

RECOVERED PAPER DATA 2006



RECOVERED PAPER DATA
2006

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 2007

NOTE

The figures reported in this survey are those supplied by countries. As is apparent from some figures in the tables (consumption of recovered paper without any relation to paper production, unrealistic percentages, etc.) there is some misunderstanding in the definitions and readers are urged to use caution when interpreting data for some countries.

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RECOVERED PAPER DATA 2006

INTRODUCTION

This FAO survey on “*Recovered Paper Data, 2006*” follows the same format as the 2003 edition. It was produced, in cooperation with the Confederation of European Paper Industry (CEPI) which supplied the necessary data relevant to its member countries (Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom) and it estimated the data for Denmark, Greece and Ireland. FAO collected data for the other remaining countries.

The survey presents data on recovery, trade and utilization of recovered paper. Historical data for the period 2006 is presented and only a few countries provided projections of recovery and use of recovered paper for the years 2007, 2008, 2009 and 2010. The ratios used to analyse the data are those recommended by the Sub-group on Waste Paper Terminology and are defined later in this document.

Appendix 1 contains the questionnaire which FAO sent to 46 countries.

In addition to the 20 countries covered by CEPI, the following 20 countries answered the questionnaires: Australia, Bolivarian Republic of Venezuela, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Estonia, Iraq, Japan, Lithuania, Malaysia, Mexico, New Zealand, Republic of Korea, Thailand, Turkey and the United States of America. All together these 40 countries represent over 85 percent of the world paper and paperboard production and the data presented can be considered representative of the recovery, use and trade of recovered paper in the world.

For inquiries on these data please contact FAO Forestry Department, Forest Products and Industry Division. Mailing address: Viale delle Terme di Caracalla, 00100 Rome, Italy, telephone: +39 06 5705 3221, fax: +39 06 5705 5137, e-mail: Felice.Padovani@fao.org. These data and data from previous surveys are also available on-line at:

www.fao.org/forestry/foris/webview/forestry2/index.jsp?siteId=3141&langId=1

DEFINITIONS OF TERMS USED

The FAO Advisory Committee on Pulp and Paper created a Sub-group on Waste Paper Terminology to define the terms to be used by FAO to describe waste paper recovery and utilization. The following are the definitions used in this report:

a) Waste paper net recovery rate: is the amount of waste paper collected for re-use as a percentage of the adjusted paper and paperboard consumption.

(Note: the adjusted paper and paperboard consumption is equal to the apparent consumption of paper and paperboard plus the net trade in converted paper and paperboard products, excluding printed materials).

b) Adjusted waste paper net recovery rate: is the amount of waste paper collected as a percentage of the adjusted paper and paperboard consumption from which the non-recoverable paper and paperboard is deducted.

c) Recovered paper utilization rate: is the amount of recovered paper used for paper and paperboard as a percentage of paper and paperboard production.

d) Recovered paper in fibre use rate: is the amount of recovered paper used for paper and paperboard as a percentage of the total fibre used for paper and paperboard.

SUMMARY

RECOVERED PAPER TRADE

Table 1– *Recovered paper trade in relation to recovered paper collection and utilization of recovered paper*, and Appendices 5 and 6 present the results of the survey.

In 2006, the United States of America was the major exporter with 15.9 million tonnes, followed by the United Kingdom with 3.9, Japan with 3.8 and Germany with 3.4 million tonnes. The Netherlands and Belgium reported more than 2 million tonnes.

Main importers of recovered paper were Germany, the Netherlands and Canada with respectively 3, 2.2 and 2 million tonnes and by Mexico, Belgium, Republic of Korea, Austria, Spain, Thailand and France with more than 1 million tonnes.

RECOVERED PAPER UTILIZATION FOR PURPOSES OTHER THAN PAPER AND PAPERBOARD MAKING

Table 2 – *Distribution of the total use of recovered paper between paper/paperboard making and other uses*, gives the relevant information. The information collected indicates that in nearly all countries virtually all recovered paper is used for paper and paperboard production.

RECOVERED PAPER UTILIZATION BY THE PAPER AND PAPERBOARD INDUSTRY

Table 3 – *Recovered paper utilization rate, recovered paper in fibre use rate and total fibre used for paper and paperboard production*, indicates the amounts of recovered paper being used in the paper furnish. This survey shows that about 50% of the countries use more than 50% of recovered paper in their domestic production of paper and paperboard.

Table 4 – *Composition of recovered paper (in percent)*, shows what are the major grades of paper entering in the flow of recovered paper. On average world-wide, corrugated, solid containers and kraft sack waste account for half of the total recovered paper, while newspaper and magazines grades account for 25%.

Table 5 – *Use of recovered paper by grades in percent* shows what percentage of recovered paper is used in the production of various paper and paperboard grades. The data indicates that 70% of recovered paper entering the production of paper is much higher for packaging grades (case material, folding boxboard, wrapping and other packaging grades) than cultural grades.

LOSSES IN REPULPING OF RECOVERED PAPER

Waste paper has higher losses during pulping than virgin material due to the amount of fines and filler in the waste paper. As the content of waste paper increases in the raw material, the amount of losses will go up.

