

iv) Chemicals*

Cl₂ ----- 4 - 5 days
NaOH

e) N° of employee

Totally 650 person and three shifts.

f) Miscellaneous

i) Several paper companies in this country have agreement that each factory mainly produces special product in order to avoid severe competition. Therefore this factory produces manily printing and writing paper.

ii) Some of products from this factory is exported to Argentina by the means of truck transportation using ferry.

iii) Fuel consumption

20% ----- Heavy fuel oil

80% ----- Wood and black liquor

They plan to convert to woods from fuel oil.

iv) Wharf

At a wharf annexed FNP factory, a 3.000 DWT tanker belonged to ANCAP (state petroleum company) is moored. According to a port representative, dredging of the port has been made once per three year by the reason of sand accumulation from upstream.

* Those chemicals are supplied to this factory from NaOH production factory far from 100 km.

Analysis: Water from river

F.N.P. (Rio de la Plata) 1984.9.22

pH	7.9
Color (Pt Carbonate method)	2.50
Electric conductivity	122
Solid Total	163 mg/l
suspended solid	38 mg/l
dissolved solid	125 mg/l
Total hardness (CaCO ₃)	35.72 mg/l

Anions

HCO ₃ (Bicarbonate) Compound	45.63 mg/l
CO ₃ Compound	0 mg/l
OH (hydroxi) Compound	0 mg/l
SiO ₂ (Salica) Compound	2.0 mg/l
SO ₄ Compound	19.5 mg/l
CL Compound	7.9 mg/l
NO ₃ (Nitrate) Compound	0.13 mg/l

Cations

Ca Compound (Ca)	11.25 mg/l
Mg Compound (Mg)	1.83 mg/l
Na Compound (Na)	4 mg/l
K Compound (Na)	0.55 mg/l
Fe Compound (Fe ₂ O ₃)	4.15 mg/l
Al Compound (Al ₂ O ₃)	trace
KMnO ₄ Consum (O ₂)	3.41 mg/l
CO ₂ gas	1 mg/l
Alkalinity (phenolphthalein)	0 mg/l
Alkalinity (Heliznitin) CaCO ₃	37.4 mg/l

MINUTES OF MEETING

(Factory Survey)

II PAPELERA MERCEDES S.A. (PAMER)

- 1) Date : December 12, 1984 (9 AM - 1 PM)
- 2) Place : PAMER
- 3) Attendants:

PAMER SIDE

Dr. ANGEL CANTONI, Director Delegado

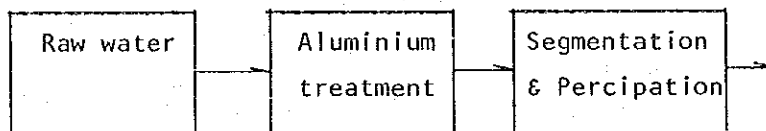
STUDY MISSION SIDE

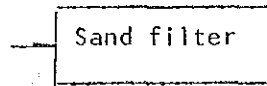
Mr. Y. MIKAMI, Study Team Leader
Mr. M. ONOZUKA, Engineer
Mr. F. SAKABE, Engineer
Mr. K. MATSUBARA, Engineer
Mr. T. SENTOKU, Engineer
Mr. T. SATO, Engineer

LATU

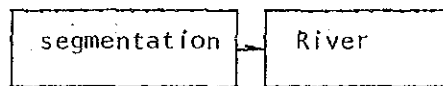
Sr. RAUL DE CASTRO

- 4) Outline of the factory survey
This factory produces mainly liner board.
They have GP and SCP facilities and their annual production 11.000 t.
- 5) Major topics of the discussion
 - a) Facility of factory
 - i) Water treatment for process water





ii) Waste water



iii) Electricity

- . Capacity 9.000 KW (80% of it-----self-generation)
- . Bark boiler (12t/h) is installed and its generating capacity is 800 KW. Beside it 1000 KW of diesel generator is also installed and it has been used once a year in case of emergency such as black-out.

The bark boiler was supplied by the Brazil Mitsubishi

capacity of bark boiler ----- 12 t/h
 40 Kg/cm²
 400 °C
 1.5 Million U\$S

b) Transportation

Mainly truck transportation for woods is carried out in this factory. However, railway transportation is cheaper than truck. For example it costs 280 pesos/ton including charge/discharg for 120 km. distance.

Water transportation (raft) is prohabled here.

c) Raw wood prices and cost

(1) Wood prices from outside plantation

(1) wood price

Pine 1100 Peso/ton 2.2m length & max dia 20 cm.

Eucalyptus 550 peso/ton (for fuel)

d) Labor wage

750 - 1200 U\$\$ for engineer plus 2 months bonus

1700 U\$\$ for invited engineer

110 - 120 U\$\$ for labor plus 57% allowance

e) Factory organization

. Total employee (Factory) 330 persons
other 330 persons in Montevideo
for box making

. Breakdown of employee

Reliable person	30 - 35	persons
Administration	20	persons
Maintenance	70	persons
Production line	210	persons

330 persons

Production line

Pulping	30	persons
Paper	50 -55	persons
Utility	18	persons
Barking	32	persons

. Production line has 3 (Three) shifts and working time is 8 hrs.
However on Sunday the line fully stops.

. On Sunday of every 15 days, production line is inspected and maintained

(2) obtaining area Within 40 - 130 Km & average 60 Km distance
 from CAJA NORTAÑA. 120 Km 50%
 100 Km 40%

Two Type Cut & loading	350 Pesos
Tree as it is	<u>200 Pesos</u>
	550 Pesos
+ Transportation	<u>550</u>
	1100 Pesos

(3) Moisture : 55 - 60%

(2) Wood prices from own plantation.

(1) Pine Stand wood	120 Pesos
Cutting cost	<u>350 Pesos</u>
	470 Pesos

Transportation	<u>200 Pesos</u>
	670 Pesos

(2) Land cost : 300 - 350 U\$S/ha.

(3) Future plan

In future wood procurement is to be achieved up to 60 - 70%
 from own plantation.

