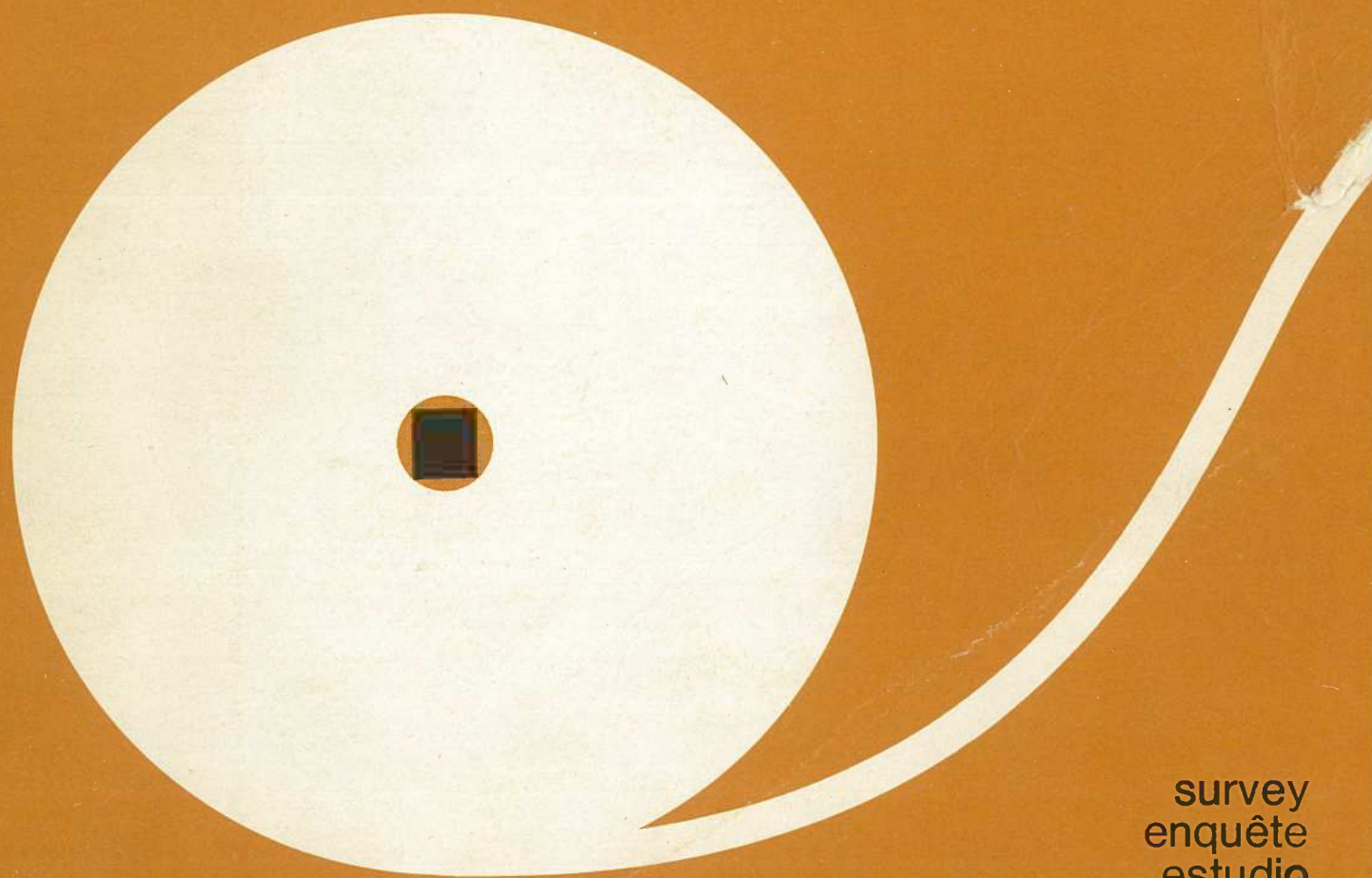


pulp and paper capacities
capacités de la pâte et du papier
capacidades de pasta y papel



survey
enquête
estudio

1977–1982

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE
ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

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Report on the FAO Survey
of
World Pulp and Paper Capacities 1977-82
by
The Secretariat

The annual FAO Surveys of World Pulp and Paper Capacities are based on figures received early in the year from correspondents in most countries of the world and on Secretariat estimates for the remaining few countries. By and large, the data are provided by national pulp and paper trade associations from information obtained from members during the preceding year concerning their future development plans. The results accordingly reflect industries' intentions at the time of the surveys, which subsequent economic, financial and market conditions may influence significantly.

The coverage, content and presentation of the survey have not been changed this year. However, thanks to the increasing interest shown in the results and the use made of them, some countries have restructured their surveys in order to obtain more meaningful and accurate data and others have enlarged upon the improvements made in recent years.

It will be recalled that, as an innovation last year, a list of expansion plans covering the next ten years was prepared giving details of the company, product, capacity and year of expected start-up of the many projects under consideration. In view of the interest elicited in the information the list has been up-dated, thanks to the cooperation of many of the participants in the survey, and is once again published separately. Where appropriate, the expected additional capacity has been cross checked with the data given in the current survey, but it should be noted that the list is not exhaustive; significant additional capacity can result from machine improvements, confidential plans, etc., details of which are not available. Nonetheless, it is hoped that the information provided will be useful for all those responsible for planning the future of the industry.

The main findings of the pulp and paper capacity survey for 1977-82 are that:

- a) world capacity of paper grades of pulp is expected to rise from 143 million tons in 1977 to 164 million tons in 1982. This increase of 21 million tons represents an annual growth of 2.8 per cent;
- b) world capacity of paper and paperboard is expected to rise from 184 million tons in 1977 to 212 million tons in 1982. This increase of 28 million tons represents an annual growth of 2.8 per cent;

- c) both the additional 21 million tons of paper grades of pulp and the 28 million tons of paper and board are the lowest increases anticipated in any of the surveys this decade;
- d) world woodpulp capacity in 1982 is slightly in excess of that envisaged for 1981 in last year's survey. By contrast, paper and board estimates are considerably higher, chiefly due to more buoyant plans in USA and Japan;
- e) the additional 13.8 million tons of chemical pulp expected to be installed between 1977 and 1982 is much smaller than the volume envisaged in recent surveys;
- f) bleached hardwood sulphate pulp capacity is likely to register a gain of 4.2 million tons from 16.1 million tons in 1977 to 20.3 million tons in 1982, an amount which is roughly comparable with 4.3 and 4.7 million tons in the last two surveys;
- g) other fibre pulp continues to play an important role in providing domestic raw materials for papermaking in developing countries;
- h) an important increase in paper and board capacity in developing countries is expected, adding over 35 per cent or 4.6 million tons to their existing manufacturing capability. An almost equal addition is expected in countries with centrally planned economies. Increases in capacity in the developed countries, although larger in volume (18.1 million tons) will mean an expansion of just over 12 per cent;
- i) the increase in capacity of wrapping and packaging paper and board, amounting to 12.4 million tons, is lower than the 13.2 and 15.5 million tons noted in the last two surveys, but still accounts for almost two thirds of the total increase of paper and board;
- j) the ratio of pulp manufacturing capacity to paper and board capacity continues at a lower level than ten years ago.

Product and Regional Trends

The latest survey indicates that the world capacity of paper grades of pulp is expected to increase from 143.3 million tons in 1977 to 164.2 million tons in 1982, at the same time as paper and paperboard capacity rises from 184.4 to 211.8 million tons. The growth of capacity by main grades since 1967 is shown in Table 1 and illustrates that over the fifteen year period, capacity increased most rapidly between 1967 and 1972, the rate of increase then declined during the second five year period and is expected to be even lower in the five years ahead. Only in the case of pulp made from fibres other than wood is this trend not apparent. Details of capacity by major product and region for each of the years 1977-82 are contained in Annexes 1-6.

Table 1 - World Pulp, Paper and Paperboard Capacity, 1967-82

	Total Capacity				Annual Average Increase		
	1967	1972	1977	1982	1967-72	1972-77	1977-82
	-- million metric tons --				-- per cent --		
Total woodpulp, paper grades	92.1	115.2	133.3	152.4	4.6	3.0	2.7
Mechanical	24.9	28.6	32.1	36.1	2.8	2.3	2.4
Semi-chemical (a)	6.5	9.1	10.5	11.8	6.8	2.8	2.3
Chemical	60.7	77.5	90.7	104.5	5.0	3.2	2.9
Other fibre pulp	6.7	7.5	10.0	11.8	2.4	5.8	3.4
Dissolving pulp	5.3	5.7	5.7	6.3	1.8	- 0.1	2.0
Total Paper and Paperboard	119.4	152.1	184.4	211.8	5.0	3.9	2.8
Newsprint	20.8	24.4	26.0	30.7	3.3	1.3	3.3
Printing and writing	24.5	33.0	41.0	47.7	6.1	4.4	3.1
Other paper and paperboard	74.1	93.7	117.4	133.4	5.0	4.4	2.6

(a) including chemi-groundwood

In the last three surveys, the anticipated rate of growth in woodpulp capacity for the five years ahead has been diminishing from 4.1 per cent to 3.4, 3.1 and to 2.7 per cent in the current survey. This lowering of expectations has been almost identically matched in the case of paper and paperboard with an uninterrupted decline from 4.1 per cent to 2.8 per cent. On a year to year basis, there is an acceleration in the rate of increase in capacity during the first three years of the survey, followed by a marked tailing off in growth, as is shown below.

Table 2 - Annual Rate of Increases in World Pulp, Paper and Paperboard Capacity 1977-82

	Annual Increases				
	1977-78	1978-79	1979-80	1980-81	1981-82
	-- per cent --				
Total woodpulp, paper grades	2.3	3.0	3.5	2.7	2.1
Mechanical	2.0	2.7	3.5	2.5	1.5
Semi-chemical (a)	3.0	3.2	2.1	1.3	2.0
Chemical	2.3	3.1	3.6	3.0	2.3
Other fibre pulp	4.1	4.8	3.2	2.3	2.5
Dissolving pulp	3.3	2.6	2.6	1.0	0.2
Total paper and paperboard	2.9	3.5	3.7	2.1	1.9
Newsprint	2.8	4.4	4.4	3.1	1.8
Printing and writing	3.4	3.1	4.7	1.8	2.3
Other paper and paperboard	2.7	3.4	3.2	2.0	1.7

(a) including chemi-groundwood

This is hardly surprising in view of the fact that expansions within the next two or three years represent firm commitments on the part of companies, whereas in later years companies are less firmly committed, particularly under current economic and financial conditions. In addition, in a few countries capacity surveys cover a shorter period than five years.

a) Total Pulp for Papermaking

An increase of 20.9 million tons of papermaking grades of pulp capacity is expected between 1977 and 1982, at an annual average rate of 2.8 per cent, which is some 3 million tons less than was actually installed in the five years 1967-72 and about the same amount as came on stream between 1972 and 1977. Mechanical pulp will account for 4.0 million tons, semi-chemical 1.3 million, chemical pulp 13.8 million and the remaining 1.8 million tons will be other fibre pulp. Only marginal additions of dissolving pulp are planned.

The developments which are taking place in hardwood pulps, mainly bleached sulphate and semi-chemical pulps, continue to be of considerable significance. Between 1977 and 1982, an expansion of 4.2 and 0.6 million tons respectively is anticipated. These figures indicate that one third of the total increase in chemical pulp can be attributed to these types of hardwood pulps. Reference to Annex 7 indicates that most of the new bleached hardwood sulphate pulp capacity will be located in the United States, Brazil and Japan. In Brazil, it will be based mainly on eucalyptus and gmelina plantations.

All but a small proportion of papermaking pulp capacity is located in developed countries. However, over the last several years the expansions which have occurred in developing countries, have resulted in a doubling of their capacity and if future plans are implemented, these countries should account for 7.7 per cent of world capacity by 1982, compared to 5.6 per cent in 1977.

The future capacity of market pulp is particularly difficult to estimate, comprised as it is of the capacity of non-integrated mills and of the "surplus" capacity of integrated pulp and paper mills. The present survey indicates that the capacity of paper grade market pulps will expand from 27.0 million tons in 1977 to 30.4 million tons in 1980, at an annual rate of 4.0 per cent. These results show only a slight variation in total from last year's survey. There are, however, changes in the estimates for individual countries. In Canada, Japan and Sweden, for example, current figures are lower than last year's; in USA and Finland they are higher, whereas in Brazil there have been only minor amendments. These six countries account for nearly three quarters of the world's market pulp capacity. Practically all the additional market pulp will be bleached sulphate pulp, more softwood than hardwood, and most of the hardwood pulp coming from Brazil. These developments can be traced in detail in Annex 8 and are illustrated in Annex 11.

i) Woodpulp

The volume of additional capacity of woodpulp for papermaking in the world between 1977 and 1982 is expected to be 19.1 million tons, which is about 1 million tons more than the amount actually installed between 1972 and 1977, but 4 million tons less than was added between 1967 and 1972. The overall rate of growth obviously varies between these periods but of greater significance is the location of the new capacity. This is illustrated in Table 3 on the following page.

Table 3 - Increases in Capacity of Total Woodpulp
for Papermaking, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	115 206	133 262	152 409	18 056	19 147	3.0	2.7
Dev'ed Mkt. Economies	99 835	112 558	124 639	12 723	12 081	2.4	2.1
Northern America	59 107	66 551	73 337	7 444	6 786	2.4	2.0
Japan	10 339	11 851	13 513	1 512	1 662	2.8	2.7
Western Europe	28 617	31 269	34 447	2 652	3 178	1.8	2.0
Oceania	1 222	2 108	2 418	886	310	11.5	2.8
Others	550	779	924	229	145	7.2	3.5
Dev'ing Mkt. Economies	3 438	5 515	9 239	2 077	3 724	9.9	10.9
Africa	245	331	672	86	341	6.2	15.2
Latin America	2 420	4 085	6 653	1 665	2 568	11.0	10.2
Asia	773	1 099	1 914	326	815	7.3	11.7
Cent. Planned Economies	11 933	15 189	18 531	3 256	3 342	4.9	4.1
Asia	1 695	2 333	2 918	638	585	6.6	4.6
Eastern Europe	2 718	3 606	4 363	888	757	5.8	3.9
U.S.S.R.	7 520	9 250	11 250	1 730	2 000	4.2	4.0

Of the 19.1 million tons of new capacity, 12.1 million tons (63.3 per cent) will be located in developed countries, 3.7 million tons (19.4 per cent) in developing countries and 3.3 million tons (17.3 per cent) in countries with centrally planned economies. Compared to the last two surveys, there has been a marked slowing down in proposed expansions, particularly in the developing countries. This no doubt reflects the unsettled economic conditions worldwide and the related difficult market situation. Planned expansions over the five year periods have been revised downwards in Brazil, for example, from 3.3 to 2.7 to 1.8 million tons in the last three surveys.

Comparing the current survey with the previous one, most of the reduced volume in the five year spans is due to lower expectations in Canada, Scandinavia and Brazil. These are only partially counterbalanced by the more optimistic plans in USA and Japan. Of the total increase, approximately one third will be located in the United States and ten per cent each in Japan, Brazil and Scandinavia.

Mechanical Pulp

Between 1977 and 1982, it is anticipated that the capacity of mechanical pulp will rise by 4.1 million tons, compared to 3.5 million tons in the preceding five year period. The annual average rate of growth hardly changes.

Particularly rapid rates of expansion are expected in developing countries, in Africa and Asia, for example, as well as in Japan and Oceania.

Table 4 - Increases in Capacity of Mechanical Woodpulp
for Papermaking, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	28 590	32 051	36 148	3 461	4 097	2.3	2.4
Dev'ed Mkt. Economies	24 497	27 287	30 502	2 790	3 215	2.2	2.3
Northern America	12 859	13 528	14 791	669	1 263	1.0	1.8
Japan	1 558	1 983	2 687	425	704	4.9	6.3
Western Europe	9 421	10 623	11 591	1 202	968	2.4	1.8
Oceania	409	810	1 082	401	272	14.6	6.0
Others	250	343	351	93	8	6.5	0.5
Dev'ing Mkt. Economies	811	819	1 219	8	400	0.2	8.3
Africa	14	18	31	4	13	5.2	11.5
Latin America	385	456	600	71	144	3.5	5.6
Asia	412	345	588	- 67	243	- 3.5	11.3
Cent. Planned Economies	3 282	3 945	4 427	663	482	3.7	2.3
Asia	745	860	1 063	115	203	2.9	4.3
Eastern Europe	637	935	964	298	29	8.0	0.6
U.S.S.R.	1 900	2 150	2 400	250	250	2.5	2.2

Semi-Chemical Pulp

Between 1977 and 1982, the world capacity of semi-chemical and chemi-groundwood pulp will increase from 10.5 to 11.8 million tons, or by 1.3 million tons, at an annual average rate of 2.3 per cent. This is marginally less than came on stream between 1972 and 1977.

Table 5 - Increases in Capacity of Semi-chemical Woodpulp
for Papermaking, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	9 108	10 471	11 759	1 363	1 288	2.8	2.3
Dev'ed Mkt. Economies	8 280	9 175	9 732	895	557	2.1	1.2
Northern America	3 908	4 550	4 984	642	434	3.1	1.8
Japan	2 222	2 026	2 100	- 196	74	- 1.9	0.7
Western Europe	1 823	2 044	2 088	221	44	2.3	0.4
Oceania	289	396	396	107	-	6.5	-
Others	38	159	164	121	5	33.0	0.6
Dev'ing Mkt. Economies	334	420	804	86	384	4.7	13.9
Africa	4	9	16	5	7	17.6	12.2
Latin America	271	348	635	77	287	5.1	12.8
Asia	59	63	153	4	90	1.3	19.4
Cent. Planned Economies	494	876	1 223	382	347	12.6	6.9
Asia	-	-	-	-	-	-	-
Eastern Europe	124	376	473	252	97	25.0	4.7
U.S.S.R.	370	500	750	130	250	6.2	8.4

Significant developments are planned in Northern America and Latin America, where some two thirds of the total increase will be located.

Chemical Woodpulp for Papermaking

Just under 65 per cent of total papermaking pulp in 1977 was chemical woodpulp and this proportion is not expected to change significantly over the next five years. Between 1977 and 1982, capacity is expected to expand from 90.7 million tons to 104.5 million, or by 13.8 million tons, at an annual average rate of 2.9 per cent. The additional volume registers a marked decrease compared to recent surveys (15.3 million tons for 1976-81 and 16.6 million tons from 1975-80).

Table 6 - Increases in Capacity of Chemical Woodpulp
for Papermaking, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	77 508	90 740	104 502	13 232	13 762	3.2	2.9
Dev'ed Mkt. Economies	67 058	76 096	84 405	9 038	8 309	2.6	2.1
Northern America	42 340	48 473	53 562	6 133	5 089	2.7	2.0
Japan	6 559	7 842	8 726	1 283	884	3.6	2.2
Western Europe	17 373	18 602	20 768	1 229	2 166	1.4	2.2
Oceania	524	902	940	378	38	11.5	0.8
Others	262	277	409	15	132	1.1	8.1
Dev'ing Mkt. Economies	2 293	4 276	7 216	1 983	2 940	13.3	11.0
Africa	227	304	625	77	321	6.0	15.5
Latin America	1 764	3 281	5 418	1 517	2 137	13.2	10.6
Asia	302	691	1 173	389	482	18.0	11.2
Cent. Planned Economies	8 157	10 368	12 881	2 211	2 513	4.9	4.4
Asia	950	1 473	1 855	523	382	9.2	4.7
Eastern Europe	1 957	2 295	2 926	338	631	3.2	5.0
U.S.S.R.	5 250	6 600	8 100	1 350	1 500	4.7	4.2

A more detailed analysis of the developments occurring in chemical pulp reveals that the capacity of sulphite pulp is stagnating and that it is sulphate pulp capacity which is expanding rapidly. Many sulphite pulp mill closures, particularly in the Nordic countries, are noted in "Information on Projected Pulp and Paper Mills in the World, 1977-1987", as well as a limited number of new mills. The reduction in capacity in the Nordic countries and North America may well amount to 0.7 million tons in the five years to 1982.

ii) Other Fibre Pulp

It is anticipated that between 1977 and 1982 the capacity of other fibre pulp for papermaking, excluding waste paper, will increase from 10.0 to 11.8 million tons, or by 1.8 million tons, equivalent to an annual rate of 3.4 per cent. Although the comparable increase from 1972-77 was 2.5 million tons, the prospective addition is substantial.

Table 7 - Increases in Capacity of Other Fibre Pulp
for Papermaking, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	----- '000 metric tons -----			-----		----- per cent -----	
World Total	7 549	10 028	11 848	2 479	1 820	5.8	3.4
Dev'ed Mkt. Economies	2 329	1 757	1 799	- 572	42	- 5.5	0.5
Northern America	1 000	699	731	- 301	32	- 6.9	0.9
Japan	6	4	4	- 2	-	- 7.8	-
Western Europe	1 270	942	951	- 328	9	- 5.8	0.2
Oceania	3	4	5	1	1	5.9	4.6
Others	50	108	108	58	-	16.7	-
Dev'ing Mkt. Economies	1 790	2 569	3 396	779	827	7.5	5.7
Africa	112	194	230	82	36	11.6	3.5
Latin America	681	981	1 452	300	471	7.6	8.2
Asia	997	1 394	1 714	397	320	6.9	4.2
Cent. Planned Economies	3 430	5 702	6 653	2 272	951	10.7	3.1
Asia	2 781	4 998	5 820	2 217	822	12.4	3.1
Eastern Europe	249	254	258	5	4	0.4	0.3
U.S.S.R.	400	450	575	50	125	2.4	5.0

Additional capacity contemplated in the developed countries is minimal, with actual reductions in some straw pulping facilities. The principal increases occur in Latin America, chiefly of bagasse pulp, and in Asia, of bamboo pulp.

iii) Dissolving pulp

The capacity of dissolving pulp, which only showed very modest growth in the past decade, will rise marginally in the future. Some 600 000 tons of additional capacity are planned, mainly in Eastern Europe and U.S.S.R.

b) Paper and Paperboard

The total paper and paperboard capacity in the world is expected to increase from 184.4 million tons in 1977 to 211.8 million tons in 1982, at an average rate of 2.3 per cent. The volume of additional capacity, 27.4 million tons, is the lowest level of increase anticipated in any of the surveys this decade. It is all too apparent that the continuance of uncertain market conditions, inflationary pressures in many countries and high investment costs in particular are still causing hesitation, re-appraisal and deferrment of some plans.

Table 8 - Increases in Capacity of Total Paper and
Paperboard, 1972-82

Paperboard, 1972-82

	Capacity						Total Increase		Annual Average Increase	
	1972	1977	1982				1972-77	1977-82	1972-77	1977-82
	'000 metric tons								per cent	
World Total	152 137 184 425	211 788	32 288	27 363		3.9	2.8			
Dev'ed Mkt. Economies	126 086 147 128	165 240	21 042	18 112		3.1	2.3			
Northern America	65 828 73 452	80 804	7 624	7 352		2.2	1.9			
Japan	15 818 20 716	24 693	4 898	3 977		5.5	3.6			
Western Europe	41 894 49 478	55 605	7 584	6 127		3.4	2.4			
Oceania	1 681 2 206	2 701	525	495		5.6	4.1			
Others	865 1 276	1 437	411	161		8.1	2.4			
Dev'ing Mkt. Economies	8 332 12 574	17 170	4 242	4 596		8.6	6.4			
Africa	412 653	853	241	200		9.6	5.5			
Latin America	5 097 7 665	10 428	2 568	2 763		8.5	6.4			
Asia	2 823 4 256	5 889	1 433	1 633		8.6	6.7			
Cent. Planned Economies	17 719 24 723	29 378	7 004	4 655		6.9	3.5			
Asia	5 174 8 447	9 753	3 273	1 306		10.3	2.9			
Eastern Europe	4 345 5 776	6 625	1 431	849		5.9	2.8			
U.S.S.R.	8 200 10 500	13 000	2 300	2 500		5.1	4.4			

Some two thirds of the new capacity will be located in the developed countries, where 80 per cent of capacity already exists. However, due to the faster rate of growth foreseen in developing countries, these may account for over 8 per cent of world paper and paperboard capacity in 1982, compared to 6.8 per cent in 1977 and 5.4 in 1972. In terms of volume, the addition in the developing countries and the countries with centrally planned economies is about the same.

Newsprint

The future annual growth of newsprint capacity may well be two and a half times as fast as in the recent past, 3.3 per cent compared to 1.3 per cent. The slowest rates of growth will occur in the area with the largest capacity, i.e. Northern America, whereas over-all the developing countries should add significantly to their production potential and thereby go some way towards meeting their consumption requirements.

Reference has been made in earlier surveys to the reduction in the grammage of newsprint enabling the same surface area to be obtained from a smaller volume. Whereas this trend appears to be continuing, its major impact has for the time being already taken place and the effect on future additional newsprint capacity is likely to be of minor importance.

Table 9 - Increases in Capacity of Newsprint, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	24 434	26 064	30 688	1 630	4 624	1.3	3.3
Dev'ed Mkt. Economies	21 305	22 297	25 579	992	3 282	0.9	2.8
Northern America	12 333	12 702	13 756	369	1 054	0.6	1.6
Japan	2 131	2 602	3 310	471	708	4.1	4.9
Western Europe	6 241	6 170	7 429	- 71	1 259	- 0.2	3.8
Oceania	416	533	709	117	176	5.1	5.9
Others	184	290	375	106	85	9.5	5.3
Dev'ing Mkt. Economies	671	863	1 751	192	888	5.2	15.2
Africa	12	13	27	1	14	1.6	15.7
Latin America	308	366	923	58	557	3.5	20.0
Asia	351	484	801	133	317	6.6	10.6
Cent. Planned Economies	2 458	2 904	3 358	446	454	3.4	2.9
Asia	760	890	1 060	130	170	3.2	3.6
Eastern Europe	348	414	448	66	34	3.5	1.6
U.S.S.R.	1 350	1 600	1 850	250	250	3.5	2.9

Other Printing and Writing Paper

The future growth in the capacity of other printing and writing paper will be particularly marked in the developing countries, where some 900 000 tons of new capacity is expected to come on stream between 1977 and 1982. Although the rate of growth is lower, this volume is higher than that actually installed between 1972 and 1977. Only in Japan does the rate of growth in the developed countries approximate that in the developing countries.

Table 10 - Increases in Capacity of Other Printing and Writing Paper, 1972-82

	Capacity			Total Increase		Annual Average Increase	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	'000 metric tons					per cent	
World Total	33 015	40 980	47 696	7 695	6 716	4.4	3.1
Dev'ed Mkt. Economies	27 708	33 268	38 186	5 560	4 918	3.7	2.8
Northern America	12 396	14 506	16 101	2 110	1 595	3.2	2.1
Japan	3 016	3 758	5 161	742	1 403	4.5	6.5
Western Europe	11 966	14 522	16 416	2 556	1 894	3.9	2.5
Oceania	195	265	278	70	13	6.3	1.0
Others	135	217	230	82	13	10.0	1.2
Dev'ing Mkt. Economies	2 163	2 963	3 864	800	901	6.5	5.5
Africa	135	204	280	69	76	8.6	6.5
Latin America	1 053	1 431	1 883	378	452	6.3	5.6
Asia	975	1 328	1 701	353	373	6.4	5.1
Cent. Planned Economies	3 144	4 749	5 646	1 605	897	8.6	3.5
Asia	1 155	2 271	2 650	1 116	379	14.5	3.1
Eastern Europe	889	1 128	1 396	239	268	4.9	4.4
U.S.S.R.	1 100	1 350	1 600	250	250	4.2	3.5

Ratio of Paper Pulp to Paper and Paperboard Capacity

For over ten years, the proportion of pulp manufacturing capacity to paper and board capacity has been moving steadily downwards, possibly reflecting the greater utilisation of waste paper in the manufacture of paper and board. It would seem, however, that this decline may now be nearly over, as a slight upward movement is expected to occur in the early 1980's. The past and future ratios of pulp to paper and board capacities are as follows:

	<u>Pulp/Paper Ratio</u> <u>per cent</u>
1965	81.8
1970	80.5
1975	77.8
1977 (a)	77.7
1978 (a)	77.3
1979 (a)	77.1
1980 (a)	76.9
1981 (a)	77.4
1982 (a)	77.6

(a) as forecast in 1977-82 survey

Comparison with earlier Surveys

For the third successive year, the FAO pulp and paper capacity survey shows a smaller total addition for the five year period for both pulp and paper. The comparison with earlier surveys is illustrated in the following table.

<u>Period of Survey</u>	<u>Total Increase over period</u>	
	<u>Total Pulp</u> <u>for paper-</u> <u>making</u>	<u>Total paper</u> <u>and</u> <u>paperboard</u>
	-- million metric tons --	
1969 - 74	26.1	37.5
1970 - 75	29.0	34.4
1971 - 76	24.9	27.8
1972 - 77	24.7	28.3
1973 - 78	23.6	32.4
1974 - 79 (a)	26.7	33.3
1975 - 80	25.4	31.1
1976 - 81	23.3	28.1
1977 - 82	21.0	27.4

(a) after amendment by nine countries, i.e. Canada, U.S.A., Brazil, Finland, France, Federal Republic of Germany, Sweden, U.K. and Japan

It is also of interest to note that the capacity for 1977 envisaged in last year's survey was over-estimated. The actual capacity for that year is 143.3 million tons of paper grades of pulp as compared to the earlier estimate of 143.9 million tons and 184.4 million tons of paper and board compared to 186.1 million tons. Uncertain conditions doubtless caused the cancellation or postponement of many plans.

The results of the present survey once again illustrate the optimism of the estimates for pulp in the final years. Actual world capacity of woodpulp in 1977 was 133.3 million tons, which compares to the 137.5 million tons for that year envisaged in the 1972-77 survey.

Whereas the same optimism used to occur in the case of paper and board capacity, the last two surveys have shown a contrary trend. An actual capacity in 1977 of 184.4 million tons compares to the 180.5 million tons indicated in the 1972-77 survey. This is illustrated in Annex 10.

For the main grades of pulp, paper and paperboard, the overall additional capacity foreseen for the periods covered by the last four surveys is shown below.

	<u>Survey*</u> <u>1974-79</u>	<u>Survey</u> <u>1975-80</u>	<u>Survey</u> <u>1976-81</u>	<u>Survey</u> <u>1977-82</u>
	----- '000 metric tons -----			
Total woodpulp	24 306	22 815	21 134	19 147
of which				
Mechanical	4 773	4 075	4 348	4 097
Semi-chemical (a)	2 298	2 148	1 477	1 288
Chemical	17 235	16 592	15 309	13 762
Other fibre pulp	2 431	2 605	2 147	1 820
Total paper and paperboard	33 256	31 060	28 077	27 363
of which				
Newsprint	4 579	4 537	4 655	4 624
Other printing & writing	7 671	7 303	6 911	6 716
Other paper and paperboard	21 008	19 220	16 511	16 023
- wrapping & packaging	..	15 493	13 161	12 435

(a) Including chemi-groundwood

* After amendment by nine countries

Rapport concernant l'enquête de la FAO sur
la capacité mondiale de production de pâte et de papier 1977-1982

par
le Secrétariat

L'enquête annuelle de la FAO sur la capacité mondiale de production de pâte et de papier est fondée, pour la plupart des pays du monde, sur les chiffres communiqués au début de l'année par les correspondants et, pour les autres, sur des estimations du Secrétariat. En général, les données sont fournies par les associations nationales des industries de la pâte et du papier à partir des indications que les membres de ces associations ont données au sujet de leurs futurs plans de développement au cours de l'année précédente. En conséquence, les résultats de l'enquête représentent les intentions de l'industrie au moment où elle a lieu; la conjoncture économique, financière et commerciale peut entraîner par la suite des modifications importantes.

Le champ, la teneur et la présentation de l'enquête n'ont subi aucun changement cette année. Toutefois, grâce à l'intérêt toujours croissant que suscitent les résultats et leur utilisation, certains pays ont réorganisé leurs enquêtes nationales afin d'obtenir des données plus significatives et plus précises et d'autres ont encore perfectionné les améliorations apportées ces dernières années.

On se souviendra qu'à titre d'innovation, l'année dernière, une liste des plans d'expansion pour les dix prochaines années avait été préparée; elle indiquait la société, le produit, la capacité et l'année où devraient débiter les nombreux projets qui étaient à l'étude. Etant donné l'intérêt qu'elle a suscité, la liste a été mise à jour, grâce à la coopération de nombreux participants à l'enquête et elle est à nouveau publiée séparément. Le cas échéant, la capacité supplémentaire prévue a été confrontée avec les données indiquées dans l'enquête actuelle, mais il faut noter que la liste n'est pas exhaustive; une augmentation importante de capacité peut résulter d'améliorations mécaniques, de projets confidentiels etc., dont on ne connaît pas les détails. Néanmoins, on espère que les renseignements fournis ici seront utiles à tous ceux qui sont chargés de planifier l'avenir de l'industrie.

Les principales conclusions de l'enquête de 1977-82 sont les suivantes:

- a) On prévoit que la capacité mondiale de production des pâtes pour papier passera de 143 millions de tonnes en 1977 à 164 millions en 1982. Cet accroissement de 21 millions de tonnes correspond à un taux de croissance annuel de 2,8 pour cent;
- b) on prévoit que la capacité mondiale de production de papiers et cartons passera de 184 millions de tonnes en 1977 à 212 millions de tonnes en 1982. Cet accroissement de 28 millions de tonnes correspond à un taux annuel de croissance de 2,8 pour cent;

- c) ces chiffres de 21 millions de tonnes pour les pâtes à papier et de 28 millions de tonnes pour les papiers et cartons sont les augmentations les plus faibles jamais envisagées dans les enquêtes de cette décennie;
- d) la capacité mondiale de production de pâte de bois en 1982 est légèrement supérieure à celle envisagée pour 1981 dans l'enquête de l'année dernière. Les estimations pour les papiers et les cartons sont beaucoup plus élevées, en raison principalement de plans plus optimistes aux Etats-Unis et au Japon;
- e) la capacité supplémentaire de production de pâtes chimiques de 13,8 millions de tonnes dont la création est prévue entre 1977 et 1982 est beaucoup plus faible que le volume envisagé dans les dernières enquêtes;
- f) la capacité de production de pâtes de feuillus au sulfate blanchies devrait augmenter de 4,2 millions de tonnes, passant de 16,1 millions de tonnes en 1977 à 20,3 millions de tonnes en 1982. Cette augmentation est en gros comparable aux 4,3 et 4,7 millions de tonnes des deux dernières enquêtes;
- g) les pâtes d'autres fibres continuent de jouer un rôle important comme source locale de matière première pour la fabrication de papier dans les pays en développement;
- h) on prévoit une hausse importante de la capacité de production de papiers et cartons dans les pays en développement: elle serait d'environ 35 pour cent soit 4,6 millions de tonnes. On prévoit une expansion à peu près du même ordre dans les pays à économie centralisée planifiée. Les augmentations de la capacité de production dans les pays développés, tout en se traduisant par un plus gros accroissement en volume (18,1 millions de tonnes), représenteront à peine plus de 12 pour cent;
- i) l'accroissement de la capacité de production de papiers et de cartons d'emballage soit 12,4 millions de tonnes, est inférieur aux chiffres de 13,2 et de 15,5 millions de tonnes indiqués dans les deux dernières enquêtes, mais représente encore environ les deux tiers de l'augmentation totale de capacité des papiers et cartons;
- j) le rapport entre la capacité de production de pâte et celle de papiers et cartons se maintient à un niveau inférieur à celui d'il y a dix ans.

Tendances par produit et par région

Comme l'indique l'enquête la plus récente, la capacité mondiale de production de pâte pour papier devrait passer de 143,3 millions de tonnes en 1977 à 164,2 millions de tonnes en 1982, tandis que la capacité de production de papiers et cartons devrait augmenter de 184,4 à 211,8 millions de tonnes. Le tableau 1 ci-après indique l'évolution de la capacité mondiale par grande catégorie de produits depuis 1967 et permet aussi de constater qu'au cours de la période de 15 ans, la capacité s'est accrue le plus rapidement entre 1967 et 1972, le rythme d'accroissement a ensuite diminué au cours des cinq années suivantes et devrait être encore plus faible pour les cinq années à venir. Ce n'est que pour la pâte faite de fibres autres que le bois que cette tendance n'apparaît pas. On trouvera aux Annexes 1 à 6 une ventilation par région et par grande catégorie de produits pour chacune des années de la période 1977-82.

Tableau 1 - Capacité mondiale de production de pâte, de papier
et de carton, 1967-82

	Capacité totale				Taux annuel moyen d'accroissement		
	1967	1972	1977	1982	1967-72	1972-77	1977-82
	- - millions de tonnes - -				- - - - pourcentage - - - - -		
Pâte de bois pour papier, total	92,1	115,2	133,3	152,4	4,6	3,0	2,7
Mécanique	24,9	28,6	32,1	36,1	2,8	2,3	2,4
Mi-chimique (a)	6,5	9,1	10,5	11,8	6,8	2,8	2,3
Chimique	60,7	77,5	90,7	104,5	5,0	3,2	2,9
Pâte d'autres fibres	6,7	7,5	10,0	11,8	2,4	5,8	3,4
Pâte à dissoudre	5,3	5,7	5,7	6,3	1,8	- 0,1	2,0
Papier et carton, total	119,4	152,1	184,4	211,8	5,0	3,9	2,8
Papier journal	20,8	24,4	26,0	30,7	3,3	1,3	3,3
Papier d'impression et d'écriture	24,5	33,0	41,0	47,7	6,1	4,4	3,1
Autres papiers et cartons	74,1	93,7	117,4	133,4	5,0	4,4	2,6

(a) Y compris la pâte chimico-mécanique

Dans les trois dernières enquêtes, le taux de croissance prévu de la capacité de production de pâte de bois pour les cinq années à venir a diminué, passant de 4,1 pour cent à 3,4, 3,1 et 2,7 pour cent dans l'enquête actuelle. Ce déclin par rapport aux quantités prévues a été presque identique dans le cas de la capacité de production des papiers et cartons qui a enregistré une baisse ininterrompue passant de 4,1 pour cent à 2,8 pour cent. D'une année à l'autre, on observe une accélération du taux d'accroissement de la capacité au cours des trois premières années de l'enquête, suivie d'un net déclin de la croissance comme on le voit ci-dessous.

Tableau 2 - Taux annuel d'accroissement de la capacité mondiale de
production de pâte, de papier et de carton 1977-82

	Accroissements annuels				
	1977-78	1978-79	1979-80	1980-81	1981-82
	- - - - - pourcentage - - - - -				
Pâte de bois pour papier, total	2,3	3,0	3,5	2,7	2,1
Mécanique	2,0	2,7	3,5	2,5	1,5
Mi-chimique (a)	3,0	3,2	2,1	1,3	2,0
Chimique	2,3	3,1	3,6	3,0	2,3
Pâte d'autres fibres	4,1	4,8	3,2	2,3	2,5
Pâte à dissoudre	3,3	2,6	2,6	1,0	0,2
Papier et carton, total	2,9	3,5	3,7	2,1	1,9
Papier journal	2,8	4,4	4,4	3,1	1,8
Papier d'impression et d'écriture	3,4	3,1	4,7	1,8	2,3
Autres papiers et cartons	2,7	3,4	3,2	2,0	1,7

(a) Y compris la pâte chimico-mécanique

Cette évolution n'est pas très surprenante si l'on pense que les expansions prévues dans les deux ou trois prochaines années représentent des engagements fermes de la part des sociétés, alors que ces dernières années les sociétés se sont engagées beaucoup moins fermement, notamment dans la situation économique et financière actuelle. En outre, dans un petit nombre de pays, les enquêtes de capacité se rapportent à une période inférieure à cinq ans.

a) Pâte pour papier, total

Entre 1977 et 1982, la capacité de production de pâte pour papier devrait augmenter de 20,9 millions de tonnes, correspondant à un taux annuel moyen de 2,8 pour cent, soit un accroissement inférieur de quelque 3 millions de tonnes à celui réalisé dans la période quinquennale 1967-72, mais à peu près équivalent à celui réalisé entre 1972 et 1977. Sur ce total, la pâte mécanique représente 4 millions de tonnes, la pâte mi-chimique 1,3 million, la pâte chimique 13,8 millions et la pâte d'autres fibres 1,8 million de tonnes. On ne prévoit que des accroissements marginaux pour la capacité de production de pâte à dissoudre.

L'évolution enregistrée dans la situation des pâtes de feuillus, principalement des pâtes au sulfate blanchies et les pâtes mi-chimiques, continue de revêtir une importance considérable. Entre 1977 et 1982, on s'attend à une augmentation de 4,2 et 0,6 millions de tonnes respectivement. On voit d'après ces chiffres qu'un tiers de l'accroissement total de la capacité de pâte chimique peut être attribué à ces types de feuillus. Si l'on se réfère à l'Annexe 7, on constatera que la plus grande partie de la nouvelle capacité de pâte de feuillus au sulfate blanchie sera située aux Etats-Unis, au Brésil et au Japon. Au Brésil, elle tirera sa matière première principalement de plantations d'eucalyptus et de gmelina.

La majeure partie de la capacité de production de pâte à papier se trouve dans les pays développés. Toutefois, ces dernières années, les accroissements de capacité qui se sont vérifiés dans les pays en développement ont doublé leur capacité totale, et si les plans futurs sont mis en oeuvre, ces pays devraient compter en 1982, 7,7 pour cent de la capacité mondiale contre 5,6 pour cent en 1977.