Table 6 – *Losses in repulping and processing into paper and paperboard* presents the percentage figures for pulping losses. Though data is scarce, in most of the countries reporting the information, pulping losses are between 10 and 20 percent, with some exceptions probably due to antiquated equipment or poor processing control.

PROJECTED FUTURE RECOVERY OF WASTE PAPER

Table 7 – *Projected future recovery of waste paper and use of recovered paper for paper and paperboard making* shows projections for the next four years in both waste paper collected for re-use and for recovered paper used for paper and paperboard. They are expressed as a percentage of the 2006 level taken as a base line (100 percent).

TABLES

FAO RECOVERED PAPER SURVEY (2006)

TABLE 1 - RECOVERED PAPER TRADE IN RELATION TO RECOVERED PAPER COLLECTION AND UTILIZATION OF RECOVERED PAPER

Country	2006					
	Recovered paper collected nationally for paper and paperboard production	Exports of recovered paper		Recovered paper used for paper and paperboard	Imports of recovered paper	
	1000mt	1000mt	%	1000mt	1000mt	%
Australia	3020	964	32	2056	58	3
Austria	1502	293	20	2384	1175	49
Belgium	2295	2411	105	1136	1252	110
Brazil	3465	2	0	3514	13	0
Canada	2851	994	35	4438	2004	45
Chile	466	12	3	504	60	12
Colombia	581	0	0	671	89	13
Costa Rica	29	34	117	29	24	83
Czech Republic	664	242	36	456	34	7
Dominican Republic	15	19	127	15	19	127
Estonia	50	44	88	2	0	0
Finland	858	194	23	734	70	10
France	6999	1986	28	6050	1037	17
Germany	15546	3354	22	15244	3052	20
Hungary	475	86	18	419	30	7
Iraq	6	0	0	1	0	0
Italy	6001	885	15	5578	462	8
Japan	22837	3887	17	18945	72	0
Korea, Republic of	7455	124	2	8668	1211	14
Lithuania	89	14	15	135	67	50
Malaysia	1112	7	1	1157	192	17
Mexico	4302	166	4	4302	1357	32
Myanmar	38	0	0	30	2	7
Netherlands	2888	2780	96	2346	2238	95
New Zealand	222	242	109	222	0	0
Norway	673	258	38	474	59	12
Poland	1393	377	27	1019	3	0
Portugal	626	292	47	340	6	2
Slovakia	245	94	38	197	46	23
Spain	4638	383	8	5371	1116	21
Sweden	1536	163	11	2037	664	33
Switzerland	1279	451	35	959	131	14
Thailand	1708	14	1	2758	1050	38
Turkey	1016	3	0	1018	38	4
United Kingdom	8015	3950	49	4172	107	3
United States of America	46710	15876	34	31270	438	1
Venezuela	236	1	0	225	58	26

FAO RECOVERED PAPER SURVEY (2006)

TABLE 2 - DISTRIBUTION OF THE TOTAL USE OF RECOVERED PAPER BETWEEN PAPER AND PAPERBOARD MAKING

Country	2006				
	Total use of recovered paper	Recovered paper used for paper & paperboard		Recovered paper used for other purposes	
		1000mt	1000mt	%	1000mt
Australia	2110	2056	97	54	3
Austria	2384	2384	100	.	0
Belgium	1136	1136	100	.	0
Brazil	3514	3514	100	0	0
Canada	4438	4438	100	0	0
Chile	504	504	100	0	0
Colombia	671	671	100	.	0
Costa Rica	29	29	100	0	0
Czech Republic	456	456	100	.	0
Dominican Republic	15	15	100	0	0
Estonia	6	2	33	4	67
Finland	734	734	100	.	0
France	6050	6050	100	.	0
Germany	15244	15244	100	.	0
Hungary	419	419	100	.	0
Iraq	6	1	17	5	83
Italy	5578	5578	100	.	0
Japan	19215	18945	99	270	1
Korea, Republic of	8668	8668	100	0	0
Lithuania	142	135	95	7	5
Malaysia	1157	1157	100	.	0
Mexico	4302	4302	100	0	0
Myanmar	38	30	79	8	21
Netherlands	2346	2346	100	.	0
New Zealand	222	222	100	.	0
Norway	474	474	100	.	0
Poland	1019	1019	100	.	0
Portugal	340	340	100	.	0
Slovakia	197	197	100	.	0
Spain	5371	5371	100	.	0
Sweden	2037	2037	100	.	0
Switzerland	959	959	100	.	0
Thailand	2758	2758	100	.	0
Turkey	1018	1018	100	.	0
United Kingdom	4172	4172	100	.	0
United States of America	33084	31270	95	1814	5
Venezuela	235	225	96	10	4

FAO RECOVERED PAPER SURVEY (2006)

TABLE 3 - RECOVERED PAPER UTILIZATION RATE, RECOVERED PAPER IN FIBRE USE RATE AND TOTAL FIBRE USED FOR PAPER AND PAPERBOARD PRODUCTION

