





•

:PCBS

2013

2013

•

2013 (CFG) .(SDC)

(CFG)

•

•

•

17		:
17	1.1	
18	2.1	
23	3.1	
27		:
27	1.2	
27	2.2	
28	3.2	
29	4.2	
30	5.2	
30	6.2	
33	7.2	
34	8.2	
34	9.2	
35		:

39

:PCBS

48			2012	:14
48			2013	:15
40			2013	.10
49			2012	:16
49	3	1	2013	:17
			2013	
50	6	4	2013	:18
50			7	:19
			2013	
51			2013	:20
51			2010	:21
			2013	
52			2013	:22
53				:23
			2013	
53			2013	:24
54				:25
			2013	.2(
54			2013	:26
55				:27
55			2013	:28
55			2013	.20

-2013 :PCBS

56	2013	:29
57		:30
58		:31
58		:32
59		:33
59		:34
60	2013	:35
60	2013	:36
	2013	
61	2013	:37
61	2013	:38

:PCBS

المقدمة

.

2013/04/16

.

2013/06/30) (

•

- .
- •

2013

: 4.5 4.5 2013 . 22.5 2.1 2.6 2013 . 1.9 2013







1.1

-2013 :PCBS

2013

%71.0



.





2.1

2013 %14.4 %65.2



:

.%58.2





:PCBS



:PCBS

%70.3

.





3.1



23

%2.8

:PCBS





2013

%78.9

%31.9

.%71.4

:

%48.3

.

%22.2 %29.5

: 2013

.%23.6

%3.6 %94.7

•

•

%1.7



2013 حاوية خاصة بالبلدية 🗖 حاوية خاصة بالمنشأة 🔳 99.3 99.2 99.3 96.7 100 80 * 60 40 20 3.3 0.7 0.7 0.8 0 شمال الضفة الغربية قطاع غزة جنوب الضفة الغربية وسط الضفة الغربية المنطقة





-20	013	:PCBS

:

•

 %89.5
 %77.8
 %81.6

.

.

2008 2006 2004

.

06 2004

•

:

.2011 2009

.

- : . •

.

-2013

2013

:PCBS

1.2

2.2

•

•

•

:

•

3.2





.







:

.2



.2012

20)

-2013 :PCBS

) .(4.2

.

:

:

.

2013/06/30 ولغاية 2013/04/16

3,982

:

:

%	
83.0	3,305
3.0	103
1.0	36
1.0	23
1.0	30
0.0	2
5.0	217
0.0	7
0.0	9
6.0	250
100	3,982
	83.0 3.0 1.0 1.0 0.0 5.0 0.0 0.0 6.0

:

5.2

.1

.2

01-

:PCBS

Access

:

.

•

•

:

:

.SPSS

6.2

:

.(User-Friendly)

		-2013	:PCBS
		:	
		:	•
· ·			•
)	(
	` ()	
.()		



%95						
88.5	83.6	%1.4	%1.2	86.2	%	-
86.0	80.2	%1.8	%1.5	87.5	%	-
1,245,368.8	694,826.2	%14.5	140,269.8	970,097	3	-

•

%95							
73.7	65.6	%3.0	%2.1	69.8	%		-
76.0	67.0	%3.4	%2.5	72.0	%	-	

:



.



.1

.2

.3

.4

.





.

:



:

w'gi = wi*fgi

7.2

.(2013 -2006)

:

.

2013	2011	2009	2008	2006
84.0	86.1	92.0	87.5	86.7
1.3	2.5	6.7	6.1	6.7
65.2	62.2	59.9	66.4	66.8
14.4	15.5	29.9	21.9	21.1
8.4	11.1	6.0	22.5	9.3
83.1	84.0	86.3	70.4	79.6

.

.

:

2013 2011 2009 2008 2006

8.2

:PCBS

%5

.) . : . : . . : : . . :) (. :

35

-2013

:PCBS

:

(

:

:

:

:

. •

:

· : .

:

.

36


-2013

:PCBS

Tables

-2013

جدول 1: مؤشرات أساسية بيئية مختارة حول نشاط المنشآت الاقتصادية في فلسطين للأعوام 2004، 2006، 2008،

2013 .2011 .2009

Table 1: Main Selected Environmental Indicators about the Activity of the Economic Establishments in
Palestine for the Years 2004, 2006, 2008, 2009, 2011, 2013

Indicator	2013	2011	2009	2008	2006	2004	المؤشر
Percentage distribution of economic establishments by:							التوزيع النسبي للمنشآت الاقتصادية
-							حسب:
Means of obtaining water							وسيلة الحصول على المياه
Public water network	84.0	86.1	92.0	87.5	86.7	93.6	شبكة مياه عامة
Water tanks	13.6	8.4	1.1	2.5	3.4	3.0	تتكات مياه
Collection rain water well	1.3	2.5	6.7	6.1	6.7	2.4	بئر لجمع مياه الأمطار
Artesian well	1.1	3.0	0.2	3.9	3.2	1.0	بئر ارتوازي
Wastewater disposal method							طريقة التخلص من المياه العادمة
Wastewater network	65.2	62.2	59.9	66.4	66.8	67.9	شبكة صرف صحي
Tight cesspit	6.5	13.4	10.0	10.0	8.2	8.1	حفرة صماء
Porous cesspit	14.4	15.5	29.9	21.9	21.1	20.2	حفرة امتصاصية
Others	3.4	4.5	0.2	1.7	3.9	3.8	أخرى
Doer of transporting solidwaste							الجهة التي تقوم بجمع النفايات
The establishment	8.4	11.1	6.0	22.5	9.3	14.5	المنشأة نفسها
Local Authority	83.1	84.0	86.3	70.4	79.6	76.1	هيئة محلية
Private contractor	1.9	0.6	0.3	1.5	0.8	1.9	متعهد خاص
Others*	6.6	4.3	7.4	5.6	10.3	7.5	أخرى*

*: Others include UNRWA and Jerusalem municipality

*: أخرى تشمل وكالة الغوث وبلدية القدس

جدول 2: كمية المياه المستهلكة في المنشآت الاقتصادية ومعدل استهلاك المنشأة الاقتصادية في فلسطين من المياه حسب

النشاط الاقتصادى، 2013*

Table 2: Quantity of Consumed Water in the Economic Establishments and the Average Water Consumption Per Establishments in Palestine by Economic Activity, 2013*

Economic activity	معدل استهلاك المنشأة الاقتصادية من المياه (م ³ /شهر) Average water consumption Per establishments (m ³ /month)	كمية المياه المستهلكة (1000 م ³ /شهر) Quantity of consumed water (m ³ /month)	النشاط الاقتصادي
Palestine	35.9	4,489.9	فلسطين
Industrial activities	54.0	946.0	الأنشطة الصناعية
Constructions	49.9	29.5	الإنشاءات
Whole sale, retail & repairs	29.7	2,103.6	تجارة الجملة والتجزئة
Transport and storage	24.2	24.8	النقل والتخزين
Information and communication	26.0	22.5	المعلومات والاتصالات
Services	39.8	1,363.5	الخدمات

* : Variance is high for this indicator and should deal carefully with numbers

```
    التباين مرتفع لهذا المؤشر ويجب التعامل مع الأرقام بحذر
```

جدول 3: كمية المياه المستهلكة في المنشآت الاقتصادية ومعدل استهلاك المنشأة الاقتصادية في فلسطين من المياه حسب

المنطقة، 2013

Table 3: Quantity of Consumed Water in the Economic Establishments and the Average Water ConsumptionPer Establishments in Palestine by Region, 2013

Region	معدل استهلاك المنشأة الاقتصادية من المياه (م ³ /شهر) Average water consumption Per establishments (m3/month)	كمية المياه المستهلكة (1000 م ³ /شهر) Quantity of consumed water (m ³ /month)	المنطقة
Palestine	35.9	4,489.9	فلسطين
West Bank	31.2	2,631.6	الضفة الغربية
Gaza Strip	45.7	1,858.3	قطاع غزة

جدول 4: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب وسيلة الحصول على المياه والنشاط الاقتصادي، 2013

Table 4: Percentage Distribution of Economic Establishments in Palestine by Means of Obtaining Water and Economic Activity, 2013

	Means of o	btaining wat	er	على المياه	وسيلة الحصول	
Economic activity	المجموع	بئر ارتوازي	تنكات مياه	بئر لجمع مياه الأمطار	شبكة مياه عامة	النشاط الاقتصادى
	Total	Artesian well	Water tanks	Collection rain water well	Public water network	-
Palestine	100	1.1	13.6	1.3	84.0	فلسطين
Industrial activities	100	4.0	9.7	1.2	85.1	الأنشطة الصناعية
Constructions	100	1.2	11.1	1.8	85.9	الإنشاءات
Whole sale, retail & repairs	100	0.8	15.6	1.3	82.3	تجارة الجملة والتجزئة
Transport and storage	100	0.0	12.8	0.0	87.2	النقل والتخزين
Information and communication	100	0.0	5.0	0.3	94.7	المعلومات والاتصالات
Services	100	0.2	11.8	1.5	86.5	الخدمات

جدول 5: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب وسيلة الحصول على المياه والمنطقة، 2013 Table 5: Percentage Distribution of Economic Establishments in Palestine by Means of Obtaining Water and Region, 2013