La capacité future de la pâte marchande est particulièrement difficile à estimer puisqu'elle comprend la capacité des usines non intégrées et celle "en surplus" des usines intégrées de pâte et de papier. Une enquête actuelle indique que la capacité de production de pâte marchande pour papier devrait passer de 27 millions de tonnes en 1977 à 30,4 millions de tonnes en 1980, soit un taux d'accroissement de 4 pour cent par an. Ces résultats ne représentent qu'une légère variation du total par rapport à l'enquête de l'année dernière. Toutefois, on observe des modifications dans les estimations pour chaque pays. Au Canada, au Japon et en Suède par exemple, les chiffres actuels sont inférieurs à ceux de l'année dernière; aux Etats-Unis et en Finlande, ils sont supérieurs, tandis que le Brésil n'enregistre que des changements mineurs. Ces six pays représentent presque les trois quarts de la capacité mondiale de pâte marchande. Presque toute la pâte marchande supplémentaire sera de la pâte au sulfate blanchie, provenant plus de résineux que de feuillus et la plus grande partie de la pâte de feuillus viendra du Brésil. Cette évolution est analysée en détail à l'Annexe 8 et illustrée à l'Annexe 11.

i) Pâte de bois

La capacité mondiale de fabrication de pâte de bois pour papier devrait augmenter entre 1977 et 1982 de 19,1 millions de tonnes, soit un accroissement de près de 1 million de tonnes par rapport à la capacité effectivement installée entre 1972 et 1977, mais une réduction de 4 millions de tonnes par rapport à l'expansion qui s'est produite entre 1967 et 1972. Le taux global de croissance varie évidemment entre ces périodes, mais ce qui assume une plus grande importance est la répartition de cette capacité nouvelle de production, comme l'illustre le tableau 3 ci-après.

Tableau 3 - Accroissement de la capacité de production totale de pâte
de bois pour papier, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes			tonnes		pourcentage	
Total mondial	115 206	133 262	152 409	18 056	19 147	3,0	2,7
Pays dev. à écon.marché	99 835	112 558	124 639	12 723	12 081	2,4	2,1
Amérique du Nord	59 107	66 551	73 337	7 444	6 786	2,4	2,0
Japon	10 339	11 851	13 513	1 512	1 662	2,8	2,7
Europe occidentale	28 617	31 269	34 447	2 652	3 178	1,8	2,0
Océanie	1 222	2 108	2 418	886	310	11,5	2,8
Autres	550	779	924	229	145	7,2	3,5
Pays en dev. à écon.marché	3 438	5 515	9 239	2 077	3 724	9,9	10,9
Afrique	245	331	672	86	341	6,2	15,2
Amérique latine	2 420	4 085	6 653	1 665	2 568	11,0	10,2
Asie	773	1 099	1 914	326	815	7,3	11,7
Pays à écon.cent. planif.	11 933	15 189	18 531	3 256	3 342	4,9	4,1
Asie	1 695	2 333	2 918	638	585	6,6	4,6
Europe orientale	2 718	3 606	4 363	888	757	5,8	3,9
U.R.S.S.	7 520	9 250	11 250	1 730	2 000	4,2	4,0

Sur les 19,1 millions de tonnes de capacité supplémentaire, 12,1 millions de tonnes (63,3 pour cent) seront situés dans les pays développés, 3,7 millions de tonnes (19,4 pour cent) dans les pays en développement et 3,3 millions de tonnes (17,3 pour cent) dans les pays à économie centralement planifiée. La comparaison avec les deux dernières enquêtes fait ressortir une baisse marquée des expansions proposées, notamment dans les pays en développement. Ceci traduit sans aucun doute l'instabilité de la situation économique mondiale et la situation commerciale difficile qui en découle. C'est ainsi que les expansions prévues pour les cinq prochaines années ont été révisées en baisse, au Brésil, par exemple, où elles sont passées de 3,3 à 2,7 puis à 1,8 millions de tonnes dans les trois dernières enquêtes.

Si l'on compare les résultats de l'enquête actuelle avec ceux de la précédente, on constate que la grande partie des réductions sur des périodes quinquennales provient de baisses prévues au Canada, en Scandinavie, au Brésil. Elles ne sont que partiellement compensées par des plans plus optimistes aux Etats-Unis et au Japon. Environ un tiers de l'accroissement total sera situé aux Etats-Unis et 10 pour cent dans chacun des trois pays, Japon, Brésil et Scandinavie.

Pâte mécanique

Entre 1977 et 1982, on prévoit que la capacité de production de pâte mécanique augmentera de 4,1 millions de tonnes, contre 3,5 millions de tonnes au cours des cinq années précédentes. Le taux annuels de croissance restera presque inchangé.

On s'attend à un rythme particulièrement rapide d'expansion dans les pays en développement, en Afrique et en Asie par exemple, ainsi qu'au Japon et en Océanie.

Tableau 4 - Accroissement de la capacité de production de pâte
mécanique pour papier, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	28 590	32 051	36 148	3 461	4 097	2,3	2,4
Pays dév. à écon. marché	24 497	27 287	30 502	2 790	3 215	2,2	2,3
Amérique du Nord	12 859	13 528	14 791	669	1 263	1,0	1,8
Japon	1 558	1 983	2 687	425	704	4,9	6,3
Europe occidentale	9 421	10 623	11 591	1 202	968	2,4	1,8
Océanie	409	810	1 082	401	272	14,6	6,0
Autres	250	343	351	93	8	6,5	0,5
Pays en dév. à écon. marché	811	819	1 219	8	400	0,2	8,3
Afrique	14	18	31	4	13	5,2	11,5
Amérique latine	385	456	600	71	144	3,5	5,6
Asie	412	345	588	- 67	243	- 3,5	11,3
Pays à écon. centr. planif.	3 282	3 945	4 427	663	482	3,7	2,3
Asie	745	860	1 063	115	203	2,9	4,3
Europe orientale	637	935	964	298	29	8,0	0,6
U.R.S.S.	1 900	2 150	2 400	250	250	2,5	2,2

Pâte de bois mi-chimique

Entre 1977 et 1982, la capacité mondiale de pâte mi-chimique et chimico-mécanique devrait passer de 10,5 à 11,8 millions de tonnes, soit une augmentation de 1,3 million de tonnes, à un taux moyen annuel de 2,3 pour cent. Ce supplément de capacité est légèrement inférieur à celui qui a été mis en service entre 1972 et 1977.

Tableau 5 - Accroissement de la capacité de production de pâte de
bois mi-chimique pour papier, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	9 108	10 471	11 759	1 363	1 288	2,8	2,3
Pays dév. à écon. marché	8 280	9 175	9 732	895	557	2,1	1,2
Amérique du Nord	3 908	4 550	4 984	642	434	3,1	1,8
Japon	2 222	2 026	2 100	- 196	74	- 1,9	0,7
Europe occidentale	1 823	2 044	2 088	221	44	2,3	0,4
Océanie	289	396	396	107	-	6,5	-
Autres	38	159	164	121	5	33,0	0,6
Pays en dév. à écon. marché	334	420	804	86	384	4,7	13,9
Afrique	4	9	16	5	7	17,6	12,2
Amérique latine	271	348	635	77	287	5,1	12,8
Asie	59	63	153	4	90	1,3	19,4
Pays à écon. centr. planif.	494	876	1 223	382	347	12,6	6,9
Asie	-	-	-	-	-	-	-
Europe orientale	124	376	473	252	97	25,0	4,7
U.R.S.S.	370	500	750	130	250	6,2	8,4

Une évolution importante est prévue en Amérique du Nord et en Amérique latine où les deux tiers de l'accroissement total seront situés.

Pâte de bois chimique pour papier

En 1977, un peu moins de 65 pour cent du total de la pâte à papier était de la pâte de bois chimique, et cette proportion ne devrait pas changer de façon significative dans les cinq prochaines années. Entre 1977 et 1982, la capacité devrait passer de 90,7 millions de tonnes à 104,5 millions de tonnes, soit un accroissement de 13,8 millions de tonnes à un taux annuel moyen de 2,9 pour cent. L'augmentation reste nettement inférieure à celle enregistrée dans les dernières enquêtes (15,3 millions de tonnes pour 1976-81 et 16,6 millions de tonnes pour 1975-80).

Tableau 6 - Accroissement de la capacité de production de pâte de bois chimique pour papier, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	77 508	90 740	104 502	13 232	13 762	3,2	2,9
Pays dev. à écon. marché	67 058	76 096	84 405	9 038	8 309	2,6	2,1
Amérique du Nord	42 340	48 473	53 562	6 133	5 089	2,7	2,0
Japon	6 559	7 842	8 726	1 283	884	3,6	2,2
Europe occidentale	17 373	18 602	20 768	1 229	2 166	1,4	2,2
Océanie	524	902	940	378	38	11,5	0,8
Autres	262	277	409	15	132	1,1	8,1
Pays en dev. à écon. marché	2 293	4 276	7 216	1 983	2 940	13,3	11,0
Afrique	227	304	625	77	321	6,0	15,5
Amérique latine	1 764	3 281	5 418	1 517	2 137	13,2	10,6
Asie	302	691	1 173	389	482	18,0	11,2
Pays à écon. centr. planif.	8 157	10 368	12 881	2 211	2 513	4,9	4,4
Asie	950	1 473	1 855	523	382	9,2	4,7
Europe orientale	1 957	2 295	2 926	338	631	3,2	5,0
U.R.S.S.	5 250	6 600	8 100	1 350	1 500	4,7	4,2

Si l'on analyse plus en détail l'évolution de la situation de la pâte chimique, on observe une stagnation de la capacité de pâte au sulfite tandis que celle de la pâte au sulfate augmente rapidement. De nombreuses usines de pâte au sulfite ont dû fermer, notamment dans les pays nordiques, comme le mentionne le document intitulé "Information on Projected Pulp and Paper Mills in the World, 1977-1987" ainsi qu'un nombre limité de nouvelles usines. La diminution de capacité dans les pays nordiques et en Amérique du Nord pourrait bien atteindre 0,7 million de tonnes dans la période 1977-1982.

ii) Pâte d'autres fibres

Entre 1977 et 1982, la capacité de production des pâtes d'autres fibres pour papier, à l'exclusion des vieux papiers, devrait passer de 10 à 11,8 millions de tonnes, soit une augmentation de 1,8 million de tonnes à un taux annuel de 3,4 pour cent. Bien que l'accroissement correspondant pour 1972-77 ait été de 2,5 millions de tonnes, l'augmentation attendue reste cependant considérable.

Tableau 7 - Accroissement de la capacité de production des pâtes
d'autres fibres pour papier, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	7 549	10 028	11 848	2 479	1 820	5,8	3,4
Pays dév. à écon. marché	2 329	1 757	1 799	- 572	42	- 5,5	0,5
Amérique du Nord	1 000	699	731	- 301	32	- 6,9	0,9
Japon	6	4	4	- 2	-	- 7,8	-
Europe occidentale	1 270	942	951	- 328	9	- 5,8	0,2
Océanie	3	4	5	1	1	5,9	4,6
Autres	50	108	108	58	-	16,7	-
Pays en dév. à écon. marché	1 790	2 569	3 396	779	827	7,5	5,7
Afrique	112	194	230	82	36	11,6	3,5
Amérique latine	681	981	1 452	300	471	7,6	8,2
Asie	997	1 394	1 714	397	320	6,9	4,2
Pays à écon. centr. planif.	3 430	5 702	6 653	2 272	951	10,7	3,1
Asie	2 781	4 998	5 820	2 217	822	12,4	3,1
Europe orientale	249	254	258	5	4	0,4	0,3
U.R.S.S.	400	450	575	50	125	2,4	5,0

L'accroissement de capacité prévu est minime dans les pays développés, où l'on enregistre même des réductions dans les installations de défibrage des pailles. Les principales augmentations auront lieu en Amérique latine, où elles porteront surtout sur la pâte de bagasse, et en Asie, sur la pâte de bambou.

iii) Pâte à dissoudre

La capacité de production de pâte à dissoudre, qui n'a connu qu'une légère augmentation au cours de la dernière décennie, n'enregistrera qu'un accroissement marginal à l'avenir. On prévoit une capacité supplémentaire d'environ 600 000 tonnes, principalement en Europe orientale et en U.R.S.S.

b) Papiers et cartons

La capacité mondiale de production de papiers et cartons devrait passer de 184,4 millions de tonnes en 1977 à 211,8 millions de tonnes en 1982, à un taux moyen annuel de 2,8 pour cent. Le volume de capacité supplémentaire, 27,4 millions de tonnes, est l'accroissement le plus faible prévu dans toutes les enquêtes au cours de cette décennie. Il est évident que l'incertitude continue des marchés, les pressions inflationnistes dans de nombreux pays et les coûts élevés d'investissement en particulier ont suscité des flottements, des réévaluations et des ajournements de certains plans.

Tableau 8 - Accroissement de la capacité de production totale de papier et carton, 1972-82

	Capacité						Augmentation totale				Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82		1972-77	1977-82			1972-77	1977-82
	----- milliers de tonnes -----						-----				-- pourcentage --	
Total mondial	152 137	184 425	211 788	32 288	27 363						3,9	2,8
Pays dév. à écon. marché	126 086	147 128	165 240	21 042	18 112						3,1	2,3
Amérique du Nord	65 828	73 452	80 804	7 624	7 352						2,2	1,9
Japon	15 818	20 716	24 693	4 898	3 977						5,5	3,6
Europe occidentale	41 894	49 478	55 605	7 584	6 127						3,4	2,4
Océanie	1 681	2 206	2 701	525	495						5,6	4,1
Autres	865	1 276	1 437	411	161						8,1	2,4
Pays en dév. à écon. marché	8 332	12 574	17 170	4 242	4 596						8,6	6,4
Afrique	412	653	853	241	200						9,6	5,5
Amérique latine	5 097	7 665	10 428	2 568	2 763						8,5	6,4
Asie	2 823	4 256	5 889	1 433	1 633						8,6	6,7
Pays à écon. centr. planif.	17 719	24 723	29 378	7 004	4 655						6,9	3,5
Asie	5 174	8 447	9 753	3 273	1 306						10,3	2,9
Europe orientale	4 345	5 776	6 625	1 431	849						5,9	2,8
U.R.S.S.	8 200	10 500	13 000	2 300	2 500						5,1	4,4

Environ deux tiers de la nouvelle capacité seront situés dans les pays développés qui comptent déjà 80 pour cent de la capacité totale. Toutefois, en raison du rythme de croissance plus rapide prévu dans les pays en développement, ces derniers pourraient compter plus de 8 pour cent de la capacité mondiale de production de papiers et de cartons en 1982, contre 6,8 pour cent en 1977 et 5,4 pour cent en 1972. En volume, la capacité supplémentaire est peu près la même pour les pays en développement et pour les pays à économie centralement planifiée.

Papier journal

La croissance annuelle future de la capacité de production de papier journal pourrait être deux fois et demi plus rapide que celle des dernières années, et atteindre 3,3 pour cent contre 1,3 pour cent. Les taux d'accroissement les plus faibles sont prévus dans les régions possédant la plus forte capacité, et notamment en Amérique du Nord, tandis que tous les pays en développement devraient accroître leur potentiel de production, approchant ainsi du moment où ils pourront satisfaire leur besoins de consommation.

On a remarqué dans les enquêtes antérieures que la réduction du grammage du papier journal permettait d'obtenir la même surface avec un volume plus faible. Cette tendance semble se poursuivre mais son impact principal s'est déjà produit et son influence sur la capacité additionnelle future de production de papier journal sera probablement d'importance mineure.

Tableau 9 - Accroissement de la capacité de production de papier journal, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	24 434	26 064	30 688	1 630	4 624	1,3	3,3
Pays dév. à écon. marché	21 305	22 297	25 579	992	3 282	0,9	2,8
Amérique du Nord	12 333	12 702	13 756	369	1 054	0,6	1,6
Japon	2 131	2 602	3 310	471	708	4,1	4,9
Europe occidentale	6 241	6 170	7 429	- 71	1 259	- 0,2	3,8
Océanie	416	533	709	117	176	5,1	5,9
Autres	184	290	375	106	85	9,5	5,3
Pays en dév. à écon. marché	671	863	1 751	192	888	5,2	15,2
Afrique	12	13	27	1	14	1,6	15,7
Amérique latine	308	366	923	58	557	3,5	20,0
Asie	351	484	801	133	317	6,6	10,6
Pays à écon. centr. planif.	2 458	2 904	3 358	466	454	3,4	2,9
Asie	760	890	1 060	130	170	3,2	3,6
Europe orientale	348	414	448	66	34	3,5	1,6
U.R.S.S.	1 350	1 600	1 850	250	250	3,5	2,9

Autres papiers d'impression et d'écriture

L'expansion future de la capacité de production des autres papiers d'impression et d'écriture sera particulièrement marquée dans les pays en développement où une capacité supplémentaire de quelque 900 000 tonnes devrait entrer en service entre 1977 et 1982. Bien que le taux d'accroissement soit inférieur, ce volume est supérieur à la capacité effectivement installée entre 1972 et 1977. Le Japon est le seul pays développé où le taux d'accroissement s'approche de celui des pays en développement.

Tableau 10 - Accroissement de la capacité de production d'autres papiers d'impression et d'écriture, 1972-82

	Capacité			Augmentation totale		Augmentation annuelle moyenne	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	milliers de tonnes					pourcentage	
Total mondial	33 015	40 980	47 696	7 695	6 716	4,4	3,1
Pays dév. à écon. marché	27 708	33 268	38 186	5 560	4 918	3,7	2,8
Amérique du Nord	12 396	14 506	16 101	2 110	1 595	3,2	2,1
Japon	3 016	3 758	5 161	742	1 403	4,5	6,5
Europe occidentale	11 966	14 522	16 416	2 556	1 894	3,9	2,5
Océanie	195	265	278	70	13	6,3	1,0
Autres	135	217	230	82	13	10,0	1,2
Pays en dév. à écon. marché	2 163	2 963	3 864	800	901	6,5	5,5
Afrique	135	204	280	69	76	8,6	6,5
Amérique latine	1 053	1 431	1 883	378	452	6,3	5,6
Asie	975	1 328	1 701	353	373	6,4	5,1
Pays à écon. centr. planif.	3 144	4 749	5 646	1 605	897	8,6	3,5
Asie	1 155	2 271	2 650	1 116	379	14,5	3,1
Europe orientale	889	1 128	1 396	239	268	4,9	4,4
U.R.S.S.	1 100	1 350	1 600	250	250	4,2	3,5

Rapport entre la capacité de production de pâte et la capacité de production de papier et carton

Pendant plus de dix ans, le rapport entre la capacité de production de pâte et celle de papiers et de cartons a fléchi régulièrement, tendance qui reflète peut-être la plus grande utilisation de papiers de rebut pour la fabrication de papiers et de cartons. Toutefois, ce déclin semble presque prendre fin et l'on s'attend à un léger redressement au début des années 1980. L'évolution du rapport pâte/papiers et cartons au cours des années passées et futures s'établit comme suit:

	<u>Pâte/papiers et cartons en pourcentage</u>
1965	81,8
1970	80,5
1975	77,8
1977 (a)	77,7
1978 (a)	77,3
1979 (a)	77,1
1980 (a)	76,9
1981 (a)	77,4
1982 (a)	77,6

(a) Selon les prévisions de l'enquête 1977-82

Comparaison avec les enquêtes précédentes

Pour la troisième année consécutive, l'enquête FAO sur la capacité de production de pâte et de papier fait ressortir, pour les deux produits, un accroissement total plus faible pour la période quinquennale. La comparaison avec les enquêtes précédentes est donnée dans le tableau ci-après.

<u>Période couverte par l'enquête</u>	<u>Augmentation totale pendant la période couverte</u>	
	<u>Pâte pour papier, total</u>	<u>Papier et carton, total</u>
	--- millions de tonnes	--- millions de tonnes
1969 - 74	26,1	37,5
1970 - 75	29,0	34,4
1971 - 76	24,9	27,8
1972 - 77	24,7	28,3
1973 - 78	23,6	32,4
1974 - 79 (a)	26,7	33,3
1975 - 80	25,4	31,1
1976 - 81	23,3	28,1
1977 - 82	21,0	27,4

(a) à la suite des amendements présentés par neuf pays: Canada, Etats-Unis, Brésil, Finlande, France, République fédérale d'Allemagne, Suède, Royaume-Uni, Japon.

Il est également intéressant de noter que la capacité prévue dans l'enquête de l'année dernière pour 1977 était optimiste. La capacité effective de production de pâte à papier en 1977 s'est élevée à 143,3 millions de tonnes au lieu des 143,9 millions de tonnes envisagées précédemment et à 184,4 millions de tonnes de papiers et cartons contre une estimation de 186,1 millions de tonnes. La situation incertaine est sans aucun doute à l'origine de l'annulation ou de l'ajournement de nombreux plans.

Les résultats de l'enquête actuelle démontrent, une fois encore, combien les estimations de la capacité de pâte pour les dernières années étaient optimistes. La capacité mondiale effective de pâte de bois en 1977 était de 133,3 millions de tonnes contre les 137,5 millions de tonnes envisagées pour la même année dans l'enquête 1972-1977.

Alors que les chiffres concernant la capacité de production de papiers et cartons sont marqués du même optimisme, les deux dernières enquêtes ont montré une tendance inverse. Une capacité effective de 184,4 millions de tonnes a été enregistrée en 1977 alors que 180,5 millions de tonnes avaient été prévues pour cette même année dans l'enquête 1972-77, voir Annexe 10.

Pour les grandes catégories de pâte, de papiers et de cartons, l'accroissement global de capacité prévu au cours des périodes couvertes par les quatre dernières enquêtes se chiffre comme suit:

	<u>Enquête*</u> <u>1974-79</u>	<u>Enquête</u> <u>1975-80</u>	<u>Enquête</u> <u>1976-81</u>	<u>Enquête</u> <u>1977-82</u>
	- - - - -	milliers	de tonnes	- - - - -
Pâte de bois	24 306	22 815	21 134	19 147
dont:				
Mécanique	4 773	4 075	4 348	4 097
Mi-chimique (a)	2 298	2 148	1 477	1 288
Chimique	17 235	16 592	15 309	13 762
Pâte d'autres fibres	2 431	2 605	2 147	1 820
Papier et carton, total	33 256	31 060	28 077	27 363
dont:				
Papier journal	4 579	4 537	4 655	4 624
Autres papiers d'impression et d'écriture	7 671	7 303	6 911	6 716
Autres papiers et cartons	21 008	19 220	16 511	16 023
- papier d'emballage	..	15 493	13 161	12 435

(a) Y compris la pâte chimico-mécanique

* A la suite des amendements présentés par neuf pays

Informe de la Secretaría de la FAO sobre la
Encuesta acerca de la Capacidad Mundial de Producción de Pasta y Papel 1977-82

Los estudios anuales de la FAO sobre capacidades mundiales de pasta y papel se basan en cifras recibidas a principios de año de parte de corresponsales en la mayoría de los países del mundo y en estimaciones de la Secretaría con respecto a los demás países. En gran parte, los datos son suministrados por las asociaciones nacionales de comerciantes en pasta y papel y se basan en informaciones proporcionadas por sus socios durante el año precedente acerca de sus planes de desarrollo futuro. Por tanto, los resultados reflejan las intenciones de los industriales en el momento de realizarse los estudios, pero condiciones económicas, financieras y de mercado posteriores pueden influir en ellas significativamente.

Ni el alcance, ni el contenido, ni la presentación del estudio han sufrido cambio alguno este año, pero dados el interés siempre creciente demostrado por los resultados y el uso que se ha hecho de ellos, algunos países han reestructurado sus propios estudios para obtener datos más útiles y exactos, y otros han ampliado las mejoras introducidas en los últimos años.

Se recordará que, como novedad, el año pasado se preparó una lista de planes de ampliación que abarca los próximos diez años y donde se detallan la compañía, el producto, la capacidad y el año de la puesta en marcha prevista de muchos proyectos que están en consideración. Cuando procede, se ha cotejado la capacidad adicional prevista con los datos que aparecen en el presente estudio, pero hay que observar que esta lista no es exhaustiva ya que pueden producirse aumentos significativos de capacidad, por mejora de máquinas, planes confidenciales, etc., cuyos detalles no están disponibles.

No obstante lo dicho, se espera que la información ofrecida será útil a todos los encargados de la planificación del futuro de la industria.

Los principales resultados del estudio de las capacidades de pasta y papel en 1977-82 son que:

- (a) la capacidad mundial de producción de pasta para papel se prevé aumentará, de 143 millones de toneladas en 1977 a 164 millones de toneladas en 1982. Este aumento de 21 millones de toneladas representa una tasa de crecimiento anual de 2,8 por ciento;
- (b) la capacidad mundial de papel y cartón se prevé aumentará, de 184 millones de toneladas en 1977 a 212 millones de toneladas en 1982. Este aumento de 28 millones de toneladas representa una tasa de crecimiento anual de 2,8 por ciento;
- (c) tanto los 21 millones de toneladas más en pastas para papel como los 28 millones de toneladas más en papeles y cartones son los aumentos mínimos previstos en cualquiera de los estudios de este decenio;

- (d) la capacidad mundial de pasta de madera en 1982 es algo superior a la prevista para 1981 en el estudio del año pasado. En cambio, en lo que respecta a papeles y cartones, las estimaciones son considerablemente superiores, debido principalmente al mayor optimismo de los planes de EE.UU. y Japón;
- (e) los 13,8 millones de toneladas más de pasta química de madera, que se prevé se producirán entre 1977 y 1982, representan un volumen mucho menor que el previsto en los últimos estudios;
- (f) la capacidad de pasta de latifoliadas blanqueada al sulfato, probablemente registrará un aumento de 4,2 millones de toneladas, o sea, de 16,1 millones de toneladas en 1977 a 20,3 millones de toneladas en 1982, cantidad más o menos semejante a los aumentos de 4,3 y 4,7 millones de toneladas que figuran en los dos últimos estudios;
- (g) otras pastas fibrosas siguen desempeñando una función importante en el suministro de materias primas nacionales para la fabricación de papel en los países en desarrollo;
- (h) se prevé un aumento importante de las capacidades de papeles y cartones en los países en desarrollo, que elevará en más del 35 por ciento, o sea, en 4,6 millones de toneladas, la capacidad manufacturera actual. Un aumento casi igual se prevé en países con economía centralmente planificada. Los aumentos de capacidad en países desarrollados, a pesar de ser mayores en volumen (18,1 millones de toneladas), significarán una ampliación de poco más de 12 por ciento;
- (i) el aumento de capacidad de papeles y cartones de envolver y empaquetar, que asciende a 12,4 millones de toneladas, es inferior a los de 13,2 y 15,5 registrados en los dos últimos estudios, pero sigue representando casi los dos tercios del aumento total de papeles y cartones;
- (j) la proporción entre la capacidad de fabricación de pasta y la de papel y cartón continúa siendo inferior a la de hace diez años.

Tendencias por productos y regiones

El último estudio indica que se prevé que la capacidad mundial de producción de pasta para papel aumentará de 143,3 millones de toneladas en 1977 a 164,2 millones de toneladas en 1982 y, al mismo tiempo, aumentarán las capacidades de papeles y cartones, de 184,4 a 211,8 millones de toneladas. En el Cuadro 1 se muestra el aumento de la capacidad en relación con los principales productos y se pone de manifiesto el hecho de que, en el período de quince años, la capacidad aumentó lo más rápidamente entre 1967 y 1972, bajó después durante el segundo quinquenio del período y se prevé que descenderá incluso más en los próximos años. El único caso en que no se manifiesta esta tendencia es el de la pasta hecha de fibras distintas de las de la madera. En los Anexos 1-6 aparecen las cifras anuales, detalladas por productos principales y regiones, correspondientes a 1977-82.

Cuadro 1 - Capacidad mundial de producción de pasta, papel y cartón, 1967-82

	Capacidad total				Incremento anual medio		
	1967	1972	1977	1982	1967-72	1972-77	1977-82
	----- millones de -----				----- porcentaje -----		
	toneladas métricas						
Total de pasta de madera para papel	92,1	115,2	133,3	152,4	4,6	3,0	2,7
Mecánica	24,9	28,6	32,1	36,1	2,8	2,3	2,4
Semiquímica (a)	6,5	9,1	10,5	11,8	6,8	2,8	2,3
Química	60,7	77,5	90,7	104,5	5,0	3,2	2,9
Otras pastas fibrosas	6,7	7,5	10,0	11,8	2,4	5,8	3,4
Pasta soluble	5,3	5,7	5,7	6,3	1,8	- 0,1	2,0
Total de papel y cartón	119,4	152,1	184,4	211,8	5,0	3,9	2,8
Papel de periódico	20,8	24,4	26,0	30,7	3,3	1,3	3,3
Escritura e impresión	24,5	33,0	41,0	47,7	6,1	4,4	3,1
Otras clases de papel y cartón	74,1	93,7	117,4	133,4	5,0	4,4	2,6

(a) Incluida la pasta quimio-mecánica

En los tres últimos estudios, la tasa prevista de aumento de la capacidad de producción de pasta de madera para los cinco años siguientes ha ido disminuyendo a partir del 4,1 por ciento al 3,4 y 3,1 y, en el presente estudio, al 2,7 por ciento. Esta reducción de las previsiones ha seguido una trayectoria casi idéntica en el caso de la producción de papel y cartón, registrándose un descenso ininterrumpido desde el 4,1 por ciento hasta el 2,8 por ciento. En lo que respecta a cada año, se ha producido una aceleración de la tasa de aumento de la capacidad, como se indica a continuación.

Cuadro 2 - Tasa anual de aumento de la capacidad mundial de producción de pasta, papel y cartón, 1977-82

	Incrementos anuales				
	1977-78	1978-79	1979-80	1980-81	1981-82
	----- porcentaje -----				
Total de pasta de madera para papel	2,3	3,0	3,5	2,7	2,1
Mecánica	2,0	2,7	3,5	2,5	1,5
Semiquímica (a)	3,0	3,2	2,1	1,3	2,0
Química	2,3	3,1	3,6	3,0	2,3
Otras pastas fibrosas	4,1	4,8	3,2	2,3	2,5
Pasta soluble	3,3	2,6	2,6	1,0	0,2
Total de papel y cartón	2,9	3,5	3,7	2,1	1,9
Papel de periódico	2,8	4,4	4,4	3,1	1,8
Escritura e impresión	3,4	3,1	4,7	1,8	2,3
Otras clases de papel y cartón	2,7	3,4	3,2	2,0	1,7

(a) Incluida la pasta quimio-mecánica

Este hecho no es sorprendente teniendo en cuenta que las expansiones dentro de los próximos dos o tres años representan compromisos firmes de parte de las compañías, mientras que en los años anteriores las compañías tenían menos compromisos firmes, particularmente en las actuales condiciones económicas y financieras. Además, en unos pocos países, los estudios sobre capacidad de producción cubren un período inferior a los cinco años.

a) Total de pastas para papel

Entre 1977 y 1982, en la capacidad de pasta para papel se prevé un aumento de 20,9 millones de toneladas, a razón del 2,8 por ciento al año por término medio, que es inferior en unos 3 millones de toneladas a la capacidad instalada efectivamente en el quinquenio 1967-72 y más o menos igual a la que empezó a producir entre 1972 y 1977. La pasta mecánica aumentará en 4,0 millones de toneladas, la semiquímica en 1,3, la química en 13,8 millones y los restantes 1,8 millones corresponden a otras pastas fibrosas. En la capacidad de pasta soluble se prevén solamente aumentos marginales.

Las novedades que se están produciendo en las pastas de latifoliadas, principalmente pastas blanqueadas al sulfato y semiquímicas, continúan teniendo importancia considerable. Entre 1977 y 1982, se prevé un aumento de 4,2 y 0,6 millones de toneladas respectivamente. Estas cifras indican que un tercio del aumento total de la producción de pastas químicas puede atribuirse a estos tipos de pastas de latifoliadas. La referencia al Anexo 7 indica que la mayor parte de la nueva capacidad de producción de pasta de latifoliadas blanqueada al sulfato estará situada en los Estados Unidos, Brasil y Japón. En Brasil, se basará principalmente en plantaciones de eucaliptus y gmelina.

Casi toda la capacidad de producción de pasta para papel está situada en países desarrollados. No obstante, durante varios de los últimos años los aumentos registrados en países en desarrollo han hecho que se duplique su capacidad y, si se ejecutan los planes para el futuro, estos países representarían el 7,7 por ciento de la capacidad mundial en 1982, mientras que en 1977 representaban el 5,6.

Es particularmente difícil determinar la capacidad futura de pasta comercial, ya que incluye la capacidad de fábricas no integradas y la capacidad "excedente" de fábricas integradas de pasta y papel. El presente estudio indica que la capacidad de las pastas comerciales para papel ascenderá de 27,0 millones de toneladas en 1977 a 30,4 millones en 1980, a un ritmo anual del 4,0 por ciento. Estos resultados no indican sino una variación ligera del total con respecto al estudio del año pasado. Sin embargo, se registran cambios en las estimaciones correspondientes a cada país. En Canadá, Japón y Suecia, por ejemplo, las cifras actuales son inferiores a las del año pasado; en EE.UU. y Finlandia, son superiores, mientras que en Brasil no hay sino modificaciones secundarias. Estos seis países representan casi las tres cuartas partes de la capacidad mundial de pasta comercial. Prácticamente todo el aumento de la pasta comercial se refiere a pasta blanqueada al sulfato, más de coníferas que de latifoliadas, y la mayor parte de la pasta de latifoliadas provendrá del Brasil. La evolución respectiva aparece en detalle en el Anexo 8 y se ilustra en el Anexo 11.

i) Pasta de madera

El volumen del aumento de la capacidad mundial de pasta de madera para papel entre 1977 y 1982 se prevé que ascenderá a 19,1 millones de toneladas, cifra superior en un millón de toneladas aproximadamente a la instalada efectivamente entre 1972 y 1977, pero inferior en 4 millones de toneladas al incremento registrado entre 1967 y 1972. La tasa general de aumento varía evidentemente entre estos períodos, pero tiene mayor importancia el emplazamiento de la nueva capacidad. Se expone esto en el Cuadro 3.

Cuadro 3 - Aumentos de la capacidad total de producción de pasta de
madera para papel, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	----- millares de toneladas métricas -----			-----		----- porcentaje -----	
Total mundial	115 206	133 262	152 409	18 056	19 147	3,0	2,7
Econ. merc. desarrolladas	99 835	112 558	124 639	12 723	12 081	2,4	2,1
América del Norte	59 107	66 551	73 337	7 444	6 786	2,4	2,0
Japón	10 339	11 851	13 513	1 512	1 662	2,8	2,7
Europa Occidental	28 617	31 269	34 447	2 652	3 178	1,8	2,0
Oceanía	1 222	2 108	2 418	886	310	11,5	2,8
Otros	550	779	924	229	145	7,2	3,5
Econ. merc. en desarrollo	3 438	5 515	9 239	2 077	3 724	9,9	10,9
África	245	331	672	86	341	6,2	15,2
América Latina	2 420	4 085	6 653	1 665	2 568	11,0	10,2
Asia	773	1 099	1 914	326	815	7,3	11,7
Econ. planif. central	11 933	15 189	18 531	3 256	3 342	4,9	4,1
Asia	1 695	2 333	2 918	638	585	6,6	4,6
Europa Oriental	2 718	3 606	4 363	888	757	5,8	3,9
U.R.S.S.	7 520	9 250	11 250	1 730	2 000	4,2	4,0

De los 19,1 millones de toneladas de nueva capacidad, 12,1 millones (63,3 por ciento) se instalarán en países desarrollados, 3,7 millones (19,4 por ciento) en países en desarrollo y 3,3 millones (17,3 por ciento) en países de planificación económica centralizada. En comparación con los dos últimos estudios, se registra una notable reducción de la expansión propuesta, particularmente en los países en desarrollo. Esto refleja indudablemente la inestabilidad mundial de las condiciones económicas y la consiguiente situación difícil del mercado. Las expansiones planeadas para los períodos quinquenales han sido revisadas hacia abajo, por ejemplo, en Brasil, de 3,3 a 2,7 y 1,8 millones de toneladas en los tres últimos estudios.

Comparando el presente estudio con el anterior, resulta que la mayor parte de la reducción del volumen en el quinquenio se debe a las estimaciones inferiores de Canadá, Escandinavia y Brasil. Estas quedan compensadas solo parcialmente por los planes más optimistas de Estados Unidos y Japón. Del aumento total, la tercera parte aproximadamente tendrá su ubicación en los EE.UU. y a Japón, Brasil y Escandinavia corresponderá un diez por ciento cada uno.

Pasta mecánica

Se prevé que entre 1977 y 1982, la capacidad de producción de pasta mecánica aumentará en 4,1 millones de toneladas, mientras que en el quinquenio precedente aumentó en 3,5 millones. La tasa anual media de crecimiento no cambiará apenas.

Se prevén índices particularmente rápidos de expansión en países en desarrollo de África y Asia, así como en Japón y Oceanía.

Cuadro 4 - Aumentos de la capacidad de producción de pasta de
madera mecánica para papel, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	millares de toneladas métricas			porcentaje			
Total mundial	28 590	32 051	36 148	3 461	4 097	2,3	2,4
Econ. merc. desarrolladas	24 497	27 287	30 502	2 790	3 215	2,2	2,3
América del Norte	12 859	13 528	14 791	669	1 263	1,0	1,8
Japón	1 558	1 983	2 687	425	704	4,9	6,3
Europa Occidental	9 421	10 623	11 591	1 202	968	2,4	1,8
Oceanía	409	810	1 082	401	272	14,6	6,0
Otros	250	343	351	93	8	6,5	0,5
Econ. merc. en desarrollo	811	819	1 219	8	400	0,2	8,3
África	14	18	31	4	13	5,2	11,5
América Latina	385	456	600	71	144	3,5	5,6
Asia	412	345	588	- 67	243	- 3,5	11,3
Econ. planificación central	3 282	3 945	4 427	663	482	3,7	2,3
Asia	745	860	1 063	115	203	2,9	4,3
Europa Oriental	637	935	964	298	29	8,0	0,6
U.R.S.S.	1 900	2 150	2 400	250	250	2,5	2,2

Pasta de madera semiquímica

Entre 1977 y 1982, la capacidad mundial de pasta semiquímica y mecanoquímica aumentará de 10,5 a 11,8 millones de toneladas, es decir en 1,3 millones de toneladas, a una tasa media anual de 2,3 por ciento. Este volumen es algo inferior al que entró en producción entre 1972 y 1977.

Cuadro 5 - Aumentos de la capacidad de producción de pasta de
madera semiquímica para papel, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	millares de toneladas métricas			porcentaje			
Total mundial	9 108	10 471	11 759	1 363	1 288	2,8	2,3
Econ. merc. desarrolladas	8 280	9 175	9 732	895	557	2,1	1,2
América del Norte	3 908	4 550	4 984	642	434	3,1	1,8
Japón	2 222	2 026	2 100	- 196	74	- 1,9	0,7
Europa Occidental	1 823	2 044	2 088	221	44	2,3	0,4
Oceanía	289	396	396	107	-	6,5	-
Otros	38	159	164	121	5	33,0	0,6
Econ. merc. en desarrollo	334	420	804	86	384	4,7	13,9
África	4	9	16	5	7	17,6	12,2
América Latina	271	348	635	77	287	5,1	12,8
Asia	59	63	153	4	90	1,3	19,4
Econ. planificación central	494	876	1 223	382	347	12,6	6,9
Asia	-	-	-	-	-	-	-
Europa Oriental	124	376	473	252	97	25,0	4,7
U.R.S.S.	370	500	750	130	250	6,2	8,4

Se planean desarrollos importantes en América del Norte y América Latina, donde se instalarán alrededor de los dos tercios del aumento total.

Pasta química para papel

Algo menos del 65 por ciento del total de pasta para papel era química en 1977, y no es probable que esta proporción cambie notablemente en los próximos cinco años. Entre 1977 y 1982, se prevé que la capacidad aumentará de 90,7 millones de toneladas a 104,5 millones, es decir, en 13,8 millones de toneladas, a una tasa anual media de 2,9 por ciento. Este volumen adicional representa una notable reducción en comparación con el previsto en los últimos estudios (15,3 millones de toneladas para 1976-81 y 16,6 millones para 1975-80).

Cuadro 6 - Aumentos de la capacidad de producción de pasta de madera química para papel, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	--- millares	de toneladas	métricas	---	---	porcentaje	---
Total mundial	77 508	90 740	104 502	13 232	13 762	3,2	2,9
Econ. merc. desarrolladas	67 058	76 096	84 405	9 038	8 309	2,6	2,1
América del Norte	42 340	48 473	53 562	6 133	5 089	2,7	2,0
Japón	6 559	7 842	8 726	1 283	884	3,6	2,2
Europa Occidental	17 373	18 602	20 768	1 229	2 166	1,4	2,2
Oceanía	524	902	940	378	38	11,5	0,8
Otros	262	277	409	15	132	1,1	8,1
Econ. merc. en desarrollo	2 293	4 276	7 216	1 983	2 940	13,3	11,0
África	227	304	625	77	321	6,0	15,5
América Latina	1 764	3 281	5 418	1 517	2 137	13,2	10,6
Asia	302	691	1 173	389	482	18,0	11,2
Econ. planificación central	8 157	10 368	12 881	2 211	2 513	4,9	4,4
Asia	950	1 473	1 855	523	382	9,2	4,7
Europa Oriental	1 957	2 295	2 926	338	631	3,2	5,0
U.R.S.S.	5 250	6 600	8 100	1 350	1 500	4,7	4,2

Un análisis más detallado de la trayectoria de la pasta química manifiesta que la capacidad de pasta al sulfito está estancada, y es la capacidad de pasta al sulfato la que aumenta rápidamente. Según se indica en "Information on Projected Pulp and Paper Mills in the World, 1977-1987", han cerrado muchas fábricas de pasta al sulfito, particularmente en los países nórdicos, y es limitado el número de nuevas fábricas. La reducción de la capacidad en los países nórdicos y América del Norte puede ascender muy bien a 0,7 millones de toneladas en el quinquenio que termina en 1982.

ii) Otras pastas fibrosas

Se prevé que entre 1977 y 1982 la capacidad de otras pastas fibrosas, excluido papel de desecho, aumentará de 10,0 a 11,8 millones de toneladas, es decir en 1,8 millones de toneladas, cifra equivalente a una tasa anual del 3,4 por ciento. Aunque la cifra de la expansión correspondiente en 1972-77 era de 2,5 millones de toneladas, el aumento previsto es considerable.

