	44.3	0.0	0.0	0.0	25.5	30.2	
Jerusalem	100	13.4	10.0	38.2	10.0	12.3	16.1	
Bethlehem	100	4.6	22.5	20.7	16.5	13.0	22.7	
Hebron	100	10.0	8.6	39.8	13.1	13.3	15.2	
Gaza Strip (2008)	100	1.6	1.7	1.9	3.6	68.0	23.2	(2008)
North Gaza	100	0.2	0.0	0.0	0.0	70.6	29.2	
Gaza	100	2.5	0.0	0.4	0.0	79.1	18.0	
Deir AL-Balah	100	5.4	0.0	0.1	0.0	80.7	13.8	
Khan Yunis	100	6.7	0.0	0.0	0.0	73.7	19.6	
Rafah	100	1.6	0.0	0.0	0.0	78.2	20.2	



Palestinian National Authority Palestinian Central Bureau of Statistics

Environmental Survey for Education Sector, 2010 Main Findings

PAGE NUMBERS OF ENGLISH TEXT ARE PRINTED IN SQUARE BRACKETS. TABLES ARE PRINTED IN THE ARABIC ORDER (FROM RIGHT TO LEFT)

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The Palestinian Central Bureau of Statistics (PCBS) extends its deep appreciations to Ministry of Education and Higher Education, UNRWA and Private Educational Establishments, Universities and Colleges included in the survey for being well dedicated in performing their duties.

The Environmental Survey for Education Sector has been planned and conducted by a technical team from PCBS and with joint funding by the Palestinian National Authority (PNA) and the Core Funding Group (CFG) for the year 2010 represented by the Representative Office of Norway to PNA and the Swiss Development and Cooperation Agency (SDC).

Moreover, PCBS very much appreciates the distinctive efforts of the Core Funding Group (CFG) for their valuable contribution to funding the project.

Important Remarks

Due to the situation in Gaza strip, the Environmental Survey for Education Sector, 2010 was not conducted there, so data of Gaza Strip in the tables refer to the year 2008

West Bank didn't include those parts of Jerusalem which were annexed by Israel in 1967.

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Preface

PCBS is pleased to release this specialized statistical report about the environment of educational establishments in the Palestinian Territory. This report has been prepared in accordance within the framework of our official efforts for creating and establishing the National Statistical System, and providing the necessary statistics to Palestinian policy-planner and decision-makers in education and higher education, environment and natural resources sector.

As the attention towards environment and the risk of environmental pollution increase, environment statistics become one of the basic fields in the official statistics. The environmental statistics for the education sector is an important subject in the environment statistics due to its negative effects on the health and the environment if not management properly. Many decisions depend on such statistics, especially in the Palestinian Territory where statistics about it is not available.

PCBS seeks to provide such data through its program for environment statistics that aims at building and updating a comprehensive and accurate statistical database on all environmental subjects. This program aims to provide statistical data as a tool for monitoring and management of the environmental status in the Palestinian Territory.

This report is one of a series of reports that are being published by the PCBS on the Palestinian environment. This report concentrates on the variables of outside effect on education building environment, water consumption in terms of providing sources and characteristics, and management of solid wastes in terms of the separation, transportation, disposal and management of waste water generated in terms of disposal method.

PCBS hopes that the findings of this report will be a reference for planners and decision-makers towards improving the environmental status in the Palestinian Territory.

September, 2010

Ola Awad Acting President

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Executive Summary

Results showed that 7.3% of educational establishments in the West Bank are exposed to noise (very often or sometimes), while 5.3% are exposed to smells. In addition, 4.4% of educational establishments in the West Bank are exposed to dust (very often or sometimes) and 3.3% to Smoke.

Concerning water, data of the survey revealed that 77.4% of educational establishments in the West Bank receive water from a water network, whereas 8.0% receive water through buying water tanks. Concerning the quantities of consumed water, results showed that the monthly average quantity of consumed water in each educational establishment in the West Bank was 56.5 cubic meters and the total amount of consumed water in the educational establishments in the West Bank was 104.2 cubic meters/month.