	Means of o	btaining wat	er	على المياه	وسيلة الحصول	
Desien	المجموع	بئر ارتوازي	تتكات مياه	بئر لجمع مياه الأمطار	شبكة مياه عامة	المنطقة
Region	Total	Artesian	Water tanks		Public water	
		well		water well	network	
Palestine	100	1.1	13.6	1.3	84.0	فلسطين
West Bank	100	0.4	7.2	1.7	90.7	الضفة الغربية
North of West Bank	100	0.8	3.5	1.8	93.9	شمال الضفة الغربية
Middle of West Bank	100	0.0	1.7	0.0	98.3	وسط الضفة الغربية
South of West Bank	100	0.0	15.5	2.9	81.6	جنوب الضفة الغربية
Gaza Strip	100	2.6	25.9	0.5	71.0	قطاع غزة

جدول 6: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة التخلص من المياه العادمة والنشاط الاقتصادي، 2013

Table 6: Percentage Distribution of Economic Establishments in Palestine by Wastewater Disposal Method and Economic Activity, 2013

	المجموع	لا يوجد	طريقة التخلص من المياه العادمة Wastewater disposal method				
Economic activity	Total	Not exist	أخرى Others	حفرة امتصاصية Porous cesspit	حفرة صماء Tight cesspit	شبکة صرف صحي Wastewater network	النشاط الاقتصادي
Palestine	100	10.5	3.4	14.4	6.5	65.2	فلسطين
Industrial activities	100	5.5	3.1	19.7	10.9	60.8	الأنشطة الصناعية
Constructions	100	7.0	0.0	14.7	5.3	73.0	الإنشاءات
Whole sale, retail & repairs	100	13.9	4.5	13.0	5.1	63.5	تجارة الجملة والتجزئة
Transport and storage	100	17.9	6.5	12.0	5.4	58.2	النقل والتخزين
Information and	100	2.4	2.5	5.3	4.1	85.7	المعلومات والاتصالات
Services	100	5.5	1.5	15.0	7.3	70.7	الخدمات

جدول 7: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة التخلص من المياه العادمة والمنطقة، 2013

Table 7: Percentage Distribution of Economic Establishments in Palestine by Wastewater Disposal Method and Region, 2013

	المجموع	لا يوجد	Wastewater dis	sposal method	بادمة		
Region			أخرى	حفرة امتصاصية أخرى		شبكة صرف صحي	المنطقة
	Total	Not exist	Others	Porous cesspit	Tight cesspit	Wastewater network	
Palestine	100	10.5	3.4	14.4	6.5	65.2	فلسطين
West Bank	100	6.4	3.3	19.5	8.0	62.8	الضفة الغربية
North of West Bank	100	13.5	5.4	15.9	9.3	55.9	شمال الضفة الغربية
Middle of West Bank	100	0.4	3.2	10.6	11.6	74.2	وسط الضفة الغربية
South of West Bank	100	1.2	0.4	32.3	2.9	63.2	جنوب الضفة الغربية
Gaza Strip	100	18.6	3.7	3.9	3.5	70.3	قطاع غزة

تج عنها والنشاط الاقتصادي، 2013	حسب نوع النفايات الصلبة التى تذ	ل 8: نسبة المنشآت الاقتصادية في فلسطين م	جدو
---------------------------------	---------------------------------	------------------------------------------	-----

	Туре о	of generated	solidwaste						صلبة الناتجة	نوع النفايات الم	
Economic activity	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	النشاط الاقتصادي
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	12.3	1.1	0.0	0.9	4.2	15.8	51.8	25.0	69.8	94.0	فلسطين
Industrial activities	31.7	1.4	-	0.6	8.0	17.4	50.9	27.7	61.4	82.3	الأنشطة الصناعية
Constructions	5.7	0.0	-	2.9	6.2	12.1	38.0	32.1	70.4	96.9	الإنشاءات
Whole sale, retail & repairs	6.6	0.5	-	1.0	2.5	12.5	53.8	22.6	72.1	95.9	تجارة الجملة والتجزئة
Transport and storage	10.7	0.0	-	0.0	1.8	12.8	47.9	17.4	61.9	98.1	النقل والتخزين
Information and communication	1.8	0.2	-	0.0	0.2	18.9	44.3	25.0	63.3	100.0	المعلومات والاتصالات
Services	14.4	2.2	0.0	0.8	5.8	21.7	48.7	28.5	69.8	95.6	الخدمات

- : No observations

0 : The percentage is less than 0.05%

- : لا يوجد مشاهدات

0 : النسبة أقل من 0.05%

	Туре с	of generated	solidwaste			نوع النفايات الصلبة الناتجة					
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	12.3	1.1	0.0	0.9	4.2	15.8	51.8	25.0	69.8	94.0	فاسطين
West Bank	13.3	1.0	0.0	0.7	4.9	17.2	33.5	28.8	74.5	95.5	الضفة الغربية
North of West Bank	18.4	0.9	0.0	0.8	2.1	17.4	38.4	19.5	56.2	92.8	شمال الضفة الغربية
Middle of West Bank	9.7	0.7	0.0	0.7	11.0			34.5	92.5	98.1	وسط الضفة الغربية
South of West Bank	9.1	1.5	0.0	0.7	3.9	27.4	48.1	37.6	85.8	97.4	جنوب الضفة الغربية
Gaza Strip	10.0	1.1	0.0	1.2	2.6	12.8	89.8	16.9	60.1	90.7	قطاع غزة

Table 9: Percentage of Economic Establishments in Palestine by Type of Generated Solidwaste and Region, 2013

0 : The percentage is less than 0.05%

.. : Variance is high

0 : النسبة أقل من 0.05%

جدول 10: نسبة المنشآت الاقتصادية في فلسطين التي تنتج عنها نفايات صلبة وتقوم بفصلها حسب نوع النفايات الصلبة والنشاط الاقتصادي، 2013 Table 10: Percentage of Economic Establishments in Palestine that Generate Solidwaste and Separate it by Type of Solidwaste and Economic Activity, 2013

	Type of	separated s	olidwaste					2	الصلبة المفصولة	نوع النفايات	
Economic activity	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	النشاط الاقتصادي
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	، ـــــ
Palestine	11.1	16.0	40.8	20.0	14.2	9.6	12.5	11.7	6.7	9.3	فلسطين
Industrial activities	13.0	13.0	-	3.2	11.2	13.3	9.0	12.0	6.1	5.4	الأنشطة الصناعية
Constructions	3.1	0.0	-	0.0	28.0	0.0	2.5	5.3	0.8	2.7	الإنشاءات
Whole sale, retail & repairs	10.8	45.9	-	0.0	6.7	8.0	15.4	13.3	8.3	11.7	تجارة الجملة والتجزئة
Transport and storage	0.0	0.0	-	0.0	0.0	0.0	2.8	12.3	3.5	5.9	النقل والتخزين
Information and communication	92.2	100.0	-	0.0	0.0	1.2	9.2	1.5	2.4	7.2	المعلومات والاتصالات
Services	9.4	3.1	40.8	80.3	23.0	10.5	8.2	9.2	3.7	6.1	الخدمات

- : No observations

- : لا يوجد مشاهدات

جدول 11: نسبة المنشآت الاقتصادية في فلسطين التي تنتج عنها نفايات صلبة وتقوم بفصلها حسب نوع النفايات الصلبة والمنطقة، 2013

Table 11: Percentage of Economic Establishments in Palestine that Generate Solidwaste and Separate it by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste			:					
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
Ū	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
		waste	waste	waste	waste	waste	stones	metals	rubber	cartoon	
Palestine	11.1	16.0	40.8	20.0	14.2	9.6	12.5	11.7	6.7	9.3	فلسطين
West Bank	7.6	23.8	40.8	22.0	11.3	7.9	9.9	11.4	4.4	6.8	الضفة الغربية
North of West Bank	5.6	49.8	65.3	42.7	3.4	6.6	15.7	17.9	7.2	10.0	شمال الضفة الغربية
Middle of West Bank	11.5	5.2	50.0	4.0	13.5	1.0	6.7	14.9	5.3	7.0	وسط الضفة الغربية
South of West Bank	10.1	9.1	25.0	3.0	12.1	10.1	3.7	3.8	0.8	2.2	جنوب الضفة الغربية
Gaza Strip	20.9	1.5	0.0	17.4	25.7	14.5	14.5	12.7	12.6	14.6	قطاع غزة

جدول 12: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بوضع النفايات الصلبة المفصولة في أكياس عادية حسب نوع النفايات الصلبة والمنطقة، 2013
Table 12: Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Normal Bags by Type of Solidwaste and
Region, 2013

	Type of	separated se	olidwaste						الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
_	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
		waste	waste	waste	waste	waste	stones	metals	rubber	cartoon	
Palestine	60.0	1.0	14.6	29.4	35.2	52.0	68.7	59.6	78.8	75.4	فلسطين
West Bank	54.0	1.0	14.6	2.7	18.5	53.2	57.2	55.9	79.4	73.8	الضفة الغربية
North of West Bank	70.6	0.7	0.0	0.9	4.3	50.0	71.4	41.7	65.7	62.3	شمال الضفة الغربية
Middle of West Bank	57.0	0.0	0.0	26.0	26.2	39.5	2.7	77.7	96.1	99.2	وسط الضفة الغربية
South of West Bank	24.5	3.0	50.0	20.1	0.9	55.3	0.2	40.1	95.2	76.9	جنوب الضفة الغربية
Gaza Strip	66.0	0.0	0.0	71.5	63.6	50.2	74.8	71.3	78.3	77.0	قطاع غزة