Cuadro 7 - Aumentos de la capacidad de producción de otras pastas
fibrosas para papel, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	- - - millares de toneladas métricas - - -			- - - - -		- - porcentaje - -	
Total mundial	7 549	10 028	11 848	2 479	1 820	5,8	3,4
Econ. merc. desarrolladas	2 329	1 757	1 799	- 572	42	- 5,5	0,5
América del Norte	1 000	699	731	- 301	32	- 6,9	0,9
Japón	6	4	4	- 2	-	- 7,8	-
Europa Occidental	1 270	942	951	- 328	9	- 5,8	0,2
Oceanía	3	4	5	1	1	5,9	4,6
Otros	50	108	108	58	-	16,7	-
Econ. merc. en desarrollo	1 790	2 569	3 396	779	827	7,5	5,7
África	112	194	230	82	36	11,6	3,5
América Latina	681	981	1 452	300	471	7,6	8,2
Asia	997	1 394	1 714	397	320	6,9	4,2
Econ. planificación central	3 430	5 702	6 653	2 272	951	10,7	3,1
Asia	2 781	4 998	5 820	2 217	822	12,4	3,1
Europa Oriental	249	254	258	5	4	0,4	0,3
U.R.S.S.	400	450	575	50	125	2,4	5,0

La capacidad adicional prevista en los países desarrollados es mínima, registrándose reducciones efectivas en algunas fábricas de pasta de paja. Los aumentos principales se producirán en América Latina, sobre todo de pasta de bagazo, y en Asia, de pasta de bambú.

iii) Pasta soluble

La capacidad de pasta soluble, que no registró más que un aumento muy pequeño en el pasado decenio, aumentará marginalmente en el futuro. Se planifica un aumento de la capacidad de 600 000 toneladas, principalmente en Europa Oriental y U.R.S.S.

b) Papeles y cartones

Se prevé que la capacidad total mundial de producción de papel y cartón aumentará de 184,4 millones de toneladas en 1977 a 211,8 millones de toneladas en 1982, a una tasa media anual de 2,8 por ciento. El volumen de la capacidad adicional, 27,4 millones de toneladas, es el nivel más bajo de incremento previsto en los estudios del presente decenio. Es evidente que las condiciones inciertas del mercado, la presión de la inflación en muchos países y los costos elevados de inversión, en particular, continúan siendo causa de titubeos, reevaluaciones y postergación de algunos planes.

Cuadro 8 - Aumentos de la capacidad de producción total de papel
y cartón, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	--- millares	de toneladas	métricas ---	---	---	--- porcentaje ---	---
Total mundial	152 137	184 425	211 788	32 288	27 363	3,9	2,8
Econ. merc. desarrolladas	126 086	147 128	165 240	21 042	18 112	3,1	2,3
América del Norte	65 828	73 452	80 804	7 624	7 352	2,2	1,9
Japón	15 818	20 716	24 693	4 898	3 977	5,5	3,6
Europa Occidental	41 894	49 478	55 605	7 584	6 127	3,4	2,4
Oceanía	1 681	2 206	2 701	525	495	5,6	4,1
Otros	865	1 276	1 437	411	161	8,1	2,4
Econ. merc. en desarrollo	8 332	12 574	17 170	4 242	4 596	8,6	6,4
Africa	412	653	853	241	200	9,6	5,5
América Latina	5 097	7 665	10 428	2 568	2 763	8,5	6,4
Asia	2 823	4 256	5 889	1 433	1 633	8,6	6,7
Econ. planificación central	17 719	24 723	29 378	7 004	4 655	6,9	3,5
Asia	5 174	8 447	9 753	3 273	1 306	10,3	2,9
Europa Oriental	4 345	5 776	6 625	1 431	849	5,9	2,8
U.R.S.S.	8 200	10 500	13 000	2 300	2 500	5,1	4,4

Alrededor de los dos tercios de la nueva capacidad se instalará en países desarrollados, donde se halla ya el 80 por ciento de la capacidad. No obstante, dada la mayor rapidez del ritmo de crecimiento previsto en los países en desarrollo, éstos podrán representar más del 8 por ciento de la capacidad mundial de papel y cartón en 1982, mientras que en 1977 representaban el 6,8 por ciento y, en 1972, el 5,4 por ciento. En términos de volumen, el aumento de los países en desarrollo y el de los países de planificación económica centralizada serán más o menos iguales.

Papel para periódicos (papel prensa)

En el futuro, el crecimiento anual de la capacidad de producción del papel para periódicos podría muy bien superar en dos veces y media el ritmo registrado en el pasado reciente, es decir, 3,3 por ciento en comparación con el 1,3 por ciento. Los índices menores de crecimiento se registrarán en la zona con mayor capacidad, América del Norte, mientras que en todos los países en desarrollo la capacidad de producción aumentará considerablemente y, por tanto, se avanzará algo hacia la meta de satisfacer sus necesidades de consumo.

En estudios anteriores se ha hecho referencia a la reducción del gramaje del papel para periódicos, que permite obtener una superficie igual de un volumen menor. Aunque parece que continúa esta tendencia, sus principales consecuencias se han producido ya hasta ahora, y es probable que sus efectos en el futuro aumento de la capacidad de producción de papel de periódicos sean de importancia secundaria.

Cuadro 9 - Aumentos de la capacidad de producción de papel de periódico, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	--- millares	--- toneladas	--- métricas	---	---	--- porcentaje	---
Total mundial	24 434	26 064	30 688	1 630	4 624	1,3	3,3
Econ. merc. desarrolladas	21 305	22 297	25 579	992	3 282	0,9	2,8
América del Norte	12 333	12 702	13 756	369	1 054	0,6	1,6
Japón	2 131	2 602	3 310	471	708	4,1	4,9
Europa Occidental	6 241	6 170	7 429	- 71	1 259	- 0,2	3,8
Oceanía	416	533	709	117	176	5,1	5,9
Otros	184	290	375	106	85	9,5	5,3
Econ. merc. en desarrollo	671	863	1 751	192	888	5,2	15,2
África	12	13	27	1	14	1,6	15,7
América Latina	308	366	923	58	557	3,5	20,0
Asia	351	484	801	133	317	6,6	10,6
Econ. planif. central	2 458	2 904	3 358	446	454	3,4	2,9
Asia	760	890	1 060	130	170	3,2	3,6
Europa Oriental	348	414	448	66	34	3,5	1,6
U.R.S.S.	1 350	1 600	1 850	250	250	3,5	2,9

Otras clases de papel de escritura e impresión

El crecimiento futuro de la capacidad de otros papeles de escritura e impresión será particularmente notable en los países en desarrollo, donde se prevé que entrará en producción entre 1977 y 1982 una nueva capacidad de unas 900 000 toneladas. Aunque la tasa de aumento es más baja, este volumen es mayor que el instalado efectivamente entre 1972 y 1977. Solo en Japón la tasa de crecimiento y el volumen se aproximan a los aumentos de los países en desarrollo.

Cuadro 10 - Aumentos de la capacidad de producción de otros papeles de escritura e impresión, 1972-82

	Capacidad			Aumento total		Aumento anual medio	
	1972	1977	1982	1972-77	1977-82	1972-77	1977-82
	--- millares	--- toneladas	--- métricas	---	---	--- porcentaje	---
Total mundial	33 015	40 980	47 696	7 695	6 716	4,4	3,1
Econ. merc. desarrolladas	27 708	33 268	38 186	5 560	4 918	3,7	2,8
América del Norte	12 396	14 506	16 101	2 110	1 595	3,2	2,1
Japón	3 016	3 758	5 161	742	1 403	4,5	6,5
Europa Occidental	11 966	14 522	16 416	2 556	1 894	3,9	2,5
Oceanía	195	265	278	70	13	6,3	1,0
Otros	135	217	230	82	13	10,0	1,2
Econ. merc. en desarrollo	2 163	2 963	3 864	800	901	6,5	5,5
África	135	204	280	69	76	8,6	6,5
América Latina	1 053	1 431	1 883	378	452	6,3	5,6
Asia	975	1 328	1 701	353	373	6,4	5,1
Econ. planif. central	3 144	4 749	5 646	1 605	897	8,6	3,5
Asia	1 155	2 271	2 650	1 116	379	14,5	3,1
Europa Oriental	889	1 128	1 396	239	268	4,9	4,4
U.R.S.S.	1 100	1 350	1 600	250	250	4,2	3,5

Proporción entre la capacidad de producción de pasta para papel y la capacidad de producción de papel y cartón

Durante más de 10 años, la proporción entre la capacidad de producción de pasta y la de papel y cartón ha ido bajando constantemente, posiblemente como consecuencia de la mayor utilización de papel de desecho en la fabricación de papel y cartón. Sin embargo, parece que este descenso está ahora a punto de detenerse, ya que se prevé un ligero movimiento ascendente para comienzos de los años ochenta. Las proporciones pasadas y futuras entre la capacidad de producción de pasta y la de papel y cartón son las siguientes:

	<u>Proporción porcentual entre la pasta/papel</u>
1965	81,8
1970	80,5
1975	77,8
1977 (a)	77,7
1978 (a)	77,3
1979 (a)	77,1
1980 (a)	76,9
1981 (a)	77,4
1982 (a)	77,6

(a) Según pronóstico de la encuesta 1977-82

Comparación con anteriores encuestas

Por tercer año consecutivo, el estudio de la FAO sobre la capacidad de producción de pasta y papel muestra un aumento total menor para el quinquenio tanto en lo que respecta a la pasta como al papel. La comparación con los estudios anteriores se ilustra en el cuadro siguiente:

<u>Período comprendido por la encuesta</u>	<u>Aumento total en el período</u>	
	<u>Total de pasta para papel</u>	<u>Total de papel y cartón</u>
	millones de toneladas métricas	
1969 - 74	26,1	37,5
1970 - 75	29,0	34,4
1971 - 76	24,9	27,8
1972 - 77	24,7	28,3
1973 - 78	23,6	32,4
1974 - 79 (a)	26,7	33,3
1975 - 80	25,4	31,1
1976 - 81	23,3	28,1
1977 - 82	21,0	27,4

(a) Después de las modificaciones introducidas por nueve países: Canadá, Estados Unidos, Brasil, Finlandia, Francia, República Federal de Alemania, Suecia, Reino Unido y Japón.

Es interesante señalar también que la estimación de la capacidad para 1977, prevista en el estudio del año pasado, era excesiva. La capacidad efectiva correspondiente a dicho año es de 143,3 millones de toneladas de pasta para papel, mientras que en la estimación anterior era de 143,9 millones de toneladas, y 184,4 millones de toneladas de papel y cartón, en lugar de 186,1 millones de toneladas. Es indudable que la incertidumbre de las condiciones hizo que se cancelaran o aplazaran muchos planes.

Los resultados del presente estudio vuelven a poner de manifiesto el optimismo de las estimaciones de la producción de pasta en los años finales. La capacidad mundial efectiva de producción de pasta en 1977 fue de 133,3 millones de toneladas, en comparación con la cifra de 137,5 millones de toneladas prevista para dicho año en el estudio de 1972-77.

Aunque solía registrarse el mismo optimismo en relación con la capacidad de producción de papel y cartón, los dos últimos estudios han mostrado una tendencia contraria. En 1977, la capacidad efectiva fue de 184,4 millones de toneladas, mientras que en el estudio de 1972-77 se indicaba una capacidad de 180,5 millones, según puede verse en el Anexo 10.

Se indican a continuación, para las principales calidades de pasta, papel y cartón, los aumentos generales de capacidad de producción previstos para los períodos que abarcan los cuatro últimos estudios.

	<u>Encuesta de*</u> <u>1974-75</u>	<u>Encuesta de</u> <u>1975-80</u>	<u>Encuesta de</u> <u>1976-81</u>	<u>Encuesta de</u> <u>1977-82</u>
	millares de toneladas métricas - - - -			
Total de pasta de madera	24 306	22 815	21 134	19 147
del cual				
Mecánica	4 773	4 075	4 348	4 097
Semiquímica (a)	2 298	2 148	1 477	1 288
Química	17 235	16 592	15 309	13 762
Otra pasta fibrosa	2 431	2 605	2 147	1 820
Total de papel y cartón	33 256	31 060	28 077	27 363
del cual				
Papel de periódico	4 579	4 537	4 655	4 624
Otro papel de escritura e impresión	7 671	7 303	6 911	6 716
Otras clases de papel y cartón	21 008	19 220	16 511	16 023
- papel de envolver y de embalar	..	15 493	13 161	12 435

* Después de las modificaciones introducidas por los nueve países
a) Incluida la pasta quimio-mecánica

A N N E X E S

CAPACITY FOR 1977		REGION / CODE	PAPER PULP						DISSOLVING PULP	PAPER AND PAPERBOARD				
			TOTAL		WOOD PULP			OTHER FIBRE PULP		TOTAL	NEWSPRINT	PRINTING WRITING	TOTAL	WRAPPING
			1 + 2	1	MECH.	SEMI-CHEM.	CHEMICAL	2	3	4	4.1	4.2	4.3	4.3.2
1 000 metric tons														
WORLD TOTAL:			143 290	133 262	32 051	10 471	90 740	10 028	5 718	184 425	26 064	40 980	117 381	88 046
of which:														
DEVELOPED MARKET ECONOMIES			114 315	112 558	27 287	9 175	76 096	1 757	3 892	147 128	22 297	33 268	91 563	70 141
of which:														
NORTHERN AMERICA			67 250	66 551	13 528	4 550	48 473	699	1 768	73 452	12 702	14 506	46 244	36 988
JAPAN			11 855	11 851	1 983	2 026	7 842	4	479	20 716	2 602	3 758	14 356	10 941
WESTERN EUROPE			32 211	31 269	10 623	2 044	18 602	942	1 335	49 478	6 170	14 522	28 786	20 310
- E. E. C.			6 818	6 231	2 902	834	2 495	587	416	27 710	2 019	8 795	16 896	10 673
- NORDIC COUNTRIES			21 035	21 035	6 775	995	13 265	—	660	14 820	3 505	3 620	7 695	6 295
- REST OF W. E.			4 358	4 003	946	215	2 842	355	259	6 948	646	2 107	4 195	3 342
OCEANIA			2 112	2 108	810	396	902	4	—	2 206	533	265	1 408	1 256
OTHERS			887	779	343	159	277	108	310	1 276	290	217	769	646
DEVELOPING MARKET ECONOMIES			8 084	5 515	819	420	4 276	2 569	209	12 574	863	2 963	8 748	7 405
of which:														
AFRICA			525	331	18	9	304	194	—	653	13	204	436	429
LATIN AMERICA			5 066	4 085	456	348	3 281	981	69	7 665	366	1 431	5 868	4 709
ASIA			2 493	1 099	345	63	691	1 394	140	4 256	484	1 328	2 444	2 267
CENT. PLANNED ECONOMIES			20 891	15 189	3 945	876	10 368	5 702	1 617	24 723	2 906	4 749	17 070	10 500
of which:														
ASIA			7 331	2 333	860	—	1 473	4 998	40	8 447	890	2 271	5 286	27
EASTERN EUROPE			3 860	3 606	935	376	2 295	254	402	5 776	414	1 128	4 234	3 703
U. S. S. R.			9 700	9 250	2 150	500	6 600	450	1 175	10 500	1 600	1 350	7 550	6 770

CAPACITY FOR 1978		PAPER PULP										PAPER AND PAPERBOARD			
REGION / CODE	TOTAL 1 + 2	WOOD PULP				OTHER FIBRE PULP	DISSOLVING PULP	TOTAL	NEWSPRINT	PRINTING WRITING	TOTAL	WRAPPING			
		TOTAL 1	MECH. 1.1	SEMI-CHEM. 1.2	CHEMICAL 1.3										
1 000 metric tons															
WORLD TOTAL:	146 739	136 295	32 705	10 784	92 806	10 444	5 909	189 711	26 799	42 400	120 512	90 229			
of which:															
DEVELOPED MARKET ECONOMIES	116 322	114 546	27 776	9 279	77 491	1 776	3 985	150 726	22 741	34 376	93 609	71 562			
of which:															
NORTHERN AMERICA	68 210	67 486	13 658	4 744	49 084	724	1 837	74 901	12 802	14 932	47 167	37 657			
JAPAN	12 084	12 080	2 052	2 020	8 008	4	479	21 284	2 721	3 964	14 599	11 021			
WESTERN EUROPE	32 922	31 987	10 868	1 956	19 163	935	1 359	50 931	6 405	14 989	29 537	20 859			
- E. E. C.	6 918	6 345	2 962	796	2 587	573	411	28 651	2 095	9 059	17 497	11 120			
- NORDIC COUNTRIES	21 335	21 335	6 925	935	13 475	—	675	15 045	3 650	3 720	7 675	6 270			
- REST OF W. E.	4 669	4 307	981	225	3 101	362	273	7 235	660	2 210	4 365	3 469			
OCEANIA	2 160	2 155	847	396	912	5	—	2 326	533	266	1 527	1 370			
OTHERS	946	838	351	163	324	108	310	1 284	280	225	779	655			
DEVELOPING MARKET ECONOMIES	8 731	5 954	878	548	4 528	2 777	229	13 375	1 048	3 146	9 181	7 696			
of which:															
AFRICA	558	359	18	9	332	199	—	693	13	210	470	462			
LATIN AMERICA	5 546	4 447	466	476	3 505	1 099	69	8 251	486	1 563	6 202	4 904			
ASIA	2 627	1 148	394	63	691	1 479	160	4 431	549	1 373	2 509	2 330			
CENT. PLANNED ECONOMIES	21 686	15 795	4 051	957	10 787	5 891	1 695	25 610	3 010	4 878	17 722	10 971			
of which:															
ASIA	7 605	2 447	901	—	1 546	5 158	40	8 701	920	2 344	5 437	27			
EASTERN EUROPE	3 956	3 698	950	407	2 341	258	405	5 909	440	1 134	4 335	3 789			
U. S. S. R.	10 125	9 650	2 200	550	6 900	475	1 250	11 000	1 650	1 400	7 950	7 155			

CAPACITY FOR 1979			PAPER PULP										PAPER AND PAPERBOARD			
REGION	/	CODE	TOTAL 1 + 2	WOOD PULP				OTHER FIBRE PULP 2	DISSOLVING PULP 3	TOTAL 4	NEWSPRINT 4.1	PRINTING WRITING 4.2	TOTAL 4.3	WRAPPING 4.32		
				TOTAL 1	MECH. 1.1	SEMI-CHEM. 1.2	CHEMICAL 1.3									
1 000 metric tons																
WORLD TOTAL:			151 347	140 403	33 581	11 132	95 690	10 944	6 064	196 366	27 989	43 719	124 658	93 271		
of which:																
DEV'ED MARKET ECONOMIES			119 025	117 233	28 520	9 503	79 210	1 792	4 027	155 468	23 643	35 333	96 492	73 611		
of which:																
NORTHERN AMERICA			69 896	69 168	13 935	4 849	50 384	728	1 859	76 936	13 045	15 262	48 629	38 826		
JAPAN			12 373	12 369	2,269	2 047	8 053	4	479	22 040	2 816	4 209	15 015	11 212		
WESTERN EUROPE			33 547	32 600	11 100	2 047	19 453	947	1 379	52 706	6 887	15 366	30 453	21 463		
- E. E. C.			7 190	6 605	3 123	824	2 658	585	417	29 647	2 282	9 287	18 078	11 444		
- NORDIC COUNTRIES			21 540	21 540	6 990	995	13 555	—	685	15 640	3 945	3 835	7 860	6 415		
- REST OF W.E.			4 817	4 455	987	228	3 240	362	277	7 419	660	2 244	4 515	3 604		
OCEANIA			2 192	2 187	865	396	926	5	—	2 392	533	270	1 589	1 430		
OTHERS			1 017	909	351	164	394	108	310	1 394	362	226	806	680		
DEV'ING MARKET ECONOMIES			9 846	6 768	909	615	5 244	3 078	229	14 434	1 248	3 332	9 854	8 285		
of which:																
AFRICA			579	377	28	9	340	202	—	726	24	224	478	470		
LATIN AMERICA			6 502	5 171	477	543	4 151	1 331	69	8 926	662	1 649	6 615	5 235		
ASIA			2 765	1 220	404	63	753	1 545	160	4 782	562	1 459	2 761	2 580		
CENT. PLANNED ECONOMIES			22 476	16 402	4 152	1 014	11 236	6 074	1 808	26 464	3 098	5 054	18 312	11 375		
of which:																
ASIA			7 879	2 561	942	—	1 619	5 318	40	8 955	950	2 417	5 588	27		
EASTERN EUROPE			4 047	3 791	960	414	2 417	256	443	6 009	448	1 187	4 374	3 808		
U.S.S.R.			10 550	10 050	2 250	600	7 200	500	1 325	11 500	1 700	1 450	8 350	7 540		

CAPACITY FOR 1980			PAPER PULP							PAPER AND PAPERBOARD				
REGION / CODE	TOTAL 1 + 2	WOOD PULP				OTHER FIBRE PULP	DISSOLVING PULP	TOTAL	NEWSPRINT	PRINTING WRITING	TOTAL	WRAPPING		
		TOTAL 1	MECH. 1.1	SEMI-CHEM. 1.2	CHEMICAL 1.3									
1 000 metric tons														
WORLD TOTAL:	156 573	145 275	34 774	11 370	99 131	11 298	6 224	203 629	29 234	45 803	128 592	96 456		
of which:														
DEV'ING MARKET ECONOMIES	122 041	120 242	29 456	9 612	81 174	1 799	4 048	160 538	24 633	36 951	98 954	75 559		
of which:														
NORTHERN AMERICA	71 864	71 133	14 471	4 917	51 745	731	1 869	78 540	13 444	15 767	49 329	39 386		
JAPAN	12 544	12 540	2 405	2 047	8 088	4	479	24 129	3 200	4 932	15 997	11 945		
WESTERN EUROPE	34 358	33 407	11 315	2 088	20 004	951	1 390	53 981	7 092	15 751	31 138	22 024		
- E. E. C.	7 493	6 904	3 281	848	2 775	589	418	30 324	2 422	9 477	18 425	11 702		
- NORDIC COUNTRIES	21 930	21 930	7 045	1 030	13 855	—	695	15 910	3 970	3 935	8 005	6 525		
- REST OF W.E.	4 935	4 573	989	210	3 374	362	277	7 747	700	2 339	4 708	3 797		
OCEANIA	2 255	2 250	914	396	940	5	—	2 476	533	274	1 669	1 510		
OTHERS	1 020	912	351	164	397	108	310	1 412	364	227	821	694		
DEV'ING MARKET ECONOMIES	11 011	7 790	1 075	663	6 052	3 221	249	15 449	1 408	3 522	10 519	8 901		
of which:														
AFRICA	646	444	31	9	404	202	—	741	27	230	484	476		
LATIN AMERICA	7 367	5 959	568	591	4 800	1 408	69	9 638	764	1 751	7 123	5 697		
ASIA	2 998	1 387	476	63	842	1 611	180	5 070	617	1 541	2 912	2 728		
CENT. PLANNED ECONOMIES	23 521	17 243	4 243	1 095	11 905	6 278	1 927	27 642	3 193	5 330	19 119	11 996		
of which:														
ASIA	8 184	2 691	983	—	1 708	5 493	40	9 242	995	2 505	5 742	30		
EASTERN EUROPE	4 362	4 102	960	445	2 697	260	487	6 400	443	1 325	4 627	4 041		
U.S.S.R.	10 975	10 450	2 300	650	7 500	525	1 400	12 000	1 750	1 500	8 750	7 925		

CAPACITY FOR 1981			PAPER PULP										DISSOLVING PULP		PAPER AND PAPERBOARD				
REGION	/	CODE	TOTAL 1 + 2	WOOD PULP				OTHER FIBRE PULP 2	3	TOTAL 4	NEWSPRINT 4.1	PRINTING WRITING 4.2	WRAPPING						
				TOTAL 1	MECH. 1.1	SEMI-CHEM. 1.2	CHEMICAL 1.3						TOTAL 4.3						
1 000 metric tons																			
WORLD TOTAL:			160 827	149 264	35 629	11 524	102 111	11 563	6 289	207 884	30 142	46 618	131 124	98 560					
of which:																			
DEV'ED MARKET ECONOMIES			124 682	122 883	30 120	9 651	83 112	1 799	4 061	162 978	25 217	37 467	100 294	76 687					
of which:																			
NORTHERN AMERICA			73 188	72 457	14 656	4 965	52 836	731	1 869	79 843	13 651	15 974	50 218	40 165					
JAPAN			13 176	13 172	2,609	2 043	8 520	4	479	24 129	3 200	4 932	15 997	11 945					
WESTERN EUROPE			34 895	33 944	11 454	2 083	20 407	951	1 403	54 898	7 283	16 057	31 558	22 346					
- E. E. C.			7 665	7 076	3 289	848	2 939	589	421	30 662	2 512	9 574	18 576	11 795					
- NORDIC COUNTRIES			22 200	22 200	7 175	1 025	14 000	—	705	16 320	4 055	4 090	8 175	6 685					
- REST OF W.E.			5 030	4 668	990	210	3 468	362	277	7 916	716	2 393	4 807	3 866					
OCEANIA			2 391	2 386	1 050	396	940	5	—	2 676	709	276	1 691	1 530					
OTHERS			1 032	924	351	164	409	108	310	1 432	374	228	830	701					
DEV'ING MARKET ECONOMIES			11 786	8 482	1 172	700	6 610	3 304	259	16 368	1 649	3 654	11 065	9 402					
of which:																			
AFRICA			658	456	31	9	416	202	—	741	27	230	484	476					
LATIN AMERICA			7 772	6 330	591	628	5 111	1 442	79	10 105	885	1 798	1 422	5 957					
ASIA			3 356	1 696	550	63	1 083	1 660	180	5 522	737	1 626	3 159	2 969					
CENT. PLANNED ECONOMIES			24 359	17 899	4 337	1 173	12 389	6 460	1 969	28 538	3 276	5 497	19 765	12 474					
of which:																			
ASIA			8 460	2 804	1 023	—	1 781	5 656	40	9 498	1 028	2 578	5 892	30					
EASTERN EUROPE			4 499	4 245	964	473	2 808	254	454	6 540	448	1 369	4 723	4 134					
U.S.S.R.			11 400	10 650	2 350	700	7 600	550	1 475	12 500	1 800	1 550	9 150	8 310					

CAPACITY FOR 1982			PAPER PULP								PAPER AND PAPERBOARD			
REGION	/	CODE	TOTAL 1 + 2	WOOD PULP			OTHER FIBRE PULP	DISSOLVING PULP	TOTAL	NEWSPRINT	PRINTING WRITING	TOTAL		WRAPPING
				TOTAL 1	MECH. 1.1	SEMI-CHEM. 1.2						CHEMICAL 1.3	4	
1 000 metric tons														
WORLD TOTAL:			164 257	152 409	36 148	11 759	104 502	11 848	6 300	211 788	30 688	47 696	133 404	100 481
of which:														
DEVELOPED MARKET ECONOMIES			126 438	124 639	30 502	9 732	84 405	1 799	4 061	165 240	25 579	38 186	101 475	77 703
of which:														
NORTHERN AMERICA			74 068	73 337	14 791	4 984	53 562	731	1 869	80 804	13 756	16 101	50 947	40 848
JAPAN			13 517	13 513	2 687	2 100	8 726	4	479	24 693	3 310	5 161	16 222	12 063
WESTERN EUROPE			35 398	34 447	11 591	2 088	20 768	951	1 403	55 605	7 429	16 416	31 760	22 539
- E. E. C.			7 702	7 113	3 301	848	2 964	589	421	30 848	2 552	9 629	18 667	11 867
- NORDIC COUNTRIES			22 555	22 555	7 300	1 030	14 225	—	705	16 775	4 145	4 370	8 260	6 780
- REST OF W.E.			5 141	4 779	990	210	3 579	362	277	7 982	732	2 417	4 833	3 892
OCEANIA			2 423	2 418	1 082	396	940	5	—	2 701	709	278	1 714	1 550
OTHERS			1 032	924	351	164	409	108	310	1 437	375	230	832	703
DEVELOPING MARKET ECONOMIES			12 635	9 239	1 219	804	7 216	3 396	269	17 170	1 751	3 864	11 555	9 869
of which:														
AFRICA			902	672	31	16	625	230	—	853	27	280	546	538
LATIN AMERICA			8 105	6 653	600	635	5 418	1 452	89	10 428	923	1 883	7 622	6 139
ASIA			3 628	1 914	588	153	1 173	1 714	180	5 889	801	1 701	3 387	3 192
CENT. PLANNED ECONOMIES			25 184	18 531	4 427	1 223	12 881	6 653	1 970	29 378	3 358	5 646	20 374	12 909
of which:														
ASIA			8 738	2 918	1 063	—	1 855	5 820	40	9 753	1 060	2 650	6 043	31
EASTERN EUROPE			4 621	4 363	964	473	2 926	258	455	6 625	448	1 396	4 781	4 183
U.S.S.R.			11 825	11 250	2 400	750	8 100	575	1 475	13 000	1 850	1 600	9 550	8 695

HARDWOOD PULP CAPACITY
IN SELECTED COUNTRIES, 1977-82

	Chemi-groundwood and Semi-chemical Hardwood Pulp (Code 1.21)						Bleached and Semi-bleached Sulphate and Soda Hardwood Pulp (Code 1.34.1)					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	'000 metric tons air dry weight											
Angola	-	-	-	-	-	-	37	37	37	37	37	37
Cameroon	-	-	-	-	-	-	-	-	-	60	72	84
Gabon	-	-	-	-	-	-	-	-	-	-	-	125
Morocco	-	-	-	-	-	-	55	83	91	95	95	95
Nigeria	-	-	-	-	-	7	-	-	-	-	-	50
South Africa	159	163	164	164	164	164	37	52	69	69	69	69
Canada	478	479	482	483	483	483	849	885	915	914	914	914
Mexico	-	-	-	-	-	-	25	25	25	25	25	25
United States	-	-	-	-	-	-	6 768	7 122	7 426	7 774	8 086	8 225
Argentina	102	185	235	265	285	285	68	70	75	80	80	80
Brazil	110	139	147	181	181	181	922	1 016	1 513	1 766	1 867	1 884
Chile	-	-	-	5	11	13	3	3	3	3	20	20
Colombia	40	40	40	40	40	40	-	-	-	-	-	-
Uruguay	-	-	-	-	-	-	12	12	12	12	12	12
India	25	25	25	25	25	25	150	150	150	150	150	150
Iran	-	-	-	-	-	90	-	-	-	-	-	-
Japan	1 937	1 931	1 957	1 957	1 953	2 008	3 677	3 794	3 827	3 856	4 156	4 238
Philippines	-	-	-	-	-	-	75	75	75	75	125	140
Turkey	28	28	28	28	28	28	-	-	-	-	-	-
Austria	55	55	55	37	37	37	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	190	190	190	190	190	190
Bulgaria	90	90	90	90	90	90	-	-	-	-	-	-
Czechoslovakia	127	127	127	127	127	127	2	4	16	9	120	114
Denmark	125	125	125	125	125	125	-	-	-	-	-	-
Finland	380	340	340	340	340	340	900	1 030	1 070	1 100	1 100	1 100
France	275	280	300	320	320	320	400	400	410	410	410	435
Germany, Fed. Rep.	69	69	69	69	69	69	-	-	-	-	-	-
Hungary	58	63	69	77	77	77	-	-	-	-	-	-
Netherlands	25	-	-	-	-	-	-	-	-	-	-	-
Norway	90	90	95	95	95	95	140	135	135	50	-	-
Poland	52	78	79	102	130	130	-	-	-	-	-	-
Portugal	-	5	5	5	5	5	303	430	511	513	513	513
Romania	44	44	44	44	44	44	90	95	95	95	95	95
Spain	-	-	-	-	-	-	417	439	442	521	551	602
Sweden	490	470	525	570	570	575	855	910	945	945	950	950
United Kingdom	103	106	108	108	108	108	-	-	-	-	-	-
Australia	88	88	94	94	94	94	110	115	118	121	121	121
New Zealand	54	54	54	54	54	54	17	17	17	17	17	17
TOTAL OF ABOVE COUNTRIES	5 004	5 074	5 257	5 405	5 455	5 614	16 102	17 089	18 167	18 887	19 775	20 285

MARKET PULP CAPACITY, PAPER GRADES

	Total Pulp, Paper Grades (Code 1 + 2)				Chemical Woodpulp (Code 1.3)			
	1977	1978	1979	1980	1977	1978	1979	1980
	----- '000 metric tons air dry weight -----							
<u>Developed Market Economies</u>								
Canada	23 109	23 942	24 402	25 024	20 535	21 362	21 798	22 320
U.S.A.	6 919	6 989	7 345	7 249	6 660	6 730	7 082	6 944
	3 633	3 862	4 003	4 383	3 528	3 757	3 898	4 278
<u>NORTHERN AMERICA</u>	10 552	10 851	11 348	11 632	10 188	10 487	10 980	11 222
Japan	1 139	1 139	1 139	1 139	1 029	1 029	1 029	1 029
Austria	191	245	255	243	183	237	247	242
Belgium	196	196	196	196	196	196	196	196
Denmark	195	198	198	198	-	-	-	-
Finland	2 000	2 240	2 290	2 340	1 930	2 170	2 220	2 270
France	545	575	655	695	540	570	650	690
Germany, Fed. Rep.	201	200	186	184	191	197	177	175
Ireland	29	29	29	29	-	-	-	-
Norway	1 170	1 130	1 090	1 090	485	445	405	405
Portugal	490	606	692	694	490	606	692	694
Spain	548	561	561	586	454	467	467	492
Sweden	5 075	5 190	4 975	5 175	4 330	4 430	4 200	4 370
Switzerland	120	120	120	110	110	110	110	110
United Kingdom	19	25	25	25	19	25	25	25
<u>WESTERN EUROPE</u>	10 779	11 315	11 272	11 575	8 928	9 447	9 389	9 669
Australia	7	6	6	6	-	-	-	-
New Zealand	603	603	608	643	386	386	386	386
<u>OCEANIA</u>	610	609	614	649	386	386	386	386
South Africa	29	28	29	29	4	13	14	14

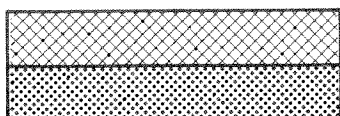
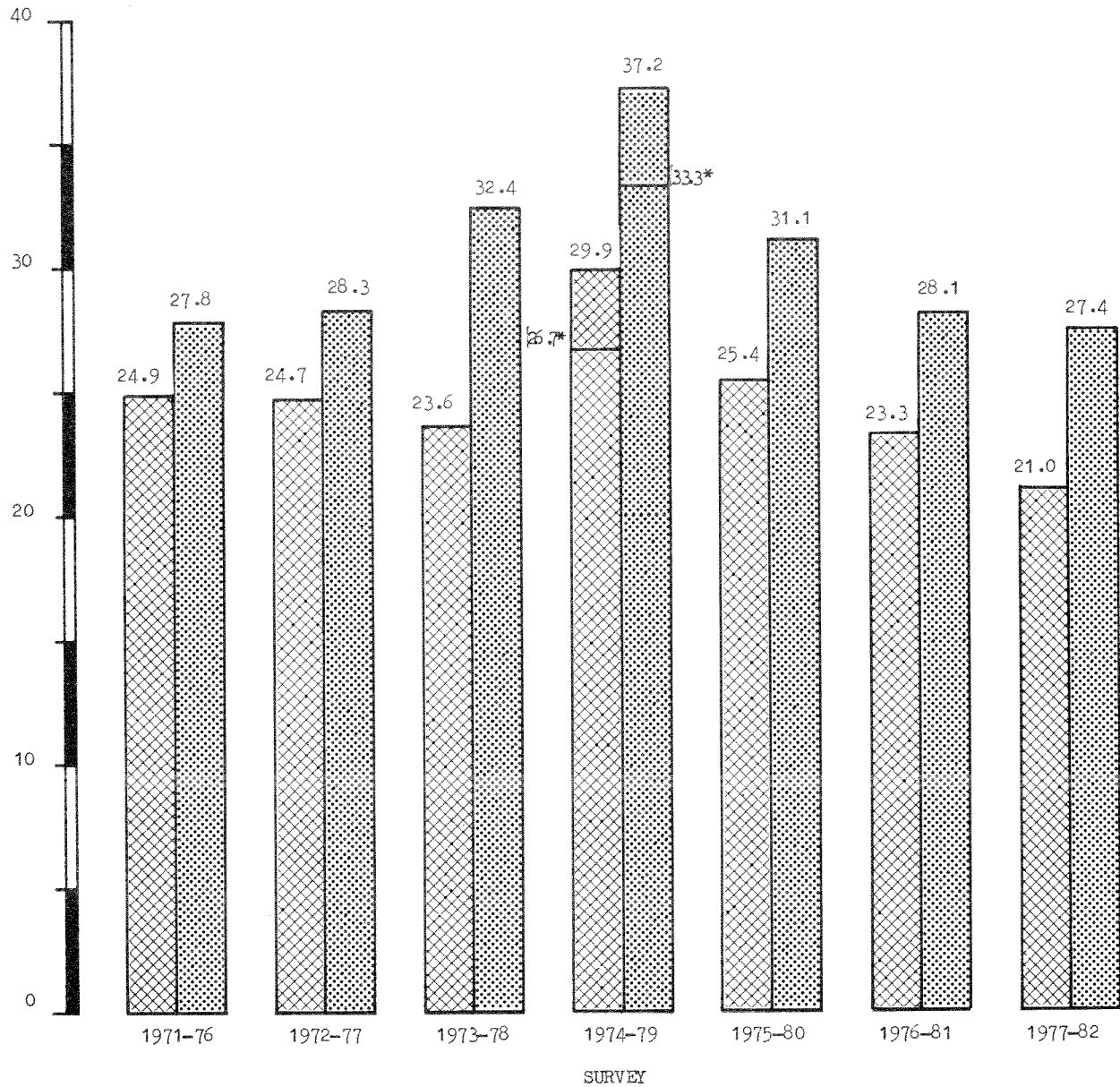
MARKET PULP CAPACITY, PAPER GRADES

	Total Pulp, Paper Grades (Code 1 + 2)				Chemical Woodpulp (Code 1.3)			
	1977	1978	1979	1980	1977	1978	1979	1980
	-----'000 metric tons air dry weight-----				-----			
<u>Developing Market Economies</u>	2 042	2 141	2 750	3 196	1 714	1 803	2 333	2 763
Algeria	44	44	44	44	-	-	-	-
Angola	32	32	32	32	32	32	32	32
Cameroon	-	-	-	60	-	-	-	60
Egypt	20	20	20	20	-	-	-	-
Morocco	55	83	91	95	55	83	91	95
Swaziland	160	160	160	160	160	160	160	160
Tunisia	8	7	7	7	-	-	-	-
AFRICA	319	346	354	418	247	275	283	347
Argentina	27	35	45	50	12	15	15	20
Brazil	926	986	1 531	1 752	853	911	1 408	1 619
Chile	442	446	446	459	442	442	442	455
Mexico	238	238	284	357	154	154	179	246
LATIN AMERICA	1 633	1 705	2 306	2 618	1 461	1 522	2 044	2 340
India	25	25	25	25	-	-	-	-
Korea, Rep. of	44	44	44	114	6	6	6	76
Philippines	21	21	21	21	-	-	-	-
ASIA	90	90	90	160	6	6	6	76
<u>Centrally Planned Economies</u>	1 872	1 967	2 056	2 160	1 794	1 890	1 979	2 083
Bulgaria	118	118	118	118	45	45	45	45
Czechoslovakia	215	211	200	204	212	208	197	201
Hungary	2	1	1	1	-	-	-	-
Romania	37	37	37	37	37	37	37	37
EASTERN EUROPE	372	367	356	360	294	290	279	283
U.S.S.R.	1 500	1 600	1 700	1 800	1 500	1 600	1 700	1 800
TOTAL OF COUNTRIES LISTED	27 023	28 050	29 208	30 380	24 043	25 055	26 110	27 166