(4) Production record

Double colgated box for citrus

1983	2.28 Million boxes
1984	3.0 " "
1990	8.0 " " (expected by citrus producers)

Citruses are now exported to Holland and Sweden.

f) Factory space

Factory 8 ha

Total 32 ha

Land cost 350 U\$S/ha

g) Analysis of pulp manufacturing cost

PAMER S.A. MERCEDES

	PESO	
Salario	1069,24	
Leyes Sociales	571,22	
Gastos Varios	244,66	
Gastos Diferidos	220,09	
Energía UTE	849,15	
Gastos Fletes	288,17	
Consumo Materias Primas vs	96,23	
Consumo Combustibles	265,13	
Consumo Maderos p/vapor	199,62	
Consumo Materiales y repaseles	364,94	
Consumo Talas y filtros	17,91	
Amortizaciones	739,10	4%
Heclesa Pino1	5129,44	27.23%
Na_2CO_3	5638,63	
Na_2SO_3	2128,52	
Agua	884,43	
Total	18836,34/t/USCP	

DOCUMENT LIST

AREA PLAN DRAWING OF FRAY BENTOS	Dec. 12
TOPOGRAPHIC DRAWING OF FRAY BENTOS	CONSTRUCTION DEPARTMENT,
AERIAL PHOTOGRAPH OF FRAY BENTOS	PREFECTURAL OFFICE
DRAWING OF PRIVATE WHARF OF ANGLO MEAT FACTORY	Dec. 14
DRAWING OF BUILDING OF ANGLO MEAT FACTORY	ANGLO MEAT FACTORY
	FRAY BENTOS
LIST OF ARRIVED VESSEL OF FRAY BENTOS PORT	Dec. 14
PLAN DRAWING OF FRAY BENTOS PORT	PORT AUTHORITY
DATA OF WEATHER CONDITION OF FRAY BENTOS AREA	OFFICE,
TARIFF OF FRAY BENTOS PORT	FRAY BENTOS
GENERAL DOCUMENTS OF FRAY BENTOS	Dec. 15
	DR. MARIO H. CARMINATTI

SITE SURVEY REPORT BY PLANTATION GROUP

1. Date: Dec.11, 1984 / 11:00 - 13:30
2. Place: Oficina Forestal y Depósito de Madera & Plantation
3. Attendant:

URUGUAY SIDE

ING. AGR. RAUL MENENDEZ RAMPA	} Departamento Forestal
ING. AGR. OSCAR R.ARCA REQUEIRA	
ING. AGR. DANIEL SAN ROMAN	Dirección Forestal, Ministerio de Agricultura y Pesca.
Sr. GUILLERMO REYES	(As interpreter)

Study Mission Side

MR. J. MOROKUMA
MR. F. SAKABE
MR. T. USHIJIMA
MR. H. YAMAMOTO (As interpreter)

4. Main Topics discussed

1) Pulp Test Samples

FNP had prepared Pulp Test Samples before Study Mission arrived at the above mentioned place as follows

i) E. Globulus	}	Length : about 25 cm
ii) E. Maidenii		Dia : about 10 cm
iii) E. Grandis		Pieces : 3/each species
iv) E. ?		Age : 4 years old

Date to have cut: Dec, 10, 1984

FNP offered that FNP could arrange to cut Test Samples in the plantation side if Study Mission wants to see cutting samples and that FNP could provide four species if S.M.wants,

Study Mission accepted Test Samples of E.Glob. and E. Maideni in accordance with the discussion result regarding the collection of Test Samples.

FNP asked S.M. what sorts of test would be carried out in Japan and S.M. gave brief answer about the pulping test.

2) Information of plantation

- i) Plantation Areas, about 4000 ha
- ii) Species : various species of E.
- iii) Cutting Age : 12 years old
- iv) Interval of planting: 2 m x 2 m in the past
2 x 3 at the moment
- v) Examples of mean annual increment
 - E.Globulus : 12 years old 17 m³/ha./year
 - E.Grandis : 11 years old 164 tons./ha.=15m³/ha./year
 - E.Globulus : 1100 kg/m³ (without bark)
 - E.Grandis : 980 kg/m³ (without bark)
 - E.Grandis : 8 years old 20 m³/ha/year (2 x 2 m)
(DBH, 13, 17,21,cm)
(H. 16 m up to 7 cm top)
- vi) Seed : E. Globulus can bear seed in FNP own plantation.
FNP is importing necessary seed from South Africa.
- vii) Storm damage : No
- viii) Frost damage : Yes; late frost, early frost
- ix) Thinning : Without thinning in case of E.
With chinning in case of Pine, but there are no demand to thinned wood.
So most of plantation owners can not make thinning because of economic issues.

x) Delivery cost of pulpwood : 10 u\$/m³
fuel wood: 8 u\$/m³

xi) Natural regeneration of E.

1st Cut	2nd Cut	3rd Cut	4th Cut
12 years old	20 years	28 years	36 years

xii) Loading capacity of truck

truck 12 m³ trailer 15 m³ total 27 m³

1. Date : Dec. 12, 1984 / 9:50 - 14:30 - 17:50
2. Place: Pamer's Plantation in Soriano, 20 km from Mill
 " " in Rio Negro, 40 km from Mill
3. Attendant :

URUGUAY SIDE

ING.AGR. LUIS SORIA PAMER
 Sr. ELIMS FIGUEROA "

ING.AGR. DANIEL SAN ROMAN
 Sr. GUILLERMO REYES (TRANSLATOR)

Study Mission

Mr. J. MOROKUMA
 Mr. T. USHIJIMA

4. MAIN TOPICS DISCUSSED

1) Information of Plantation in Soriano

Area : 168 ha. 20 Km from Mill

Planted Species: mainly E.

Frost and grass are two main obstacles against plantation in this area.

E. Grandis suffers frost damage easily. So PAMER is now planting E.TRETICORNIS and E.ROSTRATA (= E. CAMANDULENSIS)

Cutting Age : 6 - 8 years old (DBH 12 cm, H 8 - 10 m)

M.A.I. : average 25 m³/ha/year (will continue up to 10 - 12 years old)

Spacing: 2⁵/₂ x 2⁵/₂ m new plantation
 2 x 2 m old plantation

Populus:

cutting age : 6 years old

expecting yield : 250 tons/ha at the age of 6.

Spacing : 4m x 2 m

Salix :

cutting age : 6 years old

expecting yield: 300 tons/ha at the age of 6

Salix : 3rd cutting

2nd cutting was made 6 years ago, PAMER bought the area after 2nd cutting and thinning of 200 tons/ha. will be made this year, but PAMER expects 350 tons/ha of final cut 3 years after the thinning.