جدول 13: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بوضع النفايات الصلبة المفصولة في أكياس خاصة حسب نوع النفايات الصلبة والمنطقة، 2013 Table 13: Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Special Bags by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste								
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	13.3	4.9	71.6	10.0	12.7	33.6	6.2	9.8	8.2	3.8	فلسطين
West Bank	12.2	4.9	71.6	4.7	12.7	32.6	11.7	12.9	8.5	3.6	الضفة الغربية
North of West Bank	19.0	2.8	53.2	0.0	24.9	49.8	14.5	15.8	12.7	4.6	شمال الضفة الغربية
Middle of West Bank	1.1	63.1	100.0	74.0	16.2	45.8	2.1	9.7	3.8	0.7	وسط الضفة الغربية
South of West Bank	12.5	3.0	50.0	40.3	0.9	22.2	0.0	12.2	1.2	5.3	جنوب الضفة الغربية
Gaza Strip	14.3	0.0	0.0	18.3	12.5	35.2	3.3	0.1	7.8	4.0	قطاع غزة

جدول 14: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بوضع النفايات الصلبة المفصولة في صناديق كرتونية حسب نوع النفايات الصلبة والمنطقة، 2013
Table 14: Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Cartoon Boxes by Type of Solidwaste and
Region, 2013

	Type of	separated se	olidwaste						الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
		waste	waste	waste	waste	waste	stones	metals	rubber	cartoon	
Palestine	0.2	73.4	0.0	57.5	3.5	0.0	5.2	8.8	0.0	2.5	فلسطين
West Bank	0.2	75.9	0.0	90.1	0.8	0.0	0.0	11.3	0.1	0.7	الضفة الغربية
North of West Bank	0.0	95.2	0.0	98.2	4.3	0.0	0.0	24.0	0.0	0.0	شمال الضفة الغربية
Middle of West Bank	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.1	0.0	وسط الضفة الغربية
South of West Bank	0.9	3.0	0.0	0.0	0.9	0.0	0.0	0.3	0.6	6.8	جنوب الضفة الغربية
Gaza Strip	0.1	0.0	0.0	6.0	8.0	0.0	8.0	1.1	0.0	4.4	قطاع غزة

جدول 15: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بوضع النفايات الصلبة المفصولة في صناديق معدنية حسب نوع النفايات الصلبة والمنطقة، 2013 Table 15: Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Metal Boxes by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste				نوع النفايات الصلبة المفصولة						
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة		
	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic & rubber	Paper &			
Palestine	5.5	waste 2.3	waste 0.0	waste 1.4	waste 26.5	waste 1.9	stones 5.7	metals 7.5	1000er 0.1	cartoon 2.0	فلسطين		
West Bank	3.8	1.9	0.0	0.8	35.8	2.8	15.5	8.8	0.2	3.5	الضفة الغربية		
North of West Bank	0.3	0.6	0.0	0.0	0.0	0.2	7.2	2.8	0.1	4.6	شمال الضفة الغربية		
Middle of West Bank	0.0	36.9	0.0	0.0	42.6	0.0	90.0	3.1	0.0	0.1	وسط الضفة الغربية		
South of West Bank	13.4	0.0	0.0	19.5	25.6	4.3	38.0	47.4	1.9	5.7	جنوب الضفة الغربية		
Gaza Strip	7.1	14.3	0.0	2.5	10.6	0.6	0.5	3.2	0.1	0.5	قطاع غزة		

جدول 16: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بوضع النفايات الصلبة المفصولة في صناديق بلاستيك حسب نوع النفايات الصلبة والمنطقة، 2013 Table 16: Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Plastic Boxes by Type of Solidwaste and Region, 2013

	Type of	separated se	olidwaste					:	الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	7.9	3.4	13.8	0.5	21.4	5.7	8.4	6.3	10.2	7.5	فلسطين
West Bank	3.5	1.1	13.8	0.8	30.9	0.1	1.5	0.6	6.2	7.1	الضفة الغربية
North of West Bank	0.0	0.7	46.8	0.0	47.7	0.0	1.6	1.1	11.1	10.5	شمال الضفة الغربية
Middle of West Bank	0.0	0.0	0.0	0.0	14.5	14.7	5.2	0.3	0.0	0.0	وسط الضفة الغربية
South of West Bank	12.5	3.0	0.0	20.1	70.9	0.0	0.0	0.0	1.2	5.3	جنوب الضفة الغربية
Gaza Strip	12.4	71.7	0.0	0.0	5.3	14.1	12.0	24.2	13.8	7.8	قطاع غزة

جدول 17: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بجمع النفايات الصلبة المفصولة من 1 إلى 3 مرات أسبوعياً حسب نوع النفايات الصلبة والمنطقة، 2013 Table 17: Percentage of Economic Establishments in Palestine that Collect Separated Solidwaste from 1-3 Times Weekly by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste								
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	64.6	78.9	50.1	57.2	58.2	14.0	38.8	27.7	24.3	37.8	فلسطين
West Bank	67.0	78.9	50.1	92.7	49.6	22.7	54.3	25.3	22.5	41.7	الضفة الغربية
North of West Bank	86.4	97.2	100.0	99.1	79.1	13.8	51.9	45.8	39.0	59.8	شمال الضفة الغربية
Middle of West Bank	42.4	36.9	50.0	22.0	30.4	27.1	0.0	0.7	2.2	8.4	وسط الضفة الغربية
South of West Bank	60.7	3.0	0.0	19.5	94.7	28.0	79.5	27.4	3.6	19.2	جنوب الضفة الغربية
Gaza Strip	62.2	0.0	0.0	1.2	72.9	0.8	30.6	35.3	26.0	33.9	قطاع غزة

جدول 18: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بجمع النفايات الصلبة المفصولة من 4 إلى 6 مرات أسبوعياً حسب نوع النفايات الصلبة والمنطقة، 2013
Table 18: Percentage of Economic Establishments in Palestine that Collect Separated Solidwaste from 4-6 Times Weekly by Type of Solidwaste and
Region, 2013

	Type of	separated se	olidwaste						الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	29.7	2.9	0.0	31.9	31.6	14.6	13.1	37.0	24.8	24.1	فلسطين
West Bank	27.7	0.5	0.0	1.1	40.4	14.7	13.6	48.5	40.1	30.9	الضفة الغربية
North of West Bank	9.6	0.0	0.0	0.0	4.3	0.0	10.7	25.2	11.5	5.7	شمال الضفة الغربية
Middle of West Bank	57.6	0.0	0.0	26.0	57.9	39.5	96.3	86.6	84.4	81.7	وسط الضفة الغربية
South of West Bank	26.3	3.0	0.0	0.0	1.8	23.1	7.6	15.6	17.5	50.3	جنوب الضفة الغربية
Gaza Strip	31.7	71.7	0.0	80.5	16.6	14.4	12.8	0.4	11.2	17.2	قطاع غزة

جدول 19: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بجمع النفايات الصلبة المفصولة 7 مرات فأكثر أسبوعياً حسب نوع النفايات الصلبة والمنطقة، 2013 Table 19: Percentage of Economic Establishments in Palestine that Collect Separated Solidwaste from 7 Times and More in Weekly by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste						الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
C C	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
		waste	waste	waste	waste	waste	stones	metals	rubber	cartoon	
Palestine	5.7	20.8	49.9	10.9	10.2	71.4	48.1	35.3	50.8	38.0	فلسطين
West Bank	5.4	20.6	49.9	6.2	9.9	62.6	32.2	26.2	37.4	27.4	الضفة الغربية
North of West Bank	4.0	2.8	0.0	0.9	16.6	86.2	37.5	29.1	49.5	34.5	شمال الضفة الغربية
Middle of West Bank	0.0	63.1	50.0	52.0	11.8	33.3	3.7	12.7	13.5	9.9	وسط الضفة الغربية
South of West Bank	13.0	94.0	100.0	80.5	3.5	48.9	12.9	57.0	78.9	30.5	جنوب الضفة الغربية
Gaza Strip	6.1	28.3	0.0	18.3	10.5	84.9	56.5	64.3	62.8	48.9	قطاع غزة

جدول 20: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بنقل النفايات الصلبة المفصولة يدوياً داخل المؤسسة حسب نوع النفايات الصلبة والمنطقة، 2013 Table 20: Percentage of Economic Establishments in Palestine that Transform Separated Solidwaste Manually Inside the Establishment by Type of Solidwaste and Region, 2013

	Type of	separated se	olidwaste						الصلبة المفصولة	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
-	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
		waste	waste	waste	waste	waste	stones	metals	rubber	cartoon	
Palestine	78.1	95.8	50.1	41.6	55.4	86.6	83.8	78.8	89.4	92.5	فلسطين
West Bank	99.0	96.2	50.1	5.5	67.1	92.5	73.7	81.8	87.0	90.7	الضفة الغربية
North of West Bank	98.6	98.7	100.0	1.8	92.0	99.5	89.1	64.0	79.2	86.3	شمال الضفة الغربية
Middle of West Bank	99.4	80.7	50.0	52.0	53.7	39.5	10.0	99.6	96.5	99.6	وسط الضفة الغربية
South of West Bank	99.1	87.9	0.0	39.6	97.3	89.0	12.9	90.7	96.4	93.6	جنوب الضفة الغربية
Gaza Strip	57.1	86.0	0.0	98.7	35.6	77.6	89.3	69.4	91.5	94.4	قطاع غزة