OVERALL INCREASE IN TOTAL PULP FOR PAPERMAKING AND TOTAL
PAPER AND PAPERBOARD FROM THE FIRST TO THE LAST YEAR OF SURVEY

million
metric tons

* After amendment by nine countries

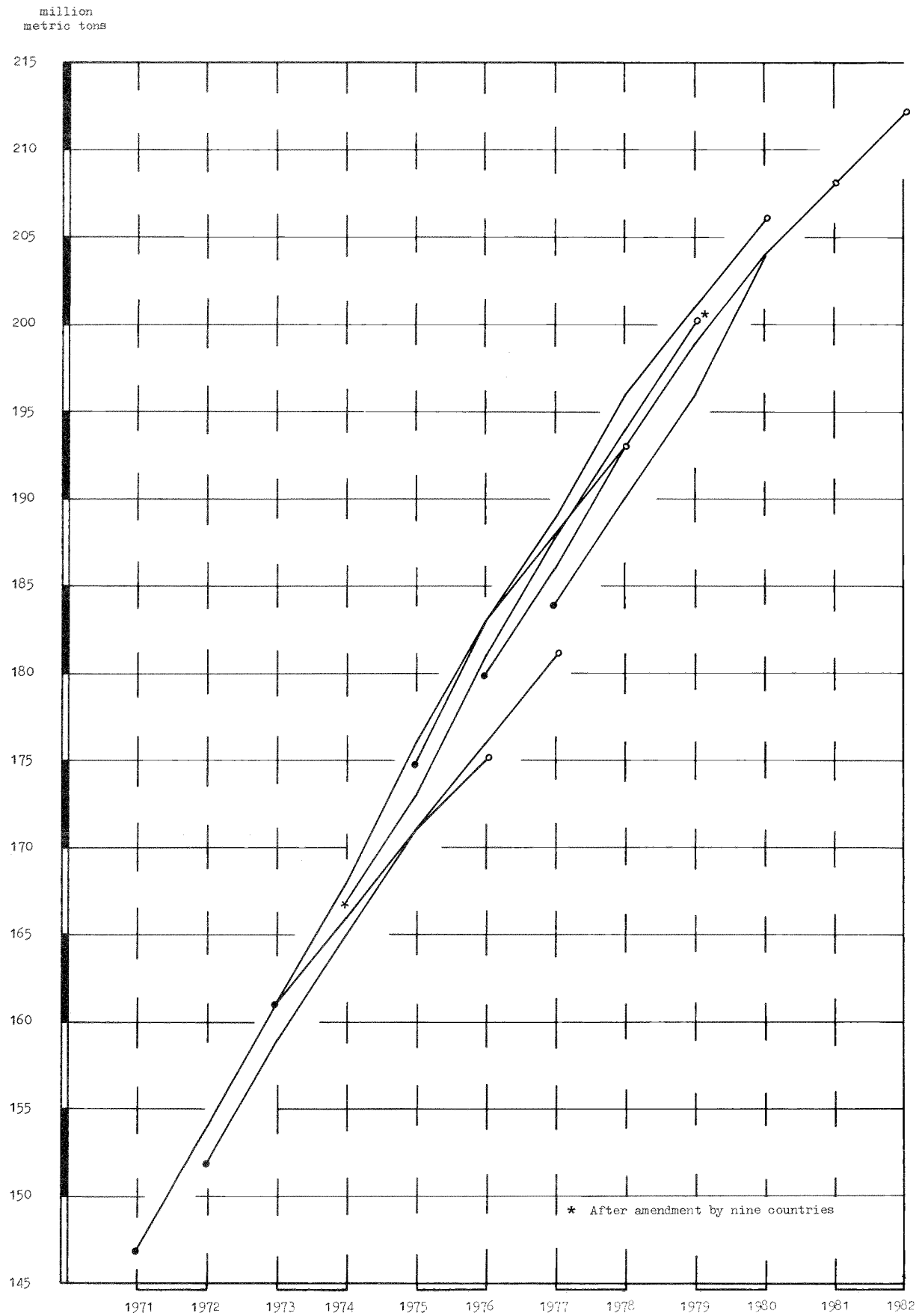


TOTAL PULP FOR PAPERMAKING

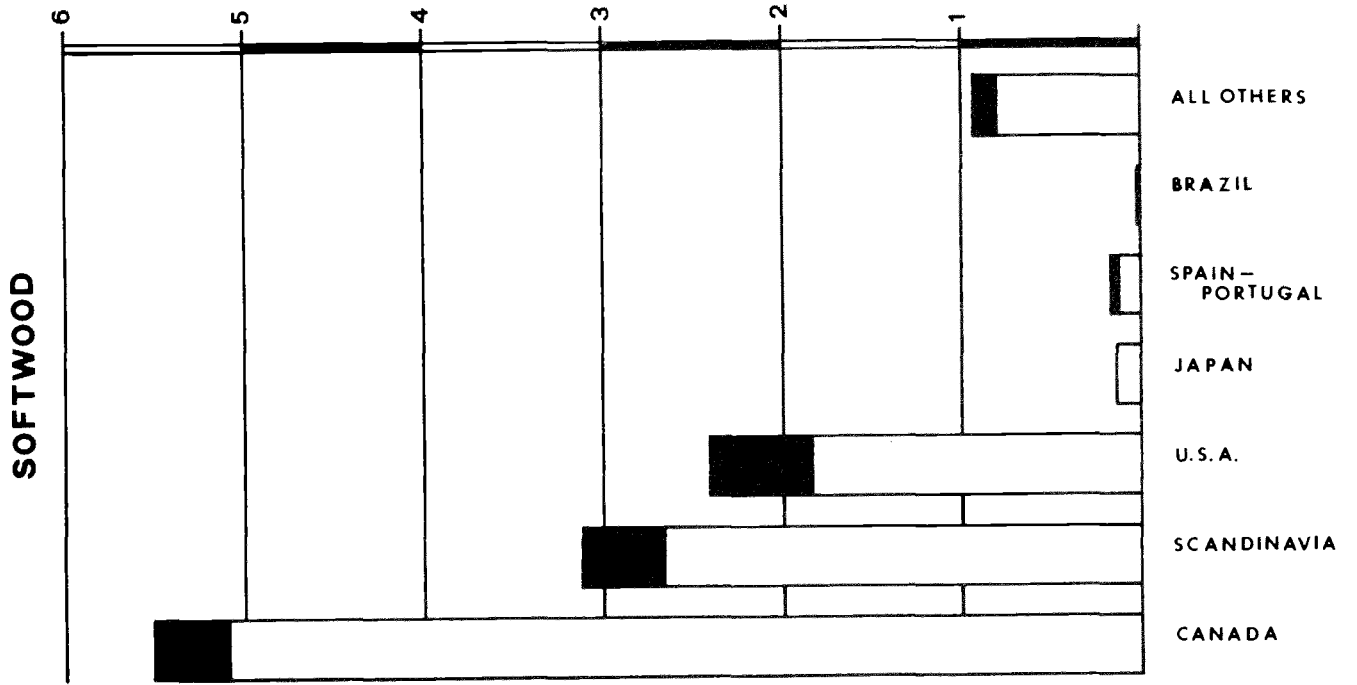
TOTAL PAPER AND PAPERBOARD

PAPER AND PAPERBOARD WORLD CAPACITY 1971-1982
COMPARISON OF ESTIMATES FROM SEVEN SURVEYS

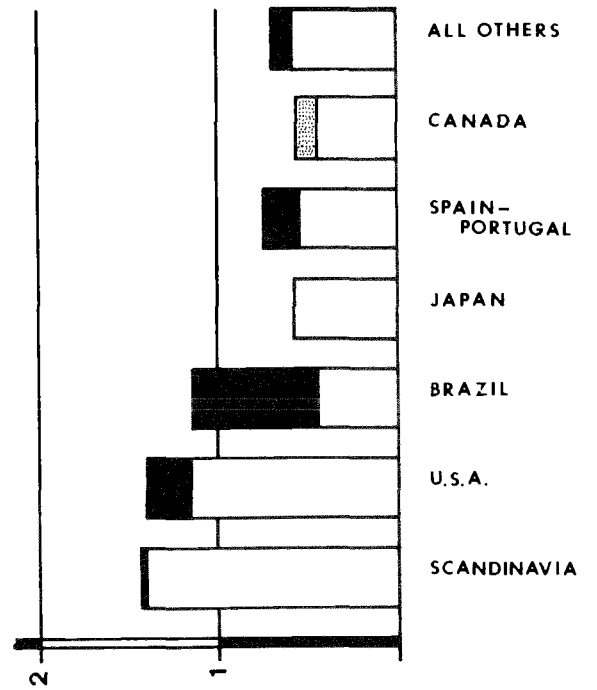
ANNEX 10



**BLEACHED SULPHATE MARKET PULP
CAPACITY IN 1977 AND 1980**
- Million Metric Tons -



HARDWOOD



■ ADDITION 1977 - 80
□ DECREASE " "

DEFINITIONS

DEFINITION OF CAPACITY

Practical Maximum Capacity, as defined for the survey, is the tonnage of paper, paperboard or pulp of normal commercial quality that could be produced per year with full use of equipment and adequate supplies of raw materials and labour, and assuming full demand. No allowance is made for losses due to unscheduled shut downs, strikes, temporary lack of power, etc., which cause decreases in actual production, but not in production capacity.

Capacity of paper machines which produce more than one grade is apportioned in accordance with actual production patterns or plans for future operation.

Capacity is reported in metric tons of net finished paper and paperboard, and air-dry (10% moisture content) pulp.

Changes in Capacity

- i) Increases in capacity for years 1, 2 and 3 of the survey should include committed plans for new machines, i.e. those underway, where ground has been broken, machinery ordered, financing obtained etc., as well as increases to existing machines. For years 4 and 5, include pulp and paper expansions which are under active consideration or seem likely to come on stream.
- ii) Changes in capacity should be included only for the portion of the year in which they are actually effective.

a) Additions to capacity.

For new mills and machines, data should reflect the fact that full capacity is only reached after a certain period of operation. For the first 12 months of operation, assume 70% of capacity, the next 12 months 90% and thereafter 100%.

b) Reductions in capacity.

Capacity of machinery which has been closed down mainly for economic reasons, with no intention of resuming production, should be excluded.

DEFINITIONS OF PULP

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

1. Wood Pulp for making Paper and Paperboard

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
1.1	Mechanical	Woodpulp, including reject pulp, obtained by grinding or milling into their fibres, coniferous or non-coniferous rounds, quarters, billets, etc. or through refining coniferous or non-coniferous chips. Called stone groundwood pulp and refiner groundwood pulp. It can be bleached or unbleached. <u>Include</u> thermo mechanical pulp. <u>Exclude</u> defibrated, exploded and groundwood pulp for fibre (building) board.
1.11	of which: non-coniferous	Mechanical pulp obtained from non-coniferous rounds, quarters, billets, chips, etc.
1.2	Chemi-mechanical and semi-chemical	Woodpulp, including reject pulp, obtained by subjecting coniferous or non-coniferous wood to a series of mechanical and chemical treatments, none of which alone is sufficient to make the fibres separate readily. According to the order and importance of the treatment, such pulp is variously named: semi-chemical, chemi-groundwood, chemi-mechanical, etc. These combined processes enable more of the lignin and hemi-cellulose constituents of the wood to be retained in the pulp and thus the proportion of pulp produced to the weight of wood used is often very high. It can be bleached or unbleached.
1.21	of which: non-coniferous	Chemi-mechanical and semi-chemical pulp obtained from non-coniferous wood.

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
	Sulphite pulp	Woodpulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips which are subsequently cooked in a pressure vessel in the presence of a bisulphite cooking liquor. Bisulphites such as ammonium, calcium, magnesium and sodium, are commonly used. <u>Exclude</u> dissolving grades having very high alpha cellulose content (usually 90% or more). These should be included in codes 3 and 3.1.
1.31	Unbleached sulphite	Sulphite pulp which has not been bleached.
1.31.1	of which: non-coniferous	Unbleached sulphite pulp obtained from non-coniferous wood.
1.32	Bleached and semi-bleached sulphite	Sulphite pulp which has been bleached or partly bleached
1.32.1	of which: non-coniferous	Bleached and semi-bleached sulphite pulp obtained from non-coniferous wood.
	Sulphate and soda pulp	Woodpulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips which are subsequently cooked in a pressure vessel in the presence of sodium hydroxide cooking liquor (soda pulp) or a mixture of sodium hydroxide and sodium sulphide cooking liquor (sulphate pulp). <u>Exclude</u> dissolving grades having very high alpha cellulose content (usually 90% or more). These should be included in codes 3 and 3.1.
1.33	Unbleached sulphate and soda	Sulphate and soda pulp which has not been bleached.
1.33.1	of which: non-coniferous	Unbleached sulphate and soda pulp obtained from non-coniferous wood.
1.34	Bleached and semi-bleached sulphate and soda	Sulphate and soda pulp which has been bleached or partly bleached.
1.34.1	of which: non-coniferous	Bleached sulphate and soda pulp obtained from non-coniferous wood.

2. Other Fibre Pulp for making Paper and Paperboard

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
2.1	Straw	Pulp obtained from straw by any method. It may be bleached.
2.2	Bagasse	Pulp obtained from residue from processing sugar cane by any method. It may be bleached.
2.3	Bamboo	Pulp obtained from bamboo by any method. It may be bleached.
2.4	Other (reeds, esparto, rags, etc.)	Includes pulp obtained by any method from such materials as esparto and other reeds or grass, cotton linters, flax, hemp, rags, other textile wastes. It may be bleached. <u>Exclude</u> dissolving grades. These should be included in code 3.

3. Dissolving Pulp (Wood and other fibrous Raw Materials)

3.	Dissolving pulp (wood and other fibrous raw materials)	Highly bleached chemical pulp (sulphate, soda or sulphite) from coniferous or non-coniferous wood, rags, cotton linters, etc., of special quality, with a very high alpha cellulose content (usually 90% and over) readily adaptable for uses other than papermaking. They are used principally as a source of cellulose in the manufacture of products such as man-made fibres, cellulosic plastic materials, lacquers, explosives, etc.
3.1	of which: non-coniferous	Dissolving pulp made from non-coniferous wood.

DEFINITIONS OF PAPER AND PAPERBOARD

The products included under this heading are in rolls, strips or sheets; the rolls and strips exceed 15 cm. in width and the sheets have no side less than 36 cm.

Exclude paper and paperboard cut to any shape other than rectangular.

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
4.1	Newsprint	Uncoated paper, unsized (or only slightly sized), containing at least 60% mechanical wood pulp (percent of fibrous content), of the type used mainly for the printing of newspapers, usually weighing not less than 40 g/m ² and generally not more than 60 g/m ² . <u>Include</u> rotonews
4.2	Other printing and writing paper	Paper, except newsprint, suitable for printing and business purposes, writing, sketching, drawing etc., made from a variety of pulp blends and with various finishes. It may be uncoated and have been subjected to sizing, calendering, supercalendering, glazing, water-marking or similar simple finishing processes, or it may be coated on one or both sides with coating material such as barium sulphate, clay, gypsum or zinc oxide, often supplemented with supercalendering, etc. <u>Include</u> such papers as: book and magazine box lining and covering calculator papers duplicating tablet or block label lithograph bank note tabulating card stock bible or imitation bible stationery manifold onionskin typewriter poster, etc.
	of which:	
4.21	Coated	Printing and writing papers, except newsprint, which have been coated on one or both sides with coating materials such as clay (beneficiated kaolin), barium sulphate, gypsum or zinc oxide, often supplemented with supercalendering, etc. <u>Include</u> coated paper produced at the paper mill from base paper manufactured for own use or purchased, together with all paper made and coated in a single operation on the papermaking machine.

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
	of which:	
4.21.1	Wood containing	Coated printing and writing papers, containing 10% or more mechanical wood pulp.
4.21.2	Woodfree	Coated printing and writing papers, containing less than 10% mechanical wood pulp.
4.22	Uncoated	Printing and writing papers, except newsprint, which have been subjected to sizing, calendering, super-calendering, glazing, water marking or similar simple finishing processes, but not to coating.
		<u>Exclude</u> coating base paper for own use or for sale to other paper mills.
	of which:	
4.22.1	Wood containing	Uncoated printing and writing papers, except newsprint, containing 10% or more mechanical woodpulp.
4.22.2	Woodfree	Uncoated printing and writing papers, except newsprint, containing less than 10% mechanical woodpulp.
4.31	Household and sanitary paper	Absorbent paper, creped or uncreped, sometimes embossed, made from bleached or unbleached pulps, sometimes with admixture of pulp from waste paper. This type of paper should be sufficiently strong to avoid disintegration or tearing in use. Other important characteristics are high absorptive capacity, retention of absorbed fluids, softness, freedom from lint and unpleasant odours. It is made in white and a variety of colours and in single, double or more plies.
		<u>Include</u> types of creped and uncreped papers such as:
		towelling napkin facial tissue toilet tissue sanitary wadding disposable tissues wiper stock
4.32	Wrapping and packaging paper and paperboard	Paper and paperboard designed for wrapping and packaging purposes made from pulps, waste paper and any combination of these.
4.32.1	Linerboard	Paperboard made either from sulphate pulp (unbleached or bleached) or principally from waste paper used as facing material on corrugated or solid paper or paperboard boxes and containers.

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
4.32.11	Kraft liner	Linerboard made wholly or principally of bleached or unbleached sulphate pulp.
4.32.11.1	Unbleached	Kraft liner made wholly or principally of unbleached sulphate pulp.
4.32.11.2	Bleached	Kraft liner made wholly or principally of bleached sulphate pulp.
4.32.12	Other linerboard	Linerboard made wholly or principally of waste paper and materials other than sulphate pulp.
4.32.2	Fluting medium	Paper or paperboard used mainly as a corrugating medium in the production of corrugating board. It may be produced wholly or principally from semi-chemical wood pulp or from other materials.
4.32.21	Semi-chemical	Fluting medium made wholly or principally of semi-chemical woodpulp.
4.32.22	Other fluting medium	Fluting medium made principally from waste paper and materials other than semi-chemical woodpulp.
4.32.3	Kraft wrapping and packaging paper	All other papers made principally from bleached and unbleached sulphate pulp used in the manufacture of single or multi-wall sacks or for other wrapping and packaging purposes.
4.32.31	Sack kraft	Bleached and unbleached kraft wrapping and packaging paper used in the manufacture of single or multi-wall sacks.
4.32.32	Other kraft wrapping and packaging paper	Bleached and unbleached kraft wrapping and packaging papers, other than sack kraft.
4.32.4	Folding boxboard	All types of paperboard used in the manufacture of folding boxes. Strength as well as good scoring and folding characteristics are required. These paperboards are made from woodpulp, waste paper or any combination of these. They may be plain or coloured throughout the mass, solid, single or double lined, coated or uncoated.

Include such folding boxboards as:

white lined board
solid bleached board
chipboard (plain or coloured)
folding kraft board

Exclude non-folding board for shipping cases,
which is included in code 4.32.52

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
4.32.41	Solid bleached board	These folding boxboards are made of bleached chemical woodpulp. They include a variety of paperboards used for packaging moist, liquid, oily or frozen foods, cosmetics, drugs, cigarette cartons etc. Some are known as "special food board". These are produced under sanitary conditions so that they can be used in direct contact with food. The boards are hard sized for moisture resistance, possess strength qualities that permit scoring and folding. Coated boards may be included. <u>Include</u> such paperboards as: - cup paper or board - liquid container board - frozen food container board - plate stock - carton stock for cigarettes, cosmetics, record sleeves, etc.
4.32.42	Other folding boxboard	Folding boxboard, other than solid bleached board, manufactured from woodpulp, waste paper and any combination of these.
4.32.5	Other wrapping and packaging paper and paperboard	Paper and paperboard designed for wrapping and packaging purposes, not included elsewhere.
4.32.51	Paper	Papers such as: i) vegetable parchment, greaseproof and glassine Papers made from chemical pulps or from mixtures of chemical woodpulp, cotton fibre pulp treated (e.g. highly hydrated or hard beaten) to render the resulting paper resistant to oil, grease and water. The papers are used primarily for packaging frozen, moist or greasy materials like butter, margarine, meat or fish, as pan liners, release paper, sterilising bags, parchmentising stock and imitations of parchment. <u>Exclude</u> papers that have been rendered grease-proof or waterproof by coating, impregnating or similar processes after manufacture of the paper. ii) wrapping and packaging papers not included under (i) above or under code 4.32.32

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
4.32.52	Paperboard	Wrapping and packaging paperboard not included under codes 4.32.11, 4.32.12, 4.32.41 and 4.32.42 <u>Include</u> straw paperboard non-folding board for shipping cases, set-up boxes, etc. board used in the manufacture of cores, tubes, cans and drums. <u>Exclude</u> corrugated board which is considered as converted paperboard straw paper and paperboard used for corrugated boxes (which is included in 4.32.12 and 4.32.22)
4.33	Other paper and paperboard, not elsewhere specified	Paper and paperboard not used for packaging purposes manufactured principally from furnishes other than sulphate pulp and not included elsewhere.
4.33.1	Paper	Papers such as: i) special thin paper These papers are made for special purposes, their common characteristics being their relative thinness. The papers included may be made from mechanical or chemical pulps, bleached or unbleached. The principal characteristics of some of these papers are uniformity of surface and caliper, freedom from pinholes, strength, close formation, opacity, low permeability and chemical purity, all related to special uses. <u>Include</u> such special thin papers as: carbonising tissue condenser and capacitor paper cable paper cigarette paper lens tissue stencil tissue pattern tissue tea bag paper <u>Exclude</u> thin printing and writing papers such as: bible and imitation bible duplicating manifold onionskin airmail stationery stock ii) kraft paper used for waxing, asphaltting, water-proofing, laminating, impregnating, spinning or twisting, gumming, etc. <u>Exclude</u> folding kraft board which is included in codes 4.32.4 and 4.32.42

<u>Survey Code</u>	<u>Grade</u>	<u>Definition</u>
		iii) all other grades of paper not included under earlier headings
		<u>Include</u> rope and jute paper folder stock blotting paper filter paper photographic sensitising paper etc. wallpaper base stock
4.33.2	Paperboard	Paperboards not included elsewhere, such as: i) construction paper and paperboard Papers, paper felts and paperboards used in the construction of buildings and other structures for insulation, vapour seal, roofing and flooring underlay etc. They are made from fully refined material such as woodpulp, waste paper, other vegetable pulp and mineral fibre. Low thermal conductivity, moisture resistance, fire resistance, permanency, insect and vermin resistance are desirable characteristics of these materials. <u>Exclude</u> a) papers, paper felts or boards impregnated, saturated, laminated or further manufactured in any way (i.e. converted). b) fibreboard (fibre building board) in the form of insulating board, medium hardboard and hardboard. ii) all other grades of paperboard not included under earlier headings <u>Include</u> shoe board gasket board transformer board press textile board index pressboard panel board (automotive) beer mat board trunk and suitcase board matrix board, etc.

DEFINITIONS

DEFINITION DE CAPACITE

Aux fins de l'enquête, la capacité maximum pratique est égale au tonnage de papier, carton ou pâte de qualité commerciale normale que l'on peut produire annuellement en utilisant pleinement le matériel, en disposant de matières premières et de la main-d'oeuvre en quantité suffisante, étant admis qu'il existe une pleine demande. On ne tient pas compte des pertes dues à des fermetures imprévues, au grèves, à un manque temporaire de source d'énergie, etc., qui font baisser la production réelle mais non la capacité de production.

La capacité des machines à papier produisant plusieurs qualités est calculée en fonction des régimes de production réelle ou des prévisions concernant le fonctionnement futur.

La capacité est exprimée en tonnes de papier et carton finis nets et de pâte séchée à l'air (10% d'humidité).

Changements de Capacité

- i) Augmentations de capacité pour les années 1, 2 et 3 de l'enquête doivent inclure projets définitifs pour l'installation de nouvelles machines, c'est-à-dire, des projets qui sont déjà en cours, dont les fondations ont été jetées, pour lesquels l'équipement a été commandé, ou pour lesquels les fonds ont été assurés etc. Inclure aussi les augmentations des machines existantes. Pour les années 4 et 5, à inclure des expansions de pâte et papier qui sont objets de considération active ou dont l'entrée en fonction est probable.
- ii) Les changements de capacité ne doivent figurer que pour la partie de l'année où il se produisent effectivement.
 - a) Additions

En ce qui concerne les nouvelles usines, les données doivent tenir compte du fait que la pleine capacité n'est atteinte qu'après un certain temps de fonctionnement. Pour les premiers 12 mois de marche, on comptera 70% de la capacité, pour les 12 mois suivants 90% et ensuite 100%.
 - b) Réductions

Ne pas déclarer la capacité des machines qui ont été arrêtées pour des raisons essentiellement économiques, sans qu'on ait l'intention de reprendre la production.

DEFINITIONS DES PATES

La pâte marchande comprend la pâte destinée à être mise en vente sur le marché et ne comprend pas la pâte utilisée directement dans une usine intégrée ou destinée à des sociétés filiales ou associées à l'intérieur du pays. Toute pâte exportée en dehors du pays est considérée comme marchande.

1. Pâtes de bois pour la fabrication des papiers et cartons

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
1.1	Mécaniques	Pâtes (et pâtes de déchets) obtenues par le broyage ou le râpage (défibrage) de bois de conifères ou de non-conifères en rondins, morceaux, billes, etc. ou par le raffinage de copeaux de bois de conifères ou de non-conifères. Elles sont dites "pâtes de bois de râperie" et "pâte mécanique de copeaux". Elles peuvent être blanchies ou non. <u>Cette rubrique comprend</u> la pâte thermo-mécanique <u>Cette rubrique ne comprend pas</u> les pâtes éclatées et défibrées entrant dans la fabrication des panneaux de fibres.
1.11	dont: de bois de non-conifères	Pâtes mécaniques obtenues de bois de non-conifères.
1.2	Chimico-mécaniques et mi-chimiques	Pâtes (et pâtes de déchets) obtenues en soumettant des bois de conifères ou de non-conifères à une série de traitements mécaniques et chimiques dont aucun n'est suffisant seul pour que les fibres se séparent aisément. Suivant l'ordre et l'importance des traitements, les pâtes sont dites mi-chimiques, mécanico-chimiques, chimico-mécaniques, etc. Ces procédés permettent de retenir dans la pâte une plus grande quantité de la lignine et de l'hémicellulose contenues dans le bois, de sorte que le rapport entre le poids de la pâte produite et le poids du bois utilisé est souvent très élevé. Elle peuvent être blanchies ou non.
1.21	dont: de bois de non-conifères	Pâtes chimico-mécaniques et mi-chimiques obtenues de bois de non-conifères.

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
	au Bisulfite	Pâtes (et déchets de pâtes) obtenues en réduisant mécaniquement des bois de conifères ou de non-conifères en copeaux et en les cuisant ensuite sous pression avec une lessive de cuisson au bisulfite. Les bisulfites les plus communément utilisés sont ceux d'ammonium, de calcium, de magnésium et de sodium. <u>Cette rubrique ne comprend pas</u> les pâtes à dissoudre qui ont une très forte teneur en alpha-cellulose (en général 90% ou plus). Elles sont classées sous les rubriques 3 et 3.1.
1.31	au Bisulfite écrues	Pâtes au bisulfite qui ne sont pas blanchies.
1.31.1	dont: de bois de non-conifères	Pâtes au bisulfite écrues obtenues de bois de non-conifères.
1.32	au Bisulfite blanchies et mi-blanchies	Pâtes au bisulfite qui sont blanchies ou mi-blanchies.
1.32.1	dont: de bois de non-conifères	Pâtes au bisulfite blanchies ou mi-blanchies obtenues de bois de non-conifères.
	au Sulfate et à la soude	Pâtes (et déchets de pâtes) obtenues en réduisant mécaniquement des bois de conifères ou de non-conifères en copeaux et en les cuisant ensuite sous pression avec une lessive de cuisson à base de soude caustique (pour les pâtes à la soude) ou d'un mélange de soude caustique et de sulfate de sodium (pour les pâtes au sulfate). <u>Cette rubrique ne comprend pas</u> les pâtes à dissoudre qui ont une très forte teneur en alpha-cellulose (en général 90% ou plus). Elles sont classées sous les rubriques 3 et 3.1.
1.33	au Sulfate et à la soude écrues	Pâtes au sulfate et à la soude qui ne sont pas blanchies.
1.33.1	dont: de bois de non-conifères	Pâtes au sulfate et à la soude écrues obtenues de bois de non-conifères.
1.34	au Sulfate et à la soude blanchies ou mi-blanchies	Pâtes au sulfate et à la soude qui sont blanchies ou mi-blanchies.
1.34.1	dont: de bois de non-conifères	Pâtes au sulfate et à la soude blanchies ou mi-blanchies obtenues de bois de non-conifères.

2. Pâtes de matériaux végétaux fibreux autres que le bois pour la fabrication des papiers et cartons

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
2.1	de Paille	Pâtes obtenues à partir de paille par n'importe quel procédé. Ces pâtes peuvent être blanchies.
2.2	de Bagasse	Pâtes obtenues à partir de résidus du traitement de la canne à sucre, par n'importe quel procédé. Ces pâtes peuvent être blanchies.
2.3	de Bambou	Pâtes obtenues à partir de bambou par n'importe quel procédé. Ces pâtes peuvent être blanchies.
2.4	Autres (roseaux, alfa, chiffons, etc.)	Pâtes obtenues par n'importe quel procédé à partir des matériaux tels que l'alfa, les roseaux et diverses autres matériaux herbacées, des linters de coton, le lin, le chanvre, les chiffons et autres déchets textiles. Ces pâtes peuvent être blanchies.

Cette rubrique ne comprend pas

les pâtes à dissoudre. Elles sont classées sous la rubrique 3.

3. Pâtes à dissoudre (de bois et d'autre matériaux végétaux)

3.	à Dissoudre (de bois et d'autres matériaux végétaux)	Pâtes chimiques hautement blanchies (au sulfate, à la soude ou au bisulfite) de bois de conifères ou de non-conifères, de chiffons, de linters de coton, etc., de qualité spéciale, ayant une très forte teneur en alpha-cellulose (en général 90% ou plus) et se prêtant à des utilisations autres que la fabrication du papier. Elles sont principalement utilisées comme matière première cellulosique dans la fabrication de produits tels que les fibres artificielles, les matières plastiques cellulosiques, les laques, les explosifs, etc.
3.1	dont: de bois de non-conifères	Pâtes à dissoudre obtenues de bois de non-conifères.

DEFINITIONS DES PAPIERS ET CARTONS

Dans ce groupe entrent les matériaux en feuilles, bandes ou rouleaux; les bandes ou rouleaux ont une largeur de plus de 15 cm. et les feuilles ont plus de 36 cm. de côté.

Ne pas déclarer les papiers et cartons de forme autre que rectangulaire.

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
4.1	Papier journal	Papier non couché, non collé ou très légèrement, contenant au moins 60% de pâte mécanique (pourcentage en matière fibreuse), utilisé principalement pour l'impression des journaux, dont le grammage n'est généralement ni inférieur à 40 g/m ² ni supérieur à 60 g/m ² .

Cette rubrique comprend

papier pour impressions sur rotative

4.2	Autres papiers d'impression et d'écriture	Papiers autres que le papier journal, utilisés pour l'impression, les besoins commerciaux, l'écriture, les croquis, le dessin, etc., faits avec divers mélanges de pâtes et soumis à divers procédés de finissage. Ces papiers peuvent être non couchés et collés, calandrés, super-calandrés, glacés ou filigranés ou soumis à des procédés similaires simples de finissages, ou peuvent être couchés sur une face ou deux faces au moyen de produits tels que sulfate de baryum, chaux, gypse ou oxyde de zinc et souvent supercalandrés, etc.
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Cette rubrique comprend

les papiers tels que:

papiers pour livres et revues
papier pour garnissage et habillage de boîtes
papier pour machines à additionner
papier pour reproduction au duplicateur
papier pour bloc-notes
papier pour étiquettes
papier pour lithographie
papier pour billets de banque
papier pour cartes mécanographiques
papier bible véritable ou imitation
papier à lettre
papier pour manifolds
papier pelure surglacé
papier machine
papier pour affiches, etc.

dont:

4.21	Couchés	Papiers d'impression et d'écriture, autres que le papier journal, couchés sur une face ou deux faces au moyen de produits tels que kaolin, sulfate de
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<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
		baryum, gypse ou oxyde de zinc et souvent supercalandrés, etc.
		<u>Cette rubrique comprend</u>
		les papiers couchés fabriqués dans l'usine à papier à partir d'un support soit fabriqué dans la même usine, soit acheté, et toutes sortes de papiers couchés sur la machine à papier.
4.21.1	dont: avec bois	Papiers couchés d'impression et d'écriture contenant au moins 10% de pâte de bois mécanique.
4.21.2	dont: sans bois	Papiers couchés d'impression et d'écriture contenant moins de 10% de pâte de bois mécanique.
4.22	Non couchés	Papiers d'impression et d'écriture, autres que le papier journal, qui ont pu être collés, calandrés, supercalandrés, glacés ou filigranés ou soumis à des procédés similaires simples de finissage, mais non couchés.
		<u>Cette rubrique ne comprend pas</u>
		les supports pour papiers couchés, qu'ils soient utilisés sur place ou vendus en l'état à d'autres usines.
4.22.1	dont: avec bois	Papiers non couchés d'impression et d'écriture, autres que le papier journal, contenant au moins 10% de pâte de bois mécanique.
4.22.2	dont: sans bois	Papiers non couchés d'impression et d'écriture, autres que le papier journal, contenant moins de 10% de pâte de bois mécanique.
4.31	Papiers à usage domestique et hygiénique	Papier absorbant, crêpé ou non, parfois gaufré, fait avec des pâtes blanchies ou écrues, parfois mélangées à de la pâte de vieux papiers. Ce papier doit avoir une force suffisante pour résister à l'usage sans désagrégation ou déchirure. Ses autres caractéristiques importantes sont la capacité d'absorption, la possibilité de retenir des liquides, la douceur au toucher, l'absence de charpie et d'odeur désagréable. Il est fait en blanc et en diverses teintes, en une, deux ou plusieurs couches.
		<u>Cette rubrique comprend</u>
		les papiers, crêpés ou non, tels que:
		papier-serviette (essuie-mains etc.)
		papier pour serviettes hygiéniques
		papier à démaquiller
		papier hygiénique
		ouates de cellulose
		articles en papier à jeter
		papier d'essuyage

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
4.32	Papiers et cartons d'emballage et d'emballage	Papiers et cartons destinés à l'emballage et l'emballage, fabriqués à partir de pâtes, de vieux papiers ou de n'importe quel combinaison de ces deux types de matières.
4.32.1	Carton de couverture	Carton fabriqué à partir de pâte au sulfate (blanchie ou non) ou essentiellement à partir de vieux papiers, employé pour couvrir des cartons ondulés ou des papiers ou carton compacts utilisés pour faire des boîtes ou récipients.
4.32.11	Couverture kraft pour carton ondulé	Cartons de couverture faits uniquement ou principalement de pâte au sulfate, blanchie ou écrue.
4.32.11.1	Ecrue	Couverture kraft pour carton ondulé faite uniquement ou principalement de pâte au sulfate écrue.
4.32.11.2	Blanchie	Couverture kraft pour carton ondulé faite uniquement ou principalement de pâte au sulfate blanchie.
4.32.12	Autres cartons de couverture	Cartons de couverture faits uniquement ou principalement de pâte de vieux papiers et des matériaux autres que de la pâte au sulfate.
4.32.2	Cannelures	Papiers et cartons utilisés essentiellement pour faire l'âme cannelée des cartons ondulés. Ils peuvent être faits uniquement ou principalement avec de la pâte mi-chimique ou avec d'autres matériaux.
4.32.21	Mi-chimique	Cannelures faites uniquement ou principalement de la pâte de bois mi-chimique.
4.32.22	Autres cannelures	Cannelures faites uniquement ou principalement de la pâte de vieux papiers et des matériaux autres que de la pâte mi-chimique.
4.32.3	Papiers kraft d'emballage et d'emballage	Tous les autres papiers faits principalement avec de la pâte au sulfate, blanchie ou écrue, utilisés sous forme de sacs d'emballage à une ou plusieurs épaisseurs ou sous d'autres formes pour l'emballage et l'emballage.
4.32.31	Papiers kraft pour grands sacs	Papiers kraft d'emballage et d'emballage blanchis et écrus utilisés dans la fabrication des sacs d'emballage à une ou plusieurs épaisseurs.
4.32.32	Autres papiers kraft d'emballage et d'emballage	Papiers kraft d'emballage et d'emballage blanchis et écrus autres que les papiers pour grands sacs.
4.32.4	Cartons pour boîtes pliantes	Cartons de tous types servant à la fabrication de boîtes pliantes. Les cartons de ce groupe doivent être résistants et posséder de bonnes caractéristiques de rainage et de pliage. Ils sont faits avec des pâtes de bois, des vieux papiers ou un mélange des deux. Ils peuvent être à l'état naturel ou coloriés dans la masse, compacts, doublés une ou deux faces, couchés ou non couchés.

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
<u>Cette rubrique comprend</u>		
des cartons pour boîtes pliants tels que:		
carton blanc satiné		
cartons compacts blanchis		
cartons gris à l'état naturel ou coloriés		
cartons kraft pliables		
<u>Cette rubrique ne comprend pas</u>		
le carton kraft pour boîtes d'emballage.		
Il est classé sous la rubrique 4.32.52		
4.32.41	Carton compact blanchi	Ces cartons pour boîtes pliantes sont faits avec de la pâte chimique blanchie. Ils comprennent différents cartons utilisés pour l'emballage de produits alimentaires humides, liquides, gras ou congelés, cosmétiques, drogues, etc. Ces cartons sont parfois appelés "cartons spéciaux pour l'alimentation". Ils sont fabriqués dans des conditions hygiéniques, de manière à pouvoir être mis directement au contact des produits alimentaires. Ces cartons sont collés fortement pour résister à l'humidité, possèdent des qualités de résistance permettant le rainage et le pliage. Les cartons couchés peuvent être compris dans cette rubrique.
<u>Cette rubrique comprend</u>		
les cartons servant à fabriquer:		
des gobelets		
des récipients pour liquides		
des récipients pour aliments congelés		
des assiettes		
des boîtes à cigarettes, à cosmétiques,		
jaquettes pour disques, etc.		
4.32.42	Autres cartons pour boîtes pliantes	Cartons pour boîtes pliantes, autres que le carton compact blanchi, faits avec des pâtes de bois, de vieux papiers et tout mélange de ces pâtes.
4.32.5	Autres papiers et cartons d'emballage et d'emballage	Papiers et cartons destinés à l'emballage et l'emballage, non désignés ailleurs.
4.32.51	Papiers	Papiers tels que:
i) papier sulfurisé, simili-sulfurisé et papier cristal		
Papiers faits avec des pâtes de bois chimiques pures ou mélangées ou de pâtes de fibres de coton, traitées (c'est-à-dire fortement hydratées ou soumises à un raffinage poussé) pour que le papier obtenu soit résistant à l'huile, à la		

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
		graisse et à l'eau. Ces papiers sont utilisés principalement pour l'emballage de produits alimentaires congelés, humides ou gras (beurre, margarine, viande, poisson, etc.) comme moules à pâtisserie, anti-adhésifs, sachets stérilisants, parchemins ou imitations de parchemin.
		<u>Cette rubrique ne comprend pas</u> les papiers qui, après fabrication, ont été rendus ingraissables ou imperméables par couchage, imprégnation ou autres procédés similaires.
		ii) papiers d'emballage et d'emballage ne figurant dans la rubrique i) ci-dessus ni sous la code 4.32.32
4.32.52	Cartons	Cartons d'emballage et d'emballage ne figurant pas dans les rubriques 4.32.11, 4.32.12, 4.32.41 et 4.32.42 <u>Cette rubrique comprend</u> des cartons tels que: carton paille carton non pliable pour boîte d'emballage, caisse rigides, etc. carton destiné à la fabrication de mandrins, tubes et boîtes cylindriques, etc.
		<u>Cette rubrique ne comprend pas</u> le carton ondulé qui est considéré comme un carton travaillé les papiers et carton paille utilisés pour les boîtes en carton ondulé (qui figurent sous 4.32.12 et 4.32.22 ci-dessus)
4.33	Autres papiers et cartons, non décrits ailleurs	Papiers et cartons non destinés à l'emballage et faits principalement avec des matières premières autres que la pâte au sulfate et non décrits ailleurs.
4.33.1	Papiers	Papiers tels que: i) papiers minces spéciaux Les papiers de cette catégorie sont destinés à usages particuliers et sont tous relativement fins. Ils sont faits parfois avec des pâtes mécaniques ou chimiques blanchies ou écruës, mais souvent avec des pâtes contenant du lin, du chanvre ou de la fibre de coton. Leurs principales caractéristiques sont l'uniformité de la surface et du calibre, l'absence de

No. Code
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Produit

Définition

perforations, la résistance, la texture serrée, l'opacité, une faible perméabilité, la pureté chimique - toutes ces caractéristiques étant liées à des utilisations spéciales.

Cette rubrique comprend

des papiers minces spéciaux tels que:

papier pelure pour carbone
papier pour condensateurs
papier isolant
papiers à cigarettes
papiers mousseline pour essuyage de
lentilles optiques
papier pour stencils
papier pour patrons
~~papiers~~ pour sachets de thé

Cette rubrique ne comprend pas

les papiers minces d'impression et d'écriture tels que:

papier bible ou imitation
papier pour reproduction au duplicateur
papier pour manifolds
papier pelure surglacé
papier à lettre avion

- ii) papiers kraft destinés à être paraffinés, asphaltés, imperméabilisés, laminés, imprégnés, filés ou tordus, gommés, etc.

Cette rubrique ne comprend pas

les cartons kraft pliables. Ils sont classés sous les rubriques 4.32.4 et 4.32.42

- iii) autres papiers ne figurant pas dans les précédents rubriques

Cette rubrique comprend

des papiers tels que:

papier de chanvre et de jute
papier pour dossiers
papier buvard
papier filtre
papier support photographique etc.
les supports de tenture (papier) peints

<u>No. Code</u> <u>Enquête</u>	<u>Produit</u>	<u>Définition</u>
4.33.2	Cartons	Cartons non décrits ailleurs, tels que: i) papiers et cartons de construction Papiers, feutres et cartons utilisés dans la construction comme isolants, joints d'étanchéité au gaz, sous-couches de plafonds ou de planchers, etc. Ils sont faits avec des matières complètement raffinées telles que pâtes de bois, vieux papiers, autres pâtes végétales et fibres minérales. La faible conductivité thermique, la résistance à l'humidité, au feu, à la vermine et aux insectes et la durabilité sont des caractéristiques souhaitables pour ces matières. <u>Cette rubrique ne comprend pas</u> a) les papiers, feutres et cartons imprégnés, imprégnés à coeur, à plusieurs épaisseurs ou traités de toute autre manière (c'est-à-dire travaillés). b) les panneaux de fibres durs, mi-durs et isolants. ii) autres cartons non décrits ailleurs. <u>Cette rubrique comprend</u> des cartons tels que: cartons pour l'industrie et la chaussure cartons pour joints cartons pour transformateurs cartons pour apprêts textiles cartons pour classeurs cartons pour carrosserie automobile cartons pour dessous de bocks cartons pour valises et malles cartons pour flans de clicherie.