Country	2006					
	Paper and paperboard production	Total fibre used for paper and paperboard	Recovered paper used for paper & paperboard	Total fibre used / paper & paperboard production	Recovered paper in fibre use rate	Recovered paper utilization rate
	1000mt	1000mt	1000mt	%	%	%
Australia	3221	3209	2056	100	64	64
Austria	5213	.	2384	0	.	46
Belgium	2056	.	1136	0	.	55
Brazil	8744	7663	3514	88	46	40
Canada	18176	16811	4438	92	26	24
Chile	1203	1120	504	93	45	42
Colombia	991	1205	671	122	56	68
Costa Rica	20	21	29	105	138	145
Czech Republic	1042	.	456	0	.	44
Dominican Republic	0	16	15	.	94	.
Estonia	64	22	2	34	9	3
Finland	14149	.	734	0	.	5
France	10006	.	6050	0	.	60
Germany	22655	.	15244	0	.	67
Hungary	546	.	419	0	.	77
Iraq	33	11	1	33	9	3
Italy	10008	.	5578	0	.	56
Japan	31106	31241	18945	100	61	61
Korea, Republic of	10703	11585	8668	108	75	81
Lithuania	119	125	135	105	108	114
Malaysia	1433	1051	1157	73	110	81
Mexico	4513	5144	4302	114	84	95
Myanmar	45	85	30	189	35	67
Netherlands	3367	.	2346	0	.	70
New Zealand	880	945	222	107	24	25
Norway	2109	.	474	0	.	22
Poland	2855	.	1019	0	.	36
Portugal	1630	.	340	0	.	21
Slovakia	889	.	197	0	.	22
Spain	6353	.	5371	0	.	85
Sweden	12066	.	2037	0	.	17
Switzerland	1698	.	959	0	.	56
Thailand	4646	1897	2758	41	145	59
Turkey	1163	1802	1018	155	56	88
United Kingdom	5589	.	4172	0	.	75
United States of America	84599	31270	31270	37	100	37
Venezuela	680	600	225	88	38	33

FAO RECOVERED PAPER SURVEY (2006)

TABLE 4 - COMPOSITION OF RECOVERED PAPER (IN PERCENT)

Country	2006				
	Total recovered paper	Old and over-issue newspapers and magazines, telephone directories, brochures, etc.	Corrugated, solid containers and kraft sack waste (old and new).	Wood-free printing and writing paper, punch cards and other high-grade qualities.	Mixed grades
	%	%	%	%	%
Australia	100	13	78	8	0
Austria	100	31	36	11	22
Belgium	100	53	29	1	17
Brazil	100	6	69	14	11
Canada	100	46	40	13	2
Chile	100	6	70	22	3
Colombia	100	7	64	26	3
Costa Rica	.	.	.	.	.
Czech Republic	100	23	49	6	22
Dominican Republic	.	.	.	.	.
Estonia	100	0	0	0	100
Finland	100	42	32	15	11
France	100	29	51	8	12
Germany	100	31	32	11	26
Hungary	100	11	66	3	20
Iraq	100	0	0	0	100
Italy	100	15	49	10	26
Japan	100	30	45	11	14
Korea, Republic of	100	25	59	5	10
Lithuania	.	.	.	.	.
Malaysia	100	10	75	10	5
Mexico	100	22	61	15	2
Myanmar	100	100	0	0	0
Netherlands	100	24	29	7	40
New Zealand	100	35	65	0	0
Norway	100	44	52	2	1
Poland	100	26	61	5	9
Portugal	100	2	61	22	14
Slovakia	100	31	38	30	2
Spain	100	19	55	10	15
Sweden	100	51	31	7	11
Switzerland	100	43	23	11	23
Thailand	100	14	80	6	0
Turkey	.	.	.	.	.
United Kingdom	100	35	41	18	7
United States of America	100	16	58	12	14
Venezuela	100	11	48	39	2

FAO RECOVERED PAPER SURVEY (2006)

TABLE 5 - USE OF RECOVERED PAPER BY GRADES IN PERCENT

Country	2006							
	Recovered paper used for paper and paperboard	Newsprint	Other graphic paper	Case material	Folding boxboard	Wrapping, other packaging paper	Household and sanitary paper	Other paper and paperboard n.e.s.
	%	%	%	%	%	%	%	%
Australia	100	10	5	0	0	0	0	85
Austria	100	15	17	39	20	1	7	0
Belgium	100	39	23	28	7	0	1	2
Brazil	100	0	1	63	7	9	15	6
Chile	100	6	22	0	0	70	0	3
Czech Republic	100	14	1	58	7	14	4	2
Dominican Republic	100	0	0	0	0	0	100	0
Finland	100	36	2	0	0	41	20	1
France	100	19	8	53	0	12	6	2
Germany	100	18	14	43	9	7	5	5
Hungary	100	0	1	79	0	10	11	0
Italy	100	5	2	57	10	18	4	4
Japan	100	17	15	50	9	0	5	5
Malaysia	100	100	0	0	0	0	0	0
Mexico	100	22	15	0	0	61	0	2
Myanmar	.	.	.	.	.	.	.	.
Netherlands	100	16	0	39	6	34	5	0
Norway	100	38	0	47	0	9	7	0
Poland	100	12	2	59	2	5	17	3
Portugal	100	0	2	69	9	15	6	0
Slovakia	100	0	0	39	0	0	61	0
Spain	100	15	2	58	8	2	5	11
Sweden	100	45	0	28	8	0	13	6
Switzerland	100	46	3	32	5	3	11	0
Thailand	100	6	4	80	9	0	2	0
United Kingdom	100	34	4	40	0	5	12	5
United States of America	100	10	5	48	0	2	12	24