جدول 21: نسبة المنشآت الاقتصادية في فلسطين التي تقوم بنقل النفايات الصلبة المفصولة بواسطة آلات خاصة داخل المؤسسة حسب نوع النفايات الصلبة والمنطقة، 2013 Table 21: Percentage of Economic Establishments in Palestine that Transform Separated Solidwaste by Special Tools Inside the Establishment by Type of Solidwaste and Region, 2013

	Type of	separated s	olidwaste					2	الصلبة المفصولا	نوع النفايات	
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
	Others	Chemical	Radioactive	Infectious	Sharp	Organic	Soil &	Glass &	Plastic &	Paper &	
Palestine	6.7	waste 1.2	waste 20.7	waste 1.7	waste 23.6	waste 9.8	stones 11.0	metals 11.8	rubber 4.6	cartoon 4.3	. t. tà
T diestine	0.7	1.2	20.7		20.0	5.0	11.0	11.0	4.0	4.0	فلسطين
West Bank	0.8	1.2	20.7	2.1	31.7	6.9	20.7	11.3	5.8	5.8	الضفة الغربية
North of West Bank	1.1	0.6	0.0	0.0	0.0	0.2	3.9	24.0	10.3	9.1	شمال الضفة الغربية
Middle of West Bank	0.6	19.3	50.0	48.0	46.3	41.8	90.0	0.2	0.1	0.2	وسط الضفة الغربية
South of West Bank	0.5	0.0	0.0	0.0	0.0	10.4	86.9	0.0	1.2	0.4	جنوب الضفة الغربية
Gaza Strip	12.6	0.0	0.0	1.3	9.8	14.2	5.9	13.3	3.5	2.8	قطاع غزة

	Type of	Type of separated solidwaste لبة المفصونة									
Region	اخرى	نفايات كيميائية	نفايات مشعة	نفايات معدية	نفايات حادة	نفايات عضوية	تراب وحجارة	زجاج ومعادن	بلاستك ومطاط	ورق وكرتون	المنطقة
Ū	Others	Chemical waste	Radioactive waste	Infectious waste	Sharp waste	Organic waste	Soil & stones	Glass & metals	Plastic & rubber	Paper & cartoon	
Palestine	15.2	3.0	29.3	92.5	20.9	3.7	5.1	9.4	6.0	3.2	فلسطين
West Bank	0.2	2.6	29.3	92.5	1.1	0.6	5.6	6.9	7.2	3.6	الضفة الغربية
North of West Bank	0.3	0.7	0.0	98.2	8.0	0.3	7.0	12.1	10.5	4.6	شمال الضفة الغربية
Middle of West Bank	0.0	0.0	0.0	0.0	0.0	18.6	0.0	0.2	3.4	0.2	وسط الضفة الغربية
South of West Bank	0.4	12.1	100.0	60.4	2.7	0.6	0.2	9.3	2.4	6.1	جنوب الضفة الغربية
Gaza Strip	30.3	14.0	0.0	0.0	54.6	8.2	4.9	17.3	4.9	2.8	قطاع غزة

جدول 22: نسبة المنشآت الاقتصادية فى فلسطين التى تقوم بنقل النفايات الصلبة المفصولة يدوياً وبآلات خاصة داخل المؤسسة حسب نوع النفايات الصلبة والمنطقة، 2013 Table 22: Percentage of Economic Establishments in Palestine that Transform Separated Solidwaste Both Manually and by Special Tools Inside the Establishment by Type of Solidwaste and Region, 2013

جدول 23: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب الوسائل التي يتم وضع النفايات الصلبة غير المفصولة فيها والنشاط الاقتصادي، 2013 Table 23: Percentage Distribution of Economic Establishments in Palestine by the Means Where Non-Separated Solidwaste Put in and Economic Activity, 2013

	المجموع		ولة فيها	الصلبة غير المفص	متخدمة لوضع النفايات	الوسائل المس		
Feenemie estivity			النشاط الاقتصادى					
Economic activity	Total	أخرى	صناديق بلاستيك	صناديق معدنية	صناديق كرتونية	أكياس خاصة	أكياس عادية	التشاكر الإصطادي
		Others	Plastic boxes	Metal boxes	Carton boxes	Special bags	Nylon bags	
Palestine	100	1.3	2.8	3.5	3.9	6.4	82.1	فاسطين
Industrial activities	100	4.0	4.6	6.2	2.2	6.0	77.0	الأنشطة الصناعية
Constructions	100	0.7	8.1	8.2	3.3	1.0	78.7	الإنشاءات
Whole sale, retail & repairs	100	1.1	3.2	4.3	5.9	4.2	81.3	تجارة الجملة والتجزئة
Transport and storage	100	0.0	5.9	2.5	3.2	4.3	84.1	النقل والتخزين
Information and communication	100	0.0	4.2	0.2	0.0	11.7	83.9	المعلومات والاتصالات
Services	100	0.0	1.0	0.7	1.2	10.8	86.3	الخدمات

جدول 24: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب الوسائل التي يتم وضع النفايات الصلبة غير المفصولة فيها والمنطقة، 2013 Table 24: Percentage Distribution of Economic Establishments in Palestine by the Means Where Non-Separated Solidwaste Put in and Region, 2013

	المجموع		ولة فيها	الصلبة غير المفصو	متخدمة لوضع النفايات	الوسائل المس			
Region			The means where non-separated solidwaste put in						
Region	Total	أخرى	صناديق بلاستيك	صناديق معدنية	صناديق كرتونية	أكياس خاصة	أكياس عادية		
		Others	Plastic boxes	Metal boxes	Carton boxes	Special bags	Nylon bags		
Palestine	100	1.3	2.8	3.5	3.9	6.4	82.1	فلسطين	
West Bank	100	1.2	3.2	3.8	4.4	7.4	80.0	الضفة الغربية	
North of West Bank	100	1.7	2.3	1.9	4.7	5.1	84.3	شمال الضفة الغربية	
Middle of West Bank	100	0.2	3.3	2.4	3.4	14.2	76.5	وسط الضفة الغربية	
South of West Bank	100	1.6	4.0	7.9	5.0	4.8	76.7	جنوب الضفة الغربية	
Gaza Strip	100	1.2	2.3	2.8	2.8	4.1	86.8	قطاع غزة	

جدول 25: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة نقل النفايات الصلبة غير المفصولة داخل المنشأة والنشاط

الاقتصادى، 2013

Table 25: Percentage Distribution of Economic Establishments in Palestine by the Transportation Method of Non-Separated Solidwaste Inside the Establishment and Economic Activity, 2013

Economic activity	المجموع	ر المفصولة داخل المنشأة Transportation method o inside the e	~	النشاط الاقتصادي	
	Total	بالطريقنين معاً	آلات خاصة	يدوياً	
		Both methods	Special tools	Manually	
Palestine	100	1.7	3.6	94.7	فلسطين
Industrial activities	100	2.1	4.8	93.1	الأنشطة الصناعية
Constructions	100	2.0	3.6	94.4	الإنشاءات
Whole sale, retail & repairs	100	2.0	3.1	94.9	تجارة الجملة والتجزئة
Transport and storage	100	0.2	1.6	98.2	النقل والتخزين
Information and communication	100	2.0	0.3	97.7	المعلومات والاتصالات
Services	100	0.7	4.3	95.0	الخدمات

جدول 26: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة نقل النفايات الصلبة غير المفصولة داخل المنشأة والمنطقة، 2013 Table 26: Percentage Distribution of Economic Establishments in Palestine by the Transportation Method of Non-Separated Solidwaste Inside the Establishment and Region, 2013

	المجموع	بر المفصولة داخل المنشأة	نقل النفايات الصلبة غب	طريقة					
Region		-	Transportation method of non-separated solidwaste inside the establishment						
	Total	بالطريقتين معاً	آلات خاصة	يدوياً					
		Both methods	Special tools	Manually					
Palestine	100	1.7	3.6	94.7	فلسطين				
West Bank	100	1.7	4.7	93.6	الضفة الغربية				
North of West Bank	100	1.2	2.6	96.2	شمال الضفة الغربية				
Middle of West Bank	100	0.8	9.7	89.5	وسط الضفة الغربية				
South of West Bank	100	3.2	3.3	93.5	جنوب الضفة الغربية				
Gaza Strip	100	1.6	1.3	97.1	قطاع غزة				

جدول 27: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب دورية جمع النفايات الصلبة غير المفصولة فيها والنشاط

الاقتصادي، 2013

	المجموع	Periodicity (weekly)	الدورية (أسبوعياً)	
Economic activity	Total	مرات فأكثر 7 times and more	من 4 الی 6 مرات 4 to 6 times	من 1 الی 3 مرات 1 to 3 times	النشاط الاقتصادي
Delection	400				
Palestine	100	22.2	29.5	48.3	فاسطين
Industrial activities	100	18.6	27.9	53.5	الأنشطة الصناعية
Constructions	100	15.0	35.1	49.9	الإنشاءات
Whole sale, retail & repairs	100	23.4	30.0	46.6	تجارة الجملة والتجزئة
Transport and storage	100	32.7	25.0	42.3	النقل والتخزين
Information and communication	100	12.1	21.2	66.7	المطومات والاتصالات
Services	100	21.8	29.5	48.7	الخدمات