Usually, 4 or 5 harvesting can be expected from one root during 20 years.

2) Information of Plantation in Rio Negro

Area: 850 ha. 40 Km from Mill

Planted species : Pine, E., Populus,

Pinus taeda:

Pruning will be made at the age of 4 - 5, or at the time when DBH reaches to 6 -9 cm.

Pinus ELLIOTTII : for pulpwood

Pruning : DBH 7 - 8 cm

Thinning : 6 - 7 years, 100 tons/ha. (equivalent to 30%)

Final cut: 10 - 12 years, 350 tons/ha.

Pinus ELLIOTTII : for SAWLOG rate of thinning

1st pruning and thinning : 6 - 7 years old 30%

2nd " " :10 -12 " " 30%

Final cut :18 -20 " "

(400 - 500 trees/ha. originally 1.100 trees/ha 3 x 3 m)

Pinus taeda plantation of 18 years old

Area : 3 ha.

DBH : 26 cm H: 18 m

Rate of thinning : 30 - 40%

Expecting volume from thinning: 400 - 500 t from total
area (→ 133 - 167 tons/ha ÷ 35% = 380 - 476 tons/ha. →
present volume per ha.)

Final cut : 20 - 21 years old for sawlog
400 - 500 tons/ha.

3) Nursery

			ready for planting
Production in 1984 : Pine	:	100.000 pieces	1 year old
E.	:	200.000 "	"
Populus	:	50.000 "	"

Size of pot : ϕ 9 cm x 15 cm.

BARBADOS : Seedling with root

Estaca : direct cutting

4) Mill consumption and purchasing price of pulpwood

E. 32.000 tons/year for energy and semi chemical pulp

Pine 12.000 "

Populus 4 - 5.000 tons/year

E. (red. white) L:2 ²⁰	ϕ - 25 cm	u\$ 500	/ton.	at mill
E. (red. white) L:1 ¹⁰	ϕ 25 - 60	" 420	"	"
E. (red, white) without bark	ϕ - 25	" 600	"	"
Pine & Populus without bark	ϕ - 25	" 770	"	"

(distance : about 100 - 120 km)

Stumpage of E. (Price of standing tree) u\$220/ton

<u>Density</u>		Purchasing rate/consumption
E. (red, white)	1.000 kg/m ³	80 -90%
Pine	600 - 650	100 %
Populus	450 - 500	20 %

5) PAMER'S policy of plantation

i) to control the pulpwood purchaching price.

1. Date: Dec. 13, 1984/11.00 - 14.00
2. Place: Caja Bancaria
3. Attendant:

URUGUAY SIDE

Sr. Santos Ronchette, Caja Bancaria
Ing. Agr. Daniel San Roman
Sr. Guillermo Reyes (as interpreter)

Study Mission Side

Mr. J. MOROKUMA
Mr. F. SAKABE
Mr. T. USHIJIMA
Mr. H. Yamamoto (as interpreter)

4. Main Topics

1) Pulp Test Samples

Caja Bancaria guided Study Mission to two logging sites to give samples of Pinus taeda and Populus alamo as requested by Study Mission.

Pinus taeda is about 12 years old and Populus alamo is 17 years old.

Caja Bancaria felled a standing tree of Pinus elliotti to make a sample, which is 16 years old.

And a sample of E. Grandis which is 14 years old was selected from piled logs.

All samples were debarked at the collected places.

2) Plantation data

Caja Bancaria has two blocks of lands. One is 900 ha. wide and the other is 6,000 ha. The land of 900 has not been planted yet.

Caja Bancaria started plantation about 20 years ago, having bought a livestock farm. Up to now, Caja Bancaria bought 3 livestock farms, totaling 6.900 ha .

Since Caja Bancaria's forest engineer was not in the office, Study Mission could not get detailed data of its plantation.

3) Estimation of *Pinus elliottii*

Age: 16 years old

DBH: 22 cm in average H: 16 m

Spacing: $2\frac{5}{2} \times 2\frac{5}{2}$ - 1600 trees/ha.

Present number of trees = 1600 x 70% = 1.120 trees (estimate)

$$\frac{(0.22)^2}{(2)^2} \times \pi \times 16 \text{ m} \times 0,4 = 0.24 \text{ m}^3/\text{tree}$$
$$\times 0.5 = 0.30$$

$$0.24 \times 1.120 = 270 \text{ m}^3/\text{ha} \text{ (with bark)} \quad 16\frac{9}{10} \text{ m}^3/\text{ha}/\text{year}$$
$$270 \times 0.75 = 200 \text{ m}^3/\text{ha} \text{ (without bark)} \quad 12\frac{7}{10} \text{ m}^3/\text{year}/\text{ha}$$
$$0.30 \times 1.120 = 340 \text{ m}^3/\text{ha} \text{ (with bark)} \quad 21\frac{3}{10} \text{ m}^3/\text{ha}/\text{year}$$
$$340 \times 0.75 = 255 \text{ m}^3/\text{ha} \text{ (without bark)} \quad 15\frac{9}{10} \text{ m}^3/\text{ha}/\text{year}$$

1. Date: Dec 15, 1984/8.30 - 18.00
2. Place: 2 plantations of Forestadora y maderera del Norte S.A.
3. Attendant

Uruguay side

Srta. Ing. Agr. Rosario Pou Ferrari

Sr. Ing. Agr. Daniel San Roman

Plantation owner: Sr. Lorenzo Balerio

Member of Excursion Tour: Sr. Alberto Voulminot
(Presidente of Industrias Forestales)

Study Team side

Mr. J. MOROKUMA

Mr. T. USHIJIMA

4. Main Topics

- 1) Study Team joined to Excursion Tour Group of plantation owners and government officials by Srta. Rosario Pou Ferrari's suggestion and introduction.
She helped Study Team during the tour.
And FYMNSA'S forest engineer Sr. Krall could not attend because his daughter delivered baby.
- 2) Partial translation of the papers given by FYMNSA a attached herewith.

FYMNSA (Forestadora Y maderera del norte S.A.)

I. General Aspects

I.1. Activities description

FYMNSA is a forestry and livestock company in Rivera since 1974. Its purpose was to develop forestry in sandy zone in Rivera and Tacuarembó. This project brought an increase in the number of workers in this region.