In the field of wastewater, data revealed that 31.7% of the educational establishments in the West Bank dispose wastewater through the sewage network compared with 52.0% use porous cesspit to dispose of wastewater.

Results revealed that the daily average of generated solid waste from each educational establishment in the West Bank was 30 kg, whereas the total amount of generated solid waste from the educational establishments in the West Bank was 54.7 tons/day. Concerning solid waste collection, results showed that 93.0% of the educational establishments in the West Bank collect generated solid waste on a daily basis, of which 68.2% collect solid waste using bags (special and normal bags), while 30.0% use plastic boxes. In addition, 85.9% of the educational establishments in the West Bank transfer the collected waste to the final disposal place by local authorities, while UNRWA is responsible of transferring the collected waste from 2.9% of the educational establishments

Chapter One

Introduction

1.1 Introduction

Environmental statistics in the educational establishments are very interesting and these statistics are an important instrument in decisions making, planning, and public debate. And relating to infrequency of data about this subject in the Palestinian Territory, the Palestinian Central Bureau of Statistics (PCBS) builds up and develop a database about the environment in the educational establishments.

PCBS implements regularly a specialized survey on the environment of educational establishments to provide needed statistics. The last survey was conducted during the period 07/03/2010 to 29/04/2010 and it covered all educational establishments in Palestinian Territory representing the different sectors (governmental sector, UNRWA, private sector, Non-governmental organizations).

1.2 The objectives of the report

The main objective of this report is to provide statistical data about the educational establishments covering fields such as:

- Outside Environmental Effects (Noise, Smell, Dust, Smoke)
- Water Consumption and Water Sources.
- Wastewater
- Solid Waste Management

1.3 Report's Structure

This report is divided into five chapters; the first chapter contains the introduction, objective and report's structure. The second chapter contains the concepts and definitions in while the third chapter presents the main findings of the report. The fourth chapter explains the methodology of data collection and tabulation while the fifth one presents the data quality.

Chapter Two

Concepts and Definitions

Solid Waste Disposal:

Ultimate deposition or placement of refuse that is not salvaged or recycled.

Wastewater:

Used water, typically discharged into the sewage system. It contains matter and bacteria in solution or suspension.

Dumping Site:

Site used to dispose of solid wastes without environmental control.

Solid Waste:

Useless and sometimes hazardous material with low liquid content, solid wastes include municipal garbage, industrial and commercial waste, sewage sludge, wastes resulting from agricultural and animal husbandry operations and other connected activities, demolition wastes and mining residues

Pharmaceutical Waste:

This includes pharmaceutical products, drugs and chemicals, which have been returned from wards, have been spilled or soiled, are out of date or contaminated, or are to be discarded for any reason.

Waste Collection:

Collection or transport of waste to the place of treatment or discharge by municipal services or similar establishments, or by public or governmental and non-governmental corporations, specialized enterprises or general government. Collection of municipal waste may be selective, that's to say carried out for a specific type of product, or undifferentiated, in other words, covering all kinds of waste at the same time.

Porous Cesspit:

A well or a pit in which night soil and other refuse is stored, constructed with porous walls.

Tight Cesspit:

A well or a pit in which night soil and other refuse is stored, constructed with either tight walls.

Sewage Network:

System of collectors, pipelines, conduits and pumps to evacuate wastewater (rainwater, domestic and other wastewater) from any of the location paces generation either to municipal sewage treatment plant or to a location place where wastewater is discharged.

Exposure To Noise And Air Pollution:

The educational establishment is considered to be exposed to noise, dust, smell or smoke if the outside effect form a real source of noise and air pollution from the view point of the educational establishment. If the outside effect considered as a source of noise and air pollution all the educational day, the exposure will report as very often, whereas for certain hours of the day (less than 50% of the educational day), it will report sometimes, if the source effect affect among long periods, the exposure will report as seldom. If the educational establishment don't suffer from noise or air pollution, then the educational establishment will considered not exposed to noise or air pollution.