Table 27: Percentage Distribution of Economic Establishments in Palestine by the Periodicity of Non-Separated Solidwaste Collection and Economic Activity, 2013

جدول 28: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب دورية جمع النفايات الصلبة غير المفصولة فيها والمنطقة، 2013 Table 28: Percentage Distribution of Economic Establishments in Palestine by the Periodicity of Non-Separated Solidwaste Collection and Region, 2013

	المجموع	Periodicity (weekly)		الدورية (أسبوعياً)	
Region	Total	7 مرات فأكثر	من 4 الى 6 مرات	من 1 الى 3 مرات	المنطقة
		7 times and more	4 to 6 times	1 to 3 times	
Palestine	100	22.2	29.5	48.3	فلسطين
West Bank	100	22.2	28.5	49.3	الضفة الغربية
North of West Bank	100	24.0	20.0	56.0	شمال الضفة الغربية
Middle of West Bank	100	12.5	42.6	44.9	وسط الضفة الغربية
South of West Bank	100	28.3	28.3	43.4	جنوب الضفة الغربية
Gaza Strip	100	22.2	31.6	46.2	قطاع غزة

جدول 29: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة التعامل مع النفايات بعد جمعها مباشرة من المنشأة والنشاط الاقتصادي، 2013

Table 29: Percentage Distribution of Economic Establishments in Palestine by How to Deal Directly with Waste after Collected from theEstablishment and Economic Activity, 2013

	المجموع		ទ	ت بعد جمعها مباشرة من المنشأ	طريقة التعامل مع النفايا.		
			How to deal dire	ctly with waste after o	ollected from the est	ablishment	
	Total	أخرى	تقوم المنشأة بإلقاء	تقوم المنشأة بنقل النفايات إلى	تقوم الهيئة المحلية بتجميع	تقوم المنشأة بنقل النفايات	
Economic activity			النفايات بشكل عشوائي	أقرب مكب نفايات	النفايات مباشرة من المنشأة	إلى اقرب حاوية	النشاط الاقتصادي
		Others	Establishment throw out the waste randomly	Establishment transfer the waste to the nearest dump site	Local authority collect the waste directly from Establishment	Establishment transfer the waste to the nearest container	
Palestine	100	3.0	1.1	2.5	11.8	81.6	فلسطين
Industrial activities	100	6.3	3.4	3.9	6.0	80.4	الأنشطة الصناعية
Constructions	100	4.9	0.0	3.7	12.4	79.0	الإنشاءات
Whole sale, retail & repairs	100	3.3	0.9	2.9	14.1	78.8	تجارة الجملة والتجزئة
Transport and storage	100	0.0	2.1	3.7	6.5	87.7	النقل والتخزين
Information and communication	100	5.1	0.0	3.5	1.7	89.7	المعلومات والاتصالات
Services	100	0.7	0.4	1.1	10.3	87.5	الخدمات

جدول 30: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب طريقة التعامل مع النفايات بعد جمعها مباشرة من المنشأة والمنطقة، 2013 Table 30: Percentage Distribution of Economic Establishments in Palestine by How to Deal Directly with Waste after Collected from the Establishment and Region, 2013

	المجموع		اة	ت بعد جمعها مباشرة من المنشر	طريقة التعامل مع النفايا		
			How to deal dire	ctly with waste after o	collected from the est	tablishment	
	Total	أخرى	تقوم المنشأة بإلقاء	تقوم المنشأة بنقل النفايات	تقوم الهيئة المحلية بتجميع	تقوم المنشأة بنقل النفايات	
Region			النفايات بشكل عشوائي	إلى أقرب مكب نفايات	النفايات مباشرة من المنشأة	إلى اقرب حاوية	المنطقة
		Others	Establishment throw out the waste randomly	Establishment transfer the waste to the nearest dump site	Local authority collect the waste directly from establishment	Establishment transfer the waste to the nearest container	
Palestine	100	3.0	1.1	2.5	11.8	81.6	فاسطين
West Bank	100	2.2	0.6	2.1	4.7	90.4	الضفة الغربية
North of West Bank	100	3.4	0.5	2.2	8.6	85.3	شمال الضفة الغربية
Middle of West Bank	100	0.5	0.0	2.9	1.4	95.2	وسط الضفة الغربية
South of West Bank	100	2.0	1.1	1.2	1.9	93.8	جنوب الضفة الغربية
Gaza Strip	100	4.5	2.3	3.5	26.5	63.2	قطاع غزة

جدول 31: التوزيع النسبى للمنشآت الاقتصادية في فلسطين حسب نوع الحاوية المستخدمة لجمع النفايات الصلبة والنشاط

الاقتصادي، 2013

Table 31: Percentage Distribution of Economic Establishments in Palestine by Type ofContainer Which Used for Solidwaste Collection and Economic Activity, 2013

	المجموع	Type of contain	ner		نوع الحاوية			
		حاوية مغلقة خاصبة	حاوية مكشوفة	حاوية مغلقة	حاوية مكشوفة			
		بالمنشأة	خاصبة بالمنشأة	خاصة بالبلدية	خاصة بالبلدية			
Economic activity	vity Total 100	Total Establishmen closed contair		Establishment open container	Municipality closed container	Municipality open container	النشاط الاقتصادي	
Palestine	100	0.5	1.0	8.0	90.5	فلسطين		
Industrial activities	100	0.0	1.4	5.9	92.7	الأنشطة الصناعية		
Constructions	100	0.0	0.0	2.0	98.0	الإنشاءات		
Whole sale, retail & repairs	100	0.6	1.3	9.1	89.0	تجارة الجملة والتجزئة		
Transport and storage	100	0.0	1.4	9.8	88.8	النقل والتخزين		
Information and communication	100	0.0	0.0	3.2	96.8	المعلومات والاتصالات		
Services	100	0.5	0.5	7.1	91.9	الخدمات		

جدول 32: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب نوع الحاوية المستخدمة لجمع النفايات الصلبة والمنطقة، 2013 Table 32: Percentage Distribution of Economic Establishments in Palestine by Type of Container Which Used for Solidwaste Collection and Region, 2013

	المجموع	Type of conta	ainer			
		حاوية مغلقة خاصة	حاوية مكشوفة	حاوية مغلقة	حاوية مكشوفة	
Region		بالمنشأة	خاصة بالمنشأة	خاصبة بالبلدية	خاصبة بالبلدية	المنطقة
	Total	Establishment closed container	Establishment open container	Municipality closed container	Municipality open container	
Palestine	100	0.5	1.0	8.0	90.5	فلسطين
West Bank	100	0.6	1.2	9.4	88.8	الضفة الغربية
North of West Bank	100	1.2	2.1	12.9	83.8	شمال الضفة الغربية
Middle of West Bank	100	0.5	0.2	7.5	91.8	وسط الضفة الغربية
South of West Bank	100	0.0	0.7	6.5	92.8	جنوب الضفة الغربية
Gaza Strip	100	0.0	0.8	3.9	95.3	قطاع غزة

جدول 33: التوزيع النسبى للمنشآت الاقتصادية في فلسطين حسب الجهة التي تقوم بالتخلص من النفايات والنشاط

الاقتصادى، 2013

Table 33: Percentage Distribution of Economic Establishments in Palestine by the Doer of SolidwasteDisposal and Economic Activity, 2013

	المجموع		ايات				
			Doe	r of solidwa	ste dispos	al	
Economic activity		أخرى	وكالة الغوث	متعهد خاص	هيئة محلية	المنشأة نفسها	النشاط الاقتصادي
	Total	Others	UNRWA	Private	Local	The	
				contractor	Authority	establishment	
Palestine	100	3.5	3.1	1.9	83.1	8.4	فاسطين
Industrial activities	100	3.5	2.5	1.9	79.6	12.5	الأنشطة الصناعية
Constructions	100	0.3	0.0	4.8	87.7	7.2	الإنشاءات
Whole sale, retail & repairs	100	2.8	3.4	2.3	83.8	7.7	تجارة الجملة والتجزئة
Transport and storage	100	1.4	3.4	1.2	88.6	5.4	النقل والتخزين
Information and communication	100	0.2	3.8	3.8	78.9	13.3	المعلومات والاتصالات
Services	100	5.2	2.9	1.1	83.3	7.5	الخدمات

جدول 34: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب الجهة التي تقوم بالتخلص من النفايات والمنطقة، 2013 Table 34: Percentage Distribution of Economic Establishments in Palestine by the Doer of Solidwaste Disposal and Region, 2013