DEFINICIONES

DEFINICION DE CAPACIDAD

Capacidad máxima práctica, para los efectos de la encuesta, es el número de toneladas de papel, cartón y pasta, de la calidad comercial corriente, que se podrían producir al año, aprovechando el equipo al máximo y contando con suficiente materia prima y mano de obra, suponiendo que la demanda es capaz de absorber toda la producción. No se toman en cuenta las diferencias que se puedan producir a causa de paros imprevistos, huelgas, interrupciones de la energía eléctrica, etc., todo lo cual se traduce efectivamente en una disminución de la producción aunque no de la capacidad.

Cuando las máquinas producen papeles de varios tipos, se indica la capacidad proporcional que corresponde a cada uno, tanto en la producción actual como en los planes futuros.

La capacidad se expresa en toneladas métricas netas de papel o cartón acabado y de pasta seca al aire (10% de humedad).

Cambios de capacidad

- i) Los aumentos de la capacidad para los años 1, 2 y 3 de la encuesta deberían incluir planes ya comprometidos para nuevas máquinas, ej.: aquellos comenzados, aquellos donde la tierra ha sido abierta, la maquinaria ordenada, la financiación obtenida, etc., así como incrementos de la maquinaria existente. Para los años 4 y 5, incluir expansiones para pulpa y papel que estén siendo consideradas o que probablemente sean llevadas a cabo.
- ii) Los cambios de capacidad deben aplicarse solamente a la parte del año en que surtan efecto.
 - a) Aumentos de capacidad.

Trantándose de fábricas y máquinas nuevas, debe tenerse presente que sólo llegan a producir a plena capacidad después de estar en funcionamiento por un cierto tiempo. En los primeros 12 meses de funcionamiento, supóngase un 70% de capacidad, 90% en los 12 meses siguientes y 100% después.
 - b) Reducciones de capacidad.

No se debe tomar en cuenta la capacidad de aquella maquinaria que se haya parado, por motivos económicos, sin intenciones de volverla a poner en marcha.

DEFINICIONES DE PASTA

Con el término "pasta para comercialización" se indica la pasta destinada a la venta en el mercado libre, excluyendo la pasta utilizada en la propia fábrica o enviada a compañías asociadas o afiliadas dentro del país. Se considera pasta para comercialización toda pasta enviada fuera del país de producción.

1. Pasta de madera para papel y cartón

<u>Código de la enquesta</u>	<u>Tipo</u>	<u>Definición</u>
1.1	Mecánica	Pasta de madera, incluida la pasta de desecho, obtenida moliendo o desfibrando troncos, cuarterones, rollizos, etc., o refinando astillas de coníferas o no coníferas. Suele denominarse también pasta mecánica de trituradora y pasta mecánica de refinador. Puede ser blanqueada o no. <u>Inclúyase</u> la pasta termomecánica. <u>Exclúyanse</u> pasta desfibrada, pasta obtenida según el proceso masonite, y pasta mecánica para cartón de fibra (para construcción).
1.11	de la cual: de especies no coníferas	Pasta mecánica obtenida de troncos, cuarterones, rollizos, astillas, etc., de especies no coníferas.
1.2	Quimiomecánica y semiquímica	Pasta de madera, incluida la pasta de desecho, obtenida sometiendo la madera, de coníferas o no, a una serie de tratamientos mecánicos y químicos, ninguno de los cuales sea suficiente por sí solo para hacer que las fibras se separen con facilidad. Según el orden y la importancia de los tratamientos, esta pasta recibe diversas denominaciones, a saber: semiquímica, quimiomecánica, etc. Con estos procesos combinados es posible conservar en la pasta una mayor cantidad de los componentes de lignina y hemicelulosa de la madera; por consiguiente, la proporción de pasta producida respecto al peso de la madera empleada es frecuentemente muy alta. Puede ser blanqueada o no.
1.21	de la cual: de especies no coníferas	Pasta quimiomecánica y semiquímica obtenida de especies no coníferas.

<u>Código de la encuesta</u>	<u>Tipo</u>	<u>Definición</u>
	Al sulfito	Pasta de madera, incluidos los desechos, obtenida reduciendo mecánicamente a partículas madera de coníferas o frondosas cociéndolas después en autoclave en presencia de licor de cocción al bisulfito. Suelen emplearse bisulfitos tales como los de amonio, calcio, magnesio y sodio. <u>Exclúyanse</u> los tipos solubles con un alto contenido de alfa-celulosa (generalmente 90% o más). Inclúyanse en los códigos 3 y 3.1.
1.31	Al sulfito, sin blanquear	Pasta al sulfito que no se ha blanqueado.
1.31.1	de la cual: de especies no coníferas	Pasta al sulfito sin blanquear hecha de madera de especies no coníferas.
1.32	Al sulfito, semi-blanqueada y blanqueada	Pasta al sulfito que se ha blanqueado en todo o en parte.
1.32.1	de la cual: de especies no coníferas	Pasta al sulfito blanqueada o semiblanqueada hecha de madera de especies no coníferas.
	Al sulfato y a sosa	Pasta de madera, incluidos los desechos, obtenida reduciendo mecánicamente a partículas madera de coníferas o frondosas y cociéndolas después en autoclave en presencia de licor de cocción al hidróxido de sodio (pasta a la sosa) o de un licor de cocción consistente en una mezcla de hidróxido de sodio y sulfuro de sodio (pasta al sulfato). <u>Exclúyanse</u> los tipos solubles con un alto contenido de alfa-celulosa (generalmente 90% o más). Inclúyanse éstos en los códigos 3 y 3.1.
1.33	Al sulfato sin blanquear y a la sosa	Pasta al sulfato y a la sosa que no se ha blanqueado.
1.33.1	de la cual: de especies no coníferas	Pasta al sulfato y a la sosa sin blanquear hecha de madera de especies no coníferas.
1.34	Al sulfato semi-blanqueada y blanqueada y a la sosa	Pasta al sulfato y a la sosa que se ha blanqueado en todo o en parte.
1.34.1	de la cual: de especies no coníferas	Pasta al sulfato y a la sosa blanqueada hecha de madera de especies no coníferas .

2. Otras pastas fibrosas para papel y cartón

<u>Código de la encuesta</u>	<u>Tipo</u>	<u>Definición</u>
2.1	(De) paja	Pasta hecha de paja con cualquier método. Puede ser blanqueada.
2.2	(De) bagazo	Pasta hecha de los residuos del beneficiado de la caña de azúcar con cualquier método. Puede ser blanqueada.
2.3	(De) bambú	Pasta hecha de bambú con cualquier método. Puede ser blanqueada.
2.4	(De) otras materias (carrizos, esparto, trapos, etc.)	Se incluye toda pasta hecha con cualquier método de materias como esparto y otros carrizos y hierbas, borra de algodón, lino, cáñamo, trapos, y otros residuos textiles. Puede ser blanqueada.

Exclúyanse los tipos solubles; inclúyase los en el código 3.

3. Pasta soluble (de madera y otras materias fibrosas)

3.	Soluble (de madera y otras materias fibrosas)	Pastas químicas muy blanqueadas (al sulfato, a la sosa o al sulfito) de madera de coníferas o frondosas, trapos, borra de algodón, etc., de calidad especial con un contenido muy alto de alfa-celulosa (90% o más) fácilmente adaptables a aplicaciones ajenas a la fabricación de papel. Se emplean principalmente como fuente de celulosa en la fabricación de productos tales como fibras artificiales, materiales plásticos celulósicos, lacas, explosivos, etc.
3.1	de la cual: de especies no coníferas	Pasta soluble hecha de madera de especies no coníferas.

DEFINICIONES DE PAPEL Y CARTON

Los productos comprendidos en esta sección se presentan en rollos, tiras u hojas; los rollos y tiras tienen una anchura superior a 15 cm y las hojas no tienen menos de 36 cm. de lado.

Exclúyase el papel y cartón cortado en otra forma que la rectangular.

Código de la encuesta

Tipo

Definición

4.1 Papel para
periódicos
(papel prensa)

Papel sin estuco, sin apresto (o con muy poco apresto) que contiene por lo menos 60% de pasta mecánica de madera (porcentaje de fibras) del tipo empleado principalmente para la impresión de diarios, que suele pesar no menos de 40 g/m² y por lo general no más de 60 g/m².

Inclúyase el papel de rotativa

4.2 Otros papeles de
escritura e impresión

Papeles, excepto el papel para periódicos, idóneos para la impresión y para uso comercial, escritura, grabado, dibujo, etc., hechos con diversas mezclas de pastas y diversos acabados. Se puede presentar sin estuco y aprestado, calandrado, supercalandrado, satinado, filigranado, o sometido a procesos sencillos de acabamiento análogos, o se puede estucar por una o ambas caras con materiales de estuco como sulfato de bario, tiza, yeso y óxido de cinc, frecuentemente completado con supercalandradura, etc.

Inclúyanse los papeles como:

los empleados en libros y revistas
forro de cajas interior y exterior
papel de calculadora
papel de copia
papel de escritura
etiquetas
papel litográfico
papel moneda
papel de tarjetas de tabulación
papel biblia o imitación biblia
papel de carta
papel para copias múltiples
papel cebolla
papel para máquina de escribir
papel para carteles, etc.

de la cual:

4.21 estucado

Papeles de impresión y escritura, salvo el papel para periódicos, que hayan sido estucados por uno o ambos lados con materiales para estucar como tiza (caolín beneficiado), sulfato de bario, yeso u óxido de cinc, suplementado a veces con supercalandradura, etc.

Código
de la
encuesta

Tipo

Definición

Inclúyase el papel estucado producido en la fábrica de papel a partir de papel soporte fabricado para uso propio o comprado y todo el papel hecho y estucado en una sola operación en la máquina de papel.

de la cual:

- | | | |
|--------|--------------------|--|
| 4.21.1 | con pasta mecánica | Papeles estucados de escritura e impresión que contienen un 10% o más de pasta mecánica. |
| 4.21.2 | sin pasta mecánica | Papeles estucados de escritura e impresión que contienen menos de un 10% de pasta mecánica. |
| 4.22 | sin estucar | Papeles de impresión y escritura, salvo el papel para periódicos, que han sido sometidos a encolado, calandradura, supercalandradura, satinado, afiligranado u otros procesos sencillos de acabado, pero no al estucado. |

Exclúyase el papel soporte para estucar para uso propio o para la venta a otras papeleras.

de la cual:

- | | | |
|--------|------------------------------------|---|
| 4.22.1 | con pasta mecánica | Papeles sin estucar de escritura e impresión que contienen un 10% o más de pasta mecánica. |
| 4.22.2 | sin pasta mecánica | Papeles sin estucar de escritura e impresión que contienen menos de un 10% de pasta mecánica. |
| 4.31 | Papel de uso doméstico y sanitario | Papel absorbente, crepé o no, a veces gofrado, hecho de pasta, blanqueada o no, a veces con mezcla de pasta de papel viejo. Este tipo de papel se presenta suficientemente robusto para evitar disgregación o laceración en el uso. Otras características importantes son: alta capacidad absorbente, retención de los líquidos absorbidos, morbidez, ausencia de pelillos y olores desagradables. Se hace blanco o en diversos colores y en una, dos, o más capas. |

Inclúyanse tipos de papeles crepé o no como:

toallas
servilletas
papel facial
papel higiénico
guata sanitaria
papeles sanitarios
material limpiador

<u>Código de la encuesta</u>	<u>Tipo</u>	<u>Definición</u>
4.32	Papel y cartón de envolver y empaquetar	Papel y cartón para envolver y empaquetar, hecho de pastas, recortes y cualquier combinación de ambos.
4.32.1	Cartón de capa	Cartón hecho de pasta al sulfato, blanqueado o no, o principalmente de recortes utilizados como material facial sobre cartón acanalado o sólido o sobre cajas y recipientes de cartón.
4.32.11	Papel kraft para forros	Cartón de capa o cara hecho en todo o principalmente de pasta al sulfato blanqueado o no.
4.32.11.1	sin blanquear	Papel kraft para forros hecho total o principalmente de pasta al sulfato sin blanquear.
4.32.11.2	blanqueado	Papel kraft para forros hecho total o principalmente de pasta al sulfato blanqueada.
4.32.12	Otros cartones de capa	Cartones de capa hechos total o principalmente de recortes y materiales que no sean pasta de sulfato.
4.32.2	Medio para acanalar	Papel o cartón empleado como medio para ondular en la producción de cartón acanalado. Se puede fabricar en todo o principalmente de pasta de madera semiquímica o de otros materiales.
4.32.21	Semiquímico	Medio para acanalar hecho total o principalmente de pasta semiquímica para madera.
4.32.22	Otros medios para acanalar	Medios para acanalar hechos total o principalmente de recortes y materiales que no sean la pasta semiquímica para madera.
4.32.3	Papel kraft de envolver y empaquetar	Todos los demás tipos de papel hechos principalmente de pasta al sulfato blanqueada y sin blanquear que se utilizan en la fabricación de sacos simples o de varias capas o para otras clases de envolturas y empaquetados.
4.32.31	Papel kraft para sacos	Papel kraft de envolver y empaquetar, blanqueado o no, que se emplea en la fabricación de sacos, simples o de varias capas.
4.32.32	Otros tipos de papel kraft de envolver y empaquetar	Papeles kraft de envolver y empaquetar, blanqueado o no, que no sean el papel kraft para sacos.
4.32.4	Cartones sólidos para cajas plegables	Todos tipos de cartón empleado en la fabricación de cajas plegables. Se exigen resistencia y buenas características de marcatura y plegadura. Se hacen de pastas de madera, papel viejo o mezclas de los dos. Se presentan naturales o coloreados, sólidos, con forro simple o doble, con estuco o no.

Código
de la
encuesta

Tipo

Definición

Inclúyanse cartones sólidos para cajas plegables como:

cartón con forro blanco
cartón sólido blanqueado
cartón de astillas (natural or coloreado)
cartón kraft plegable

Exclúyase el cartón no plegable para caja de embarque,
comprendido en el código 4.32.52

4.32.41

Cartón sólido
blanqueado

Estos cartones para cajas plegables se hacen de pasta de madera química blanqueada. Comprenden diversos cartones empleados para empaquetar alimentos húmedos, líquidos, aceitosos o congelados, cosméticos, medicamentos, etc. Los denominados "cartones especiales para alimentos" se producen en condiciones sanitarias de manera que se puedan emplear en contacto directo con los alimentos. Los cartones se presentan espesos para soportar la humedad, tienen buenas calidades de resistencia a plegaduras y marcaduras. Se puede incluir también cartones con estuco.

Inclúyanse cartones como:

papel o cartón para tazas
cartón para contener líquidos
envases para alimentos congelados
papel o cartón para platos
cartón para cigarillos, cosméticos,
fundas para discos, etc.

4.32.42

Otros cartones
sólidos para
cajas plegables

Cartones sólidos para cajas plegables, exceptuado el cartón sólido blanqueado, hecho de pastas de madera, papel viejo, o cualquier mezcla de los dos.

4.32.5

Otros papeles y
cartones de envolver
y empaquetar

Papeles y cartones de envolver y empaquetar no incluidos en otros párrafos.

4.32.51

Papel

Papeles como los siguientes:

- i) pergamino vegetal, papel impermeable a las grasas y papel glaseado (papel cristal)

Papeles hechos de pasta de madera química pura o de mezclas de pasta de madera química, de pastas de fibras de algodón tratadas (o sea, altamente hidratadas o bataneadas energicamente) para que el papel obtenido resista al aceite, la grasa y el agua. Se emplean principalmente para envasar productos congelados, húmedos o grasosos, como la mantequilla, la margarina, la carne y el pescado, como forros para cazuelas, papel anti-adhesivo, sacos esterilizadores, pergamino o imitaciones de pergamino.

<u>Código de la encuesta</u>	<u>Tipo</u>	<u>Definición</u>
		<u>Exclúyanse</u> los papeles impermeabilizados a las grasas o el agua con procesos de estuco, impregnación o similares después de su fabricación.
		ii) papel de envolver y empacar no especificado en el anterior párrafo i) o en el 4.32.32
4.32.52	Cartón	Cartón de envolver y empaquetar no incluido en los párrafos 4.32.11, 4.32.12, 4.32.41 y 4.32.42
		<u>Inclúyanse</u> cartón de paja cartón no plegable para cajas de embarque, cajas de cartón no desmontable, etc.
		<u>Exclúyase</u> el cartón acanalado que se considera cartón de conversión el papel y cartón de paja utilizado para cajas acanaladas (que se incluyen en los párrafos 4.32.12 y 4.32.22)
4.33	Otros papeles y cartones no incluidos en otro lugar	Papel y cartón que no se utiliza para empaquetar, fabricado principalmente de materiales que no sean pasta de sulfato y no incluidos en otro lugar.
4.33.1	Papel	Papeles como los siguientes: i) papel especial fino Aquellos papeles hechos para fines especiales cuyas características comunes están en relación con su delgadez. Pueden ser de pastas mecánicas o químicas, blanqueadas o no. Las principales características de algunos de estos papeles son la uniformidad de su superficie y espesor, la ausencia de poro, su resistencia, su densidad, opacidad, escasa permeabilidad y pureza química, todas relacionadas con aplicaciones especiales. <u>Inclúyanse</u> papeles especiales finos como: para papel carbón papel de condensador y capacitor papel aislante papel de cigarrillos papel para limpiar lentes papel para estarcidos papel para patrones papel para bolsitas de té <u>Exclúyanse</u> papeles de escritura e impresión finos como: papel biblia o imitación biblia papel de copia para máquina de reproducir papel cebolla papel de carta para correo aéreo

Código
de la
encuesta

Tipo

Definición

- ii) papel kraft empleado para encerar, asfaltar, impermeabilizar, laminar, impregnar, hilar o torcer, engomar, etc.

Exclúyanse los cartones sólidos para cajas plegables que están comprendidos en los códigos 4.32.4 y 4.32.42

- iii) todos los demás tipos de papel no especificados anteriormente.

Inclúyanse papel de cordeles
papel de carpeta
papel secante
papel filtro
papel sensible fotográfico, etc.
base de papel mural

4.33.2

Cartón

Cartones no especificados anteriormente, como:

- i) papeles y cartones para la construcción

Papeles, fieltros de papel y cartones empleados en la construcción de edificios y otras estructuras para aislar, evitar emanaciones, colonar debajo de los techos y pisos, etc. Se hacen de material totalmente refinado como, por ejemplo, pasta de madera, papel viejo, pasta de otros vegetales y fibra mineral. Las características convenientes en estos materiales son su poca conductividad térmica, su resistencia a la humedad, su resistencia al fuego, su permanencia y su resistencia a los insectos y alimañas.

Exclúyanse a) los papeles, fieltros y cartones impregnados, saturados, laminados o elaborados ulteriormente de cualquier manera.

- b) los tableros de fibra (tableros para construcción) o sea, tableros aislantes, tableros semiduros y tableros duros.

- ii) todos los demás tipos de cartón no especificados anteriormente

Inclúyanse cartón de zapato
cartón de guarniciones
cartón de transformador
cartón prensado textil
cartón prensado para índices
cartón panel (automóviles)
cartón para posavasos de cerveza
cartón de baúles y maletas
cartón de matrices, etc.

COUNTRY DATA
CHIFFRES PAR PAYS
DATOS RELATIVOS A LOS PAISES

LIST OF COUNTRIESAFRICA

- * 1. Algeria
- * 2. Angola
- * 3. Cameroon
- * 4. Egypt
- * 5. Ethiopia
- * 6. Gabon
- * 7. Kenya
- * 8. Libya
- * 9. Madagascar
- * 10. Morocco
- * 11. Mozambique
- * 12. Nigeria
- * 13. Rhodesia
- ‡ 14. South Africa
- * 15. Sudan
- * 16. Swaziland
- * 17. Tunisia
- * 18. Uganda
- * 19. Zaire

NORTH AND CENTRAL AMERICA

- ‡ 20. Canada
- * 21. Costa Rica
- * 22. Cuba
- * 23. Dominican Republic
- * 24. El Salvador
- * 25. Guatemala
- * 26. Jamaica
- * 27. Mexico
- * 28. Panama
- * 29. Puerto Rico
- * 30. United States

SOUTH AMERICA

- * 31. Argentina
- * 32. Bolivia
- * 33. Brazil
- * 34. Chile
- * 35. Colombia
- * 36. Ecuador
- * 37. Paraguay
- * 38. Peru
- * 39. Uruguay
- * 40. Venezuela

ASIA

- * 41. Bangladesh
- * 42. Burma
- 43. China
- * 44. Cyprus
- * 45. Hong Kong
- * 46. India
- * 47. Indonesia
- * 48. Iran
- * 49. Iraq
- ‡ 50. Israel
- ‡ 51. Japan
- * 52. Jordan
- 53. Kampuchea, Democratic
- 54. Korea, Dem. People's Rep.
- * 55. Korea, Republic of
- * 56. Lebanon
- * 57. Malaysia
- 58. Mongolia
- * 59. Nepal
- * 60. Pakistan
- * 61. Philippines
- * 62. Singapore
- * 63. Sri Lanka
- * 64. Syria
- * 65. Thailand
- * 66. Turkey
- 67. Viet-Nam, Socialist Republic

LISTE DE PAYSAFRIQUE

- Algérie
- Angola
- Cameroon
- Egypte
- Ethiopie
- Gabon
- Kenya
- Libye
- Madagascar
- Maroc
- Mozambique
- Nigéria
- Rhodésie
- Afrique du Sud
- Soudan
- Swaziland
- Tunisie
- Ouganda
- Zaire

AMERIQUE DU NORD ET CENTRALE

- Canada
- Costa Rica
- Cuba
- République Dominicaine
- El Salvador
- Guatemala
- Jamaïque
- Mexique
- Panama
- Porto Rico
- Etats-Unis

AMERIQUE DU SUD

- Argentine
- Bolivie
- Brésil
- Chili
- Colombie
- Equateur
- Paraguay
- Pérou
- Uruguay
- Venezuela

ASIE

- Bangladesh
- Birmanie
- Chine
- Chypre
- Hong-Kong
- Inde
- Indonésie
- Iran
- Irak
- Israël
- Japon
- Jordanie
- Kampuchea, Démocratique
- Corée, Rép. Pop. Dém.
- Corée, République de
- Liban
- Malaisie
- Mongolie
- Népal
- Pakistan
- Philippines
- Singapour
- Sri Lanka
- Syrie
- Thaïlande
- Turquie
- Viet-Nam, Rép. Soc.

LISTA DE LOS PAISESAFRICA

- Algeria
- Angola
- Camerdn
- Egipto
- Etiopia
- Gabón
- Kenia
- Libia
- Madagascar
- Marruecos
- Mozambique
- Nigeria
- Rhodesia
- Sudáfrica
- Sudan
- Swazilandia
- Túnez
- Uganda
- Zaire

AMERICA DEL NORTE Y CENTRAL

- Canadá
- Costa Rica
- Cuba
- República Dominicana
- El Salvador
- Guatemala
- Jamaica
- México
- Panamá
- Puerto Rico
- Estados Unidos

AMERICA LATINA

- Argentina
- Bolivia
- Brasil
- Chile
- Colombia
- Ecuador
- Paraguay
- Perú
- Uruguay
- Venezuela

ASIA

- Bangladesh
- Birmania
- China
- Chipre
- Hong Kong
- India
- Indonesia
- Irán
- Irak
- Israel
- Japón
- Jordania
- Kampuchea, Democrática
- Corea, Rep. Pop. Dem.
- Corea, República de
- Libano
- Malasia
- Mongolia
- Nepal
- Paquistán
- Filipinas
- Singapur
- Sri Lanka
- Siria
- Tailandia
- Turquia
- Viet-Nam, Rep. Soc.

EUROPE

- 68. Albania
- ‡ 69. Austria
- ‡ 70. Belgium/Luxembourg
- 71. Bulgaria
- 72. Czechoslovakia
- ‡ 73. Denmark
- ‡ 74. Finland
- ‡ 75. France
- 76. German Democratic Republic
- ‡ 77. Germany, Federal Republic of
- ‡ 78. Greece
- 79. Hungary
- ‡ 80. Ireland
- ‡ 81. Italy
- ‡ 82. Netherlands
- ‡ 83. Norway
- 84. Poland
- ‡ 85. Portugal
- 86. Romania
- ‡ 87. Spain
- ‡ 88. Sweden
- ‡ 89. Switzerland
- ‡ 90. United Kingdom
- ‡ 91. Yugoslavia

OCEANIA

- ‡ 92. Australia
- ‡ 93. New Zealand
- 94. U.S.S.R.

EUROPE

- Albanie
- Autriche
- Belgique/Luxembourg
- Bulgarie
- Tchécoslovaquie
- Danemark
- Finlande
- France
- Allemagne, République Dém.
- Allemagne, République féd. de
- Grèce
- Hongrie
- Irlande
- Italie
- Pays-Bas
- Norvège
- Pologne
- Portugal
- Roumanie
- Espagne
- Suède
- Suisse
- Royaume Uni
- Yugoslavie

OCEANIE

- Australie
- Nouvelle Zélande
- U.R.S.S.

EUROPA

- Albania
- Austria
- Bélgica/Luxemburgo
- Bulgaria
- Checoslovaquia
- Dinamarca
- Finlandia
- Francia
- Alemania, República Dem.
- Alemania, República Federal
- Grecia
- Hungría
- Irlanda
- Italia
- Países Bajos
- Noruega
- Polonia
- Portugal
- Rumania
- España
- Suecia
- Suiza
- Reino Unido
- Yugoslavia

OCEANIA

- Australia
- Nueva Zelandia
- U.R.S.S.

‡ DEVELOPED MARKET ECONOMIES - PAYS DEVELOPPES A ECONOMIES DE MARCHÉ - ECONOMIAS DE MERCADO DESARROLLADAS

* DEVELOPING MARKET ECONOMIES - PAYS EN DEVELOPPEMENT A ECONOMIES DE MARCHÉ - ECONOMIAS DE MERCADO EN DESARROLLO

■ CENTRALLY PLANNED ECONOMIES - PAYS A ECONOMIES CENTRALEMENT PLANIFIEES - ECONOMIAS DE PLANIFICACION CENTRALIZADA

WESTERN EUROPE:

E. E. C. :

- Belgium/Luxembourg
- Denmark
- France
- Germany Fed. Rep.
- Ireland
- Italy
- Netherlands
- United Kingdom

NORDIC COUNTRIES:

- Finland
- Norway
- Sweden

REST OF WESTERN EUROPE

- Austria
- Greece
- Portugal
- Spain
- Switzerland
- Yugoslavia

EUROPE OCCIDENTALE:

C. E. E. :

- Belgique/Luxembourg
- Danemark
- France
- Allemagne Rép. féd.
- Irlande
- Italie
- Pays-Bas
- Royaume-Uni

PAYS NORDIQUES:

- Finlande
- Norvège
- Suède

AUTRES PAYS DE L'EUROPE
OCCIDENTALE:

- Autriche
- Grèce
- Portugal
- Espagne
- Suisse
- Yugoslavie

EUROPA OCCIDENTAL:

C. E. E. :

- Bélgica/Luxemburgo
- Dinamarca
- Francia
- Alemania Rep. fed.
- Irlanda
- Italia
- Países Bajos
- Reino Unido

PAISES NORDICOS:

- Finlandia
- Noruega
- Suecia

OTROS PAISES DE L'EUROPA
OCCIDENTAL:

- Austria
- Grecia
- Portugal
- España
- Suiza
- Yugoslavia

PULP TERMINOLOGY

TERMINOLOGIE DE LA PÂTE

TERMINOLOGIA DE LA PASTA

1. Wood pulp for making paper and paperboard, total:	Total des pâtes de bois pour la fabrication des papiers et cartons:	Total des pastas de madera para papel y cartón
1.1 Mechanical 1.11 of which non-coniferous	Pâtes mécaniques dont: de bois de non-conifères	Mecánica de la cual: de especies no coníferas
1.2 Chemi-mechanical and semi-chemical 1.21 of which: non-coniferous	Pâtes chimico-mécaniques et mi-chimiques dont: de bois de non-conifères	Quimiomecánica y semiquímica de la cual: de especies no coníferas
1.3 Chemical, total:	Total pâtes chimiques:	Total de química
1.31 Unbleached sulphite 1.31.1 of which: non-coniferous	Pâtes au bisulfite écru dont: de bois de non-conifères	Al sulfito, sin blanquear de la cual: de especies no coníferas
1.32 Bleached and semibleached sulphite	Pâtes au bisulfite mi-blanchies et blanchies	Al sulfito semi-blanqueada y blanqueada
1.33 Unbleached sulphate and soda 1.33.1 of which: non-coniferous	Pâtes au sulfate et à la soude écru dont: de bois de non-conifères	Al sulfato sin blanquear y a la sosa de la cual: de especies no coníferas
1.34 Bleached and semibleached sulphate and soda 1.34.1 of which: non-coniferous	Pâtes au sulfate et à la soude blanchies et mi-blanchies dont: de bois de non-conifères	Al sulfato semi-blanqueada y a la sosa de la cual: de especies no coníferas
2. Other fibre pulp for making paper and paperboard: total	Total des pâtes de matériaux végétaux fibreux autres que le bois pour la fabrication des papiers et cartons:	Total de otras pastas fibrosas para papel y cartón:
2.1 Straw	Pâtes de paille	De paja
2.2 Bagasse	Pâtes de bagasse	De bagazo
2.3 Bamboo	Pâtes de bambou	De bambú
2.4 Other (reeds, esparto, rags, etc.)	Autres (roseaux, alfa, chiffons, linters de coton, etc.)	De otras materias (carizos, esparto, trapos, borra de algodón, etc.)
3. Dissolving pulp (wood and other fibre raw materials) 3.1 of which: non-coniferous	Pâtes à dissoudre (de bois et d'autres matériaux végétaux dont: de bois de non-conifères)	Pasta soluble (de madera y otras materias fibrosas) de la cual: de especies no coníferas

PAPER AND PAPERBOARD TERMINOLOGY

ENGLISH

4. Paper and Paperboard, total:
 - 4.1 Newsprint
 - 4.2 Other printing and writing paper, total:
 - 4.21 Coated:
 - 4.21.1 Wood containing
 - 4.21.2 Wood free
 - 4.22 Uncoated:
 - 4.22.1 Wood containing
 - 4.22.2 Wood free
 - 4.3 Other paper and paperboard, total:
 - 4.31 Household and sanitary paper
 - 4.32 Wrapping and packaging paper and paperboard, total:
 - 4.32.1 Lineboard:
 - 4.32.11 Kraft liner:
 - 4.32.11.1 Unbleached
 - 4.32.11.2 Bleached
 - 4.32.12 Other linerboard
 - 4.32.2 Fluting medium:
 - 4.32.21 Semi-chemical
 - 4.32.22 Other fluting medium
 - 4.32.3 Kraft wrapping and packaging paper:
 - 4.32.31 Sack kraft
 - 4.32.32 Other kraft wrapping and packaging paper
 - 4.32.4 Folding boxboard:
 - 4.32.41 Solid bleached board
 - 4.32.42 Other folding boxboard
 - 4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:
 - 4.32.51 Paper
 - 4.32.52 Paperboard
 - 4.33 Other paper and paperboard, n.e.s., total
 - 4.33.1 Paper, n.e.s.
 - 4.33.2 Paperboard, n.e.s.

TERMINOLOGIE DU PAPIER ET DU CARTON

FRANCAIS

- Total papiers et cartons:
 - Papier journal
 - Total autres papiers d'impression et d'écriture:
 - Couchés:
 - Avec bois
 - Sans bois
 - Non couchés:
 - Avec bois
 - Sans bois
 - Total autres papiers et cartons:
 - Papiers à usage domestique et hygiénique
 - Papiers et cartons d'emballage et d'emballage:
 - Carton de couverture:
 - Couverture kraft pour carton ondulé:
 - Ecrue
 - Blanche
 - Autres cartons de couverture
 - Cannelures:
 - Mi-chimique
 - Autres cannelures
 - Papiers kraft d'emballage et d'emballage:
 - Papier kraft pour grands sacs
 - Autres papiers kraft d'emballage et d'emballage
 - Cartons pour boîtes pliantes:
 - Carton compact blanchi
 - Autres cartons pour boîtes pliantes
 - Autres papiers et cartons d'emballage et d'emballage:
 - Papiers
 - Cartons

Total autres papiers et cartons, non décrits ailleurs:

- Papiers, n.d.a.
- Cartons, n.d.a.

TERMINOLOGIA DE PAPEL Y CARTÓN

ESPAÑOL

- Total de papeles y cartones:
 - Papel para periódicos (papel prensa)
 - Total de otros papeles de escritura y impresión:
 - Estucados:
 - Con pasta mecánica
 - Sin pasta mecánica
 - Sin estucar:
 - Con pasta mecánica
 - Sin pasta mecánica
 - Total de otros papeles y cartones:
 - Papel de uso doméstico y sanitario
 - Papel y cartón de envolver y empaquetar:
 - Cartón de capa:
 - Papel kraft para forros:
 - Sin blanquear
 - Blanqueado
 - Otros cartones de capa
 - Medio para acanalar:
 - Semiquímico
 - Otros medios para acanalar
 - Papel kraft de envolver y empaquetar:
 - Papel kraft para sacos
 - Otros tipos de papel kraft de envolver y empaquetar
 - Cartones sólidos par cajas plegables:
 - Cartón sólido blanqueado
 - Otros cartones sólidos para cajas plegables
 - Otros papeles y cartones de envolver y empaquetar:
 - Papeles
 - Cartones

Total de otros papeles y cartones, no especificado anteriormente:

- Papeles, n.e.a.
- Cartones, n.e.a.

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

1 Country: ALGERIA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	147	154	157	157	157	157
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	58	58	58	58	58	58
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	58	58	58	58	58	58
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	58	58	58	58	58	58
4.3 Other paper and paperboard, total:	89	96	99	99	99	99
4.31 Household and sanitary paper	5	5	5	5	5	5
4.32 Wrapping and packaging paper and paperboard, total:	84	91	94	94	94	94
4.32.1 Linerboard:	8	10	11	11	11	11
4.32.11 Kraft liner:	8	10	11	11	11	11
4.32.11.1 Unbleached	8	10	11	11	11	11
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	8	10	11	11	11	11
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	8	10	11	11	11	11
4.32.3 Kraft wrapping and packaging paper:	25	25	25	25	25	25
4.32.31 Sack kraft	14	14	14	14	14	14
4.32.32 Other kraft wrapping and packaging paper	11	11	11	11	11	11
4.32.4 Folding boxboard:	24	24	24	24	24	24
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	24	24	24	24	24	24
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	19	23	23	23	23	23
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

2 Country: ANGOLA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	19	19	19	19	19	19
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	5	5	5	5	5	5
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	5	5	5	5	5	5
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	5	5	5	5	5	5
4.3 Other paper and paperboard, total:	14	14	14	14	14	14
4.31 Household and sanitary paper	1	1	1	1	1	1
4.32 Wrapping and packaging paper and paperboard, total:	13	13	13	13	13	13
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	2	2	2	2	2	2
4.32.31 Sack kraft	1	1	1	1	1	1
4.32.32 Other kraft wrapping and packaging paper	1	1	1	1	1	1
4.32.4 Folding boxboard:	2	2	2	2	2	2
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	2	2	2	2	2	2
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	9	9	9	9	9	9
4.32.51 Paper	5	5	5	5	5	5
4.32.52 Paperboard	4	4	4	4	4	4
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

3 Country: CAMEROON

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	5	5	5	5	5	5
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	5	5	5	5	5	5
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	5	5	5	5	5	5
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	5	5	5	5	5	5
4.32.51 Paper	3	3	3	3	3	3
4.32.52 Paperboard	2	2	2	2	2	2
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

4 Country: EGYPT

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	160	161	163	163	163	163
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	57	58	60	60	60	60
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	57	58	60	60	60	60
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	57	58	60	60	60	60
4.3 Other paper and paperboard, total:	103	103	103	103	103	103
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	103	103	103	103	103	103
4.32.1 Linerboard:	18	18	18	18	18	18
4.32.11 Kraft liner:	8	8	8	8	8	8
4.32.11.1 Unbleached	8	8	8	8	8	8
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	10	10	10	10	10	10
4.32.2 Fluting medium:	8	8	8	8	8	8
4.32.21 Semi-chemical	8	8	8	8	8	8
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	10	10	10	10	10	10
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	10	10	10	10	10	10
4.32.4 Folding boxboard:	17	17	17	17	17	17
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	17	17	17	17	17	17
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	50	50	50	50	50	50
4.32.51 Paper	15	15	15	15	15	15
4.32.52 Paperboard	35	35	35	35	35	35
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

5 Country: ETHIOPIA

5 Country: ETHIOPIA

5 Country: ETHIOPIA						
	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	10	10	10	10	10	10
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	4	4	4	4	4	4
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	4	4	4	4	4	4
4.22.1 Wood containing	2	2	2	2	2	2
4.22.2 Wood free	2	2	2	2	2	2
4.3 Other paper and paperboard, total:	6	6	6	6	6	6
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	6	6	6	6	6	6
4.32.1 Linerboard:	1	1	1	1	1	1
4.32.11 Kraft liner:	1	1	1	1	1	1
4.32.11.1 Unbleached	1	1	1	1	1	1
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	1	1	1	1	1	1
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	1	1	1	1	1	1
4.32.3 Kraft wrapping and packaging paper:	1	1	1	1	1	1
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	1	1	1	1	1	1
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	3	3	3	3	3	3
4.32.51 Paper	2	2	2	2	2	2
4.32.52 Paperboard	1	1	1	1	1	1
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

6 Country: GABON

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	-	-	-	-	-	-
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	-	-	-	-	-	-
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	-	-	-	-	-	-
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

7 Country: KENYA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	51	51	51	51	51	51
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	22	22	22	22	22	22
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	22	22	22	22	22	22
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	22	22	22	22	22	22
4.3 Other paper and paperboard, total:	29	29	29	29	29	29
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	29	29	29	29	29	29
4.32.1 Linerboard:	11	11	11	11	11	11
4.32.11 Kraft liner:	11	11	11	11	11	11
4.32.11.1 Unbleached	11	11	11	11	11	11
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	5	5	5	5	5	5
4.32.21 Semi-chemical	5	5	5	5	5	5
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	7	7	7	7	7	7
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	7	7	7	7	7	7
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	6	6	6	6	6	6
4.32.51 Paper	3	3	3	3	3	3
4.32.52 Paperboard	3	3	3	3	3	3
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

	1977	1978	1979	1980	1981	1982
Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity
Country: LIBYA						
Wood pulp for making paper and paperboard, total:						
1.1 Mechanical	-	-	-	-	-	-
1.11 of which: non-coniferous	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-
1.3 Chemical, total:	-	-	-	-	-	-
1.31 Unbleached sulphite	-	-	-	-	-	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	-	-	-	-	-	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	-	-	-	-	-	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	-	-	-	-	-	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-
Other fibre pulp for making paper and paperboard, total:						
2.1 Straw	-	-	-	-	-	-
2.2 Bagasse	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-
Dissolving pulp (wood and other fibrous raw materials)						
3.1 of which: non-coniferous	-	-	-	-	-	-

8 Country: LIBYA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	5	5	5	5	5	5
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	5	5	5	5	5	5
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	5	5	5	5	5	5
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	1	1	1	1	1	1
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	1	1	1	1	1	1
4.32.4 Folding boxboard:	2	2	2	2	2	2
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	2	2	2	2	2	2
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	2	2	2	2	2
4.32.51 Paper	2	2	2	2	2	2
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

9 Country: MADAGASCAR

[illegible]

9 Country: MADAGASCAR		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4 Paper and Paperboard, total:		12	12	12	12	12	12
4.1 Newsprint		1	1	1	1	1	1
4.2 Other printing and writing paper, total:		3	3	3	3	3	3
4.21 Coated:		-	-	-	-	-	-
4.21.1 Wood containing		-	-	-	-	-	-
4.21.2 Wood free		-	-	-	-	-	-
4.22 Uncoated:		3	3	3	3	3	3
4.22.1 Wood containing		3	3	3	3	3	3
4.22.2 Wood free		-	-	-	-	-	-
4.3 Other paper and paperboard, total:		8	8	8	8	8	8
4.31 Household and sanitary paper		-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:		8	8	8	8	8	8
4.32.1 Linerboard:		-	-	-	-	-	-
4.32.11 Kraft liner:		-	-	-	-	-	-
4.32.11.1 Unbleached		-	-	-	-	-	-
4.32.11.2 Bleached		-	-	-	-	-	-
4.32.12 Other linerboard		-	-	-	-	-	-
4.32.2 Fluting medium:		-	-	-	-	-	-
4.32.21 Semi-chemical		-	-	-	-	-	-
4.32.22 Other fluting medium		-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:		2	2	2	2	2	2
4.32.31 Sack kraft		-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper		2	2	2	2	2	2
4.32.4 Folding boxboard:		1	1	1	1	1	1
4.32.41 Solid bleached board		-	-	-	-	-	-
4.32.42 Other folding boxboard		1	1	1	1	1	1
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:		5	5	5	5	5	5
4.32.51 Paper		3	3	3	3	3	3
4.32.52 Paperboard		2	2	2	2	2	2
4.33 Other paper and paperboard, n.e.s., total:		-	-	-	-	-	-
4.33.1 Paper, n.e.s.		-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.		-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

10 Country: MOROCCO

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	115	147	153	160	160	160
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	21	26	27	28	28	28
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	21	26	27	28	28	28
4.22.1 Wood containing	3	4	4	4	4	4
4.22.2 Wood free	18	22	23	24	24	24
4.3 Other paper and paperboard, total:	94	121	126	132	132	132
4.31 Household and sanitary paper	1	2	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	93	119	124	130	130	130
4.32.1 Linerboard:	13	23	25	27	27	27
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	13	23	25	27	27	27
4.32.2 Fluting medium:	6	10	11	12	12	12
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	6	10	11	12	12	12
4.32.3 Kraft wrapping and packaging paper:	15	15	15	15	15	15
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	15	15	15	15	15	15
4.32.4 Folding boxboard:	29	29	29	29	29	29
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	29	29	29	29	29	29
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	30	42	44	47	47	47
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

11 Country: MOZAMBIQUE		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4 Paper and Paperboard, total:		11	11	11	11	11	11
4.1 Newsprint		-	-	-	-	-	-
4.2 Other printing and writing paper, total:		-	-	-	-	-	-
4.21 Coated:		-	-	-	-	-	-
4.21.1 Wood containing		-	-	-	-	-	-
4.21.2 Wood free		-	-	-	-	-	-
4.22 Uncoated:		-	-	-	-	-	-
4.22.1 Wood containing		-	-	-	-	-	-
4.22.2 Wood free		-	-	-	-	-	-
4.3 Other paper and paperboard, total:		11	11	11	11	11	11
4.31 Household and sanitary paper		-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:		11	11	11	11	11	11
4.32.1 Linerboard:		-	-	-	-	-	-
4.32.11 Kraft liner:		-	-	-	-	-	-
4.32.11.1 Unbleached		-	-	-	-	-	-
4.32.11.2 Bleached		-	-	-	-	-	-
4.32.12 Other linerboard		-	-	-	-	-	-
4.32.2 Fluting medium:		-	-	-	-	-	-
4.32.21 Semi-chemical		-	-	-	-	-	-
4.32.22 Other fluting medium		-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:		-	-	-	-	-	-
4.32.31 Sack kraft		-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper		-	-	-	-	-	-
4.32.4 Folding boxboard:		-	-	-	-	-	-
4.32.41 Solid bleached board		-	-	-	-	-	-
4.32.42 Other folding boxboard		-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:		11	11	11	11	11	11
4.32.51 Paper		-	-	-	-	-	-
4.32.52 Paperboard		-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:		-	-	-	-	-	-
4.33.1 Paper, n.e.s.		-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.		-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

12 Country: NIGERIA

[illegible]

12 Country: NIGERIA

2 Country:	NICERIA					
	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	13	13	13	13	13	125
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	3	3	3	3	3	53
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	3	3	3	3	3	53
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	3	3	3	3	3	53
4.3 Other paper and paperboard, total:	10	10	10	10	10	72
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	10	10	10	10	10	72
4.32.1 Linerboard:	2	2	2	2	2	19
4.32.11 Kraft liner:	2	2	2	2	2	19
4.32.11.1 Unbleached	2	2	2	2	2	19
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	2	2	2	2	2	17
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	2	2	2	2	2	17
4.32.3 Kraft wrapping and packaging paper:	1	1	1	1	1	31
4.32.31 Sack kraft	1	1	1	1	1	16
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	15
4.32.4 Folding boxboard:	3	3	3	3	3	3
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	3	3	3	3	3	3
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	2	2	2	2	2
4.32.51 Paper	2	2	2	2	2	2
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

13 Country: RHODESIA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	65	65	85	93	93	93
4.1 Newsprint	12	12	23	26	26	26
4.2 Other printing and writing paper, total:	2	2	11	16	16	16
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	2	2	11	16	16	16
4.22.1 Wood containing	2	2	11	16	16	16
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	51	51	51	51	51	51
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	51	51	51	51	51	51
4.32.1 Linerboard:	8	8	8	8	8	8
4.32.11 Kraft liner:	8	8	8	8	8	8
4.32.11.1 Unbleached	8	8	8	8	8	8
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	14	14	14	14	14	14
4.32.21 Semi-chemical	14	14	14	14	14	14
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	14	14	14	14	14	14
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	14	14	14	14	14	14
4.32.4 Folding boxboard:	6	6	6	6	6	6
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	6	6	6	6	6	6
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	9	9	9	9	9	9
4.32.51 Paper	3	3	3	3	3	3
4.32.52 Paperboard	6	6	6	6	6	6
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982.