Smoke:

Particles suspended in air after incomplete combustion of materials.

Noise:

Audible sound from traffic, construction, and so on that may generate unpleasant and harmful effects (hearing loss). It is measured in decibels.

Dust:

Particles light enough to be suspended in the air.

Public Water Network:

A net of pipes for the purpose of providing clean water to households. It normally belongs to a municipality, the council or to a private company

A set of special symbols was used in the tables of this report

- (-): Nil
- (0): The value is less than (0.05)

Main Findings

3.1 Outside Environmental Effects

Results showed that 7.3% of educational establishments in the West Bank are exposed to noise (very often or sometimes), while 5.3% are exposed to smells. In addition, 4.4% of educational establishments in the West Bank are exposed to dust (very often or sometimes) and 3.3% to Smoke.

7.3

6

7.3

4.4

Noise

Smell

Dust

Smoke

Outside Environmental Effects

Figure 1: Percentage of Educational Establishments in the West Bank Exposure Sometimes or Very Often to Outside Effects by effect, 2010

3.2 Water Consumption and Water Sources

Main Sources of Water:

Results of the survey revealed that 77.4% of educational establishments in the West Bank receive water from a water network, whereas 8.0% receive water through buying water tanks.

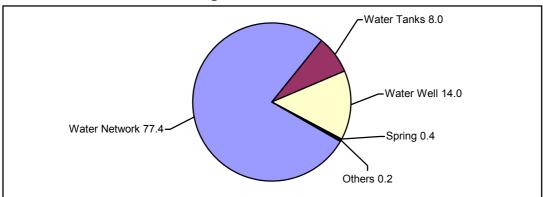


Figure 2: Percentage Distribution of Educational Establishments in the West Bank by the Main Source of Obtaining Water in the Educational Establishments, 2010

Quantity of Consumed Water:

Results showed that the monthly average quantity of consumed water in each educational establishment in the West Bank was 56.5 cubic meters and the total amount of consumed water in the educational establishments in the West Bank was 104.2 cubic meters/month.

3.3 Wastewater

Wastewater Disposal Method:

Results showed that 31.7% of the educational establishments in the West Bank dispose wastewater through the sewage network compared with 52.0% use porous cesspit to dispose of wastewater.

Porous Cesspit 52.0

Wastew ater
Netw ork 31.7

Figure 3: Percentage Distribution of Educational Establishments in the West Bank by Wastewater Disposal Method in the Educational Establishment, 2010

3.4 Solid Waste Management

Results revealed that the daily average of generated solid waste from each educational establishment in the West Bank was 30 kg, whereas the total amount of generated solid waste from the educational establishments in the West Bank was 54.7 tons/day. Concerning solid waste collection, results showed that 93.0% of the educational establishments in the West Bank collect generated solid waste on a daily basis, of which 68.2% collect solid waste using bags (special and normal bags), while 30.0% use plastic boxes. In addition, 85.9% of the educational establishments in the West Bank transfer the collected waste to the final disposal place by local authorities, while UNRWA is responsible of transferring the collected waste from 2.9% of the educational establishments

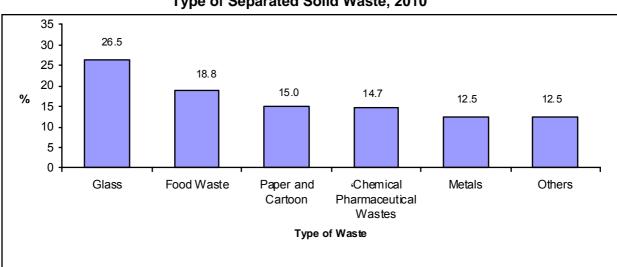


Figure 4: Percentage Distribution of Educational Establishments in the West Bank by Type of Separated Solid Waste, 2010

Chapter Four

Methodology

This chapter presents the scientific methodology used in the planning and implementation of environmental survey for the education sector including the design of the survey tools, fieldwork collection, data processing and analysis of data.