	المجموع		ונ				
		Doer of solidwaste disposal					
Region	Total	أخرى	وكالة الغوث	متعهد خاص	هيئة محلية	المنشأة نفسها	المنطقة
		Others	UNRWA	Private	Local	The	
				contractor	Authority	establishment	
Palestine	100	3.5	3.1	1.9	83.1	8.4	فلسطين
West Bank	100	4.8	1.9	2.5	84.9	5.9	الضفة الغربية
North of West Bank	100	2.1	1.9	4.6	84.4	7.0	شمال الضفة الغربية
Middle of West Bank	100	14.8	3.1	0.0	77.8	4.3	وسط الضفة الغربية
South of West Bank	100	0.1	0.8	1.7	91.8	5.6	جنوب الضفة الغربية
Gaza Strip	100	1.0	5.6	0.7	79.3	13.4	قطاع غزة

جدول 35: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب مكان التخلص النهائي من النفايات والنشاط الاقتصادي، 2013

	المجموع					
Economic activity	Total	أخرى	إلقاؤها بشكل عشوائي	مکب خاص	مكب للهيئة المحلية	النشاط الاقتصادي
		Others	Disposed randomly	Private dumping site	Local Authority dumping site	
Palestine	100	0.7	1.0	16.7	81.6	فلسطين
Industrial activities	100	0.8	3.2	16.8	79.2	الأنشطة الصناعية
Constructions	100	0.0	0.0	12.2	87.8	الإنشاءات
Whole sale, retail & repairs	100	0.8	0.8	18.9	79.5	تجارة الجملة والتجزئة
Transport and storage	100	1.0	1.2	15.1	82.7	النقل والتخزين
Information and communication	100	1.2	0.0	8.3	90.5	المعلومات والاتصالات
Services	100	0.6	0.4	12.4	86.6	الخدمات

Table 35: Percentage Distribution of Economic Establishments in Palestine by the Solidwaste FinalDisposal Place and Economic Activity, 2013

جدول 36: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب مكان التخلص النهائي من النفايات والمنطقة، 2013 Table 36: Percentage Distribution of Economic Establishment in Palestine by the Solidwaste Final Disposal Place and Region, 2013

	المجموع		من النفايات	ما			
		Solidwaste final disposal place					
Region	Total	أخرى	إلقاؤها بشكل عشوائي	مكب خاص	مكب للهيئة المحلية	المنطقة	
		Others	Disposed randomly	Private dumping site	Local authority dumping site		
Palestine	100	0.7	1.0	16.7	81.6	فلسطين	
West Bank	100	0.6	0.9	20.7	77.8	الضفة الغربية	
North of West Bank	100	0.1	1.1	34.8	64.0	شمال الضفة الغربية	
Middle of West Bank	100	0.5	0.2	18.0	81.3	وسط الضفة الغربية	
South of West Bank	100	1.4	1.2	2.7	94.7	جنوب الضفة الغربية	
Gaza Strip	100	1.0	1.1	8.4	89.5	قطاع غزة	

جدول 37: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب دورية التخلص النهائي من النفايات والنشاط الاقتصادي، 2013 Table 37: Percentage Distribution of Economic Establishments in Palastina by the Pariodicity of Einal

Table 37: Percentage Distribution of Economic Establishments in Palestine by the Periodicity of Final
Disposal Waste and Economic Activity, 2013

	المجموع	المجموع Periodicity (Weekly)		الدورية (أسبوعياً)	النشاط الاقتصادي	
Economic activity	Total	من 4 الی 6 مرات 7 مرات فأكثر Total		من 1 الي 3 مرات		
		7 times and more	4 to 6 times	1 to 3 times		
Palestine	100	25.1	31.5	43.4	فلسطين	
Industrial activities	100	18.9	32.3	48.8	الأنشطة الصناعية	
Constructions	100	9.2	35.3	55.5	الإنشاءات	
Whole sale, retail & repairs	100	28.8	29.0	42.2	تجارة الجملة والتجزئة	
Transport and storage	100	22.2	42.6	35.2	النقل والتخزين	
Information and communication	100	17.7	35.3	47.0	المعلومات والاتصالات	
Services	100	21.0	35.9	43.1	الخدمات	

جدول 38: التوزيع النسبي للمنشآت الاقتصادية في فلسطين حسب دورية التخلص النهائي من النفايات والمنطقة، 2013 Table 38: Percentage Distribution of Economic Establishments in Palestine by the Periodicity of Final Disposal Waste and Region, 2013

	المجموع	Periodicity (We	ekly)	الدورية (أسبوعياً)		
Region	Total	7 مرات فأكثر	من 4 الى 6 مرات	من 1 الى 3 مرات	المنطقة	
		7 times and more	4 to 6 times	1 to 3 times		
Palestine	100	25.1	31.5	43.4	فلسطين	
West Bank	100	24.0	32.1	43.9	الضفة الغربية	
North of West Bank	100	30.6	26.4	43.0	شمال الضفة الغربية	
Middle of West Bank	100	14.2	39.3	46.5	وسط الضفة الغربية	
South of West Bank	100	22.8	34.2	43.0	جنوب الضفة الغربية	
Gaza Strip	100	27.2	30.4	42.4	قطاع غزة	



State of Palestine Palestinian Central Bureau of Statistics

Environmental Economic Survey, 2013 Main Findings

October, 2013

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

This document is prepared in accordance with the standard procedures stated in the Code of Practice for Palestine Official Statistics 2006

© October, 2013. All rights reserved.

Suggested Citation:

Palestinian Central Bureau of Statistics, 2013. *Environmental Economic Survey - 2013: Main Findings*. Ramallah - Palestine.

All correspondence should be directed to: **Palestinian Central Bureau of Statistics P.O.Box 1647 Ramallah, Palestine.**

Tel: (972/970) 2 298 2700 Fax: (972/970) 2 298 2710 Toll Free: 1800300300 E-Mail: <u>diwan@pcbs.gov.ps</u> web-site: http://www.pcbs.gov.ps

Reference ID: 2010

Acknowledgment

The Palestinian Central Bureau of Statistics (PCBS) extends its deep appreciations to all Palestinian Establishments who contributed to the success of collecting the survey data and to all workers in the survey for being well dedicated in performing their duties.

The survey of Environmental Economic, 2013 in Palestine has been planned and conducted by a technical team from PCBS and with joint funding by the State of Palestine and the Core Funding Group (CFG) for the year 2013 represented by the Representative Office of Norway to State of Palestine 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.

PCBS: Environmental Economic Survey, 2013 - Main Findings

Team Work

• Technical Committee

Head of the Committee

- Hiba Hindi Mohammad Antari Jafer Qadous Laila Ghannam Amneh Al-Natsheh Mahmoud Souf Anas Ahmad Sherin Aqel
- Report Preparation
 Mahmoud Souf
 Safia Ibrahim
 Zahran Ikhlaif
- Maps Design Ihtisab Obidi
- Graphic Design Ahmad Sawalmeh
- **Dissemination Standard** Hanan Janajreh
- **Preliminary Review** Mahmoud Abd-Alrhman
- Final Review Mahmoud Jaradat
- Overall Supervision Ola Awad

President of PCBS

PCBS: Environmental Economic Survey, 2013 - Main Findings

Table of Contents

Subject		Page
	List of Tables Introduction	
Chapter One:	Main Findings	[15]
	1.1 Water	[15]
	1.2 Wastewater	[15]
	1.3 Solid waste	[16]
Chapter Two:	Methodology and Data Quality	[19]
	2.1 Survey Objectives	[19]
	2.2 Questionnaire	[19]
	2.3 Target Population	[19]
	2.4 Fieldwork	[20]
	2.5 Data Processing	[20]
	2.6 Accuracy	[21]
	2.7 Comparability	[22]
	2.8 Data Quality Assurance Procedures	[23]
	2.9 Special Technical Notes	[23]
Chapter Three:	Concepts and Definitions	[25]
	References	[27]
	Tables	39

PCBS: Environmental Economic Survey, 2013 - Main Findings

List of Tables

Table		Page
Table 1:	Main Selected Environmental Indicators about the Activity of the Economic Establishments in Palestine for the Years 2004, 2006, 2008, 2009, 2011, 2013	41
Table 2:	Quantity of Consumed Water in the Economic Establishments and the Average Water Consumption Per Establishments in Palestine by Economic Activity, 2013	42
Table 3:	Quantity of Consumed Water in the Economic Establishments and the Average Water Consumption Per Establishments in Palestine by Region, 2013	42
Table 4:	Percentage Distribution of Economic Establishments in Palestine by Means of Obtaining Water and Economic Activity, 2013	43
Table 5:	Percentage Distribution of Economic Establishments in Palestine by Means of Obtaining Water and Region, 2013	43
Table 6:	Percentage Distribution of Economic Establishments in Palestine by Wastewater Disposal Method and Economic Activity, 2013	44
Table 7:	Percentage Distribution of Economic Establishments in Palestine by Wastewater Disposal Method and Region, 2013	44
Table 8:	Percentage of Economic Establishments in Palestine by Type of Generated Solidwaste and Economic Activity, 2013	45
Table 9:	Percentage of Economic Establishments in Palestine by Type of Generated Solidwaste and Region, 2013	45
Table 10:	Percentage of Economic Establishments in Palestine that Generate Solidwaste and Separate it by Type of Solidwaste and Economic Activity, 2013	46
Table 11:	Percentage of Economic Establishments in Palestine that Generate Solidwaste and Separate it by Type of Solidwaste and Region, 2013	46
Table 12:	Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Normal Bags by Type of Solidwaste and Region, 2013	47
Table 13:	Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Special Bags by Type of Solidwaste and Region, 2013	47
Table 14:	Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Cartoon Boxes by Type of Solidwaste and Region, 2013	48
Table 15:	Percentage of Economic Establishments in Palestine that Put Separated Solidwaste in Metal Boxes by Type of Solidwaste and Region, 2013	48