In order to achieve the purpose, FYMNSA built

- houses for workers and their families,
- school, etc.

The plantation began in a 5,000 ha. farm (today : 6,850 ha.)

At the same time the company dedicated to livestock activity.

I.2. Location

The plantation is 9 km far from the railroad and the town of Paso Atoques, and 11 km far from the town of Tranqueras.

The plantation is over the geological formation called Tacuarembó.

Its area is about 1,600,000 ha.

1,000,000 ha. of this area can be forested.

Characteristics of the soil :

- a) high depth, sandy soil, low productivity, erosionable,
- b) low productivity, CONEAT index : 35% to 75%.

This is the reason why this soil is not good for livestock and agriculture. The climate of this region favours species of quick growth (P.taeda, P.elliottii, E.grandis) because of the high amount of rain.

II. Main Activity : Forestry

II.1. Basic topics

II.1.1. Introduction

The original project was approved by Forestry Direction (2,500 ha.). Today we are doing the 2nd part of the project (2,000 ha.).

II.1.2. Nursery

The seedlings are produced in their own nursery. The seed is from orchard seed (South Africa).

II.1.3. Forestry

Almost 100% of the plantation is of *P. taeda* and *P. elliottii*, 1100 trees/ha.

Fig. 1 Forestry Area

Year	Ha.	
1976	100	
1977	740	
1978	830	
1979	330	
1980	480	
1984	1,280	"effective plantation area is about 80%" suggested by Ing. Daniel.
Total	3,730	

"Ing. Daniel gave the following data.

Actual result of soil preparation in the 2nd project.

16 hours (2 shift) / day x 45 days

60cm wide x 5cm deep of cultivation was made by Rotunador plus 50hp tractor along the contour line.

Plantation area : about 1,280 ha. x 80% = 1,024 ha.

Species : almost 100% P.Taeda 4 x 3m
a few P.Patuda 4 x 3m

Foremen : 4

Plantation workers : 44

Ants control : 6

Cooks : 2

Cook-helpers : 2

Total : 58 x 30 days

II.1.4. Forest Management

i) Ants control

The control begins 6 months before the forest planting, and continues during the 1st, 2nd and 3rd year of planting.

ii) Prunning

All the trees are prunned up to 2.20m in height between the 3rd and 4th year. The trees to be remaind until final cut (350 trees) are prunned up to 5m in height between the 6th and 7th year. "Prunning is never done over 2/3 of tree height because crown becomes too small to grow."

iii) Thinning

The first thinning is between 9th and 10th year, remaining 750 trees/ha. The 2nd thinning is between the 14th and 15th year, remaining 350 trees/ha.

Final cut is from the 18th to 20th year.

II.1.5. Destination of the wood (Uses)

- a) Thinning : chips, pulpwood, packing, sawlog.
- b) Final cut : veneer, sawlog (high quality), etc.
- c) Residues (of logging) should be to energy source.

II.2. Labour

Fig.2. Average 60 people

Year	Labour	1975=100
1975	33	100
1976	46	140
1977	56	170
1978	59	179
1979	60	182
1980	57	173
1981	62	188
1982	65	197
1983	65	197
1984	80	243

Transitory labour : during plantation, pruning and thinning
: 90 people.

In livestock activities : 1 man/400 ha.

(before 1975 : 1 man/1,000 ha)

Today, FYMNSA : 1 man/76 ha.

Fig. III

Year	Ha./man
1975	152
1978	85
1981	81
1984	76

II.3. Incencives and Finacial

II.3.1. Ways of Financial

The whole project was made with our own fund.

II.3.2. Incentives (just explained)

II.4. Forestry and livestock

Fig. IV

Year	Amount of cattle breed	Amount of sheep
1976	2,102	1,813
1977	2,831	2,660
1978	2,398	1,750
1979	1,812	1,494
1980	1,862	2,601
1981	2,163	2,311
1982	2,094	979
1983	2,089	596
1984	2,168	900

The amout of animals per ha. is similar to other farms with an equal CONIAT index (55%)

Fig. V

Year	Cattle breed only (ha.)	Cattle and forestry (ha.)
1976	3,986	-
1977	3,246	-
1978	2,416	30
1979	2,086	203
1980	1,606	673
1981	1,606	1,362
1982	1,606	1,948
1983	1,606	2,264
1984	1,456	2,480

Fig. VI
Production of livestock meat (of cattle and sheep)

Year	Weight of living meat (kg)
1977	93,146
1978	93,146
1979	107,909
1980	107,909
1981	115,519
1982	115,519
1983	123,450

II.5. Others

Eucaliptus 30 ton/ha./year = 6 ton of oil = U\$ 1,380

Extensive land production (34.6 kg of meat/ha./year + 3.0 kg of
wool/ha./year) = U\$ 55

"Data given by Ing. Daniel (regarding FYMNSA)

- 1) Soil preparation cost in 1984 : U\$ 35/ha., very cheap
- 2) Cost of 1st pruning : U\$ 22 - 23/ha.
" 2nd " : " 29 "
- 3) Expecting increase of diameter 2.5 - 3.4 (=3cm)/year in DBH
- 4) Increment : 23 ton/ha./year at the age of 18 - 20
- 5) Rainfall : 1500 mm/year in the North of Uruguay
800 - 900 in the South "
- 6) Growing period : 10 months from Aug. to May in the North
8 " in the South

7) Plantation observed

Planted year : 1976, 8 years old

Ave. DBH : 20cm, H : 14m

thinned logs ^o20cm l = 2.40m, 160 - 180 kg/tree

Planted year : 1984, soil preparation was made 1 month before
planting.

Sheep enter the plantation 6 months after planting.

Cattle " " 12 " " " . "

1. Date: Dec. 16, 1984/10:30 - 11:00 17:00 - 19:00

2. Place: Near Tacuarembó Project 23
on the way from Rivera to Melo

3. Attendant:

Uruguay side

Ing. Agr. Daniel San Román
Sr. Guillermo Reyes (As interpreter)

Study Mission side

Mr. T. USHIJIMA
Mr. J. MOROKUMA

4. Survey Result

Owner of Plantation : Michel Acle
Planted year : 1975, 9 years old
Areas : 50 ha.
Species : E. Grandis
Average DBH : 24 cm
Average Height : 18 m
Interval : 3 x 3 m = 1.100 trees/ha

Present number of trees (estimate)

$1.100 \times 65 - 70\% = 715 - 770$ trees/ha.

$$\frac{(0.24)^2}{(2)^2} \times \bar{n} \times 18 \times 0.65 = 0.59$$

$$\left. \begin{array}{l} \times 715 = 378 \\ \times 770 = 407 \end{array} \right\} \text{Ave. } 390 \text{ m}^3/\text{ha} \\ 44 \text{ m}^3/\text{ha}/\text{year (with bark)}$$

5. Mr. Daniel gave Study Team the explanation about FYMMA'S document which was given during the excursion tour and also the data he got in the Spanish language.
And also he gave the explanation of the forest incentive in detail.