FAO RECOVERED PAPER SURVEY (2006)

TABLE 6 - LOSSES IN REPULPING AND PROCESSING INTO PAPER AND PAPERBOARD

Country	2006		
	Total recovered paper used	Losses in pulping	
	1000mt	1000mt	%
Australia	2110	224	11
Austria	2384	.	
Belgium	1136	.	
Brazil	3514	521	15
Canada	4438	.	
Chile	504	.	
Colombia	671	.	
Costa Rica	29	.	
Czech Republic	456	.	
Dominican Republic	15	.	
Estonia	6	.	
Finland	734	.	
France	6050	.	
Germany	15244	.	
Hungary	419	.	
Iraq	6	.	
Italy	5578	.	
Japan	19215	.	
Korea, Republic of	8668	.	
Lithuania	142	12	8
Malaysia	1157	.	0
Mexico	4302	631	15
Myanmar	38	8	21
Netherlands	2346	.	
New Zealand	222	.	
Norway	474	.	
Poland	1019	.	
Portugal	340	.	
Slovakia	197	.	
Spain	5371	.	
Sweden	2037	.	
Switzerland	959	.	
Thailand	2758	.	
Turkey	1018	.	
United Kingdom	4172	.	
United States of America	33084	.	
Venezuela	235	.	

APPENDIX 1: QUESTIONNAIRE

FAO RECOVERED PAPER SURVEY (2006)
Part 1: Main Questionnaire

Country:

(All figures in 000 metric tons)		2006
1.	Production of paper and paperboard	
2.	Net trade in paper and paperboard	
3.	Recovered paper collected nationally for paper and paperboard production	
4.	Exports of recovered paper.*	
5.	Imports of recovered paper.*	
6a.	Recovered paper* used domestically for purposes other than paper and paperboard making.	
6b.	Recovered paper* used domestically for paper and paperboard making	
	(i) Old and over-issue newspapers and magazines, telephone directories, brochures, etc.	
	(ii) Corrugated, solid containers and kraft sack waste (old and new)	
	(iii) Wood-free printing and writing paper, punch cards and other high-grade qualities	
	(iv) Mixed grades	
7.	Losses in repulping and processing into paper and paperboard	
8.	Total fibre used for paper and paperboard	

*including recovered paper market pulp measured in terms of recovered paper.

FAO RECOVERED PAPER SURVEY (2006)

Part 2: Use of the main types of recovered paper in the manufacture of major grades of paper and paperboard.

Country:

		Types of recovered paper (all figures in 000 metric tons)				
		Recovered paper* used domestically for paper and paperboard making. Total recovered paper	Old and over-issue newspapers, magazines, telephone directories, brochures, etc.	Corrugated, solid container and kraft sack waste (old and new).	Wood-free printing and writing papers, punch cards and other high-grade qualities.	Mixed grades
Major grades of paper and paperboard	year	[6b.] **	[6b.(i)] **	[6b.(ii)] **	[6b.(iii)] **	[6b.(iv)] **
Paper and paperboard total	2003	_____	_____	_____	_____	_____
Newsprint	2003	_____	_____	_____	_____	_____
Other graphic paper	2003	_____	_____	_____	_____	_____
Case material	2003	_____	_____	_____	_____	_____
Folding boxboard	2003	_____	_____	_____	_____	_____
Wrappings, other packaging paper	2003	_____	_____	_____	_____	_____
Household and sanitary paper	2003	_____	_____	_____	_____	_____
Other paper and paperboard, n.e.s.	2003	_____	_____	_____	_____	_____

* including recovered paper market pulp measured in terms of recovered paper

** same headings as in Part 1: Main Questionnaire

FAO RECOVERED PAPER SURVEY (2006)

Part 3: Projected future consumption and supply of recovered paper

Country:

(All figures in 000 metric tons)	2006	2007	2008	2009	2010
Waste paper collected for re-use					
Exports of recovered paper* [4] **					
Imports of recovered paper* [5] **					
Recovered paper* used domestically for purposes other than paper and paperboard making [6a.] **					
Recovered paper* used domestically for paper and paperboard making [6b.] **					

*including recovered paper market pulp measured in terms of recovered paper

** same headings as in Part 1: Main Questionnaire

FAO RECOVERED PAPER SURVEY (2006)

Part 4: Recovered paper EXPORTS by country of destination

Country:

Recovered paper* EXPORTS to: (indicate countries of destination) (all figures in 000 mt)	2006
Total exports of recovered papers * [4]**	

* including recovered paper market pulp measured in terms of recovered paper
 ** same headings as in Part 1: Main Questionnaire

FAO RECOVERED PAPER SURVEY (2006)

Part 5: Recovered paper IMPORTS by country of origin

Country:

Recovered paper* IMPORTS from: (indicate countries of origin) (all figures in 000 mt)	2006
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
Total imports of recovered papers * [5]**	_____