Region, 2013

Table

Table 16:

Percentage	of	Economic	Establishments	in	Palestine	that	Put	49
Separated 3	Solid	waste in Pl	lastic Boxes by '	Тур	e of Solidy	waste	and	

- Percentage of Economic Establishments in Palestine that Collect 49 **Table 17:** Separated Solidwaste from 1-3 Times Weekly by Type of Solidwaste and Region, 2013
- Table 18: Percentage of Economic Establishments in Palestine that Collect 50 Separated Solidwaste from 4-6 Times Weekly by Type of Solidwaste and Region, 2013
- Percentage of Economic Establishments in Palestine that Collect 50 Table 19: Separated Solidwaste from 7 Times and More in Weekly by Type of Solidwaste and Region, 2013
- Percentage of Economic Establishments in Palestine that Transform Table 20: 51 Separated Solidwaste Manually Inside the Establishment by Type of Solidwaste and Region, 2013
- Table 21: Percentage of Economic Establishments in Palestine that Transform 51 Separated Solidwaste by Special Tools Inside the Establishment by Type of Solidwaste and Region, 2013
- Table 22: Percentage of Economic Establishments in Palestine that Transform 52 Separated Solidwaste Both Manually and by Special Tools Inside the Establishment by Type of Solidwaste and Region, 2013
- **Table 23:** Percentage Distribution of Economic Establishments in Palestine by 52 the Means Where Non-Separated Solidwaste Put in and Economic Activity, 2013
- Percentage Distribution of Economic Establishments in Palestine by Table 24: 53 the Means Where Non-Separated Solidwaste Put in and Region, 2013
- Table 25: Percentage Distribution of Economic Establishments in Palestine by 53 the Transportation Method of Non-Separated Solidwaste Inside the Establishment and Economic Activity, 2013
- Percentage Distribution of Economic Establishments in Palestine by Table 26: 54 the Transportation Method of Non-Separated Solidwaste Inside the Establishment and Region, 2013
- **Table 27:** Percentage Distribution of Economic Establishments in Palestine by 55 the Periodicity of Non-Separated Solidwaste Collection and Economic Activity, 2013
- **Table 28:** Percentage Distribution of Economic Establishments in Palestine by 55 the Periodicity of Non-Separated Solidwaste Collection and Region, 2013
- Percentage Distribution of Economic Establishments in Palestine by **Table 29:** 56 How to Deal Directly with Waste after Collected from the Establishment and Economic Activity, 2013

Table

Table 30:	Percentage Distribution of Economic Establishments in Palestine by										57
	How	to	Deal	Directly	with	Waste	after	Collected	from	the	
	Estab	lishı	ment a	nd Region	, 2013						

- Table 31: Percentage Distribution of Economic Establishments in Palestine by Type of Container Which Used for Solidwaste Collection and Economic Activity, 2013
- **Table 32:**Percentage Distribution of Economic Establishments in Palestine by
Type of Container Which Used for Solidwaste Collection and
Region, 201358
- **Table 33:** Percentage Distribution of Economic Establishments in Palestine by**59**the Doer of Solidwaste Disposal and Economic Activity, 2013
- **Table 34:** Percentage Distribution of Economic Establishments in Palestine by**59**the Doer of Solidwaste Disposal and Region, 2013
- **Table 35:**Percentage Distribution of Economic Establishments in Palestine by
the Solidwaste Final Disposal Place and Economic Activity, 201360
- **Table 36:**Percentage Distribution of Economic Establishment in Palestine by
the Solidwaste Final Disposal Place and Region, 201360
- Table 37:Percentage Distribution of Economic Establishments in Palestine by
the Periodicity of Final Disposal Waste and Economic
Activity, 201361
- **Table 38:** Percentage Distribution of Economic Establishments in Palestine by61the Periodicity of Final Disposal Waste and Region, 2013

PCBS: Environmental Economic Survey, 2013 - Main Findings
Introduction

The attention of the world is increasingly drawn to environmental issues and environmental statistics on the economic sector are essential in order to assist with policy making and legislation that reduces the pressure on the environment, after many years of environmental neglect and the absence of standards and rules during the Israeli occupation, concern about the environment has grown in Palestine, as it has internationally.

PCBS conducted the Environmental Economic Survey during the period 16/04/2013 to 30/06/2013; with the primary objective of providing reliable data on the main environmental indicators in economic establishments in Palestine, including the methods used to handle solid waste and wastewater, the survey also includes the role of the local authority in providing a suitable environment that minimizes the negative effect of different types of pollution from economic activities.

This report is divided into three chapters: The first chapter defines the main findings of the report, the second chapter explains the methodology of data collection and tabulation, in addition to details regarding data quality and estimations of the data sources of this report, and the third chapter contains the concepts and definitions used in this report.

October, 2013

Ola Awad President of PCBS PCBS: Environmental Economic Survey, 2013 - Main Findings

Chapter One

Main Findings

This chapter presents the main findings of the survey comprising environmental indicators for economic establishments in Palestine in 2013.

1.1 Water

Economic establishments consumed around 4.5 million cubic meters per month of water:

Survey results showed that the average quantity of water consumed by economic establishments in Palestine in 2013 was 4.5 million cubic meters per month. The highest quantity of water consumed was 2.1 million cubic meters by establishments in the wholesale, retail and repairs sector, while the smallest amount was 22.5 thousand cubic meters in the information and communications sector.

By region, the average quantity of water consumed by economic establishments in West Bank was 2.6 million cubic meters per month and 1.9 million cubic meters per month in Gaza Strip.

Main source of water for economic establishments:

Results showed that the main source of water for economic establishments in Palestine was the public water network, which was used by 84.0% of economic establishments.





By region, 90.7% of economic establishments obtained water from the public water network in West Bank compared with 71.0% in Gaza Strip.

1.2 Wastewater

Data for 2013 indicated that 65.2% of economic establishments in Palestine used the wastewater network to dispose of their wastewater and 14.4% used porous cesspits.

Percentage of Economic Establishments in Palestine that Use Wastewater Network by Region, 2013



1.3 Solid Waste

Components of solid waste:

In 2013, 94.0% of economic establishments in Palestine stated that their waste comprised paper and cardboard, 69.8% of economic establishments said that their waste comprised plastic and rubber and 51.8% said their waste comprised soil and stones.

By region, 95.5% of economic establishments in West Bank said their waste comprised paper and cardboard compared to 90.7% in Gaza Strip.

Solid waste separation:

The percentage of economic establishments in 2013 that produced and separated radioactive waste was 40.8%, all of them in service sector.

Means of disposal of solid waste:

In 2013, 78.8% of economic establishments in Palestine used nylon bags to dispose of plastic and rubber waste, 71.6% used special containers to dispose of radioactive waste and 73.4% used cardboard boxes to dispose of chemical waste. In addition, 26.5% of economic establishments used metal containers to dispose of hazardous waste and 21.4% used plastic boxes to dispose of hazardous waste.

The survey results showed that 82.1% of economic establishments used nylon bags to dispose of non-separated solid waste, 6.4% used special bags, 3.9% used cardboard containers and 3.5% used metal containers.

Regularity of solid waste collection:

In 2013, 78.9% of economic establishments in Palestine had their waste collected once to three times a week, 31.9% had a waste collection four to six times a week and 71.4% had their waste collected seven times per week or more.

For non-separated solid waste, 48.3% of economic establishments had it collected once to three times a week, 29.5% had it collected four to six times a week and 22.2% had their waste collected seven times or more per week.

Transportation of separated solid waste:

In 2013, 95.8% of economic establishments in Palestine transported separated solid waste manually and 23.6% transported separated solid waste by special methods.

For non-separated solid waste, the survey results showed that 94.7% of economic establishments transported the waste manually and 3.6% transported the waste by special methods.

Solid waste disposal:

In 2013, 8.4% of economic establishments in Palestine disposed of their solid waste themselves while 83.1% were served by local authority disposal services. By region, 5.9% of all economic establishments in West Bank disposed of their solid waste themselves compared to 13.4% of economic establishments in Gaza Strip.

Percentage of Economic Establishments in Palestine by Doer of Solid waste Disposal and Region, 2013



Waste disposal sites:

Data showed that in 2013, 81.6% of economic establishments in Palestine disposed of their solid waste in local authority dumping sites: 77.8% in West Bank and 89.5% in Gaza Strip.

PCBS: Environmental Economic Survey, 2013 - Main Findings

Chapter Two

Methodology and Data Quality

This chapter presents the scientific methodology and data quality procedures used in the planning and implementation of the Environmental Economic Survey, including the design of the survey tools and methods of collecting, processing and analyzing data, in addition to the data quality assurance controls.

2.1 Survey Objectives

The primary objective is to provide reliable data on the main environmental indicators in economic establishments in Palestine, including the methods used to handle solid waste and wastewater. The survey also includes the role of the local authority in providing a suitable environment that minimizes the negative effect of different types of pollution from economic activities.

2.2 Questionnaire

The environmental questionnaire was designed according to international standards and recommendations for the most important indicators, taking into account the special situation of Palestine. Many visits were made to economic establishments to improve the survey tools and test the questionnaire prior to the implementation of the survey. Subsequent to the visits, some modifications were made to the questionnaire and the instructions.