[illegible]

14 Country: SOUTH AFRICA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1,159	1,157	1,260	1,274	1,288	1,288
4.1 Newsprint	278	263	344	346	355	355
4.2 Other printing and writing paper, total:	176	182	182	182	182	182
4.21 Coated:	104	104	104	104	104	104
4.21.1 Wood containing	35	35	35	35	35	35
4.21.2 Wood free	69	69	69	69	69	69
4.22 Uncoated:	72	78	78	78	78	78
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	72	78	78	78	78	78
4.3 Other paper and paperboard, total:	705	712	734	746	751	751
4.31 Household and sanitary paper	82	82	82	82	82	82
4.32 Wrapping and packaging paper and paperboard, total:	598	605	627	639	644	644
4.32.1 Linerboard:	231	241	251	262	273	273
4.32.11 Kraft liner:	161	171	181	192	203	203
4.32.11.1 Unbleached	161	171	181	192	203	203
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	70	70	70	70	70	70
4.32.2 Fluting medium:	155	146	154	156	152	152
4.32.21 Semi-chemical	133	124	132	134	130	130
4.32.22 Other fluting medium	22	22	22	22	22	22
4.32.3 Kraft wrapping and packaging paper:	79	82	88	87	85	85
4.32.31 Sack kraft	56	59	65	68	71	71
4.32.32 Other kraft wrapping and packaging paper	23	23	23	19	14	14
4.32.4 Folding boxboard:	130	130	130	130	130	130
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	130	130	130	130	130	130
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	3	6	4	4	4	4
4.32.51 Paper	3	6	4	4	4	4
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	25	25	25	25	25	25
4.33.1 Paper, n.e.s.	10	10	10	10	10	10
4.33.2 Paperboard, n.e.s.	15	15	15	15	15	15

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

15 Country: SUDAN

		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4	Paper and Paperboard, total:	8	8	8	8	8	8
4.1	Newsprint	-	-	-	-	-	-
4.2	Other printing and writing paper, total:	-	-	-	-	-	-
4.21	Coated:	-	-	-	-	-	-
4.21.1	Wood containing	-	-	-	-	-	-
4.21.2	Wood free	-	-	-	-	-	-
4.22	Uncoated:	-	-	-	-	-	-
4.22.1	Wood containing	-	-	-	-	-	-
4.22.2	Wood free	-	-	-	-	-	-
4.3	Other paper and paperboard, total:	8	8	8	8	8	8
4.31	Household and sanitary paper	-	-	-	-	-	-
4.32	Wrapping and packaging paper and paperboard, total:	8	8	8	8	8	8
4.32.1	Linerboard:	-	-	-	-	-	-
4.32.11	Kraft liner:	-	-	-	-	-	-
4.32.11.1	Unbleached	-	-	-	-	-	-
4.32.11.2	Bleached	-	-	-	-	-	-
4.32.12	Other linerboard	-	-	-	-	-	-
4.32.2	Fluting medium:	-	-	-	-	-	-
4.32.21	Semi-chemical	-	-	-	-	-	-
4.32.22	Other fluting medium	-	-	-	-	-	-
4.32.3	Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31	Sack kraft	-	-	-	-	-	-
4.32.32	Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4	Folding boxboard:	-	-	-	-	-	-
4.32.41	Solid bleached board	-	-	-	-	-	-
4.32.42	Other folding boxboard	-	-	-	-	-	-
4.32.5	Other wrapping and packaging paper and paperboard, n.e.s.:	8	8	8	8	8	8
4.32.51	Paper	6	6	6	6	6	6
4.32.52	Paperboard	2	2	2	2	2	2
4.33	Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1	Paper, n.e.s.	-	-	-	-	-	-
4.33.2	Paperboard, n.e.s.	-	-	-	-	-	-

16 Country: SWAZILAND

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	-	-	-	-	-	-
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	-	-	-	-	-	-
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	-	-	-	-	-	-
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

17 Country: TUNISIA

[illegible]

17 Country: TUNISIA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	23	23	25	25	25	25
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	23	23	25	25	25	25
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	23	23	25	25	25	25
4.22.1 Wood containing	12	12	12	12	12	12
4.22.2 Wood free	11	11	13	13	13	13
4.3 Other paper and paperboard, total:	-	-	-	-	-	-
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	-	-	-	-	-	-
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

18 Country: UGANDA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	7	7	7	7	7	7
4.1 Newspaper	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	6	6	6	6	6	6
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	6	6	6	6	6	6
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	6	6	6	6	6	6
4.3 Other paper and paperboard, total:	1	1	1	1	1	1
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	1	1	1	1	1	1
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	1	1	1	1	1	1
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	1	1	1	1	1	1
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

19 Country: ZAIRE

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	2	2	2	2	2	2
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	2	2	2	2	2	2
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	2	2	2	2	2	2
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	2	2	2	2	2
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	2	2	2	2	2	2
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	14,476	14,369	14,552	14,677	14,677	14,677
4.1 Newsprint	8,981	9,026	9,117	9,208	9,208	9,208
4.2 Other printing and writing paper, total:	1,297	1,342	1,379	1,396	1,396	1,396
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	1,297	1,342	1,379	1,396	1,396	1,396
4.22.1 Wood containing	499	525	544	544	544	544
4.22.2 Wood free	798	817	835	852	852	852
4.3 Other paper and paperboard, total:	4,198	4,001	4,056	4,073	4,073	4,073
4.31 Household and sanitary paper	361	374	377	377	377	377
4.32 Wrapping and packaging paper and paperboard, total:	3,584	3,363	3,408	3,425	3,425	3,425
4.32.1 Linerboard:	1,567	1,318	1,341	1,344	1,344	1,344
4.32.11 Kraft liner:	1,287	978	982	982	982	982
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	280	340	359	362	362	362
4.32.2 Fluting medium:	583	589	592	593	593	593
4.32.21 Semi-chemical	464	467	470	472	472	472
4.32.22 Other fluting medium	119	122	122	121	121	121
4.32.3 Kraft wrapping and packaging paper:	611	616	621	623	623	623
4.32.31 Sack kraft	458	462	466	467	467	467
4.32.32 Other kraft wrapping and packaging paper	153	154	155	156	156	156
4.32.4 Folding boxboard:	427	436	448	459	459	459
4.32.41 Solid bleached board	134	134	134	134	134	134
4.32.42 Other folding boxboard	293	302	314	325	325	325
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	396	404	406	406	406	406
4.32.51 Paper	23	23	23	23	23	23
4.32.52 Paperboard	373	381	383	383	383	383
4.33 Other paper and paperboard, n.e.s., total:	253	264	271	271	271	271
4.33.1 Paper, n.e.s.	22	22	22	22	22	22
4.33.2 Paperboard, n.e.s.	231	242	249	249	249	249

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

21 Country: COSTA RICA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	9	9	16	19	23	26
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	9	9	16	19	23	26
4.31 Household and sanitary paper	9	9	13	15	17	19
4.32 Wrapping and packaging paper and paperboard, total:	-	-	3	4	6	7
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	3	4	6	7
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	3	4	6	7
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

22 Country: CUBA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	163	167	173	175	175	175
4.1 Newsprint	-	4	10	12	12	12
4.2 Other printing and writing paper, total:	35	35	35	35	35	35
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	35	35	35	35	35	35
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	35	35	35	35	35	35
4.3 Other paper and paperboard, total:	128	128	128	128	128	128
4.31 Household and sanitary paper	6	6	6	6	6	6
4.32 Wrapping and packaging paper and paperboard, total:	98	98	98	98	98	98
4.32.1 Linerboard:	40	40	40	40	40	40
4.32.11 Kraft liner:	10	10	10	10	10	10
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	30	30	30	30	30	30
4.32.2 Fluting medium:	16	16	16	16	16	16
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	12	12	12	12	12	12
4.32.31 Sack kraft	6	6	6	6	6	6
4.32.32 Other kraft wrapping and packaging paper	6	6	6	6	6	6
4.32.4 Folding boxboard:	24	24	24	24	24	24
4.32.41 Solid bleached board	2	2	2	2	2	2
4.32.42 Other folding boxboard	22	22	22	22	22	22
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	6	6	6	6	6	6
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	6	6	6	6	6	6
4.33 Other paper and paperboard, n.e.s., total:	24	24	24	24	24	24
4.33.1 Paper, n.e.s.	20	20	20	20	20	20
4.33.2 Paperboard, n.e.s.	4	4	4	4	4	4

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3	Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-
3.1	of which: non-coniferous	-	-	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	51	51	51	51	51	51
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	5	5	5	5	5	5
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	5	5	5	5	5	5
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	5	5	5	5	5	5
4.3 Other paper and paperboard, total:	46	46	46	46	46	46
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	42	42	42	42	42	42
4.32.1 Linerboard:	20	20	20	20	20	20
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	18	18	18	18	18	18
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	4	4	4	4	4	4
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	4	4	4	4	4	4
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	4	4	4	4	4	4
4.33.1 Paper, n.e.s.	2	2	2	2	2	2
4.33.2 Paperboard, n.e.s.	2	2	2	2	2	2

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24 Country: EL SALVADOR

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	16	16	16	16	16	16
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	16	16	16	16	16	16
4.31 Household and sanitary paper	6	6	6	6	6	6
4.32 Wrapping and packaging paper and paperboard, total:	10	10	10	10	10	10
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	2	2	2	2	2	2
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	2	2	2	2	2	2
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	8	8	8	8	8	8
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	8	8	8	8	8	8
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

25 Country: GUATEMALA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	45	45	63	63	63	63
4.1 Newspaper	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	22	22	25	25	25	25
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	23	23	38	38	38	38
4.31 Household and sanitary paper	3	3	3	3	3	3
4.32 Wrapping and packaging paper and paperboard, total:	10	10	25	25	25	25
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	10	10	10	10	10	10
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

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26 Country: JAMAICA						
	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	7	9	10	10	10	10
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	7	9	10	10	10	10
4.31 Household and sanitary paper	7	9	10	10	10	10
4.32 Wrapping and packaging paper and paperboard, total:	-	-	-	-	-	-
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1,820	1,873	2,095	2,279	2,347	2,367
4.1 Newsprint	102	102	207	277	307	312
4.2 Other printing and writing paper, total:	305	314	330	370	382	391
4.21 Coated:	65	65	65	65	65	65
4.21.1 Wood containing	29	29	29	29	29	29
4.21.2 Wood free	36	36	36	36	36	36
4.22 Uncoated:	240	249	265	305	317	326
4.22.1 Wood containing	35	35	35	35	35	35
4.22.2 Wood free	205	214	230	270	282	291
4.3 Other paper and paperboard, total:	1,413	1,457	1,558	1,632	1,658	1,664
4.31 Household and sanitary paper	150	156	167	171	173	173
4.32 Wrapping and packaging paper and paperboard, total:	1,193	1,193	1,268	1,330	1,353	1,359
4.32.1 Linerboard:	497	497	497	497	497	497
4.32.11 Kraft liner:	55	55	55	55	55	55
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	442	442	442	442	442	442
4.32.2 Fluting medium:	202	202	202	202	202	202
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	183	183	258	278	289	289
4.32.31 Sack kraft	133	133	133	133	133	133
4.32.32 Other kraft wrapping and packaging paper	50	50	125	145	156	156
4.32.4 Folding boxboard:	198	198	198	240	252	258
4.32.41 Solid bleached board	35	35	35	35	35	35
4.32.42 Other folding boxboard	163	163	163	205	217	223
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	113	113	113	113	113	113
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	70	108	123	131	132	132
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

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28 Country: PANAMA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	29	30	31	31	31	31
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	29	30	31	31	31	31
4.31 Household and sanitary paper	6	7	8	8	8	8
4.32 Wrapping and packaging paper and paperboard, total:	23	23	23	23	23	23
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	20	20	20	20	20	20
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	3	3	3	3	3	3
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	3	3	3	3	3	3
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	50	50	50	50	50	50
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	50	50	50	50	50	50
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	50	50	50	50	50	50
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	50	50	50	50	50	50
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	50	50	50	50	50	50
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

30 Country: UNITED STATES

30 Country: UNITED STATES										
	1977		1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp		
----- 1,000 metric tons (air dry) per year -----										
1 Wood pulp for making paper and paperboard, total:	44,446	3,633	45,668	3,862	46,820	4,003	48,480	4,383	49,804	50,684
1.1 Mechanical	4,556	105	4,709	105	4,924	105	5,331	105	5,516	5,651
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	4,072	-	4,265	-	4,367	-	4,434	-	4,482	4,501
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	35,818	3,528	36,694	3,757	37,529	3,898	38,715	4,278	39,806	40,532
1.31 Unbleached sulphite	406	23	406	24	406	24	406	24	406	406
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	1,686	319	1,639	330	1,642	337	1,626	337	1,628	1,664
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	17,855	163	17,992	119	18,292	99	18,652	91	18,998	19,381
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	15,871	3,023	16,657	3,284	17,189	3,438	18,031	3,826	18,774	19,081
1.34.1 of which: non-coniferous	6,768	1,175	7,122	1,200	7,426	1,300	7,774	1,400	8,086	8,225

2	Other fibre pulp for making paper and paperboard, total:	699	-	724	-	728	-	731	-	731	731
2.1	Straw	..	-	..	-	..	-	..	-	..	..
2.2	Bagasse	..	-	..	-	..	-	..	-	..	..
2.3	Bamboo	-	-	-	-	-	-	-	-	-	-
2.4	Other (reeds, esparto, rags, etc.)	..	-	..	-	..	-	..	-	..	..

3	Dissolving pulp (wood and other fibrous raw materials)	1,425	1,314	1,416	1,398	1,413	1,395	1,413	1,413
	3.1 of which: non-coniferous	-	-	-	-	-	-	-	-

30 Country: UNITED STATES

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	58,976	60,532	62,384	63,863	65,166	66,127
4.1 Newsprint	3,721	3,776	3,928	4,236	4,443	4,548
4.2 Other printing and writing paper, total:	13,209	13,590	13,883	14,371	14,578	14,705
4.21 Coated:	3,946	4,005	4,110	4,327	4,390	4,390
4.21.1 Wood containing	2,177	2,179	2,245	2,395	2,446	2,446
4.21.2 Wood free	1,769	1,826	1,865	1,932	1,944	1,944
4.22 Uncoated:	9,263	9,585	9,773	10,044	10,188	10,315
4.22.1 Wood containing	1,207	1,213	1,214	1,201	1,189	1,189
4.22.2 Wood free	8,056	8,372	8,559	8,843	8,999	9,126
4.3 Other paper and paperboard, total:	42,046	43,166	44,573	45,256	46,145	46,874
4.31 Household and sanitary paper	4,153	4,286	4,532	4,672	4,777	4,823
4.32 Wrapping and packaging paper and paperboard, total:	33,404	34,294	35,418	35,961	36,740	37,423
4.32.1 Linerboard:	12,780	13,175	13,566	13,998	14,501	14,964
4.32.11 Kraft liner:	12,461	12,789	13,163	13,592	14,015	14,399
4.32.11.1 Unbleached	12,368	12,696	13,070	13,497	13,917	14,301
4.32.11.2 Bleached	93	93	93	95	98	98
4.32.12 Other linerboard	319	386	403	406	486	565
4.32.2 Fluting medium:	5,610	5,818	6,047	6,160	6,232	6,264
4.32.21 Semi-chemical	4,333	4,515	4,722	4,821	4,885	4,917
4.32.22 Other fluting medium	1,277	1,303	1,325	1,339	1,347	1,347
4.32.3 Kraft wrapping and packaging paper:	4,624	4,509	4,514	4,506	4,506	4,506
4.32.31 Sack kraft	1,162	1,134	1,135	1,132	1,132	1,132
4.32.32 Other kraft wrapping and packaging paper	3,462	3,375	3,379	3,374	3,374	3,374
4.32.4 Folding boxboard:	6,683	7,025	7,459	7,421	7,587	7,746
4.32.41 Solid bleached board	3,644	3,876	4,013	4,056	4,111	4,236
4.32.42 Other folding boxboard	3,039	3,149	3,446	3,365	3,476	3,510
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	3,707	3,767	3,832	3,876	3,914	3,943
4.32.51 Paper	231	228	229	229	229	229
4.32.52 Paperboard	3,476	3,539	3,603	3,647	3,685	3,714
4.33 Other paper and paperboard, n.e.s., total:	4,489	4,586	4,623	4,623	4,628	4,628
4.33.1 Paper, n.e.s.	1,153	1,180	1,178	1,174	1,178	1,178
4.33.2 Paperboard, n.e.s.	3,336	3,406	3,445	3,449	3,450	3,450

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

31 Country: ARGENTINA

[illegible]

31 Country: ARGENTINA						
	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	960	1,045	1,140	1,215	1,295	1,390
4.1 Newsprint	-	40	80	105	105	105
4.2 Other printing and writing paper, total:	210	220	225	235	250	260
4.21 Coated:	50	55	55	60	65	70
4.21.1 Wood containing	40	45	45	45	50	55
4.21.2 Wood free	10	10	10	15	15	15
4.22 Uncoated:	160	165	170	175	185	190
4.22.1 Wood containing	10	15	15	15	15	15
4.22.2 Wood free	150	150	155	160	170	175
4.3 Other paper and paperboard, total:	750	785	835	875	940	1,025
4.31 Household and sanitary paper	50	55	55	60	65	70
4.32 Wrapping and packaging paper and paperboard, total:	615	640	685	720	775	850
4.32.1 Linerboard:	105	115	125	135	150	170
4.32.11 Kraft liner:	35	40	45	55	65	80
4.32.11.1 Unbleached	30	35	40	50	60	75
4.32.11.2 Bleached	5	5	5	5	5	5
4.32.12 Other linerboard	70	75	80	80	85	90
4.32.2 Fluting medium:	75	80	85	85	100	120
4.32.21 Semi-chemical	20	20	25	25	30	40
4.32.22 Other fluting medium	55	60	60	60	70	80
4.32.3 Kraft wrapping and packaging paper:	110	115	135	145	155	170
4.32.31 Sack kraft	90	90	100	105	110	120
4.32.32 Other kraft wrapping and packaging paper	20	25	35	40	45	50
4.32.4 Folding boxboard:	50	50	55	60	65	70
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	50	50	55	60	65	70
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	275	280	285	295	305	320
4.32.51 Paper	95	95	95	100	105	110
4.32.52 Paperboard	180	185	190	195	200	210
4.33 Other paper and paperboard, n.e.s., total:	85	90	95	95	100	105
4.33.1 Paper, n.e.s.	45	50	50	50	55	55
4.33.2 Paperboard, n.e.s.	40	40	45	45	45	50

[illegible]

32 Country: BOLIVIA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	1	1	1	1	1	1
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	1	1	1	1	1	1
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	1	1	1	1	1	1
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	1	1	1	1	1	1
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	1	1	1	1	1	1
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

33 Country: BRAZIL

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	2,839	3,114	3,367	3,729	3,932	4,101
4.1 Newsprint	127	127	147	147	147	147
4.2 Other printing and writing paper, total:	556	648	672	711	728	794
4.21 Coated:	40	67	74	78	78	78
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	40	67	74	78	78	78
4.22 Uncoated:	516	581	598	633	650	716
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	516	581	598	633	650	716
4.3 Other paper and paperboard, total:	2,156	2,339	2,548	2,871	3,057	3,160
4.31 Household and sanitary paper	259	289	301	302	311	314
4.32 Wrapping and packaging paper and paperboard, total:	1,634	1,756	1,931	2,240	2,408	2,508
4.32.1 Linerboard:	351	360	402	590	701	787
4.32.11 Kraft liner:	252	255	293	481	592	632
4.32.11.1 Unbleached	252	255	293	481	592	632
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	99	105	109	109	109	155
4.32.2 Fluting medium:	338	354	390	401	405	405
4.32.21 Semi-chemical	338	354	390	401	405	405
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	472	540	621	722	764	778
4.32.31 Sack kraft	245	284	357	418	449	458
4.32.32 Other kraft wrapping and packaging paper	227	256	264	304	315	320
4.32.4 Folding boxboard:	246	262	275	281	282	282
4.32.41 Solid bleached board	96	96	96	96	96	96
4.32.42 Other folding boxboard	150	166	179	185	186	186
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	227	240	243	246	256	256
4.32.51 Paper	227	240	243	246	256	256
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	263	294	316	329	338	338
4.33.1 Paper, n.e.s.	147	175	185	195	202	202
4.33.2 Paperboard, n.e.s.	116	119	131	134	136	136

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

34 Country: CHILE

	1977	1978	1979	1980	1981	1982
	--- 1,000 metric tons per year ---					
4 Paper and Paperboard, total:	296	311	335	376	466	492
4.1 Newsprint	136	142	142	142	223	246
4.2 Other printing and writing paper, total:	55	56	76	77	79	79
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	55	56	76	77	79	79
4.22.1 Wood containing	4	4	5	5	5	5
4.22.2 Wood free	51	52	71	72	74	74
4.3 Other paper and paperboard, total:	105	113	117	157	164	167
4.31 Household and sanitary paper	18	20	20	25	28	31
4.32 Wrapping and packaging paper and paperboard, total:	83	89	92	127	131	131
4.32.1 Linerboard:	15	15	15	16	20	22
4.32.11 Kraft liner:	12	12	12	13	17	19
4.32.11.1 Unbleached	12	12	12	13	17	19
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	3	3	3	3	3	3
4.32.2 Fluting medium:	11	11	12	12	16	17
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	11	11	12	12	16	17
4.32.3 Kraft wrapping and packaging paper:	31	37	39	71	67	62
4.32.31 Sack kraft	14	15	15	17	18	19
4.32.32 Other kraft wrapping and packaging paper	17	22	24	54	49	43
4.32.4 Folding boxboard:	19	19	19	21	21	23
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	19	19	19	21	21	23
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	7	7	7	7	7	7
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	7	7	7	7	7	7
4.33 Other paper and paperboard, n.e.s., total:	4	4	5	5	5	5
4.33.1 Paper, n.e.s.	-	-	1	1	1	1
4.33.2 Paperboard, n.e.s.	4	4	4	4	4	4

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	369	384	405	431	440	440
4.1 Newspaper	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	77	85	93	101	101	101
4.21 Coated:	8	9	10	11	11	11
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	8	9	10	11	11	11
4.22 Uncoated:	69	76	83	90	90	90
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	69	76	83	90	90	90
4.3 Other paper and paperboard, total:	292	299	312	330	339	339
4.31 Household and sanitary paper	26	37	48	51	52	52
4.32 Wrapping and packaging paper and paperboard, total:	255	251	258	273	281	281
4.32.1 Linerboard:	86	86	89	98	98	98
4.32.11 Kraft liner:	78	78	81	90	90	90
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	8	8	8	8	8	8
4.32.2 Fluting medium:	53	55	55	58	58	58
4.32.21 Semi-Chemical	53	55	55	58	58	58
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	51	54	54	59	61	61
4.32.31 Sack kraft	44	46	46	49	51	51
4.32.32 Other kraft wrapping and packaging paper	7	8	8	10	10	10
4.32.4 Folding boxboard:	45	46	48	50	55	55
4.32.41 Solid bleached board	3	3	3	3	3	3
4.32.42 Other folding boxboard	42	43	45	47	52	52
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	20	10	12	8	9	9
4.32.51 Paper	15	10	12	8	9	9
4.32.52 Paperboard	5	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	11	11	6	6	6	6
4.33.1 Paper, n.e.s.	3	3	3	3	3	3
4.33.2 Paperboard, n.e.s.	8	8	3	3	3	3

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	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	46	50	53	57	60	60
4.1 Newsprint	7	-	-	-	-	-
4.2 Other printing and writing paper, total:	6	7	8	9	10	10
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	6	7	8	9	10	10
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	6	7	8	9	10	10
4.3 Other paper and paperboard, total:	40	43	45	48	50	50
4.31 Household and sanitary paper	14	16	17	18	18	18
4.32 Wrapping and packaging paper and paperboard, total:	26	27	28	30	32	32
4.32.1 Linerboard:	2	2	2	2	2	2
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	2	2	2	2	2	2
4.32.2 Fluting medium:	2	2	2	2	2	2
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	2	2	2	2	2	2
4.32.3 Kraft wrapping and packaging paper:	17	17	17	18	20	20
4.32.31 Sack kraft	12	12	12	12	13	13
4.32.32 Other kraft wrapping and packaging paper	5	5	5	6	7	7
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	5	6	7	8	8	8
4.32.51 Paper	5	6	7	8	8	8
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

[illegible]

37 Country: PARAGUAY

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1	4	7	7	7	7
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	1	2	2	2	2
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	1	2	2	2	2
4.22.1 Wood containing	-	1	2	2	2	2
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	1	3	5	5	5	5
4.31 Household and sanitary paper	-	1	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	1	2	3	3	3	3
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	1	2	3	3	3	3
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	4	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

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1,000 metric tons per year									
	1977	1978	1979	1980	1981	1982			
4 Paper and Paperboard, total:	200	288	298	313	323	333			
4.1 Newsprint	-	70	75	80	90	100			
4.2 Other printing and writing paper, total:	46	51	59	62	62	62			
4.21 Coated:	6	6	12	12	12	12			
4.21.1 Wood containing	-	-	-	-	-	-			
4.21.2 Wood free	6	6	12	12	12	12			
4.22 Uncoated:	40	45	47	50	50	50			
4.22.1 Wood containing	10	10	10	10	10	10			
4.22.2 Wood free	30	35	37	40	40	40			
4.3 Other paper and paperboard, total:	154	167	164	171	171	171			
4.31 Household and sanitary paper	18	20	20	24	26	26			
4.32 Wrapping and packaging paper and paperboard, total:	133	144	139	142	140	140			
4.32.1 Linerboard:	32	35	38	40	40	40			
4.32.11 Kraft liner:	32	35	38	40	40	40			
4.32.11.1 Unbleached	32	35	38	40	40	40			
4.32.11.2 Bleached	-	-	-	-	-	-			
4.32.12 Other linerboard	-	-	-	-	-	-			
4.32.2 Fluting medium:	34	33	15	13	6	6			
4.32.21 Semi-chemical	-	-	-	-	-	-			
4.32.22 Other fluting medium	34	33	15	13	6	6			
4.32.3 Kraft wrapping and packaging paper:	39	46	51	52	57	57			
4.32.31 Sack kraft	30	35	40	40	45	45			
4.32.32 Other kraft wrapping and packaging paper	9	11	11	12	12	12			
4.32.4 Folding boxboard:	8	10	10	12	12	12			
4.32.41 Solid bleached board	-	-	-	-	-	-			
4.32.42 Other folding boxboard	8	10	10	12	12	12			
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	20	20	25	25	25	25			
4.32.51 Paper	-	-	-	-	-	-			
4.32.52 Paperboard	-	-	-	-	-	-			
4.33 Other paper and paperboard, n.e.s., total:	3	3	5	5	5	5			
4.33.1 Paper, n.e.s.	-	-	-	-	-	-			
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-			

[illegible]

39 Country: URUGUAY

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	57	57	57	57	57	57
4.1 Newsprint	1	1	1	1	1	1
4.2 Other printing and writing paper, total:	19	19	19	19	19	19
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	19	19	19	19	19	19
4.22.1 Wood containing	4	4	4	4	4	4
4.22.2 Wood free	15	15	15	15	15	15
4.3 Other paper and paperboard, total:	37	37	37	37	37	37
4.31 Household and sanitary paper	9	9	9	9	9	9
4.32 Wrapping and packaging paper and paperboard, total:	25	25	25	25	25	25
4.32.1 Linerboard:	5	5	5	5	5	5
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	5	5	5	5	5	5
4.32.2 Fluting medium:	1	1	1	1	1	1
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	7	7	7	7	7	7
4.32.31 Sack kraft	2	2	2	2	2	2
4.32.32 Other kraft wrapping and packaging paper	5	5	5	5	5	5
4.32.4 Folding boxboard:	7	7	7	7	7	7
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	5	5	5	5	5	5
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	3	3	3	3	3	3
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	706	747	758	758	758	758
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	95	100	100	100	100	100
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	611	647	658	658	658	658
4.31 Household and sanitary paper	96	99	99	99	99	99
4.32 Wrapping and packaging paper and paperboard, total:	510	543	554	554	554	554
4.32.1 Linerboard:	143	156	161	161	161	161
4.32.11 Kraft liner:	143	156	161	161	161	161
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	72	75	75	75	75	75
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	72	75	75	75	75	75
4.32.3 Kraft wrapping and packaging paper:	150	152	153	153	153	153
4.32.31 Sack kraft	125	127	128	128	128	128
4.32.32 Other kraft wrapping and packaging paper	25	25	25	25	25	25
4.32.4 Folding boxboard:	134	149	154	154	154	154
4.32.41 Solid bleached board	8	8	8	8	8	8
4.32.42 Other folding boxboard	126	141	146	146	146	146
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	11	11	11	11	11	11
4.32.51 Paper	8	8	8	8	8	8
4.32.52 Paperboard	3	3	3	3	3	3
4.33 Other paper and paperboard, n.e.s., total:	5	5	5	5	5	5
4.33.1 Paper, n.e.s.	3	3	3	3	3	3
4.33.2 Paperboard, n.e.s.	2	2	2	2	2	2

[illegible]

41 Country: BANGLADESH

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	142	142	142	142	147	148
4.1 Newsprint	54	54	54	54	54	54
4.2 Other printing and writing paper, total:	71	71	71	71	71	71
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	71	71	71	71	71	71
4.22.1 Wood containing	12	12	12	12	12	12
4.22.2 Wood free	59	59	59	59	59	59
4.3 Other paper and paperboard, total:	17	17	17	17	22	23
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	17	17	17	17	22	23
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

42 Country: BURMA

42 Country: BURMA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	13	14	15	16	22	24
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	12	13	14	15	15	15
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	12	13	14	15	15	15
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	12	13	14	15	15	15
4.3 Other paper and paperboard, total:	1	1	1	1	7	9
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	1	1	1	1	7	9
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	1	1	1	1	7	9
4.32.31 Sack kraft	-	-	-	-	6	8
4.32.32 Other kraft wrapping and packaging paper	1	1	1	1	1	1
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

43 Country: CHINA a/

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
	----- 1,000 metric tons (air dry) per year -----											
1 Wood pulp for making paper and paperboard, total:	2,280	..	2,390	..	2,500	..	2,610	..	2,720	..	2,830	..
1.1 Mechanical	840	..	880	..	920	..	960	..	1,000	..	1,040	..
1.11 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.2 Chemi-mechanical and semi-chemical	..	..	..	..	..	..	..	..	..	..	..	..
1.21 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.3 Chemical, total:	1,440	..	1,510	..	1,580	..	1,650	..	1,720	..	1,790	..
1.31 Unbleached sulphite	..	..	..	..	..	..	..	..	..	..	..	..
1.31.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.32 Bleached and semibleached sulphite	..	..	..	..	..	..	..	..	..	..	..	..
1.32.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.33 Unbleached sulphate and soda	..	..	..	..	..	..	..	..	..	..	..	..
1.33.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.34 Bleached and semibleached sulphate and soda	..	..	..	..	..	..	..	..	..	..	..	..
1.34.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
2 Other fibre pulp for making paper and paperboard, total:	4,930	..	5,090	..	5,250	..	5,410	..	5,570	..	5,730	..
2.1 Straw	..	..	..	..	..	..	..	..	..	..	..	..
2.2 Bagasse	395	..	415	..	425	..	..	..	425	..	425	..
2.3 Bamboo	..	..	..	..	..	..	..	..	..	..	..	..
2.4 Other (reeds, esparto, rags, etc.)	..	..	..	..	..	..	..	..	..	..	..	..
3 Dissolving pulp (wood and other fibrous raw materials)	40	-	40	-	40	-	40	-	40	-	40	-
3.1 of which: non-coniferous	40	-	40	-	40	-	40	-	40	-	40	-

a/ Secretariat estimate.

43 Country: CHINA ^{a/}

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	8,250	8,500	8,750	9,000	9,250	9,500
4.1 Newsprint	890	920	950	980	1,010	1,040
4.2 Other printing and writing paper, total:	2,210	2,280	2,350	2,420	2,490	2,560
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	5,150	5,300	5,450	5,600	5,750	5,900
4.31 Household and sanitary paper	..	..	..	..	..	..
4.32 Wrapping and packaging paper and paperboard, total:	..	..	..	..	..	..
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

^{a/} Secretariat estimate.