1. Date: Dec. 17, 1984/8:00 - 13:00
2. Place: Estación Experimental Bañados de Medina
3. Attendant

Uruguay side

Ing. Agr. Fernando Martínez
Ing. Agr. Daniel San Roman
Sr. Guillermo Reyes (As interpreter)

Study Team Side

Mr. J. MOROKUMA
Mr. T. USHIJIMA

4. Main Topics

- 1) Ing. Fernando Martínez showed Study Team experimental comparison forests of various pine species and provenance test forests of Pinus Taeda in detail and gave the comparison result data of Pinus Taeda, which is attached herewith.
- 2) Ing. Daniel took notes of Ing Fernando's explanation on behalf of Mr. Morokuma and gave it to Mr. Morokuma. Also, Mr. Daniel gave procedencias situación actual de la forestación, en el Uruguay.

(Some data from the "Bicentenario" Test - 6 provenances of Pino Taeda)
 ALGUNOS DATOS DEL ENSAYO "BICENTENARIO" - 6 PROCEDENCIAS DE PINO TAEDA

Promedios de 6 árboles, 2 repeticiones; muestreo= 25%. Edad 18 años.
 (Average of 6 trees, 2 replications; to sample: 25% Age: 18 years)

9/13

PROCEDENCIAS (Provenances)

	Sam Houston Texas	Howie Texas	Natchitoches Louisiana	Kisatchie Louisiana	Crossett Arkansas	Warren Georgia
(D.B.H)						
D.A.P. cm.	38,6	32,9	32,2	34,2	32,6	33,0
Total height altura total m.	17,85	15,70	15,42	16,65	17,05	16,73
Weight Aver. Tree Peso Prom. Arbol quilos (kg)	1117,2	692,8	692,3	802,0	772,3	741,5
TT /Ha Toneladas/Há.	438	272	271	314	303	291
TT/ha/y Ton./Há./Año.	24,1	15,1	15,1	17,5	16,8	16,2

Detail of trees
 Detalle de los árboles:

		1	2	3	Weight P. total	(Average) Promedio	TT/Ha Ton./Há.	Ton./Há./Año.
Sam Houston								
Texas	A	828	1147	1355	3300	1110,0	435,12	24,17
idem	B	1579	834	990	3403	1134,3	444,66	24,70
Howie								
Texas	A	576	734	920	2230	743,3	291,39	16,19
idem	B	555	708	624	1927	642,3	251,79	13,99
Natchitoches								
Louisiana	A	1089	609	593	2291	763,7	299,36	16,63
idem	B	598	633	632	1863	621,0	243,43	13,52
Kisatchie								
Louisiana	A	1134	694	726	2554	851,3	333,72	18,54
idem	B	526	991	741	2258	752,7	295,05	16,39
Crossett								
Arkansas	A	440	724	810	1974	658,0	257,94	14,33
idem	B	802	969	889	2660	886,6	347,57	19,31
Warren								
Georgia	A	611	922	730	2263	754,3	295,70	16,43
idem	B	639	677	872	2188	728,7	289,60	15,82

1. Date: Dec. 17, 1984/ 17.00 - 19.30
2. Place: Nuevo Hotel in Melo
3. Attendant

Uruguay side

Ing. Agr. Daniel San Roman
 Sr. Guillermo Reyes (As interpreter)

Study Team Side

Mr. J. MOROKUMA
 Mr. T. USHIJIMA

4. Main Topics Discussed

- 1) Study Team showed Ing. Daniel Discussion Material of Dec. 14, 1984, attached herewith, in order to have Study Team's intention regarding Draft Progress Report understood.
- 2) Both parties held a meeting on Dec. 17, 1984, in order to discuss the items which should be included in Draft Progress Report as the part of Plantation Survey Team.
- 3) The following are the result of discussion
 - i) Price of land U\$S 225/ha
 - ii) Cost of Plantation, cutting age and havesting volume

Year	Pine	E. and Populus
0	6.193,50	8.503,30
1	619,40	850,30
2	619,40	850,30
3	619,40	850,30
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
: 11	- (15 m ³ /ha/year)	500 (25m ³ /ha/year)
14		500 (30m ³ /ha/year)
:		:
20		500 (30m ³ /ha/year)
:		:
28		500 (25m ³ /ha/year)
:		:
36		(25m ³ /ha/year)

iii) Interest rate

LIBOR rate

iv) Logging cost

Pine N\$ 150/ton including loading cost with bark

E. and Populus N\$ 250/m³ including loading cost without bark

v) Transportation Cost

up to 150 Km N\$ 3.00/ton/km

over 150 km N\$ 2.70/ton/km

vii) Study Team told Ing. Daniel that Study Team thinks that it is necessary to introduce mechanical logging system because it seems difficult to extract the whole of 1.5 million m³ by traditional logging method only, and that Study Team wants to calculate the mechanical logging cost and wants to increase logging cost including logging road maintenance cost, if necessary.

Ing. Daniel agreed to Study Team's idea.

Regarding the Progress Report (Interim Report)

1. Draft Progress report should be completed until Dec. 20 1984, having hold discussion between Uruguay side and Study Mission.
2. The following are Japanese Plantation Team's ideas as to what sorts of items should be decided in Final Progress Report. Study Team will make Draft Final Report according to Progress Report which are mutually agreed.
 - i) According to the master plan made by JICA on February 1981, requirement of pulpwood is as follows:

Pines	779.000 m ³ /year
Hardwood	664.000 m ³ /year
Total	1.443.000 m ³ /year \approx 1.5 million m ³ /year
 - ii) How to develop plantations to supply such amount of pulpwood.
 - iii) Where do you plant?
 - iv) When do you start?
 - v) Can you buy plantation areas? and how much does it cost per ha.?
 - vi) What is the plantation cost?
 - vii) What species should be planted?
 - viii) What is mean annual increment (m³/ha/year)?