4.1 The Survey's Questionnaire

The environmental questionnaire was designed in accordance with similar country experiments and according to international standards and recommendations for the most important indicators, taking into account the special situation of the West Bank.

Stages of designing and checking the questionnaire:

The questionnaire design was passed through different steps including:

- Consultation with the relevant UN recommendations
- A visit to the Ministry of Education and Higher Education was conducted to have an idea about the questionnaires they used.
- Consultation with PCBS' previous surveys including household environmental survey, industrial environmental survey, economical environmental survey, health care environment survey, and the environmental survey for the education sector questionnaire 2008.
- The questionnaire was modified according to the main findings of the environmental survey for the education sector 2008.
- Validation rules and editing manual were updated prior to the actual implementation of the survey.

Questionnaire's sections:

- Cover page with data about the educational establishments.
- Outside environmental effects
- Water
- Wastewater
- Solid waste management
- Cafeteria environment

4.2 Sample and Sampling Frame

Target Population:

The target population of this survey is all educational establishments, including:

- 1. Educational establishments belonging to Ministry of Education and Higher Education.
- 2. Educational establishments belonging to UNRWA.
- 3. Educational establishments belonging to Non-governmental organizations.
- 4. Educational establishments belonging to the Private sector.

Sampling Frame:

The frame for all establishments in the education sector is updated annually by administrative records of the Ministry of Education and Higher Education.

4.3 Fieldwork:

Field operations were conducted during the period 07/03/2010 to 29/04/2010.

4.4 Data Processing

The data processing stage consisted of the following operations:

Editing before data entry:

All questionnaires were edited in the office using the same instructions adopted for editing in the field

Data entry:

Then data was entered into the computer using Microsoft Access. The data entry program was prepared to satisfy a number of requirements such as:

- Identifying questionnaire duplication during data entry.
- Application of logical and consistency check during data capturing.
- Ability to perform within record checks as well as cross records checks
- Minimize the number of data entry and fieldworkers errors.
- User-friendly handling of errors
- Possibility of transferring data into another format to be used and analyzed using other analytical statistical systems such as SAS and SPSS.

Data Quality

5.1 Accuracy of the Data

Two types of errors affect the quality of data, namely sampling and non sampling errors. Sampling errors are measurable and very limited in this report, because the study covered all educational establishments in the Palestinian Territory. The non-sampling errors could not be determined easily, due to the diversity of sources (e.g. the interviewers, respondents, editors, coders, date entry operators...etc). To minimize such errors, data was edited before and after the data entry process.

Coverage:

One of the most important goals of such report series is to provide users and researchers with time series statistics for the most important indicators relating to environmental conditions of the educational sector in the Palestinian Territory.

Geographically, data of the educational establishments is covered for all governorates. The survey is implemented for the second time (the first was in 2008), and the data pertinent to the Gaza Strip is that of 2008 because of the difficulty of collecting data in Gaza Strip this year.

5.2 Comparison of the Data

This survey is implemented for the second time (the first was in 2008). For comparison purposes, a three years time series should be available.

5.3 Special Technical Notes

Sources of some non-statistical errors that have emerged during the implementation of the survey can be summarized as the following:

- 1. Data of Gaza Strip refer to 2008 because of the difficulty of data collection.
- 2. Difficulty of making comparison with the 2008 data because of the absence of 3 years time series.
- 3. Some of the educational establishments reported huge amounts of consumed water
- 4. Some of the educational establishments reported huge amounts of produced solid waste.
- 5. Errors found in registering the national number of the educational establishments.
- 6. Inconsistent data found about the number of water taps and number of times water tanks are cleaned.
- 7. Percentages of the produced and separated solid waste were more than 100% for some of the educational establishments.
- 8. Inconsistent data found about the area of the cafeteria.

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