44 Country: CYPRUS

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	2	12	15	17	17	17
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	2	12	15	17	17	17
4.31 Household and sanitary paper	2	2	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	-	10	13	15	15	15
4.32.1 Linerboard:	-	7	9	10	10	10
4.32.11 Kraft liner:	-	7	9	10	10	10
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	3	4	5	5	5
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

45 Country: HONG KONG

[illegible]

45 Country: HONG KONG						
	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	11	11	12	12	12	12
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	11	11	12	12	12	12
4.31 Household and sanitary paper	1	1	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	10	10	10	10	10	10
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	10	10	10	10	10	10
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	10	10	10	10	10	10
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n. e. s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n. e. s., total:	-	-	-	-	-	-
4.33.1 Paper, n. e. s.	-	-	-	-	-	-
4.33.2 Paperboard, n. e. s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

	1977		1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp		
----- 1,000 metric tons (air dry) per year -----										
1 Wood pulp for making paper and paperboard, total:	350	-	350	-	350	-	418	-	440	462
1.1 Mechanical	25	-	25	-	25	-	93	-	115	137
1.11 of which: non-coniferous	25	-	25	-	25	-	93	-	115	137
1.2 Chemi-mechanical and semi-chemical	25	-	25	-	25	-	25	-	25	25
1.21 of which: non-coniferous	25	-	25	-	25	-	25	-	25	25
1.3 Chemical, total:	300	-	300	-	300	-	300	-	300	300
1.31 Unbleached sulphite	-	-	-	-	-	-	-	-	-	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	-	-	-	-	-	-	-	-	-	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	150	-	150	-	150	-	150	-	150	150
1.33.1 of which: non-coniferous	150	-	150	-	150	-	150	-	150	150
1.34 Bleached and semibleached sulphate and soda	150	-	150	-	150	-	150	-	150	150
1.34.1 of which: non-coniferous	150	-	150	-	150	-	150	-	150	150
2 Other fibre pulp for making paper and paperboard, total:	875	25	935	25	959	25	994	25	1,021	1,037
2.1 Straw	30	-	85	-	85	-	85	-	85	85
2.2 Bagasse	15	-	15	-	30	-	30	-	30	30
2.3 Bamboo	685	25	685	25	694	25	729	25	756	772
2.4 Other (reeds, esparto, rags, etc.)	145	-	150	-	150	-	150	-	150	150
3 Dissolving pulp (wood and other fibrous raw materials)	120	120	140	140	140	140	160	160	160	160
3.1 of which: non-coniferous	120	120	140	140	140	140	160	160	160	160

46 Country: INDIA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1,215	1,223	1,344	1,484	1,616	1,713
4.1 Newsprint	75	75	75	123	183	207
4.2 Other printing and writing paper, total:	627	627	661	717	763	786
4.21 Coated:	30	30	40	40	40	40
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	30	30	40	40	40	40
4.22 Uncoated:	597	597	621	677	723	746
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	597	597	621	677	723	746
4.3 Other paper and paperboard, total:	513	521	608	644	670	720
4.31 Household and sanitary paper	10	10	10	10	10	10
4.32 Wrapping and packaging paper and paperboard, total:	503	511	598	634	660	710
4.32.1 Linerboard:	30	30	40	50	60	60
4.32.11 Kraft liner:	30	30	40	50	60	60
4.32.11.1 Unbleached	30	30	40	50	60	60
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	10	30	40	50
4.32.21 Semi-chemical	-	-	10	30	40	50
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	263	263	310	310	310	350
4.32.31 Sack kraft	5	5	10	10	10	10
4.32.32 Other kraft wrapping and packaging paper	258	258	300	300	300	340
4.32.4 Folding boxboard:	6	8	28	34	40	40
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	6	8	28	34	40	40
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	204	210	210	210	210	210
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	204	210	210	210	210	210
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

47 Country: INDONESIA

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	85	129	157	172	233	289
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	76	112	134	147	176	205
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	76	112	134	147	176	205
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	9	17	23	25	57	84
4.31 Household and sanitary paper	2	2	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	6	14	20	22	50	75
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	1	1	1	1	5	7
4.33.1 Paper, n.e.s.	1	1	1	1	5	7
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	139	139	209	244	269	389
4.1 Newsprint	-	-	-	-	-	20
4.2 Other printing and writing paper, total:	90	90	90	90	90	110
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	90	90	90	90	90	110
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	90	90	90	90	90	110
4.3 Other paper and paperboard, total:	49	49	119	154	179	259
4.31 Household and sanitary paper	9	9	9	9	9	9
4.32 Wrapping and packaging paper and paperboard, total:	40	40	110	145	170	250
4.32.1 Linerboard:	-	-	30	40	55	60
4.32.11 Kraft liner:	-	-	30	40	55	60
4.32.11.1 Unbleached	-	-	30	40	55	60
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	20	30	35	80
4.32.21 Semi-chemical	-	-	20	30	35	80
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	25	25	40	50	55	60
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	25	25	40	50	55	60
4.32.4 Folding boxboard:	-	-	-	-	-	20
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	20
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	15	15	20	25	25	30
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	15	15	20	25	25	30
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

4.9 Country: IRAQ

	1977	-1978	1979	1980	1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity
Country: IRAQ						
1 Wood pulp for making paper and paperboard, total:						
1.1 Mechanical						
1.11 of which: non-coniferous						
1.2 Chemi-mechanical and semi-chemical						
1.21 of which: non-coniferous						
1.3 Chemical, total:						
1.31 Unbleached sulphite						
1.31.1 of which: non-coniferous						
1.32 Bleached and semibleached sulphite						
1.32.1 of which: non-coniferous						
1.33 Unbleached sulphate and soda						
1.33.1 of which: non-coniferous						
1.34 Bleached and semibleached sulphate and soda						
1.34.1 of which: non-coniferous						
2 Other fibre pulp for making paper and paperboard, total:	18	27	36	44	61	67
2.1 Straw	-	-	-	-	-	-
2.2 Bagasse	4	5	6	6	10	12
2.3 Bamboo	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	14	22	30	38	51	55
3 Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-
3.1 of which: non-coniferous	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	41	53	67	76	95	107
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	16	24	32	39	46	46
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	16	24	32	39	46	46
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	25	29	35	37	49	61
4.31 Household and sanitary paper	1	3	4	6	7	7
4.32 Wrapping and packaging paper and paperboard, total:	24	26	31	31	42	54
4.32.1 Linerboard:	12	13	15	15	15	15
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	12	13	15	15	15	15
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	1	1	2	2	9	16
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	8	9	11	11	15	20
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	8	9	11	11	15	20
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	3	3	3	3	3	3
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	3	3	3	3	3	3
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

50 Country: ISRAEL

1,000 metric tons per year									
	1977	1978	1979	1980	1981	1982			
4 Paper and Paperboard, total:	117	127	134	138	144	149			
4.1 Newsprint	12	17	18	18	19	20			
4.2 Other printing and writing paper, total:	41	43	44	45	46	48			
4.21 Coated:	-	-	-	-	-	-			
4.21.1 Wood containing	-	-	-	-	-	-			
4.21.2 Wood free	-	-	-	-	-	-			
4.22 Uncoated:	41	43	44	45	46	48			
4.22.1 Wood containing	3	4	4	5	5	5			
4.22.2 Wood free	38	39	40	40	41	43			
4.3 Other paper and paperboard, total:	64	67	72	75	79	81			
4.31 Household and sanitary paper	12	13	15	16	18	18			
4.32 Wrapping and packaging paper and paperboard, total:	48	50	53	55	57	59			
4.32.1 Linerboard:	-	-	-	-	-	-			
4.32.11 Kraft liner:	-	-	-	-	-	-			
4.32.11.1 Unbleached	-	-	-	-	-	-			
4.32.11.2 Bleached	-	-	-	-	-	-			
4.32.12 Other linerboard	-	-	-	-	-	-			
4.32.2 Fluting medium:	18	19	20	20	21	22			
4.32.21 Semi-chemical	-	-	-	-	-	-			
4.32.22 Other fluting medium	18	19	20	20	21	22			
4.32.3 Kraft wrapping and packaging paper:	10	10	10	10	10	10			
4.32.31 Sack kraft	3	3	3	3	3	3			
4.32.32 Other kraft wrapping and packaging paper	7	7	7	7	7	7			
4.32.4 Folding boxboard:	15	16	18	20	21	22			
4.32.41 Solid bleached board	-	-	-	-	-	-			
4.32.42 Other folding boxboard	15	16	18	20	21	22			
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	5	5	5	5	5	5			
4.32.51 Paper	5	5	5	5	5	5			
4.32.52 Paperboard	-	-	-	-	-	-			
4.33 Other paper and paperboard, n.e.s., total:	4	4	4	4	4	4			
4.33.1 Paper, n.e.s.	-	-	-	-	-	-			
4.33.2 Paperboard, n.e.s.	4	4	4	4	4	4			

	1977						1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity
	----- 1,000 metric tons (air dry) per year -----													
Country: JAPAN														
1 Wood pulp for making paper and paperboard, total:	11,851	1,135	12,080	1,135	12,369	1,135	12,540	1,135	13,172		13,513			
1.1 Mechanical	1,983	31	2,052	31	2,269	31	2,405	31	2,609		2,687			
1.1.1 of which: non-coniferous	30	-	31	-	34	-	36	-	39		40			
1.2 Chemi-mechanical and semi-chemical	2,026	75	2,020	75	2,047	75	2,047	75	2,043		2,100			
1.2.1 of which: non-coniferous	1,937	75	1,931	75	1,957	75	1,957	75	1,953		2,008			
1.3 Chemical, total:	7,842	1,029	8,008	1,029	8,053	1,029	8,088	1,029	8,520		8,726			
1.3.1 Unbleached sulphite	299	22	299	22	299	22	299	22	299		299			
1.3.1.1 of which: non-coniferous	11	5	11	5	11	5	11	5	11		11			
1.3.2 Bleached and semibleached sulphite	..	..	..	..	..	..	..	..	..		..			
1.3.2.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..		..			
1.3.3 Unbleached sulphate and soda	3,166	259	3,192	259	3,198	259	3,198	259	3,273		3,382			
1.3.3.1 of which: non-coniferous	814	63	820	63	822	63	822	63	841		869			
1.3.4 Bleached and semibleached sulphate and soda	4,377	748	4,517	748	4,556	748	4,591	748	4,948		5,045			
1.3.4.1 of which: non-coniferous	3,677	590	3,794	590	3,827	590	3,856	590	4,156		4,238			
2 Other fibre pulp for making paper and paperboard, total:	4	4	4	4	4	4	4	4	4		4			
2.1 Straw	-	-	-	-	-	-	-	-	-		-			
2.2 Bagasse	-	-	-	-	-	-	-	-	-		-			
2.3 Bamboo	-	-	-	-	-	-	-	-	-		-			
2.4 Other (reeds, esparto, rags, etc.)	4	4	4	4	4	4	4	4	4		4			
3 Dissolving pulp (wood and other fibrous raw materials)	479	479	479	479	479	479	479	479	479		479			
3.1 of which: non-coniferous	448	448	448	448	448	448	448	448	448		448			

51 Country: JAPAN

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	20,716	21,284	22,040	22,938	24,129	24,693
4.1 Newsprint	2,602	2,721	2,816	2,898	3,200	3,310
4.2 Other printing and writing paper, total:	3,758	3,964	4,209	4,511	4,932	5,161
4.21 Coated:	1,348	1,430	1,505	1,625	1,785	1,843
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	2,410	2,534	2,704	2,886	3,147	3,318
4.22.1 Wood containing	1,353	1,359	1,450	1,563	1,704	1,756
4.22.2 Wood free	1,057	1,175	1,254	1,323	1,443	1,562
4.3 Other paper and paperboard, total:	14,356	14,599	15,015	15,529	15,997	16,222
4.31 Household and sanitary paper	827	868	898	929	946	955
4.32 Wrapping and packaging paper and paperboard, total:	10,941	11,021	11,212	11,605	11,945	12,063
4.32.1 Linerboard:	4,513	4,558	4,593	4,741	4,849	4,897
4.32.11 Kraft liner:	1,950	1,969	1,998	2,058	2,095	2,116
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	2,563	2,589	2,595	2,683	2,754	2,781
4.32.2 Fluting medium:	2,729	2,737	2,786	2,936	3,118	3,149
4.32.21 Semi-chemical	2,186	2,192	2,232	2,352	2,498	2,522
4.32.22 Other fluting medium	543	545	554	584	620	627
4.32.3 Kraft wrapping and packaging paper:	1,487	1,509	1,595	1,667	1,694	1,711
4.32.31 Sack kraft	1,039	1,053	1,074	1,135	1,157	1,169
4.32.32 Other kraft wrapping and packaging paper	448	456	521	532	537	542
4.32.4 Folding boxboard:	1,717	1,733	1,750	1,768	1,785	1,802
4.32.41 Solid bleached board	558	563	569	575	580	586
4.32.42 Other folding boxboard	1,159	1,170	1,181	1,193	1,205	1,216
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	495	484	488	493	499	504
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	495	484	488	493	499	504
4.33 Other paper and paperboard, n.e.s., total:	2,588	2,710	2,905	2,995	3,106	3,204
4.33.1 Paper, n.e.s.	1,625	1,714	1,899	1,979	2,080	2,168
4.33.2 Paperboard, n.e.s.	963	996	1,006	1,016	1,026	1,036

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982.

[illegible]

52 Country: JORDAN

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	9	10	10	10	10	10
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	9	10	10	10	10	10
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	9	10	10	10	10	10
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	5	5	5	5	5	5
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	5	5	5	5	5	5
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	4	5	5	5	5	5
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	4	5	5	5	5	5
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	5	5	5	5	5	5
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	3	3	3	3	3	3
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	3	3	3	3	3	3
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	3	3	3	3	3	3
4.3 Other paper and paperboard, total:	2	2	2	2	2	2
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	2	2	2	2	2	2
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	2	2	2	2	2
4.32.51 Paper	2	2	2	2	2	2
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

54 Country: KOREA, DEM. PEOPLE'S REP. OF ^{a/}

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	43	-	47	-	51	-	56	-	56	-	56	-
1.1 Mechanical	10	-	11	-	12	-	13	-	13	-	13	-
1.11 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.2 Chemi-mechanical and semi-chemical	-	-	-	-	-	-	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	33	-	36	-	39	-	43	-	43	-	43	-
1.31 Unbleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.31.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.32 Bleached and semibleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.32.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.33 Unbleached sulphate and soda	..	-	..	-	..	-	..	-	..	-	..	-
1.33.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.34 Bleached and semibleached sulphate and soda	23	-	26	-	29	-	33	-	33	-	33	-
1.34.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
2 Other fibre pulp for making paper and paperboard, total:	50	-	50	-	50	-	50	-	50	-	50	-
2.1 Straw	..	-	..	-	..	-	..	-	..	-	..	-
2.2 Bagasse	..	-	..	-	..	-	..	-	..	-	..	-
2.3 Bamboo	..	-	..	-	..	-	..	-	..	-	..	-
2.4 Other (reeds, esparto, rags, etc.)	..	-	..	-	..	-	..	-	..	-	..	-
3 Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-	-	-	-	-
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-

^{a/} Secretariat estimate.

54 Country: KOREA, People's Dem. Rep. of a/

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	128	132	136	140	140	140
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total: b/	21	24	27	30	30	30
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	107	108	109	110	110	110
4.31 Household and sanitary paper	..	..	..	..	..	..
4.32 Wrapping and packaging paper and paperboard, total:	..	..	..	..	..	..
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard: b/	7	8	9	10	10	10
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..
a/ Secretariat estimate.	..	..	..	..	..	..

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

55 Country: KOREA, REPUBLIC OF

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	933	981	1,050	1,110	1,128	1,134
4.1 Newsprint	167	212	225	232	232	232
4.2 Other printing and writing paper, total:	164	164	164	164	164	164
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	602	605	661	714	732	738
4.31 Household and sanitary paper	9	9	9	9	9	9
4.32 Wrapping and packaging paper and paperboard, total:	533	536	592	645	663	669
4.32.1 Linerboard:	144	147	172	216	229	235
4.32.11 Kraft liner:	134	134	157	201	214	220
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	10	13	15	15	15	15
4.32.2 Fluting medium:	63	63	63	63	63	63
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	178	178	178	178	178	178
4.32.31 Sack kraft	178	178	178	178	178	178
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	148	148	179	188	193	193
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	60	60	60	60	60	60
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

[illegible]

56 Country: LEBANON

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	45	45	45	45	45	45
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	45	45	45	45	45	45
4.31 Household and sanitary paper	2	2	2	2	2	2
4.32 Wrapping and packaging paper and paperboard, total:	43	43	43	43	43	43
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	13	13	13	13	13	13
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	20	20	20	20	20	20
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	20	20	20	20	20	20
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	10	10	10	10	10	10
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

	1977	1978	1979	1980	1981	1982
	--- 1,000 metric tons per year ---					
4 Paper and Paperboard, total:	50	50	50	50	50	50
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	50	50	50	50	50	50
4.31 Household and sanitary paper	13	13	13	13	13	13
4.32 Wrapping and packaging paper and paperboard, total:	25	25	25	25	25	25
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	11	11	11	11	11	11
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	4	4	4	4	4	4
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	8	8	8	8	8	8
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	2	2	2	2	2
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	12	12	12	12	12	12
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
1 Wood pulp for making paper and paperboard, total:												
1.1 Mechanical	-	-	-	-	-	-	-	-	-	-	-	-
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	-	-	-	-	-	-	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	-	-	-	-	-	-	-	-	-	-	-	-
1.31 Unbleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
2 Other fibre pulp for making paper and paperboard, total:												
2.1 Straw	2	-	2	-	2	-	2	-	2	-	2	-
2.2 Bagasse	..	-	..	-	..	-	..	-	..	-	..	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	..	-	..	-	..	-	..	-	..	-	..	-
3 Dissolving pulp (wood and other fibrous raw materials)												
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-

a/ Secretariat estimate.

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	2	2	2	2	2	2
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	..	..	..	..	..	..
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	..	..	..	..	..	..
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	..	..	..	..	..	..
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	..	-	..	-	..	-	..	-	..	-	..	-
1.1 Mechanical	..	-	..	-	..	-	..	-	..	-	..	-
1.11 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.2 Chemi-mechanical and semi-chemical	-	-	-	-	-	-	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	-	-	-	-	-	-	-	-	-	-	-	-
1.31 Unbleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
2 Other fibre pulp for making paper and paperboard, total:	4	-	4	-	4	-	4	-	4	-	4	-
2.1 Straw	..	-	..	-	..	-	..	-	..	-	..	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	..	-	..	-	..	-	..	-	..	-	..	-
3 Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-	-	-	-	-
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-

a/ Secretariat estimate.

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	4	4	4	4	4	4
4.1 Newsprint	..	..	..	..	..	..
4.2 Other printing and writing paper, total:	..	..	..	..	..	..
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	..	..	..	..	..	..
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	..	..	..	..	..	..
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..
a/ Secretariat estimate.	..	..	..	..	..	..

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

60 Country: PAKISTAN

[illegible]

60 Country: PAKISTAN

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	109	109	109	109	109	109
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	47	47	47	47	47	47
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	47	47	47	47	47	47
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	47	47	47	47	47	47
4.3 Other paper and paperboard, total:	62	62	62	62	62	62
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	62	62	62	62	62	62
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	9	9	9	9	9	9
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	9	9	9	9	9	9
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	27	27	27	27	27	27
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	26	26	26	26	26	26
4.32.51 Paper	6	6	6	6	6	6
4.32.52 Paperboard	20	20	20	20	20	20
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

61 Country: PHILIPPINES		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4 Paper and Paperboard, total:		418	455	460	462	462	462
4.1 Newsprint		105	125	125	125	125	125
4.2 Other printing and writing paper, total:		49	49	49	49	49	49
4.21 Coated:		-	-	-	-	-	-
4.21.1 Wood containing		-	-	-	-	-	-
4.21.2 Wood free		-	-	-	-	-	-
4.22 Uncoated:		49	49	49	49	49	49
4.22.1 Wood containing		-	-	-	-	-	-
4.22.2 Wood free		49	49	49	49	49	49
4.3 Other paper and paperboard, total:		264	281	286	288	288	288
4.31 Household and sanitary paper		18	18	18	18	18	18
4.32 Wrapping and packaging paper and paperboard, total:		246	263	268	270	270	270
4.32.1 Linerboard:		58	58	58	58	58	58
4.32.11 Kraft liner:		58	58	58	58	58	58
4.32.11.1 Unbleached		-	-	-	-	-	-
4.32.11.2 Bleached		-	-	-	-	-	-
4.32.12 Other linerboard		-	-	-	-	-	-
4.32.2 Fluting medium:		58	58	58	58	58	58
4.32.21 Semi-chemical		-	-	-	-	-	-
4.32.22 Other fluting medium		-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:		86	86	86	86	86	86
4.32.31 Sack kraft		59	59	59	59	59	59
4.32.32 Other kraft wrapping and packaging paper		27	27	27	27	27	27
4.32.4 Folding boxboard:		44	61	66	68	68	68
4.32.41 Solid bleached board		-	-	-	-	-	-
4.32.42 Other folding boxboard		-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:		-	-	-	-	-	-
4.32.51 Paper		-	-	-	-	-	-
4.32.52 Paperboard		-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:		-	-	-	-	-	-
4.33.1 Paper, n.e.s.		-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.		-	-	-	-	-	-

62 Country: SINGAPORE

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	47	47	47	47	47	47
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	-	-	-	-
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	47	47	47	47	47	47
4.31 Household and sanitary paper	5	5	5	5	5	5
4.32 Wrapping and packaging paper and paperboard, total:	42	42	42	42	42	42
4.32.1 Linerboard:	3	3	3	3	3	3
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	3	3	3	3	3	3
4.32.2 Fluting medium:	21	21	21	21	21	21
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	21	21	21	21	21	21
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	18	18	18	18	18	18
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	18	18	18	18	18	18
4.32.5 Other wrapping and packaging paper and paperboard, n. e. s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n. e. s., total:	-	-	-	-	-	-
4.33.1 Paper, n. e. s.	-	-	-	-	-	-
4.33.2 Paperboard, n. e. s.	-	-	-	-	-	-

63 Country: SRI LANKA

[illegible]

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	34	33	36	38	38	38
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	21	21	24	26	26	26
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	21	21	24	26	26	26
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	13	12	12	12	12	12
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	13	12	12	12	12	12
4.32.1 Linerboard:	1	1	1	1	1	1
4.32.11 Kraft liner:	1	1	1	1	1	1
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	1	2	2	2	2	2
4.32.21 Semi-chemical	1	2	2	2	2	2
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	1	2	2	2	2	2
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	1	2	2	2	2	2
4.32.4 Folding boxboard:	8	6	6	6	6	6
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	8	6	6	6	6	6
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	2	1	1	1	1	1
4.32.51 Paper	2	1	1	1	1	1
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

[illegible]

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	-	-	36	42	48	54
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	-	-	18	21	24	27
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	18	21	24	27
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	-	-	18	21	24	27
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	-	-	18	21	24	27
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	18	21	24	27
4.32.51 Paper	-	-	18	21	24	27
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	362	362	362	377	382	384
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	50	50	50	50	50	50
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	50	50	50	50	50	50
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	50	50	50	50	50	50
4.3 Other paper and paperboard, total:	312	312	312	327	332	334
4.31 Household and sanitary paper	21	21	21	21	21	21
4.32 Wrapping and packaging paper and paperboard, total:	289	289	289	304	309	311
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	2	2	2	2	2	2
4.33.1 Paper, n.e.s.	2	2	2	2	2	2
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

66 Country: TURKEY

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	597	612	612	613	788	853
4.1 Newsprint	83	83	83	83	143	163
4.2 Other printing and writing paper, total:	103	103	103	103	103	103
4.21 Coated:	-	-	5	10	15	20
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	5	10	15	20
4.22 Uncoated:	103	103	98	93	88	83
4.22.1 Wood containing	55	55	50	45	40	35
4.22.2 Wood free	48	48	48	48	48	48
4.3 Other paper and paperboard, total:	411	426	426	427	542	587
4.31 Household and sanitary paper	5	5	5	5	5	8
4.32 Wrapping and packaging paper and paperboard, total:	404	419	419	419	533	575
4.32.1 Linerboard:	66	66	66	66	126	131
4.32.11 Kraft liner:	26	26	26	26	76	81
4.32.11.1 Unbleached	26	26	26	26	76	81
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	40	40	40	40	50	50
4.32.2 Fluting medium:	28	43	43	43	43	43
4.32.21 Semi-chemical	15	15	15	15	15	15
4.32.22 Other fluting medium	13	28	28	28	28	28
4.32.3 Kraft wrapping and packaging paper:	107	107	107	107	158	172
4.32.31 Sack kraft	60	60	60	60	105	116
4.32.32 Other kraft wrapping and packaging paper	47	47	47	47	53	56
4.32.4 Folding boxboard:	42	42	42	42	45	54
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	42	42	42	42	45	54
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	161	161	161	161	161	175
4.32.51 Paper	35	35	35	35	35	35
4.32.52 Paperboard	126	126	126	126	126	140
4.33 Other paper and paperboard, n.e.s., total:	2	2	2	3	4	4
4.33.1 Paper, n.e.s.	2	2	2	3	4	4
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

67 Country: VIET NAM., Socialist Republic a/

	1977			1978			1979			1980			1981			1982		
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity	of which market pulp	Total capacity
----- 1,000 metric tons (air dry) per year -----																		
1 Wood pulp for making paper and paperboard, total:	10	-	10	-	10	-	10	-	25	-	28	-	32	-	32	-	32	-
1.1 Mechanical	10	-	10	-	10	-	10	-	10	-	10	-	10	-	10	-	10	-
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	-	-	-	-	-	-	-	-	15	-	18	-	22	-	22	-	22	-
1.31 Unbleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	-	-	-	-	-	-	-	-	15	-	18	-	22	-	22	-	22	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	15	-	18	-	22	-	22	-	22	-
2 Other fibre pulp for making paper and paperboard, total:	10	-	10	-	10	-	10	-	25	-	28	-	32	-	32	-	32	-
2.1 Straw	10	-	10	-	10	-	10	-	10	-	10	-	10	-	10	-	10	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	15	-	18	-	22	-	22	-	22	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a/ Secretariat estimate.

67 Country: VIET NAM, Socialist Rep. a/

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	62	62	62	95	101	106
4.1 Newsprint	-	-	-	15	18	20
4.2 Other printing and writing paper, total:	37	37	37	52	55	57
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	37	37	37	52	55	57
4.22.1 Wood containing	10	10	10	10	10	10
4.22.2 Wood free	27	27	27	42	45	47
4.3 Other paper and paperboard, total:	25	25	25	28	28	29
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	25	25	25	28	28	29
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	-	-	-	-	-	-
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	-	-	-	-	-	-
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	25	25	25	28	28	29
4.32.51 Paper	25	25	25	28	28	29
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

a/ Secretariat estimate.

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
1 Wood pulp for making paper and paperboard, total:												
1.1 Mechanical	10	-	10	-	10	-	10	-	10	-	10	-
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Chemical-mechanical and semi-chemical	-	-	-	-	-	-	-	-	-	-	-	-
1.21 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.3 Chemical, total:	10	-	10	-	10	-	10	-	10	-	10	-
1.31 Unbleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.31.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.32 Bleached and semibleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.32.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.33 Unbleached sulphate and soda	..	-	..	-	..	-	..	-	..	-	..	-
1.33.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.34 Bleached and semibleached sulphate and soda	..	-	..	-	..	-	..	-	..	-	..	-
1.34.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
2 Other fibre pulp for making paper and paperboard, total:												
2.1 Straw	5	-	5	-	5	-	5	-	5	-	5	-
2.2 Bagasse	5	-	5	-	5	-	5	-	5	-	5	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-	-	-	-
3 Dissolving pulp (wood and other fibrous raw materials)												
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-

a/ Secretariat estimate.

68 Country: ALBANIA a/		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4 Paper and Paperboard, total:		15	15	15	15	15	15
4.1 Newsprint		-	-	-	-	-	-
4.2 Other printing and writing paper, total:		7	7	7	7	7	7
4.21 Coated:		..	..	..	..	..	..
4.21.1 Wood containing		..	..	..	..	..	..
4.21.2 Wood free		..	..	..	..	..	..
4.22 Uncoated:		..	..	..	..	..	..
4.22.1 Wood containing		..	..	..	..	..	..
4.22.2 Wood free		..	..	..	..	..	..
4.3 Other paper and paperboard, total:		8	8	8	8	8	8
4.31 Household and sanitary paper		-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:		8	8	8	8	8	8
4.32.1 Linerboard:		-	-	-	-	-	-
4.32.11 Kraft liner:		-	-	-	-	-	-
4.32.11.1 Unbleached		-	-	-	-	-	-
4.32.11.2 Bleached		-	-	-	-	-	-
4.32.12 Other linerboard		-	-	-	-	-	-
4.32.2 Fluting medium:		-	-	-	-	-	-
4.32.21 Semi-chemical		-	-	-	-	-	-
4.32.22 Other fluting medium		-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:		-	-	-	-	-	-
4.32.31 Sack kraft		-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper		-	-	-	-	-	-
4.32.4 Folding boxboard:		-	-	-	-	-	-
4.32.41 Solid bleached board		-	-	-	-	-	-
4.32.42 Other folding boxboard		-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:		8	8	8	8	8	8
4.32.51 Paper		-	-	-	-	-	-
4.32.52 Paperboard		8	8	8	8	8	8
4.33 Other paper and paperboard, n.e.s., total:		-	-	-	-	-	-
4.33.1 Paper, n.e.s.		-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.		-	-	-	-	-	-

a/ Secretariat estimate.

69 Country: AUSTRIA

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982									
	1977		1978		1979		1980		1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity
----- 1,000 metric tons (air dry) per year -----									
1 Wood pulp for making paper and paperboard, total:	965	191	1,061	245	1,070	255	1,055	243	1,065
1.1 Mechanical	211	1	238	1	238	1	238	1	238
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-
1.2 Chemical-mechanical and semi-chemical	55	7	55	7	55	7	37	-	37
1.21 of which: non-coniferous	55	7	55	7	55	7	37	-	37
1.3 Chemical, total:	699	183	768	237	777	247	780	242	790
1.31 Unbleached sulphite	30	10	23	10	17	10	17	10	17
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	438	150	514	200	529	210	532	205	542
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	224	21	224	25	224	25	224	25	224
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	7	2	7	2	7	2	7	2	7
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-
2 Other fibre pulp for making paper and paperboard, total:	-	-	-	-	-	-	-	-	-
2.1 Straw	-	-	-	-	-	-	-	-	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-
3 Dissolving pulp (wood and other fibrous raw materials)	120	12	127	22	127	22	127	22	127
3.1 of which: non-coniferous	120	12	127	22	127	22	127	22	127

		1977	1978	1979	1980	1981	1982
		1,000 metric tons per year					
4	Paper and Paperboard, total:	1,470	1,538	1,565	1,572	1,572	1,572
4.1	Newsprint	135	140	140	140	140	140
4.2	Other printing and writing paper, total:	665	691	693	696	696	696
4.21	Coated:	175	176	176	179	179	179
4.21.1	Wood containing	30	30	30	30	30	30
4.21.2	Wood free	145	146	146	149	149	149
4.22	Uncoated:	490	515	517	517	517	517
4.22.1	Wood containing	195	215	217	217	217	217
4.22.2	Wood free	295	300	300	300	300	300
4.3	Other paper and paperboard, total:	670	707	732	736	736	736
4.31	Household and sanitary paper	91	91	91	91	91	91
4.32	Wrapping and packaging paper and paperboard, total:	529	566	591	595	595	595
4.32.1	Linerboard:	87	87	87	87	87	87
4.32.11	Kraft liner:	87	87	87	87	87	87
4.32.11.1	Unbleached	87	87	87	87	87	87
4.32.11.2	Bleached	-	-	-	-	-	-
4.32.12	Other linerboard	-	-	-	-	-	-
4.32.2	Fluting medium:	96	131	156	160	160	160
4.32.21	Semi-chemical	-	-	-	-	-	-
4.32.22	Other fluting medium	-	-	-	-	-	-
4.32.3	Kraft wrapping and packaging paper:	128	128	128	128	128	128
4.32.31	Sack kraft	82	82	82	82	82	82
4.32.32	Other kraft wrapping and packaging paper	46	46	46	46	46	46
4.32.4	Folding boxboard:	178	180	180	180	180	180
4.32.41	Solid bleached board	-	-	-	-	-	-
4.32.42	Other folding boxboard	-	-	-	-	-	-
4.32.5	Other wrapping and packaging paper and paperboard, n.e.s.:	40	40	40	40	40	40
4.32.51	Paper	35	35	35	35	35	35
4.32.52	Paperboard	5	5	5	5	5	5
4.33	Other paper and paperboard, n.e.s., total:	50	50	50	50	50	50
4.33.1	Paper, n.e.s.	30	30	30	30	30	30
4.33.2	Paperboard, n.e.s.	20	20	20	20	20	20

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	862	941	966	996	1,008	1,009
4.1 Newsprint	98	105	105	105	105	105
4.2 Other printing and writing paper, total:	441	441	444	447	449	450
4.21 Coated:	140	140	140	140	140	140
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	301	301	304	307	309	310
4.22.1 Wood containing	146	142	142	142	142	142
4.22.2 Wood free	155	159	162	165	167	168
4.3 Other paper and paperboard, total:	323	395	417	444	454	454
4.31 Household and sanitary paper	66	93	100	105	110	110
4.32 Wrapping and packaging paper and paperboard, total:	166	205	220	242	247	247
4.32.1 Linerboard:	25	60	70	89	104	104
4.32.11 Kraft liner:	-	25	35	50	65	65
4.32.11.1 Unbleached	-	..	..	..	..	..
4.32.11.2 Bleached	-	..	..	..	..	..
4.32.12 Other linerboard	25	35	35	39	39	39
4.32.2 Fluting medium:	20	25	25	33	33	33
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	20	25	25	33	33	33
4.32.3 Kraft wrapping and packaging paper:	24	25	30	25	15	15
4.32.31 Sack kraft	9	15	20	20	15	15
4.32.32 Other kraft wrapping and packaging paper	15	10	10	5	-	-
4.32.4 Folding boxboard:	27	25	25	25	25	25
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	70	70	70	70	70	70
4.32.51 Paper	45	45	45	45	45	45
4.32.52 Paperboard	25	25	25	25	25	25
4.33 Other paper and paperboard, n.e.s., total:	91	97	97	97	97	97
4.33.1 Paper, n.e.s.	35	41	41	41	41	41
4.33.2 Paperboard, n.e.s.	56	56	56	56	56	56

[illegible]

71 Country: BULGARIA

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	424	424	424	515	541	554
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	78	78	78	99	105	108
4.21 Coated:	6	6	6	6	6	6
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	6	6	6	6	6	6
4.22 Uncoated:	72	72	72	93	99	102
4.22.1 Wood containing	12	12	12	12	12	12
4.22.2 Wood free	60	60	60	81	87	90
4.3 Other paper and paperboard, total:	346	346	346	416	436	446
4.31 Household and sanitary paper	7	7	7	7	7	7
4.32 Wrapping and packaging paper and paperboard, total:	302	302	302	369	388	398
4.32.1 Linerboard:	95	95	95	95	95	95
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	95	95	95	95	95	95
4.32.2 Fluting medium:	73	73	73	115	127	133
4.32.21 Semi-chemical	60	60	60	60	60	60
4.32.22 Other fluting medium	13	13	13	55	67	73
4.32.3 Kraft wrapping and packaging paper:	56	56	56	56	56	56
4.32.31 Sack kraft	40	40	40	40	40	40
4.32.32 Other kraft wrapping and packaging paper	16	16	16	16	16	16
4.32.4 Folding boxboard:	52	52	52	52	52	52
4.32.41 Solid bleached board	2	2	2	2	2	2
4.32.42 Other folding boxboard	50	50	50	50	50	50
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	26	26	26	51	58	62
4.32.51 Paper	26	26	26	51	58	62
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	37	37	37	40	41	41
4.33.1 Paper, n.e.s.	-	-	-	3	4	4
4.33.2 Paperboard, n.e.s.	37	37	37	37	37	37

72 Country: CZECHOSLOVAKIA

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	876	214	879	210	869	199	961	203	1,021		1,104	
1.1 Mechanical	179	2	179	2	179	2	179	2	179		179	
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-	
1.2 Chemi-mechanical and semi-chemical	127	-	127	-	127	-	127	-	127		127	
1.21 of which: non-coniferous	127	-	127	-	127	-	127	-	127		127	
1.3 Chemical, total:	570	212	573	208	563	197	655	201	715		798	
1.31 Unbleached sulphite	159	54	159	54	129	25	129	25	116		116	
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-	
1.32 Bleached and semibleached sulphite	119	56	120	50	128	56	227	67	189		193	
1.32.1 of which: non-coniferous	-	-	-	-	-	-	13	-	24		60	
1.33 Unbleached sulphate and soda	190	-	190	-	190	-	190	-	190		190	
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-	
1.34 Bleached and semibleached sulphate and soda	102	102	104	104	116	116	109	109	220		299	
1.34.1 of which: non-coniferous	2	2	4	4	16	16	9	9	120		114	

2 Other fibre pulp for making paper and paperboard, total:	25	1	25	1	25	1	25	1	25		25	
2.1 Straw	-	-	-	-	-	-	-	-	-		-	
2.2 Bagasse	-	-	-	-	-	-	-	-	-		-	
2.3 Bamboo	-	-	-	-	-	-	-	-	-		-	
2.4 Other (reeds, esparto, rags, etc.)	25	1	25	1	25	1	25	1	25		25	

3 Dissolving pulp (wood and other fibrous raw materials)	68	66	71	68	72	69	89	87	61		62	
3.1 of which: non-coniferous	27	25	29	27	43	41	69	67	40		41	

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1,285	1,286	1,294	1,294	1,294	1,303
4.1 Newsprint	80	80	80	80	80	80
4.2 Other printing and writing paper, total:	251	244	244	244	244	244
4.21 Coated:	17	21	28	31	31	31
4.21.1 Wood containing	14	14	14	14	14	14
4.21.2 Wood free	3	7	14	17	17	17
4.22 Uncoated:	234	223	216	213	213	213
4.22.1 Wood containing	93	93	93	93	93	93
4.22.2 Wood free	141	130	123	120	120	120
4.3 Other paper and paperboard, total:	954	962	970	970	970	979
4.31 Household and sanitary paper	41	41	41	41	41	50
4.32 Wrapping and packaging paper and paperboard, total:	784	792	800	800	800	800
4.32.1 Linerboard:	52	52	60	60	60	60
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	52	52	60	60	60	60
4.32.2 Fluting medium:	162	162	162	162	162	162
4.32.21 Semi-chemical	150	150	150	150	150	150
4.32.22 Other fluting medium	12	12	12	12	12	12
4.32.3 Kraft wrapping and packaging paper:	162	165	165	165	165	165
4.32.31 Sack kraft	143	146	146	146	146	146
4.32.32 Other kraft wrapping and packaging paper	19	19	19	19	19	19
4.32.4 Folding boxboard:	26	26	26	26	26	26
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	26	26	26	26	26	26
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	382	387	387	387	387	387
4.32.51 Paper	119	119	119	119	119	119
4.32.52 Paperboard	263	268	268	268	268	268
4.33 Other paper and paperboard, n.e.s., total:	129	129	129	129	129	129
4.33.1 Paper, n.e.s.	63	63	63	63	63	63
4.33.2 Paperboard, n.e.s.	66	66	66	66	66	66

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	300	300	300	300	300	300
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	120	120	120	120	120	120
4.21 Coated:	30	30	30	30	30	30
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	90	90	90	90	90	90
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	180	180	180	180	180	180
4.31 Household and sanitary paper	15	15	15	15	15	15
4.32 Wrapping and packaging paper and paperboard, total:	158	161	161	161	161	161
4.32.1 Linerboard:	48	48	48	48	48	48
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	48	48	48	48	48	48
4.32.2 Fluting medium:	55	58	58	58	58	58
4.32.21 Semi-chemical	25	28	28	28	28	28
4.32.22 Other fluting medium	30	30	30	30	30	30
4.32.3 Kraft wrapping and packaging paper:	16	16	16	16	16	16
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	16	16	16	16	16	16
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	39	39	39	39	39	39
4.32.51 Paper	15	15	15	15	15	15
4.32.52 Paperboard	24	24	24	24	24	24
4.33 Other paper and paperboard, n.e.s., total:	7	4	4	4	4	4
4.33.1 Paper, n.e.s.	7	4	4	4	4	4
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

	1977						1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity
	----- 1,000 metric tons (air dry) per year -----													
74 Country: FINLAND														
1 Wood pulp for making paper and paperboard, total:	7,480	2,000	7,690	2,240	7,810	2,290	7,910	2,340	8,010	8,095				
1.1 Mechanical	2,710	50	2,780	50	2,790	50	2,810	50	2,850	2,910				
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-				
1.2 Chemi-mechanical and semi-chemical	380	20	340	20	340	20	340	20	340	340				
1.21 of which: non-coniferous	380	20	340	20	340	20	340	20	340	340				
1.3 Chemical, total:	4,390	1,930	4,570	2,170	4,680	2,220	4,760	2,270	4,820	4,845				
1.31 Unbleached sulphite	500	150	410	150	410	150	410	150	410	410				
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-				
1.32 Bleached and semibleached sulphite	540	270	420	230	420	230	430	230	430	430				
1.32.1 of which: non-coniferous	60	30	60	30	60	30	60	30	60	60				
1.33 Unbleached sulphate and soda	1,320	290	1,320	290	1,330	290	1,350	290	1,370	1,370				
1.33.1 of which: non-coniferous	20	-	30	25	30	25	20	15	20	20				
1.34 Bleached and semibleached sulphate and soda	2,030	1,220	2,420	1,500	2,520	1,550	2,570	1,600	2,610	2,635				
1.34.1 of which: non-coniferous	900	670	1,030	720	1,070	730	1,100	740	1,100	1,100				
2 Other fibre pulp for making paper and paperboard, total:	-	-	-	-	-	-	-	-	-	-				
2.1 Straw	-	-	-	-	-	-	-	-	-	-				
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-				
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-				
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-	-				
3 Dissolving pulp (wood and other fibrous raw materials)	270	270	270	270	275	275	280	280	280	280				
3.1 of which: non-coniferous	65	65	65	65	65	65	65	65	65	65				

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	6,220	6,270	6,340	6,390	6,530	6,750
4.1 Newsprint	1,360	1,420	1,430	1,430	1,430	1,470
4.2 Other printing and writing paper, total:	2,170	2,195	2,255	2,300	2,420	2,605
4.21 Coated:	465	475	485	490	540	600
4.21.1 Wood containing	410	420	430	430	480	540
4.21.2 Wood free	55	55	55	60	60	60
4.22 Uncoated:	1,705	1,720	1,770	1,810	1,880	2,005
4.22.1 Wood containing	1,350	1,370	1,390	1,410	1,460	1,515
4.22.2 Wood free	355	350	380	400	420	490
4.3 Other paper and paperboard, total:	2,690	2,655	2,655	2,660	2,680	2,675
4.31 Household and sanitary paper	150	150	159	155	160	160
4.32 Wrapping and packaging paper and paperboard, total:	2,070	2,035	2,030	2,025	2,040	2,045
4.32.1 Linerboard:	520	520	495	485	485	485
4.32.11 Kraft liner:	495	495	475	470	470	470
4.32.11.1 Unbleached	435	435	415	410	410	410
4.32.11.2 Bleached	60	60	60	60	60	60
4.32.12 Other linerboard	25	25	20	15	15	15
4.32.2 Fluting medium:	320	280	280	280	280	280
4.32.21 Semi-chemical	320	280	280	280	280	280
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	420	420	420	420	425	425
4.32.31 Sack kraft	325	325	325	325	330	330
4.32.32 Other kraft wrapping and packaging paper	95	95	95	95	95	95
4.32.4 Folding boxboard:	615	620	640	645	650	650
4.32.41 Solid bleached board	225	225	235	240	240	240
4.32.42 Other folding boxboard	390	395	405	405	410	410
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	195	195	195	195	200	205
4.32.51 Paper	70	70	70	65	65	65
4.32.52 Paperboard	125	125	125	130	135	140
4.33 Other paper and paperboard, n.e.s., total:	470	470	470	480	480	470
4.33.1 Paper, n.e.s.	320	320	320	330	330	320
4.33.2 Paperboard, n.e.s.	150	150	150	150	150	150

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

1977															1978		1979		1980		1981	1982
Total capacity		of which market pulp		Total capacity		of which market pulp		Total capacity		of which market pulp		Total capacity		of which market pulp		Total capacity	Total capacity					
----- 1,000 metric tons (air dry) per year -----																						
1 Wood pulp for making paper and paperboard, total:																						
2,110		545		2,185		575		2,270		655		2,420		695		2,575	2,600					
515		5		545		5		550		5		570		5		570	570					
1.1 Mechanical																						
-		-		-		-		-		-		-		-		-	-					
1.11 of which: non-coniferous																						
300		-		280		-		300		-		320		-		320	320					
1.2 Chemi-mechanical and semi-chemical																						
275		-		280		-		300		-		320		-		320	320					
1.21 of which: non-coniferous																						
1,295		540		1,360		570		1,420		650		1,530		690		1,685	1,710					
1.3 Chemical, total:																						
20		10		20		10		20		10		20		10		20	20					
1.31 Unbleached sulphite																						
-		-		-		-		-		-		-		-		-	-					
1.31.1 of which: non-coniferous																						
200		155		235		175		265		205		285		205		300	300					
1.32 Bleached and semibleached sulphite																						
45		10		60		10		60		10		60		10		60	60					
1.32.1 of which: non-coniferous																						
500		-		500		-		500		-		550		-		600	600					
1.33 Unbleached sulphate and soda																						
-		-		-		-		-		-		-		-		-	-					
1.33.1 of which: non-coniferous																						
575		375		605		385		635		435		675		475		765	790					
1.34 Bleached and semibleached sulphate and soda																						
400		300		400		300		410		300		410		300		410	435					
1.34.1 of which: non-coniferous																						
2 Other fibre pulp for making paper and paperboard, total:																						
-		-		-		-		-		-		-		-		-	-					
2.1 Straw																						
-		-		-		-		-		-		-		-		-	-					
2.2 Bagasse																						
-		-		-		-		-		-		-		-		-	-					
2.3 Bamboo																						
-		-		-		-		-		-		-		-		-	-					
2.4 Other (reeds, esparto, rags, etc.)																						
-		-		-		-		-		-		-		-		-	-					
3 Dissolving pulp (wood and other fibrous raw materials)																						
130		130		130		130		130		130		130		130		130	130					
3.1 of which: non-coniferous																						
90		90		90		90		90		90		90		90		90	90					

75 Country: FRANCE

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	5,620	5,855	6,020	6,200	6,285	6,285
4.1 Newsprint	300	332	332	347	347	347
4.2 Other printing and writing paper, total:	1,835	1,860	1,885	1,940	1,980	1,980
4.21 Coated:	650	660	660	670	670	670
4.21.1 Wood containing	360	360	360	360	360	360
4.21.2 Wood free	290	300	300	310	310	310
4.22 Uncoated:	1,185	1,200	1,225	1,270	1,310	1,310
4.22.1 Wood containing	345	355	365	385	405	405
4.22.2 Wood free	840	845	860	885	905	905
4.3 Other paper and paperboard, total:	3,485	3,663	3,803	3,913	3,958	3,958
4.31 Household and sanitary paper	160	170	215	220	220	220
4.32 Wrapping and packaging paper and paperboard, total:	2,930	3,075	3,165	3,270	3,300	3,300
4.32.1 Linerboard:	1,015	1,075	1,110	1,135	1,150	1,150
4.32.11 Kraft liner:	310	335	335	335	335	335
4.32.11.1 Unbleached	270	295	295	295	295	295
4.32.11.2 Bleached	40	40	40	40	40	40
4.32.12 Other linerboard	705	740	775	800	815	815
4.32.2 Fluting medium:	600	645	670	715	720	720
4.32.21 Semi-chemical	340	370	380	420	420	420
4.32.22 Other fluting medium	260	275	290	295	300	300
4.32.3 Kraft wrapping and packaging paper:	405	415	415	425	430	430
4.32.31 Sack kraft	140	145	145	150	150	150
4.32.32 Other kraft wrapping and packaging paper	265	270	270	275	280	280
4.32.4 Folding boxboard:	355	370	385	395	395	395
4.32.41 Solid bleached board	145	150	155	160	160	160
4.32.42 Other folding boxboard	210	220	230	235	235	235
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	555	570	585	600	605	605
4.32.51 Paper	295	300	305	310	315	315
4.32.52 Paperboard	260	270	280	290	290	290
4.33 Other paper and paperboard, n.e.s., total:	395	418	423	423	438	438
4.33.1 Paper, n.e.s.	325	348	348	348	363	363
4.33.2 Paperboard, n.e.s.	70	70	75	75	75	75

	1977		1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity
1 Wood pulp for making paper and paperboard, total:	950	-	970	-	990	-	1,020	-	1,040	1,065
1.1 Mechanical	445	-	445	-	445	-	445	-	445	445
1.11 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..
1.2 Chemi-mechanical and semi-chemical	5	-	5	-	5	-	5	-	5	5
1.21 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..
1.3 Chemical, total:	500	-	520	-	540	-	570	-	590	615
1.31 Unbleached sulphite	..	-	..	-	..	-	..	-	..	..
1.31.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..
1.32 Bleached and semibleached sulphite	..	-	..	-	..	-	..	-	..	..
1.32.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..
1.33 Unbleached sulphate and soda	..	-	..	-	..	-	..	-	..	..
1.33.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..
1.34 Bleached and semibleached sulphate and soda	..	-	..	-	..	-	..	-	..	..
1.34.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	..