P. taeda, P. elliotii
E. Grandis, E. Globulus, E. Mandeni,
Populus
 - ix) What is logging cost?
 - x) What is transportation cost?

"National Plantation Development Program"

1) Forestry Department, Ministry of Agriculture and Fishery,
wants to enlarge plantation areas.

Is it right?

2) In case of Japan, Japanese Government has announced its 5 years'
economic development plan (or program) every 5 years,
including plantation development plan (or program)

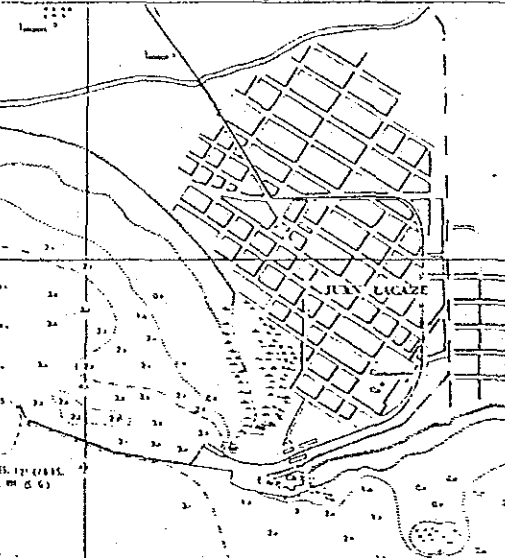
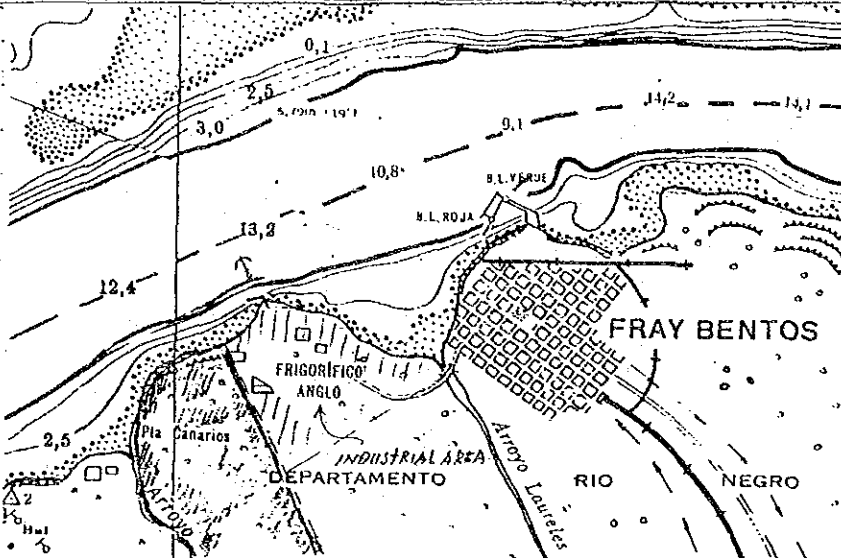
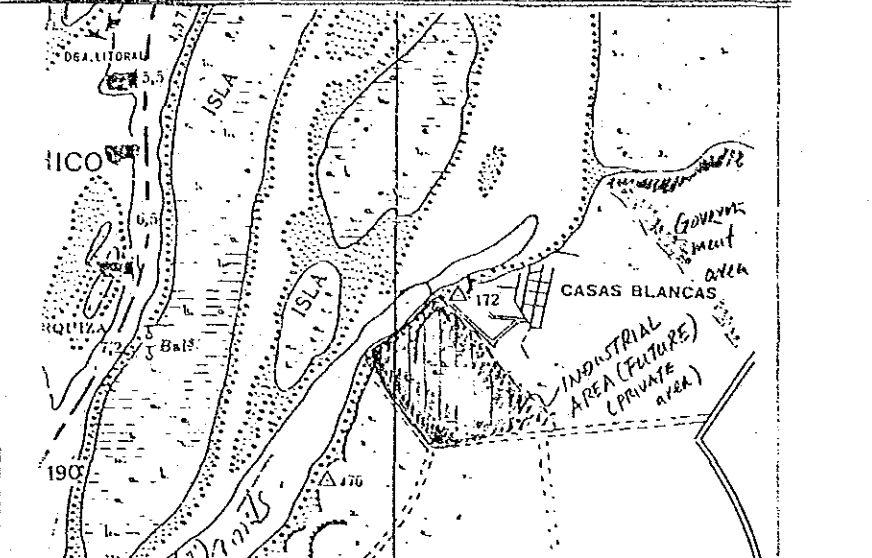
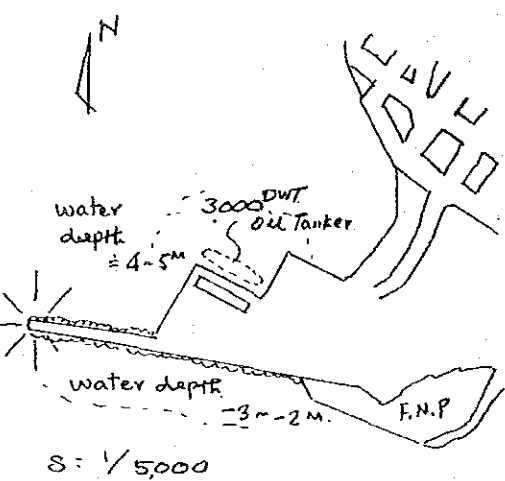
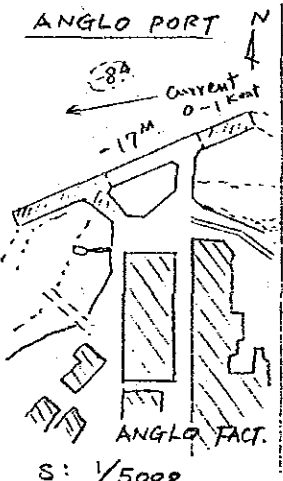
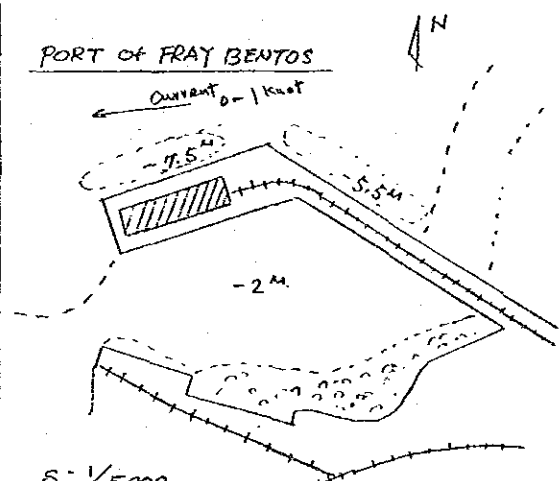
Does your such economic development plan include plantation
development plan.