2.3 Target Population

All economic establishments approved by the Central Bureau of Statistics in the classification of economic activities. The Environmental Economic Survey covers activities in accordance with ISIC.rev.4.

Sample frame:

The sampling frame is the list of all economic establishments enumerated in the Establishments Census of 2012 conducted by PCBS.

Sample size:

The sample size of the Environmental Economic Survey is 3982 economic establishments.

Sample design:

The sample was a single-stage stratified random systematic sample.

Stratification:

Three levels of stratification were followed in designing the sample of the survey, including:

- 1. Stratification by region: (North, Middle, South West Bank) and Gaza Strip.
- 2. Stratification by economic activity according to ISIC.rev.4.
- 3. Stratification by employment group.

Publication level:

- 1- State of Palestine
- 2- Economic activity according to ISIC1.
- 3- Region: (North, Middle, South West Bank) and Gaza Strip.

2.4 Field Work

Training field workers:

Field workers were trained on the main skills prior to the start of data collection. Interviewers were trained on the environmental survey in training courses in one location in West Bank and one location in Gaza Strip. Trainers briefed the participants on the aims and definitions of the different indicators of the survey and how to fill in the questionnaire.

Data collection:

Field operations started on 16/04/2013 and lasted until 30/06/2013. The field work team consisted of a coordinator, directors of the field work offices and field workers, and each team consisted of supervisors and five field workers.

During field work, 3,982 economic establishments were visited in Palestine, the end results of the interviews were then dealt with as follows:

interview results	Frequency	Percentage %
Completed questionnaires	3,305	83.0
Completely closed	103	3.0
Temporarily closed	36	1.0
Not found unit	23	1.0
Did not practice any activity during the reference period	30	1.0
The economic activate are different	2	0.0
Refusal	217	5.0
Repeated	7	0.0
Government	9	0.0
Others	250	6.0
Total	3,982	100

2.5 Data Processing

The data processing stage comprised the following operations:

- 1. Editing prior to data entry: all questionnaires were edited again in the office using the same instructions adopted for editing in the field.
- 2. Data entry: At this stage, data were entered into the computer using Access database.
- 3. The data entry program was set up to satisfy a number of requirements such as:
 - Duplication of the questionnaire on the computer screen.
 - Checks for logic and consistency of data entered.
 - Possibility of internal editing of answers to questions.
 - Ensuring a minimum of digital data entry and field work errors.
 - User-friendly handling.
 - Possibility of transferring data into another format to be used and analyzed using other statistical analytical systems such as SAS and SPSS.

2.6 Accuracy

This covers many aspects of the survey, mainly statistical errors originating from the sample and also non-statistical errors by workers and survey tools. It also includes response rates to the survey and their effect on the assumptions. This section includes:

Sampling errors:

Sampling errors result from studying only a part of a social base. As this survey is sample based, data will be affected by sampling errors due to not using the whole frame of society and differences may appear compared with the actual values that could be obtained through a census. For this survey, variance calculations were made for the amounts of water consumed, the solid waste generated and the main source of water in economic establishments by region and activity.

The results of the variance calculations showed that it is possible to publish the results of water sources by region (North, Middle, South of West Bank and Gaza Strip) and by economic activity. For the amounts of water consumed it is possible to publish the results for the West Bank and Gaza Strip as there is high variance between the regions. For the quantities of solid waste it is not possible to publish the results as there is high variance between both regions and the economic activities engaged in.

Variable	Estimate		Standard	C.V %	%95Confidence Interval		
	unit	value	Error	C.V %	Lower	Upper	
Main source of water – Public Water Network	%	86.2	1.2%	1.4%	83.6	88.5	
Main source of water in the Industrial activities – Public Water Network	%	87.5	1.5%	1.8%	80.2	86.0	
Consumed water in the industrial activities	M ³	970,097	140,269.8	14.5%	694,826.2	1,245,368.8	

Table of Variance for Environmental Economic Survey 2013, West Bank

Table of Variance for Environmental Economic Survey 2013, Gaza Strip

Variable	Estimate		Standar	C.V %	%95Confidence Interval	
	unit	value	d Error	011 /0	Lower	Upper
Main source of water – Public Water Network	%	69.8	2.1%	3.0%	65.6	73.7
Main source of water in the Industrial activities – Public Water Network	%	72.0	2.5%	3.4%	67.0	76.0

Non-sampling errors:

Several measures were adopted to minimize the effects of such errors. The interviewers, editors and coders underwent intensive training and were provided with field work manuals to consult when facing any problem.

The data entry program was designed in a way that allows for error detection and correction. This applies particularly to logical errors that might not be discovered prior to data entry. A consistency check was also performed to ensure accuracy after data entry.

Errors may result from cases of non-response as well as in the implementation of the survey. In this survey, errors emerged because of (a) the special situation of the questionnaire itself

which depends on a estimates; (b) diversity of sources (e.g., interviewers, respondents, editors, coders, data entry operators, etc.).

It is important to note that five percent of the sample for this survey underwent re-interview and the results of these re-interviews were reported by the supervisors. Re-interview reveals variances in estimates by interviewers of the quantities of water consumed and solid waste produced when the interviewer responsible for the main survey questionnaire differs from the person responsible for the re-interview questionnaire.

Response and non-response formulas:

Percentage of over coverage errors = Total <u>cases of over coverage</u> x 100% Number of cases in original sample = 3%Non response rate = Total <u>cases of non response</u> x 100% Net Sample size = 13.6%

Net sample = Original sample – cases of over coverage Response rate = 100% - non-response rate = 86.4%

Treatment of non-response cases using weight adjustment

$$fg = \frac{\sum_{ng} wi - \sum_{o.c} wi}{\sum_{rg} wi}$$

Where as

wi: the primary weight before adjustment for the establishments i g: adjustment group by (governorate, locality type). f_g : weight adjustment factor for the group g.

 $\sum_{ng} wi$: Total weights in group g

cases $\sum_{o.cg} wi$: Total weights of over coverage

: Total weights of response cases $\sum_{rg} wi$

We calculate fg for each group, and final we obtain the final household weight (w'i) by using the following formula:

w'i = wi * fgi

2.7 Comparability

The data of the Environmental Economic Survey are comparable by region and by time period. A comparison of the data by geographical area and with data from previous rounds showed no significant differences.

The data on indicators dealing with separated solid waste are not comparable with previous rounds of the survey. Nor are the quantities of water consumed and solid waste generated due to the high variance of these indicators.

The following table presents comparison:

Establishments in Palestine for the Years 2006, 2008, 2009, 2011, 2013					
Indicator	2006	2008	2009	2011	2013
Means of obtaining water :					
Public water network	86.7	87.5	92.0	86.1	84.0
Collection rain water well	6.7	6.1	6.7	2.5	1.3
Wastewater disposal method:					
Wastewater network	66.8	66.4	59.9	62.2	65.2
Porous cesspit	21.1	21.9	29.9	15.5	14.4
Doer of transporting solid waste:					
The establishment	9.3	22.5	6.0	11.1	8.4
Local Authority	79.6	70.4	86.3	84.0	83.1

Main Selected Environmental Indicators about the Activity of the Economic Establishments in Palestine for the Years 2006, 2008, 2009, 2011, 2013

2.8 Data Quality Assurance Procedures

Several measures were applied to ensure quality control in the survey, such as the training of field workers on the main skills prior to data collection and field visits to field researchers to ensure the accuracy of data collection. In addition, a re-interview was conducted of five percent of the economic establishments. An audit of questionnaires was carried out before data entry and a program was used that filters out errors during the data entry process. Data were examined to ensure that they were free from errors not previously discovered. Following receipt of the raw data file, cleaning and inspection of the anomalous values was conducted and the consistency of different questions on the questionnaire was examined.

2.9 Special Technical Notes

The following are important technical notes on the indicators presented in the results of the survey:

• Tables of water quantities were based on estimates by respondents so care should be taken in relation to these figures.

PCBS: Environmental Economic Survey, 2013 - Main Findings

Chapter Three

Concepts and Definitions

Establishment:

An establishment is an enterprise, or part of an enterprise, that is situated in a single location and in which only a single (non-ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.

Solid Waste Disposal:

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

Waste Collection:

Collection or transport of waste to the place of treatment or discharge by municipal services or similar institutions, or by public or private 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.

Open Burning:

Outdoor burning of wastes such as lumber, used textile and others.

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 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.

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.

Wastewater:

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

Dump:

Site used to dispose solid waste 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.

Wastewater Treatment:

Process to render wastewater fit to meet environmental standards or other quality norms. Three broad types of treatment may be distinguished: mechanical, biological, and advanced.

References

- 1. United Nations, 1997. Glossary of Environment Statistics. Series F, NO.67. New York-USA.
- 2. Palestinian Central Bureau of Statistics. Environmental Economic Survey, 2004, 2006, 2008, 2009 and 2011. Ramallah- Palestine
- 3. Palestinian Central Bureau of Statistics. Statistical Reports Publishing Manual, 11th Edition. Ramallah- Palestine
- 4. Palestinian Central Bureau of Statistics. Environmental Economic Survey, 2013, Fieldwork Training Manual. Ramallah- Palestine