2 Other fibre pulp for making paper and paperboard, total:	49	-	53	-	57	-	61	-	65	69
2.1 Straw	-	-	-	-	-	-	-	-	-	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	49	-	53	-	57	-	61	-	65	69

3 Dissolving pulp (wood and other fibrous raw materials)	200	..	200	..	200	..	200	..	200	200
3.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..

a/ Secretariat estimate.

	1977	1978	1979	1980	1981	1982
	--- 1,000 metric tons per year ---					
4 Paper and Paperboard, total:	1,410	1,440	1,470	1,500	1,530	1,560
4.1 Newsprint	140	150	150	150	150	150
4.2 Other printing and writing paper, total:	280	285	295	300	310	320
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	990	1,005	1,025	1,050	1,070	1,090
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	990	1,005	1,025	1,050	1,070	1,090
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..
a/ Secretariat estimate.	..	..	..	..	..	..

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

77 Country: GERMANY, FED. REP. OF

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	1,826	201	1,865	200	1,991	186	2,122	184	2,124	184	2,124	184
1.1 Mechanical	1,136	10	1,168	9	1,292	9	1,420	9	1,416	9	1,416	9
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	69	-	69	-	69	-	69	-	69	-	69	-
1.21 of which: non-coniferous	69	-	69	-	69	-	69	-	69	-	69	-
1.3 Chemical, total:	621	191	628	191	630	177	633	175	639	175	639	175
1.31 Unbleached sulphite	51	26	45	27	38	20	38	20	38	20	38	20
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	570	165	583	164	592	157	595	155	601	155	601	155
1.32.1 of which: non-coniferous	136	41	126	26	127	27	127	28	128	28	128	28
1.33 Unbleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	-	-	-	-	-	-	-	-	-	-	-	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
2 Other fibre pulp for making paper and paperboard, total:	-	-	-	-	-	-	-	-	-	-	-	-
2.1 Straw	-	-	-	-	-	-	-	-	-	-	-	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-	-	-	-
3 Dissolving pulp (wood and other fibrous raw materials)	196	196	189	189	192	192	192	192	195	192	195	192
3.1 of which: non-coniferous	145	142	135	135	138	138	138	138	141	138	141	138

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	8,412	8,793	9,285	9,482	9,608	9,740
4.1 Newsprint	612	631	792	870	960	1,000
4.2 Other printing and writing paper, total:	2,797	2,949	3,051	3,091	3,129	3,180
4.21 Coated:	1,024	1,057	1,130	1,164	1,197	1,230
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	1,773	1,892	1,921	1,927	1,932	1,950
4.22.1 Wood containing	824	846	872	875	879	890
4.22.2 Wood free	949	1,046	1,049	1,052	1,053	1,060
4.3 Other paper and paperboard, total:	5,003	5,213	5,442	5,521	5,519	5,560
4.31 Household and sanitary paper	479	485	555	557	558	560
4.32 Wrapping and packaging paper and paperboard, total:	3,881	4,083	4,235	4,306	4,299	4,330
4.32.1 Linerboard:	402	419	478	490	495	500
4.32.11 Kraft liner:	1	1	1	1	1	1
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	401	418	477	489	494	499
4.32.2 Fluting medium:	921	986	1,027	1,038	1,038	1,050
4.32.21 Semi-chemical	92	93	93	93	93	93
4.32.22 Other fluting medium	829	893	934	945	945	957
4.32.3 Kraft wrapping and packaging paper:	206	204	210	215	215	220
4.32.31 Sack kraft	29	33	34	34	34	35
4.32.32 Other kraft wrapping and packaging paper	177	171	176	181	181	185
4.32.4 Folding boxboard:	622	668	691	707	707	710
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	622	668	691	707	707	710
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	1,730	1,806	1,829	1,856	1,844	1,850
4.32.51 Paper	1,008	1,066	1,079	1,089	1,077	1,080
4.32.52 Paperboard	722	740	750	767	767	770
4.33 Other paper and paperboard, n.e.s., total:	643	645	652	658	662	670
4.33.1 Paper, n.e.s.	487	489	495	502	506	510
4.33.2 Paperboard, n.e.s.	156	156	157	156	156	160

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	470	497	506	506	506	506
4.1 Newsprint	81	90	90	90	90	90
4.2 Other printing and writing paper, total:	153	171	180	180	180	180
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	236	236	236	236	236	236
4.31 Household and sanitary paper	106	106	106	106	106	106
4.32 Wrapping and packaging paper and paperboard, total:	105	105	105	105	105	105
4.32.1 Linerboard:	6	6	6	6	6	6
4.32.11 Kraft liner:	6	6	6	6	6	6
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	11	11	11	11	11	11
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	6	6	6	6	6	6
4.32.31 Sack kraft	3	3	3	3	3	3
4.32.32 Other kraft wrapping and packaging paper	3	3	3	3	3	3
4.32.4 Folding boxboard:	48	48	48	48	48	48
4.32.41 Solid bleached board	4	4	4	4	4	4
4.32.42 Other folding boxboard	44	44	44	44	44	44
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	34	34	34	34	34	34
4.32.51 Paper	34	34	34	34	34	34
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	25	25	25	25	25	25
4.33.1 Paper, n.e.s.	20	20	20	20	20	20
4.33.2 Paperboard, n.e.s.	5	5	5	5	5	5

[illegible]

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	433	432	448	449	449	449
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	109	104	116	116	116	116
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	109	104	116	116	116	116
4.22.1 Wood containing	44	44	58	58	58	58
4.22.2 Wood free	65	60	58	58	58	58
4.3 Other paper and paperboard, total:	324	328	332	333	333	333
4.31 Household and sanitary paper	15	19	19	19	19	19
4.32 Wrapping and packaging paper and paperboard, total:	299	299	303	304	304	304
4.32.1 Linerboard:	-	16	16	16	16	16
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	16	16	16	16	16
4.32.2 Fluting medium:	137	127	115	108	108	108
4.32.21 Semi-chemical	60	53	53	50	50	50
4.32.22 Other fluting medium	77	74	62	58	58	58
4.32.3 Kraft wrapping and packaging paper:	35	40	40	40	40	40
4.32.31 Sack kraft	27	40	40	40	40	40
4.32.32 Other kraft wrapping and packaging paper	8	-	-	-	-	-
4.32.4 Folding boxboard:	32	30	30	30	30	40
4.32.41 Solid bleached board	16	15	15	15	15	20
4.32.42 Other folding boxboard	16	15	15	15	15	20
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	95	86	102	110	110	110
4.32.51 Paper	48	43	52	60	60	60
4.32.52 Paperboard	47	43	50	50	50	50
4.33 Other paper and paperboard, n.e.s., total:	10	10	10	10	10	10
4.33.1 Paper, n.e.s.	6	6	6	6	6	6
4.33.2 Paperboard, n.e.s.	4	4	4	4	4	4

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	160	162	164	165	165	166
4.1 Newsprint	-	-	-	-	-	-
4.2 Other printing and writing paper, total:	36	36	36	36	36	36
4.21 Coated:	3	3	3	3	3	3
4.21.1 Wood containing	2	2	2	2	2	2
4.21.2 Wood free	1	1	1	1	1	1
4.22 Uncoated:	33	33	33	33	33	33
4.22.1 Wood containing	13	13	13	13	13	13
4.22.2 Wood free	20	20	20	20	20	20
4.3 Other paper and paperboard, total:	124	126	128	129	129	130
4.31 Household and sanitary paper	-	-	-	-	-	-
4.32 Wrapping and packaging paper and paperboard, total:	124	126	128	129	129	130
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	100	100	102	102	102	102
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	100	100	102	102	102	102
4.32.3 Kraft wrapping and packaging paper:	11	11	11	11	11	11
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	11	11	11	11	11	11
4.32.4 Folding boxboard:	-	-	-	-	-	-
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	-	-	-	-	-	-
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	13	15	15	16	16	17
4.32.51 Paper	13	15	15	16	16	17
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

81 Country: ITALY

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	1,139	-	1,160	-	1,190	-	1,202	-	1,202	-	1,202	-
1.1 Mechanical	662	-	675	-	695	-	701	-	701	-	701	-
1.11 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.2 Chemical-mechanical and semi-chemical	212	-	216	-	222	-	226	-	226	-	226	-
1.21 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.3 Chemical, total:	265	-	269	-	273	-	275	-	275	-	275	-
1.31 Unbleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.31.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.32 Bleached and semibleached sulphite	..	-	..	-	..	-	..	-	..	-	..	-
1.32.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.33 Unbleached sulphate and soda	..	-	..	-	..	-	..	-	..	-	..	-
1.33.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.34 Bleached and semibleached sulphate and soda	..	-	..	-	..	-	..	-	..	-	..	-
1.34.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
2 Other fibre pulp for making paper and paperboard, total:	420	-	428	-	440	-	444	-	444	-	444	-
2.1 Straw	420	-	428	-	440	-	444	-	444	-	444	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	-	-	-	-	-	-	-	-	-	-	-	-
3 Dissolving pulp (wood and other fibrous raw materials)	90	-	92	-	95	-	96	-	96	-	96	-
3.1 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	5,437	5,545	5,712	5,768	5,768	5,768
4.1 Newsprint	500	525	550	550	550	550
4.2 Other printing and writing paper, total:	1,685	1,703	1,745	1,767	1,767	1,767
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	3,252	3,317	3,417	3,451	3,451	3,451
4.31 Household and sanitary paper	..	..	..	..	..	..
4.32 Wrapping and packaging paper and paperboard, total:	..	..	..	..	..	..
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	..	..	..	..	..	..
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

[illegible]

82 Country: NETHERLANDS

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	2,097	2,125	2,137	2,218	2,218	2,218
4.1 Newsprint	144	144	144	191	191	191
4.2 Other printing and writing paper, total:	650	672	684	718	718	718
4.21 Coated:	218	247	257	253	253	253
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	432	425	427	465	465	465
4.22.1 Wood containing	85	86	86	126	126	126
4.22.2 Wood free	347	339	341	339	339	339
4.3 Other paper and paperboard, total:	1,303	1,309	1,309	1,309	1,309	1,309
4.31 Household and sanitary paper	118	120	120	120	120	120
4.32 Wrapping and packaging paper and paperboard, total:	1,137	1,141	1,141	1,141	1,141	1,141
4.32.1 Linerboard:	116	119	119	119	119	119
4.32.11 Kraft liner:	24	24	24	24	24	24
4.32.11.1 Unbleached	3	3	3	3	3	3
4.32.11.2 Bleached	21	21	21	21	21	21
4.32.12 Other linerboard	92	95	95	95	95	95
4.32.2 Fluting medium:	344	345	345	345	345	345
4.32.21 Semi-chemical	57	57	57	57	57	57
4.32.22 Other fluting medium	287	288	288	288	288	288
4.32.3 Kraft wrapping and packaging paper:	59	59	59	59	59	59
4.32.31 Sack kraft	-	-	-	-	-	-
4.32.32 Other kraft wrapping and packaging paper	59	59	59	59	59	59
4.32.4 Folding boxboard:	111	113	113	113	113	113
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	111	113	113	113	113	113
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	507	505	505	505	505	505
4.32.51 Paper	68	68	68	68	68	68
4.32.52 Paperboard	439	437	437	437	437	437
4.33 Other paper and paperboard, n.e.s., total:	48	48	48	48	48	48
4.33.1 Paper, n.e.s.	4	4	4	4	4	4
4.33.2 Paperboard, n.e.s.	44	44	44	44	44	44

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982

83 Country: NORWAY

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	1,695	1,750	1,790	1,845	1,845	1,845
4.1 Newsprint	625	650	675	700	700	700
4.2 Other printing and writing paper, total:	400	420	430	440	440	440
4.21 Coated:	15	15	15	15	15	15
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	385	405	415	425	425	425
4.22.1 Wood containing	235	250	255	255	255	255
4.22.2 Wood free	150	155	160	170	170	170
4.3 Other paper and paperboard, total:	670	680	685	705	705	705
4.31 Household and sanitary paper	40	40	40	40	40	40
4.32 Wrapping and packaging paper and paperboard, total:	610	620	625	645	645	645
4.32.1 Linerboard:	40	40	40	45	45	45
4.32.11 Kraft liner:	40	40	40	45	45	45
4.32.11.1 Unbleached	35	35	35	40	40	40
4.32.11.2 Bleached	5	5	5	5	5	5
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	80	80	80	85	85	85
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	155	165	165	175	175	175
4.32.31 Sack kraft	100	110	110	120	120	120
4.32.32 Other kraft wrapping and packaging paper	55	55	55	55	55	55
4.32.4 Folding boxboard:	120	120	125	125	125	125
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	120	120	125	125	125	125
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	215	215	215	215	215	215
4.32.51 Paper	210	210	210	210	210	210
4.32.52 Paperboard	5	5	5	5	5	5
4.33 Other paper and paperboard, n.e.s., total:	20	20	20	20	20	20
4.33.1 Paper, n.e.s.	5	5	5	5	5	5
4.33.2 Paperboard, n.e.s.	15	15	15	15	15	15

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
84 Country: POLAND	----- 1,000 metric tons (air dry) per year -----											
1 Wood pulp for making paper and paperboard, total:	733	-	770	-	832	-	953	-	996	-	996	-
1.1 Mechanical	166	-	166	-	166	-	166	-	170	-	170	-
1.11 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Chemi-mechanical and semi-chemical	52	-	78	-	79	-	102	-	130	-	130	-
1.21 of which: non-coniferous	52	-	78	-	79	-	102	-	130	-	130	-
1.3 Chemical, total:	515	-	526	-	587	-	685	-	696	-	696	-
1.31 Unbleached sulphite	48	-	48	-	41	-	41	-	41	-	41	-
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	87	-	87	-	87	-	89	-	95	-	95	-
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	345	-	356	-	361	-	360	-	360	-	360	-
1.33.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.34 Bleached and semibleached sulphate and soda	35	-	35	-	98	-	195	-	200	-	200	-
1.34.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
2 Other fibre pulp for making paper and paperboard, total:	23	-	23	-	17	-	17	-	7	-	7	-
2.1 Straw	21	-	21	-	15	-	15	-	5	-	5	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	2	-	2	-	2	-	2	-	2	-	2	-
3 Dissolving pulp (wood and other fibrous raw materials)	71	-	71	-	71	-	71	-	66	-	66	-
3.1 of which: non-coniferous	55	-	55	-	55	-	55	-	55	-	55	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	1,398	1,460	1,472	1,666	1,730	1,753
4.1 Newsprint	85	85	85	85	85	85
4.2 Other printing and writing paper, total:	263	265	289	397	425	439
4.21 Coated:	17	18	18	18	18	18
4.21.1 Wood containing	11	11	11	11	11	11
4.21.2 Wood free	6	7	7	7	7	7
4.22 Uncoated:	246	247	271	379	407	421
4.22.1 Wood containing	163	164	165	165	165	165
4.22.2 Wood free	83	83	106	214	242	256
4.3 Other paper and paperboard, total:	1,050	1,110	1,098	1,184	1,220	1,229
4.31 Household and sanitary paper	96	102	103	113	115	115
4.32 Wrapping and packaging paper and paperboard, total:	815	866	850	924	958	967
4.32.1 Linerboard:	147	150	146	150	150	150
4.32.11 Kraft liner:	57	60	60	60	60	60
4.32.11.1 Unbleached	57	60	60	60	60	60
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	90	90	86	90	90	90
4.32.2 Fluting medium:	68	122	124	124	124	124
4.32.21 Semi-chemical	59	113	115	115	115	115
4.32.22 Other fluting medium	9	9	9	9	9	9
4.32.3 Kraft wrapping and packaging paper:	261	261	250	261	261	261
4.32.31 Sack kraft	166	166	155	166	166	166
4.32.32 Other kraft wrapping and packaging paper	95	95	95	95	95	95
4.32.4 Folding boxboard:	196	196	195	259	286	295
4.32.41 Solid bleached board	103	103	102	103	112	112
4.32.42 Other folding boxboard	93	93	93	156	174	183
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	143	137	135	130	137	137
4.32.51 Paper	140	134	132	127	134	134
4.32.52 Paperboard	3	3	3	3	3	3
4.33 Other paper and paperboard, n.e.s., total:	139	142	145	147	147	147
4.33.1 Paper, n.e.s.	65	68	71	72	72	72
4.33.2 Paperboard, n.e.s.	74	74	74	75	75	75

85 Country: PORTUGAL

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	530	544	554	595	640	640
4.1 Newsprint	2	2	2	2	2	2
4.2 Other printing and writing paper, total:	90	99	100	100	115	115
4.21 Coated:	90	99	-	-	-	-
4.21.1 Wood containing	14	14	15	15	20	20
4.21.2 Wood free	76	85	85	85	95	95
4.22 Uncoated:	-	-	-	-	-	-
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	-	-	-	-	-	-
4.3 Other paper and paperboard, total:	438	443	452	493	523	523
4.31 Household and sanitary paper	31	36	38	38	68	68
4.32 Wrapping and packaging paper and paperboard, total:	332	334	336	377	377	377
4.32.1 Linerboard:	136	136	136	177	177	177
4.32.11 Kraft liner:	136	136	136	177	177	177
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	47	48	48	48	48	48
4.32.21 Semi-chemical	-	-	-	-	-	-
4.32.22 Other fluting medium	47	48	48	48	48	48
4.32.3 Kraft wrapping and packaging paper:	93	93	94	94	94	94
4.32.31 Sack kraft	35	36	36	36	36	36
4.32.32 Other kraft wrapping and packaging paper	58	58	58	58	58	58
4.32.4 Folding boxboard:	56	57	58	58	58	58
4.32.41 Solid bleached board	12	12	12	12	12	12
4.32.42 Other folding boxboard	44	45	46	46	46	46
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	75	73	78	78	78	78
4.33.1 Paper, n.e.s.	65	65	70	70	70	70
4.33.2 Paperboard, n.e.s.	10	8	8	8	8	8

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	674	37	700	37	710	37	775	37	795	37	805	37
1.1 Mechanical	103	-	118	-	128	-	128	-	128	-	128	-
1.11 of which: non-coniferous	16	-	16	-	16	-	16	-	16	-	16	-
1.2 Chemi-mechanical and semi-chemical	44	-	44	-	44	-	44	-	44	-	44	-
1.21 of which: non-coniferous	44	-	44	-	44	-	44	-	44	-	44	-
1.3 Chemical, total:	527	37	538	37	538	37	603	37	623	37	633	37
1.31 Unbleached sulphite	57	..	57	..	57	..	57	..	57	..	57	..
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.32 Bleached and semibleached sulphite	74	..	78	..	78	..	78	..	78	..	78	..
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-	-	-	-
1.33 Unbleached sulphate and soda	208	..	208	..	208	..	273	..	293	..	303	..
1.33.1 of which: non-coniferous	33	..	33	..	33	..	33	..	33	..	33	..
1.34 Bleached and semibleached sulphate and soda	188	..	195	..	195	..	195	..	195	..	195	..
1.34.1 of which: non-coniferous	90	..	95	..	95	..	95	..	95	..	95	..
2 Other fibre pulp for making paper and paperboard, total:	102	-	102	-	102	-	102	-	102	-	102	-
2.1 Straw	58	-	58	-	58	-	58	-	58	-	58	-
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, rags, etc.)	44	-	44	-	44	-	44	-	44	-	44	-
3 Dissolving pulp (wood and other fibrous raw materials)	63	63	63	63	100	100	127	127	127	127	127	127
3.1 of which: non-coniferous	63	63	63	63	100	100	127	127	127	127	127	127

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	811	852	886	961	981	991
4.1 Newsprint	109	125	133	133	133	133
4.2 Other printing and writing paper, total:	140	151	158	162	162	162
4.21 Coated:	6	6	6	6	6	6
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	6	6	6	6	6	6
4.22 Uncoated:	134	145	152	156	156	156
4.22.1 Wood containing	50	50	50	50	50	50
4.22.2 Wood free	84	95	102	106	106	106
4.3 Other paper and paperboard, total:	562	576	595	666	686	696
4.31 Household and sanitary paper	25	25	25	25	25	25
4.32 Wrapping and packaging paper and paperboard, total:	505	517	520	586	606	616
4.32.1 Linerboard:	80	80	80	115	125	130
4.32.11 Kraft liner:	80	80	80	115	125	130
4.32.11.1 Unbleached	80	80	80	115	125	130
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	60	60	60	95	105	110
4.32.21 Semi-chemical	40	40	40	40	40	40
4.32.22 Other fluting medium	20	20	20	55	65	70
4.32.3 Kraft wrapping and packaging paper:	164	172	175	171	171	171
4.32.31 Sack kraft	83	91	92	94	94	94
4.32.32 Other kraft wrapping and packaging paper	81	81	83	77	77	77
4.32.4 Folding boxboard:	119	119	119	119	119	119
4.32.41 Solid bleached board	30	30	30	30	30	30
4.32.42 Other folding boxboard	89	89	89	89	89	89
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	82	86	86	86	86	86
4.32.51 Paper	12	12	12	12	12	12
4.32.52 Paperboard	70	74	74	74	74	74
4.33 Other paper and paperboard, n.e.s., total:	32	34	50	55	55	55
4.33.1 Paper, n.e.s.	16	18	29	30	30	30
4.33.2 Paperboard, n.e.s.	16	16	21	25	25	25

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	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	2,609	2,733	2,741	2,930	3,013	3,073
4.1 Newsprint	148	148	148	188	204	220
4.2 Other printing and writing paper, total:	649	657	665	751	785	809
4.21 Coated:	206	206	206	241	241	241
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	443	451	459	510	544	568
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	1,812	1,928	1,928	1,991	2,024	2,044
4.31 Household and sanitary paper	162	195	195	195	195	195
4.32 Wrapping and packaging paper and paperboard, total:	1,590	1,673	1,673	1,736	1,769	1,789
4.32.1 Linerboard:	515	553	553	603	623	643
4.32.11 Kraft liner:	125	140	140	140	140	140
4.32.11.1 Unbleached	105	120	120	120	120	120
4.32.11.2 Bleached	20	20	20	20	20	20
4.32.12 Other linerboard	390	413	413	463	433	503
4.32.2 Fluting medium:	465	480	480	480	480	480
4.32.21 Semi-chemical	90	90	90	90	90	90
4.32.22 Other fluting medium	375	390	390	390	390	390
4.32.3 Kraft wrapping and packaging paper:	170	190	190	190	190	190
4.32.31 Sack kraft	170	190	190	190	190	190
4.32.32 Other kraft wrapping and packaging paper	-	-	-	-	-	-
4.32.4 Folding boxboard:	330	340	340	340	340	340
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	110	110	110	123	136	136
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	60	60	60	60	60	60
4.33.1 Paper, n.e.s.	47	47	47	47	47	47
4.33.2 Paperboard, n.e.s.	13	13	13	13	13	13

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977 - 1982.

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	6,905	7,025	7,510	7,675	7,945	8,180
4.1 Newsprint	1,520	1,580	1,840	1,840	1,925	1,975
4.2 Other printing and writing paper, total:	1,050	1,105	1,150	1,195	1,230	1,325
4.21 Coated:	285	295	310	325	345	430
4.21.1 Wood containing	115	110	115	115	135	215
4.21.2 Wood free	170	185	195	210	210	215
4.22 Uncoated:	765	810	840	870	885	895
4.22.1 Wood containing	320	335	345	355	365	375
4.22.2 Wood free	445	475	495	515	520	520
4.3 Other paper and paperboard, total:	4,335	4,340	4,520	4,640	4,790	4,880
4.31 Household and sanitary paper	225	235	245	265	265	265
4.32 Wrapping and packaging paper and paperboard, total:	3,615	3,615	3,760	3,855	4,000	4,090
4.32.1 Linerboard:	1,130	1,155	1,160	1,150	1,235	1,295
4.32.11 Kraft liner:	1,080	1,115	1,135	1,120	1,205	1,265
4.32.11.1 Unbleached	1,000	1,020	1,040	1,035	1,120	1,180
4.32.11.2 Bleached	80	95	95	85	85	85
4.32.12 Other linerboard	50	40	25	30	30	30
4.32.2 Fluting medium:	380	380	425	465	465	470
4.32.21 Semi-chemical	375	375	420	460	460	465
4.32.22 Other fluting medium	5	5	5	5	5	5
4.32.3 Kraft wrapping and packaging paper:	1,215	1,160	1,215	1,240	1,280	1,285
4.32.31 Sack kraft	945	920	955	975	980	980
4.32.32 Other kraft wrapping and packaging paper	270	240	260	265	300	305
4.32.4 Folding boxboard:	600	650	685	725	740	745
4.32.41 Solid bleached board	225	220	235	245	245	245
4.32.42 Other folding boxboard	375	430	450	480	495	500
4.32.5 Other wrapping and packaging paper and paperboard, n. e. s.:	290	270	275	275	280	295
4.32.51 Paper	155	140	140	135	135	135
4.32.52 Paperboard	135	130	135	140	145	160
4.33 Other paper and paperboard, n. e. s., total:	495	490	515	520	525	525
4.33.1 Paper, n. e. s.	260	255	255	260	265	265
4.33.2 Paperboard, n. e. s.	235	235	260	260	260	260

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	975	975	980	980	990	990
4.1 Newsprint	200	200	200	200	200	200
4.2 Other printing and writing paper, total:	285	285	285	285	290	290
4.21 Coated:	40	40	40	40	40	40
4.21.1 Wood containing	10	10	10	10	10	10
4.21.2 Wood free	30	30	30	30	30	30
4.22 Uncoated:	245	245	245	245	250	250
4.22.1 Wood containing	130	130	130	130	135	135
4.22.2 Wood free	115	115	115	115	115	115
4.3 Other paper and paperboard, total:	490	490	495	495	500	500
4.31 Household and sanitary paper	90	90	95	95	95	95
4.32 Wrapping and packaging paper and paperboard, total:	360	360	360	360	365	365
4.32.1 Linerboard:	-	-	-	-	-	-
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	140	140	140	140	145	145
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	50	50	50	50	50	50
4.32.31 Sack kraft	30	30	30	30	30	30
4.32.32 Other kraft wrapping and packaging paper	20	20	20	20	20	20
4.32.4 Folding boxboard:	70	70	70	70	70	70
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	100	100	100	100	100	100
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	100	100	100	100	100	100
4.33 Other paper and paperboard, n.e.s., total:	40	40	40	40	40	40
4.33.1 Paper, n.e.s.	40	40	40	40	40	40
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

2	Other fibre pulp for making paper and paperboard, total:	25	-	25	-	25	-	25	-	25	25
2.1	Straw	-	-	-	-	-	-	-	-	-	-
2.2	Bagasse	-	-	-	-	-	-	-	-	-	-
2.3	Bamboo	-	-	-	-	-	-	-	-	-	-
2.4	Other (reeds, esparto, rags, etc.)	25	-	25	-	25	-	25	-	25	25

3	Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-
3.1	of which: non-coniferous	-	-	-	-	-	-	-	-

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	4,822	4,930	5,063	5,195	5,310	5,362
4.1 Newsprint	365	358	359	359	359	359
4.2 Other printing and writing paper, total:	1,231	1,278	1,322	1,358	1,375	1,378
4.21 Coated:	393	408	424	441	445	445
4.21.1 Wood containing	36	35	37	39	39	39
4.21.2 Wood free	357	373	387	402	406	406
4.22 Uncoated:	838	870	898	917	930	933
4.22.1 Wood containing	45	46	45	46	47	47
4.22.2 Wood free	793	824	853	871	883	886
4.3 Other paper and paperboard, total:	3,226	3,294	3,382	3,478	3,576	3,625
4.31 Household and sanitary paper	422	435	444	448	473	479
4.32 Wrapping and packaging paper and paperboard, total:	2,277	2,329	2,394	2,453	2,518	2,558
4.32.1 Linerboard:	371	363	385	416	422	423
4.32.11 Kraft liner:	-	-	-	-	-	-
4.32.11.1 Unbleached	-	-	-	-	-	-
4.32.11.2 Bleached	-	-	-	-	-	-
4.32.12 Other linerboard	371	363	385	416	422	423
4.32.2 Fluting medium:	503	544	567	578	592	599
4.32.21 Semi-chemical	164	171	173	173	173	173
4.32.22 Other fluting medium	339	373	394	405	419	426
4.32.3 Kraft wrapping and packaging paper:	179	177	178	178	178	178
4.32.31 Sack kraft	54	54	54	54	54	54
4.32.32 Other kraft wrapping and packaging paper	125	123	124	124	124	124
4.32.4 Folding boxboard:	438	455	464	469	500	530
4.32.41 Solid bleached board	-	-	-	-	-	-
4.32.42 Other folding boxboard	438	455	464	469	500	530
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	786	790	800	812	826	828
4.32.51 Paper	331	329	330	331	333	335
4.32.52 Paperboard	455	461	470	481	493	493
4.33 Other paper and paperboard, n.e.s., total:	527	530	544	577	585	588
4.33.1 Paper, n.e.s.	273	282	289	298	302	305
4.33.2 Paperboard, n.e.s.	254	248	255	279	283	283

[illegible]

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	894	948	1,073	1,164	1,195	1,201
4.1 Newsprint	80	80	80	80	80	80
4.2 Other printing and writing paper, total:	265	307	321	327	327	327
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	549	561	672	757	788	794
4.31 Household and sanitary paper	24	29	31	31	31	31
4.32 Wrapping and packaging paper and paperboard, total:	426	431	539	624	655	661
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	..	..	..	..	..	..
4.32.21 Semi-Chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	99	101	102	102	102	102
4.33.1 Paper, n.e.s.	..	..	..	..	..	..
4.33.2 Paperboard, n.e.s.	..	..	..	..	..	..

	1977						1978		1979		1980		1981	1982
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	Total capacity
	----- 1,000 metric tons (air dry) per year -----													
Country: AUSTRALIA														
1 Wood pulp for making paper and paperboard, total:	758	7	799	6	826	6	854	6	966		998			
1.1 Mechanical	201	7	232	6	245	6	259	6	371		403			
1.11 of which: non-coniferous	126	-	126	-	127	-	125	-	147		147			
1.2 Chemi-mechanical and semi-chemical	331	-	331	-	331	-	331	-	331		331			
1.21 of which: non-coniferous	88	-	88	-	94	-	94	-	94		94			
1.3 Chemical, total:	226	-	236	-	250	-	264	-	264		264			
1.31 Unbleached sulphite	-	-	-	-	-	-	-	-	-		-			
1.31.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-			
1.32 Bleached and semibleached sulphite	56	-	56	-	56	-	56	-	56		56			
1.32.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-			
1.33 Unbleached sulphate and soda	60	-	65	-	65	-	65	-	65		65			
1.33.1 of which: non-coniferous	20	-	20	-	20	-	20	-	20		20			
1.34 Bleached and semibleached sulphate and soda	110	-	115	-	129	-	143	-	143		143			
1.34.1 of which: non-coniferous	110	-	115	-	118	-	121	-	121		121			
2 Other fibre pulp for making paper and paper-board, total:	4	-	5	-	5	-	5	-	5		5			
2.1 Straw	-	-	-	-	-	-	-	-	-		-			
2.2 Bagasse	-	-	-	-	-	-	-	-	-		-			
2.3 Bamboo	-	-	-	-	-	-	-	-	-		-			
2.4 Other (reeds, esparto, rags, etc.)	4	-	5	-	5	-	5	-	5		5			
3 Dissolving pulp (wood and other fibrous raw materials)	-	-	-	-	-	-	-	-	-		-			
3.1 of which: non-coniferous	-	-	-	-	-	-	-	-	-		-			

	1977	1978	1979	1980	1981	1982
	1,000 metric tons per year					
4 Paper and Paperboard, total:	1,447	1,535	1,601	1,685	1,885	1,910
4.1 Newsprint	208	208	208	208	384	384
4.2 Other printing and writing paper, total:	224	225	229	233	235	237
4.21 Coated:	36	38	42	44	46	46
4.21.1 Wood containing	21	23	27	29	31	31
4.21.2 Wood free	15	15	15	15	15	15
4.22 Uncoated:	188	187	187	189	189	191
4.22.1 Wood containing	11	15	10	9	7	8
4.22.2 Wood free	177	172	177	180	182	183
4.3 Other paper and paperboard, total:	1,015	1,102	1,164	1,244	1,266	1,289
4.31 Household and sanitary paper	107	110	112	112	114	117
4.32 Wrapping and packaging paper and paperboard, total:	908	992	1,052	1,132	1,152	1,172
4.32.1 Linerboard:	..	..	..	..	..	..
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	68	82	82	82	82	82
4.32.21 Semi-chemical	68	82	82	82	82	82
4.32.22 Other fluting medium	-	-	-	-	-	-
4.32.3 Kraft wrapping and packaging paper:	..	..	..	..	..	..
4.32.31 Sack kraft	..	..	..	..	..	..
4.32.32 Other kraft wrapping and packaging paper	..	..	..	..	..	..
4.32.4 Folding boxboard:	..	..	..	..	..	..
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	..	..	..	..	..	..
4.32.51 Paper	..	..	..	..	..	..
4.32.52 Paperboard	..	..	..	..	..	..
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

[illegible]

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	759	791	791	791	791	791
4.1 Newsprint	325	325	325	325	325	325
4.2 Other printing and writing paper, total:	41	41	41	41	41	41
4.21 Coated:	-	-	-	-	-	-
4.21.1 Wood containing	-	-	-	-	-	-
4.21.2 Wood free	-	-	-	-	-	-
4.22 Uncoated:	41	41	41	41	41	41
4.22.1 Wood containing	-	-	-	-	-	-
4.22.2 Wood free	41	41	41	41	41	41
4.3 Other paper and paperboard, total:	393	425	425	425	425	425
4.31 Household and sanitary paper	45	47	47	47	47	47
4.32 Wrapping and packaging paper and paperboard, total:	348	378	378	378	378	378
4.32.1 Linerboard:	103	103	103	103	103	103
4.32.11 Kraft liner:	103	103	103	103	103	103
4.32.11.1 Unbleached	99	99	99	99	99	99
4.32.11.2 Bleached	4	4	4	4	4	4
4.32.12 Other linerboard	-	-	-	-	-	-
4.32.2 Fluting medium:	25	25	25	25	25	25
4.32.21 Semi-chemical	24	24	24	24	24	24
4.32.22 Other fluting medium	1	1	1	1	1	1
4.32.3 Kraft wrapping and packaging paper:	94	94	94	94	94	94
4.32.31 Sack kraft	56	56	56	56	56	56
4.32.32 Other kraft wrapping and packaging paper	38	38	38	38	38	38
4.32.4 Folding boxboard:	126	156	156	156	156	156
4.32.41 Solid bleached board	..	..	..	..	..	..
4.32.42 Other folding boxboard	..	..	..	..	..	..
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	-	-	-	-	-	-
4.32.51 Paper	-	-	-	-	-	-
4.32.52 Paperboard	-	-	-	-	-	-
4.33 Other paper and paperboard, n.e.s., total:	-	-	-	-	-	-
4.33.1 Paper, n.e.s.	-	-	-	-	-	-
4.33.2 Paperboard, n.e.s.	-	-	-	-	-	-

FAO WORLD PULP, PAPER AND PAPERBOARD CAPACITY SURVEY 1977-1982

94 Country: U.S.S.R. ^{a/}

	1977		1978		1979		1980		1981		1982	
	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp	Total capacity	of which market pulp
----- 1,000 metric tons (air dry) per year -----												
1 Wood pulp for making paper and paperboard, total:	9,250	1,500	9,650	1,600	10,050	1,700	10,450	1,800	10,850	1,850	11,250	1,900
1.1 Mechanical	2,150	-	2,200	-	2,250	-	2,300	-	2,350	-	2,400	-
1.11 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.2 Chemical-mechanical and semi-chemical	500	-	550	-	600	-	650	-	700	-	750	-
1.21 of which: non-coniferous	..	-	..	-	..	-	..	-	..	-	..	-
1.3 Chemical, total:	6,600	1,500	6,900	1,600	7,200	1,700	7,500	1,800	7,800	1,850	8,100	1,900
1.31 Unbleached sulphite	2,750	350	2,800	350	2,850	350	2,900	350	2,950	350	3,000	350
1.31.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.32 Bleached and semibleached sulphite	..	..	..	..	..	..	..	..	..	..	..	..
1.32.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.33 Unbleached sulphate and soda	2,950	1,000	3,100	1,100	3,250	1,200	3,400	1,300	3,550	1,350	3,700	1,400
1.33.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
1.34 Bleached and semibleached sulphate and soda	900	150	1,000	150	1,100	150	1,200	150	1,300	150	1,400	150
1.34.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..
2 Other fibre pulp for making paper and paperboard, total:	450	..	475	..	500	..	525	..	550	..	575	..
2.1 Straw	..	..	..	..	..	..	..	..	..	..	..	..
2.2 Bagasse	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Bamboo	-	-	-	-	-	-	-	-	-	-	-	-
2.4 Other (reeds, esparto, tags, etc.)	..	..	..	..	..	..	..	..	..	..	..	..
3 Dissolving pulp (wood and other fibrous raw materials)	1,175	1,175	1,250	1,250	1,325	1,325	1,400	1,400	1,475	1,475	1,550	1,550
3.1 of which: non-coniferous	..	..	..	..	..	..	..	..	..	..	..	..

^{a/} Secretariat estimate.

	1977	1978	1979	1980	1981	1982
	----- 1,000 metric tons per year -----					
4 Paper and Paperboard, total:	10,500	11,000	11,500	12,000	12,500	13,000
4.1 Newsprint	1,600	1,650	1,700	1,750	1,800	1,850
4.2 Other printing and writing paper, total:	1,350	1,400	1,450	1,500	1,550	1,600
4.21 Coated:	..	..	..	..	..	..
4.21.1 Wood containing	..	..	..	..	..	..
4.21.2 Wood free	..	..	..	..	..	..
4.22 Uncoated:	..	..	..	..	..	..
4.22.1 Wood containing	..	..	..	..	..	..
4.22.2 Wood free	..	..	..	..	..	..
4.3 Other paper and paperboard, total:	7,550	7,950	8,350	8,750	9,150	9,550
4.31 Household and sanitary paper	115	115	115	115	115	115
4.32 Wrapping and packaging paper and paperboard, total:	6,770	7,155	7,540	7,925	8,310	8,695
4.32.1 Linerboard:	1,300	1,380	1,460	1,540	1,620	1,700
4.32.11 Kraft liner:	..	..	..	..	..	..
4.32.11.1 Unbleached	..	..	..	..	..	..
4.32.11.2 Bleached	..	..	..	..	..	..
4.32.12 Other linerboard	..	..	..	..	..	..
4.32.2 Fluting medium:	1,130	1,220	1,310	1,400	1,490	1,580
4.32.21 Semi-chemical	..	..	..	..	..	..
4.32.22 Other fluting medium	..	..	..	..	..	..
4.32.3 Kraft wrapping and packaging paper:	1,330	1,490	1,650	1,810	1,970	2,130
4.32.31 Sack kraft	1,050	1,160	1,270	1,380	1,490	1,600
4.32.32 Other kraft wrapping and packaging paper	280	330	380	430	480	530
4.32.4 Folding boxboard:	1,470	1,510	1,550	1,590	1,630	1,670
4.32.41 Solid bleached board	640	680	720	760	800	840
4.32.42 Other folding boxboard	830	830	830	830	830	830
4.32.5 Other wrapping and packaging paper and paperboard, n.e.s.:	1,540	1,555	1,570	1,585	1,600	1,615
4.32.51 Paper	620	625	635	640	650	655
4.32.52 Paperboard	920	930	935	945	950	960
4.33 Other paper and paperboard, n.e.s., total:	665	680	695	710	725	740
4.33.1 Paper, n.e.s.	340	345	350	355	360	365
4.33.2 Paperboard, n.e.s.	325	335	345	355	365	365
a/ Secretariat estimate.						