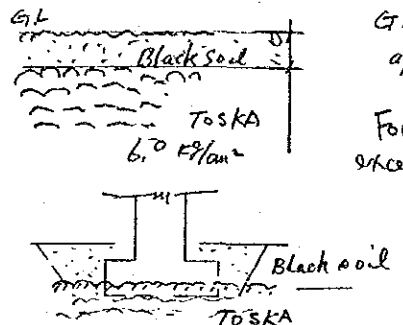
Please give me a copy of your plantation development plan when we
come back to Montevideo, if you have.

COMPARISON TABLE for PLANT SITE SELECTION

(AS of 20, DEC. 1984)

(1/4)

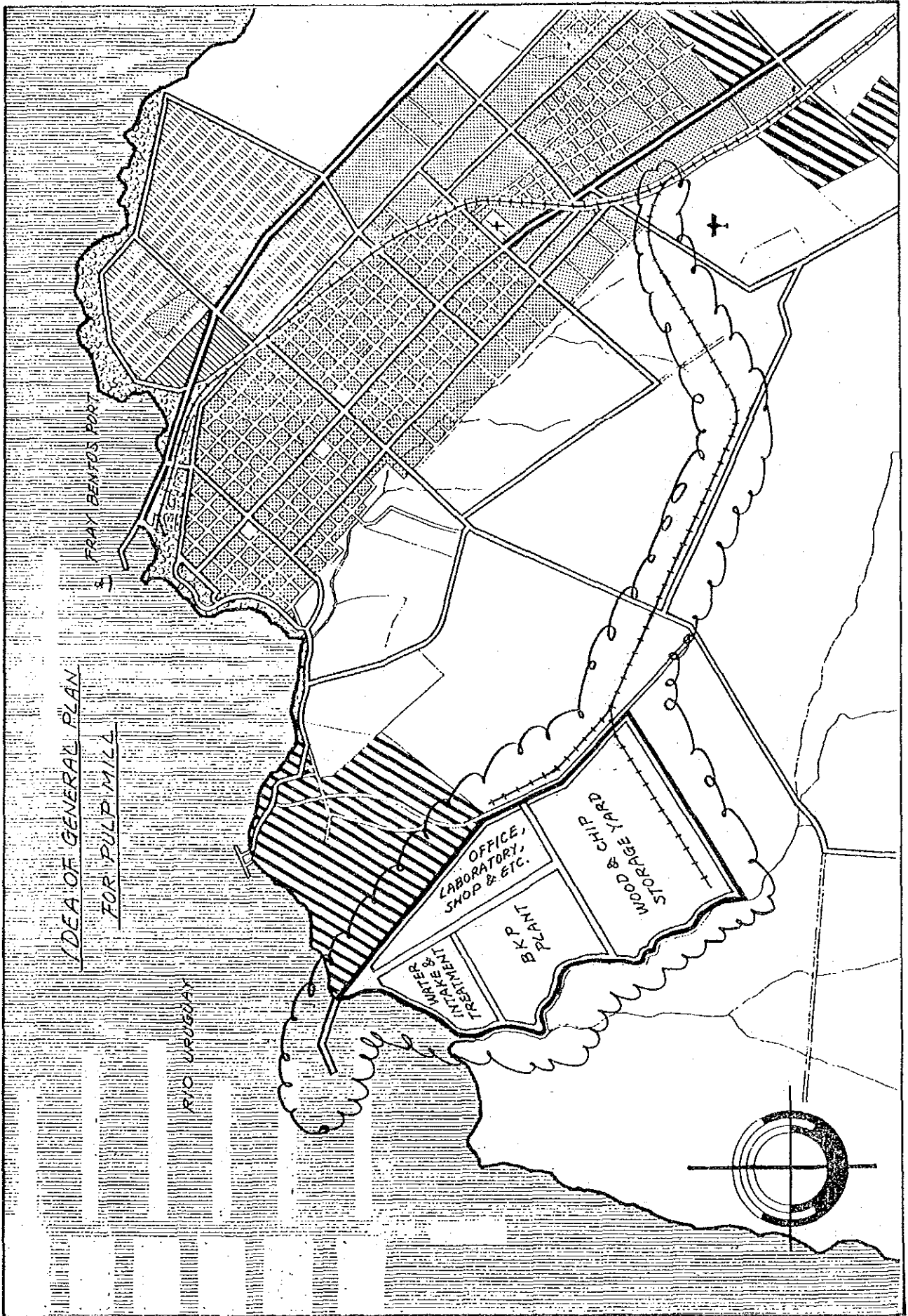
NO	SURVEY ITEMS	JUAN LAOAZE	FRAY BENTOS	CASA BLANCA
1	Site Location			
2	Date of Survey	11, DEC. 1984 (Tuesday)	13. DEC. ~ 15, DEC. 1984	17. DEC. 1984 (Monday)
3	Detail Location of Port		 	<p>There is a small jetty at meat factory named FRICASA.</p> <p>Detail location of port is not available.</p>
4	Average water depth	4m ~ 6m	17m	10m
5	Past experience arrival of Max Cargo Vessel	information not available	L=170m Cargo Vessel arrived	52,000 Ton (Loading 18,350 Ton) "EUTHALIA" arrived
6	Availability of plant site	not available	Available near River side. Area space is about 140ha.	Available not near River side. (150ha) Area is occupied by STATE of Government.
7	Availability of Electricity	Available	Electricity power is supplied to ANGLO FACTORY, but not enough capacity. In future will be available to supply PLANT SITE.	Not available now, but according to Government information, it will be available future.
8	Availability of water intake	Available from River	Available from River	Available, but not easy to take water from River.
9	River Condition	<p>Around port is very shallow and river bed condition is muddy. Current of river is not so much. F.N.P does not use port for transportation.</p> <p>Max differential water level is within 1.0m.</p>	<p>Port condition is good and river bed is almost sand, therefore, anchoring for ship is no problem. Current is not so much, about 0-1 knot.</p> <p>Experiene of FLOOD is almost None.</p>	<p>Water depth of river is enough, but there are some shallow place around FRICASA port. FRICASA port is not used for transportation now.</p> <p>Too much experience of FLOOD. Differential water level is max. 8m.</p>