* including recovered paper market pulp measured in terms of recovered paper

** same headings as in Part 1: Main Questionnaire

**APPENDIX 2: DEFINITIONS OF THE TERMS USED IN
THE FAO RECOVERED PAPER SURVEY QUESTIONNAIRE**

APPENDIX 2 – DEFINITIONS OF THE TERMS USED IN THE FAO RECOVERED PAPER SURVEY QUESTIONNAIRE

1. Paper and paperboard production is the quantity of all paper and paperboard of commercial quality (fibre building boards not included) produced within a country.
2. Net trade in paper and paperboard (excluding printed material) is the difference between the imports and exports of converted paper and paperboard products (SITC [Rev. 2] 642 and part of BIN 48). In case imports exceed exports, this factor is positive, and in case exports are higher than imports the factor is negative.
3. Recovered paper collected nationally for paper and paperboard production is the net quantity of recovered paper collected which is used exclusively in paper and paperboard manufacture including also recovered paper market pulp measured in terms of recovered paper input.
4. and 5. Exports and imports of recovered paper are the quantities of all kinds of waste paper exported and imported for any kind of use including waste paper market pulp¹ measured in terms of waste paper inputs.
- 6a. Recovered paper used domestically for purposes other than paper and paperboard making is the quantity of waste paper used for fibre building boards, moulded products, in bulk as wrapping and packaging material or for any other major industrial or commercial use.
- 6b. Recovered paper used domestically for paper and paperboard making is the net quantity of the waste paper intake at the mill (and excluding all sorting losses) of any kind of waste paper - either locally collected or imported - which is used exclusively in paper and paperboard manufacture including also recovered paper market pulp measured in terms of recovered paper input. (Whenever possible, the quantities of recovered paper should be expressed at 90 percent dryness and should include the losses in repulping and processing into paper and paperboard). The details under this heading include the following:
 - i) Old and over-issue newspapers and magazines, telephone directories, brochures, etc., i.e. waste paper containing mainly mechanical pulp.
 - ii) Corrugated, solid container and kraft sack waste (old and new), i.e. recovered paper containing mainly unbleached sulphate pulp.
 - iii) Wood-free printing and writing papers, copy paper, computer printouts, and other high-grade qualities, i.e. recovered paper containing mainly bleached chemical pulp.
 - iv) Mixed grades, all other types of recovered paper.
7. Losses in repulping and processing into paper and paperboard is the quantity which is lost as broken fibres, fillers, coatings and other additives when the recovered paper is repulped, as well as the fibre losses in processing the derived recovered paper pulp into paper and paperboard.
8. Total fibre used for paper and paperboard is the total input quantity of all types of fibres at 90 percent dryness used for paper and paperboard manufacturing. The fibres can originate from wood (round, split, chips, residues, sawdust, etc.), from non-wood fibrous vegetable materials (bagasse, straw, bamboo, esparto, other reeds and grass, cotton linters, flax, hemp, etc.), from rags and other textile wastes and from recovered paper.

1

Recovered paper market pulp is the pulp made of recovered paper for sale in the open market and does not include recovered paper pulp used in own plant or shipped to wholly owned or associated companies within the country. All recovered paper pulp moving outside the producing country is considered to be recovered paper market pulp.

PLEASE NOTE: For some of the headings or for some parts of the headings the data might not be readily available. In such cases you are kindly requested to make estimates and to indicate such estimates with e.g. a footnote.

**APPENDIX 3: WASTE PAPER RECOVERY AND UTILIZATION OF
RECOVERED PAPER IN PAPER AND PAPERBOARD IN 2006**

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 3 - WASTE PAPER RECOVERY AND UTILIZATION OF RECOVERED PAPER IN PAPER AND PAPERBOARD INDUSTRY

Country	2006						
	Production of paper and paperboard	Net trade in paper and paperboard	Apparent consumption of paper and paperboard	Recovered paper collected nationally for paper and paperboard production	Recovered paper collection rate	Exports of recovered paper	Imports of recovered paper
	1000 mt	1000 mt	1000 mt	1000 mt	%	1000 mt	1000 mt
Australia	3221	859	4080	3020	74	964	58
Austria	5213	-3116	2097	1502	72	293	1175
Belgium	2056	1775	3831	2295	60	2411	1252
Brazil	8744	-859	7885	3465	44	2	13
Canada	18176	-10451	7725	2851	37	994	2004
Chile	1203	-157	1046	466	45	12	60
Colombia	991	-80	911	581	64	0	89
Costa Rica	20	365	385	29	8	34	24
Czech Republic	1042	432	1474	664	45	242	34
Dominican Republic	0	17	17	15	88	19	19
Estonia	64	-31	33	50	152	44	0
Finland	14149	-12545	1604	858	53	194	70
France	10006	922	10928	6999	64	1986	1037
Germany	22655	132	22787	15546	68	3354	3052
Hungary	546	301	847	475	56	86	30
Iraq	33	-12	21	6	29	0	0
Italy	10008	1686	11694	6001	51	885	462
Japan	31106	434	31540	22837	72	3887	72
Korea, Republic of	10703	-2124	8579	7455	87	124	1211
Lithuania	119	-77	42	89	211	14	67
Malaysia	1433	1837	3270	1112	34	7	192
Mexico	4513	2095	6608	4302	65	166	1357
Myanmar	45	39	84	38	45	0	2
Netherlands	3367	85	3452	2888	84	2780	2238
New Zealand	880	-111	769	222	29	242	0
Norway	2109	-1245	864	673	78	258	59
Poland	2855	936	3791	1393	37	377	3
Portugal	1630	-486	1144	626	55	292	6
Slovakia	889	-440	449	245	55	94	46
Spain	6353	1505	7858	4638	59	383	1116
Sweden	12066	-9649	2417	1536	64	163	664
Switzerland	1698	-29	1669	1279	77	451	131
Thailand	4646	-175	4471	1708	38	14	1050
Turkey	1163	-978	185	1016	549	3	38
United Kingdom	5589	6755	12344	8015	65	3950	107
United States of America	84599	6300	90899	46710	51	15876	438
Venezuela	680	298	978	236	24	1	58

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 3 - WASTE PAPER RECOVERY AND UTILIZATION OF RECOVERED PAPER IN PAPER AND PAPERBOARD INDUSTRY (cont.)

Country	2006						
	Recovered paper used for other purpose than paper and paperboard	Recovered paper used for paper and paperboard	Losses in repulping and processing into paper and paperboard	Total fibre used for paper and paperboard	Recovered paper in fibre use rate	Total fibre / paper and paperboard production	Recovered paper utilization rate
	1000 mt	1000 mt	1000 mt	1000 mt	%	%	%
Australia	54	2056	224	3209	64	100	64
Austria	.	2384	.	.	.	.	46
Belgium	.	1136	.	.	.	.	55
Brazil	0	3514	521	7663	46	88	40
Canada	0	4438	.	16811	26	92	24
Chile	0	504	.	1120	45	93	42
Colombia	.	671	.	1205	56	122	68
Costa Rica	0	29	.	21	138	105	145
Czech Republic	.	456	.	.	.	.	44
Dominican Republic	0	15	.	16	94	.	.
Estonia	4	2	.	22	9	34	3
Finland	.	734	.	.	.	.	5
France	.	6050	.	.	.	.	60
Germany	.	15244	.	.	.	.	67
Hungary	.	419	.	.	.	.	77
Iraq	5	1	0	11	9	33	3
Italy	.	5578	.	.	.	.	56
Japan	270	18945	.	31241	61	100	61
Korea, Republic of	0	8668	.	11585	75	108	81
Lithuania	7	135	12	125	108	105	114
Malaysia	.	1157	.	1051	110	73	81
Mexico	0	4302	631	5144	84	114	95
Myanmar	8	30	8	85	35	189	67
Netherlands	.	2346	.	.	.	.	70
New Zealand	.	222	.	945	24	107	25
Norway	.	474	.	.	.	.	22
Poland	.	1019	.	.	.	.	36
Portugal	.	340	.	.	.	.	21
Slovakia	.	197	.	.	.	.	22
Spain	.	5371	.	.	.	.	85
Sweden	.	2037	.	.	.	.	17
Switzerland	.	959	.	.	.	.	56
Thailand	.	2758	.	1897	145	41	59
Turkey	.	1018	.	1802	56	155	88
United Kingdom	.	4172	.	.	.	.	75
United States of America	1814	31270	.	31270	100	37	37
Venezuela	10	225	.	600	38	88	33

APPENDIX 4: EXPORTS 2006

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 4	EXPORTS OF RECOVERED PAPER BY COUNTRY OF DESTINATION IN 2006 (1000 mt)												
<i>from</i>	Australia	Austria	Belgium	Canada	Chile	Costa Rica	Denmark	Dominican Rp	Czech Rep	Estonia	Finland	France	Germany
<i>to</i>													
ARGENTINA					12								
AUSTRALIA													
AUSTRIA							4		54		4	13	448
BELGIUM												264	59
BELARUS													
CANADA													2
CHINA	554		638			1	1			3	18	217	682
COLOMBIA						7		3					
CUBA								9					
CZECH REP.		5											11
DENMARK													18
ECUADOR						2							
EL SALVADOR						8							
ESTONIA											2		
FINLAND							2			6			
FRANCE			226										149
GERMANY		223	100				260		145	1	100	361	
GREECE													
HUNGARY		4											6
INDIA	68					1							
INDONESIA	153												
IRELAND			0										
ITALY		12	2				2					82	110
JAPAN													
KOREA D P RP													
KOREA REP	1					1							
LATVIA										2			
LITHUANIA										28			
MALAYSIA	12												
MEXICO													
NETHERLANDS		4	1079				90		3		1	173	1296
NORWAY							2				2		
PAKISTAN	1												
PANAMA						2							
PERU						4							
PHILIPPINES	110												
POLAND									4			1	2
PORTUGAL												1	
RUSSIAN FED											1		
SLOVAKIA		3							30				1
SLOVENIA		32							6			8	30
SINGAPORE													
SPAIN			8									632	15
SWEDEN							184				37		88
SWITZERLAND	3	1									1	34	89
THAILAND	47												
TURKEY													1
UCRAINA										4			
URUGUAY													
UK			2	994							1	44	2
USA			3										
VIETNAM	13					1							
VENEZUELA						7		7					
OTHERS	2		15									88	
GRAND TOTAL	964	284	2073	994	12	34	545	19	242	44	167	1918	3009

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 4	EXPORTS OF RECOVERED PAPER BY COUNTRY OF DESTINATION IN 2006 (cont.) (1000 mt)												
<i>from</i>	Greece	Hungary	Italy	Ireland	Japan	Korea Rep	Latvia	Lithuania	Malaysia	Mexico	Netherland	New Zealand	Norway
<i>to</i>													
ARGENTINA													
AUSTRALIA												7	
AUSTRIA		42	147								29		
BELGIUM				6							258		
BELARUS							4	3					
CANADA													
CHINA	62		225	176	3349	111					1261	60	
COLOMBIA													
CUBA													
CZECH REP.		3	1								2		
DENMARK											1		25
ECUADOR													
EL SALVADOR													
ESTONIA													
FINLAND													2
FRANCE			51								93		1
GERMANY		2	255	2				4			497		16
GREECE			2									0	
HUNGARY			1								0		
INDIA												22	
INDONESIA					20				1			51	
IRELAND													
ITALY	27										9		
JAPAN						1							
KOREA D P RP					116								
KOREA REP													
LATVIA								1					
LITHUANIA							23						
MALAYSIA												5	
MEXICO													
NETHERLANDS	40		1					4					58
NORWAY													
PAKISTAN												1	
PANAMA													
PERU													
PHILIPPINES					20							16	
POLAND													
PORTUGAL			1										
RUSSIAN FED		32											
SLOVAKIA		7											
SLOVENIA			89								1		
SINGAPORE									5			1	
SPAIN			10	20									
SWEDEN											26		109
SWITZERLAND											1		
THAILAND					293	1		1	1			39	
TURKEY													
UCRAINA							13	1					
URUGUAY													
UK				76							50		
USA										166	15		
VIETNAM					82	8						39	
VENEZUELA													
OTHERS					7	3						1	
GRAND TOTAL	129	86	783	280	3887	124	40	14	7	166	2243	242	211

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 4		EXPORTS OF RECOVERED PAPER BY COUNTRY OF DESTINATION IN 2006 (cont.) (1000 mt)										
		Poland	Portugal	Slovakia	Spain	Sweden	Switzerland	Thailand	Turkey	UK	USA	Total
from	to											
	ARGENTINA											12
	AUSTRALIA											7
	AUSTRIA	80		53	2	5	54			11		946
	BELGIUM				4		1			62		654
	BELARUS											7
	CANADA									1	2004	2007
	CHINA	10	7		183	1		3		1971	9144	18677
	COLOMBIA											10
	CUBA											9
	CZECH REP.	2		6								30
	DENMARK					19						63
	ECUADOR											2
	EL SALVADOR											8
	ESTONIA											2
	FINLAND					13						23
	FRANCE				38		143			186		887
	GERMANY	261		3	15	50	201			106		2602
	GREECE				1					1		4
	HUNGARY			9								20
	INDIA							1			714	806
	INDONESIA							7	1		390	623
	IRELAND				1					2		3
	ITALY				13	16	44	1		9		327
	JAPAN									8	71	80
	KOREA D P RP											116
	KOREA REP								2		846	850
	LATVIA											3
	LITHUANIA	3				2						56
	MALAYSIA											17
	MEXICO										1138	1138
	NETHERLANDS	3	1	1	59	17	2			350		3182
	NORWAY					30				13		47
	PAKISTAN								4			6
	PANAMA											2
	PERU											4
	PHILIPPINES							1				147
	POLAND											7
	PORTUGAL				12							14
	RUSSIAN FED											33
	SLOVAKIA	3										44
	SLOVENIA			2	1		5			8		182
	SINGAPORE											6
	SPAIN	1	278			1	1			37		1003
	SWEDEN	1	0							188		633
	SWITZERLAND		1		1					4		135
	THAILAND											382
	TURKEY					1						2
	UCRAINA											18
	URUGUAY											0
	UK				4							1173
	USA									3		187
	VIETNAM											143
	VENEZUELA											14
	OTHERS	6						1			1569	1692
	GRAND TOTAL	370	287	74	334	155	451	14	7	2960	15876	39045

APPENDIX 5: IMPORTS 2006

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 5	RECOVERED PAPER IMPORTS BY COUNTRY OF ORIGIN IN 2006												
	(1000 mt)												
to	Australia	Austria	Belgium	Brazil	Canada	Chile	Colombia	Costa Rica	Czech Rep.	Denmark	Dominican Rep	Finland	France
from													
AUSTRALIA													
AUSTRIA			2										
BELGIUM		4											211
CAMBODIA													
CANADA			2			3							3
CHINA													
COSTA RICA							5						
CZECH REP.		74											
DOMINICAN REP						5	12						
DENMARK		4										2	
ECUADOR				11			11						
EL SALVADOR							2	4					
ESTONIA												6	
FINLAND		2											
FIJI	50												
FRANCE		10	409										
GERMANY		660	78						25	18		35	273
GREECE													
HONDURAS							6	3					
HUNGARY		41							3				
IRELAND			6										
ITALY		178	1										60
ISRAEL													
JAPAN													
KOREA DEM REP							2						
KUWAIT													
LAOS													
LATVIA													
LITHUANIA													
MALAYSIA													
MEXICO													
NETHERLANDS		22	646						2	1			90
NEW ZEALAND	6												
NICARAGUA								2					
NORWAY										25		2	
PANAMA							4						
PARAGUAY				6									
PERU						2							
POLAND		52	1										1
PORTUGAL													
RUSSIAN FED												5	
SINGAPORE	2												
SLOVAKIA		40							3				
SLOVENIA		4											
SOUTH AFRICA													
SPAIN			1										73
SWEDEN		8	10						1	19		18	
SWITZERLAND		54											145
UK		15	92										177
UNITED ARAB EM													
URUGUAY				4									
USA		4	4	3	2,004	50	48	15			19	1	2
OTHERS						2							
GRAND TOTAL	58	1172	1252	24	2004	62	90	24	34	63	19	69	1035

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 5		RECOVERED PAPER IMPORTS BY COUNTRY OF ORIGIN IN 2006 (cont.)												
		(1000 mt)												
to	Germany	Greece	Hungary	Italy	Ireland	Japan	Korea Rep	Latvia	Lithuania	Malaysia	Mexico	Myanmar	Netherlands	
from														
AUSTRALIA							1			10				
AUSTRIA	192		11	12										
BELGIUM	140			2			4			4			645	
CAMBODIA														
CANADA				9			7						3	
CHINA							3			1				
COSTA RICA														
CZECH REP.	77												4	
DOMINICAN REP														
DENMARK	260			2									90	
ECUADOR														
EL SALVADOR														
ESTONIA								4	30					
FINLAND	110							1						
FIJI														
FRANCE	383			76						7			115	
GERMANY			9	105			16			5			931	
GREECE				27			1						40	
HONDURAS														
HUNGARY	2													
IRELAND	2													
ITALY	279	2	1				1						68	
ISRAEL							15							
JAPAN	0		0				123							
KOREA DEM REP						1							2	
KUWAIT							2							
LAOS														
LATVIA										26				
LITHUANIA								2						
MALAYSIA														
MEXICO														
NETHERLANDS	944			33			74			9				
NEW ZEALAND										4				
NICARAGUA														
NORWAY	37						2							
PANAMA														
PARAGUAY														
PERU														
POLAND	244			1						5			3	
PORTUGAL														
RUSSIAN FED										5				
SINGAPORE							19			82				
SLOVAKIA	6		9											
SLOVENIA	4													
SOUTH AFRICA										3				
SPAIN	12	1		16	1					6			22	
SWEDEN	65			16					1				23	
SWITZERLAND	199			38						28				
UK	90	1		6	2		84			18			243	
UNITED ARAB EM							5							
URUGUAY														
USA	3			109		69	847			15	1,357		51	
OTHERS						2	7	2						
GRAND TOTAL	3049	4	30	452	3	72	1211	9	67	192	1357	2	2238	

FAO RECOVERED PAPER SURVEY (2006)

APPENDIX 5		RECOVERED PAPER IMPORTS BY COUNTRY OF ORIGIN IN 2006 (cont.)											
		(1000 mt)											
to	Norway	Poland	Portugal	Slovakia	Spain	Sweden	Switzerl.	Thailand	Turkey	UK	USA	Venezuela	Total
from													
AUSTRALIA								42					53
AUSTRIA				6			6						229
BELGIUM							1	4		1			1016
CAMBODIA								13					13
CANADA											420		447
CHINA								9					13
COSTA RICA													5
CZECH REP.		2		24									181
DOMINICAN REP												4	21
DENMARK	2					184							544
ECUADOR													22
EL SALVADOR													6
ESTONIA													40
FINLAND	2				1	46	1	1		4			168
FIJI													50
FRANCE		1			671		29	3					1704
GERMANY				2	29	64	83	69	1				2403
GREECE									20				88
HONDURAS													9
HUNGARY				8									54
IRELAND					20					76			104
ITALY					15		3			5			613
ISRAEL									3				18
JAPAN								288					411
KOREA DEM REP								2					7
KUWAIT													2
LAOS								5					5
LATVIA													26
LITHUANIA													2
MALAYSIA								56					56
MEXICO											18	1	19
NETHERLANDS	4				2	49	2	40	1	17			1936
NEW ZEALAND								41					51
NICARAGUA													2
NORWAY						155							221
PANAMA													4
PARAGUAY													6
PERU													2
POLAND				5		1							313
PORTUGAL					288								288
RUSSIAN FED													10
SINGAPORE								160					263
SLOVAKIA													58
SLOVENIA				1						1			10
SOUTH AFRICA								7					10
SPAIN			3				2			2			139
SWEDEN	38				11								210
SWITZERLAND					1								465
UK	13				34	153	4	44					976
UNITED ARAB EM								10					15
URUGUAY													4
USA					35			256	10	1		52	4955
OTHERS									3			1	17
GRAND TOTAL	59	3	3	46	1107	652	131	1050	38	107	438	58	18284