No.	SURVEY ITEMS	JUAN LA CAZE	FRAY BENTOS	CASA BLANCA
10	General Geological Condition	No information, but it may be same condition to FRAY BENTOS	<p>Generally, surface material of ground is black soil which is not suitable material for foundation. Thickness of black soil layer is about 1.0m. Below black soil, there are so much hard layer such as rock. This material is hard CLAY named Toska. Soil bearing capacity of Toska is about 6.0 kg/cm^2</p>  <p>Ground water Level is approximate 5.0m below G.L.</p> <p>Foundation is usually no pile except to special condition.</p>	No information, but it may be same condition to. FRAY BENTOS
11	General Topographical Condition of plant Site	No information, but Land elevation from water level of river is approximate 4.0m.	<p>According to site survey by visual check and Topographical map, land elevation of plant site which is taken for FEASIBILITY STUDY is approximate 10m to 15m above water level of river.</p> <p>Land slope is not so steep and covered with so much grass.</p>	<p>No information, but according to site survey by visual check, same condition to. FRAY BENTOS.</p> <p>However, expected plant site is not occupied by government and along the river side of area is cliff. Land slope is not so steep and covered with so much grass.</p>
12	Rail way condition around port.	There is no rail way around port side.	Railway transportation is available from port.	Not available.
13	Rail way condition around plant site	NO information	According to government information, it is available to connect new rail way and existing main rail way between	No information
14	Road and Traffic Condition around Port and plant site	Around F.N.P and port are no problem, but no information for another area.	Road condition around port is almost good, but if plant site will be located designated area, it will be necessary to provide the NEW ROAD from site to port. Because, when plant operation will be commenced, many big truck will pass to the town. New warehouse is necessary near the port.	<p>No information, but if plant site will be located governmental area which is located far from river, it is necessary to carry the material and product from site to PATSANDU port.</p> <p>As that case, it will be some traffic problem.</p>
	SITE SELECTION based on SITE SURVEY	not suitable	Suitable	not suitable

No.	SURVEY ITEMS	NUEVA PALMIRA	PAYSANDU (except CASA BLANCA)
1	Site Location		
2	Date of Survey	16, DEC. 1984 (Sunday)	17, DEC. 1984 (Monday)
3	Detail Location of port	<p>No detail map.</p>	

NO.	SURVEY ITEMS	NUEVA PALMIRA	PAYSANDU (except CASA BLANCA)
4	Average water depth	14 ^m ~ 15 ^m	7 ^m ~ 10 ^m
5	Past experience arrival of max. Cargo vessel	no information	not exactory information, but 6,000 ^{Ton} to 10,000 ^{Ton} arrived
6	Availability of Plant site	Free zone area located near port is approximate 100ha, but certain factory occupied a part of area already.	No area around near port
7	Availability of Electricity	available	available
8	Availability of water intake	Available from River	Available from River
9	River Condition	no detail information, but water depth is enough.	water depth is enough and differential water level is so much
10	General Geological Condition	no information	no information
11	General Topographical Condition of plant site	no information	no information
12	Rail way condition around port	no rail way	Available
13	Rail way condition around plant site	no rail way	no information
14	Road and Traffic Condition around Port and Plant site	Around port site is no problem, but plant site is no information.	Around port site is no problem, but plant site is no information
	SITE SELECTION based on SITE SURVEY	This area is not candidated for this study, but only Visual survey of port is carried out. At this moment, it will not be suitable.	not suitable





IDEA OF GENERAL PLAN
 FOR PULP MILL

Annex I-4

MINUTES OF MEETING
(JULY 2, 1985)

Annex I-4

Minutes of Meeting

JICA Study Team on the establishment of a paper pulp plant in the Oriental Republic of Uruguay and Office of Planning and Budget (O.P.P.) had a series of discussions and exchanged views on the draft report of this project during the period from June 27th. to July 1st. 1985 at LATU office Montevideo.

Attendants of both side are listed in attached sheet.

JICA Study Team explained briefly the result of study and stated that any comments and questions would be welcome to finalize the report.

O.P.P. stated that they were satisfied with the study of the draft report, however, O.P.P. requested to clarify the characteristic of "Recommendation".

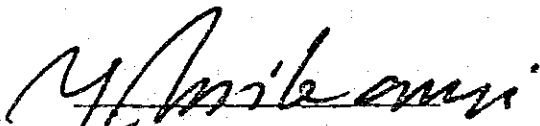
In response to the request JICA Study Team has clarified as follows:

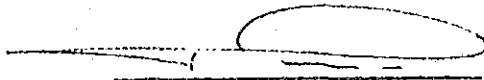
Characteristic of "Recommendation"

All parts of this report were prepared by JICA Study Team for the Government of Uruguay.

Therefore, suggestions and opinions mentioned in the "Recommendation" are entirely ones made by JICA Study Team to realize this big project smoothly.

Montevideo, July 2 , 1985


Yoshiyasu Mikami
JICA Study Team Leader


Jorge Pelufo
Director of International
Cooperation Division
Office of Planning and Budget

URUGUAYAN SIDE

Thursday 27/6/85

- Dr. Juan Antonio Moratorio
General Director (MIE)
- Ing. José L. Bozzo
Vice Director National Energy Bureau (MIE)
- Ing. Ana Cazzadori
Planning and Budgeting Bureau (OPP)
- Ec. Gustavo Cola (OPP)
- Fernando Stotz (LATU)
- Br. Gerardo Almeida (MIE)

Friday 28/6/85

- Ing. José L. Bozzo (MIE)
- Ing. Ana Cazzadori (OPP)
- Ec. Gustavo Cola (OPP)
- Ing. Agr. Pedro Senyzsyn (Faculty of Agriculture)
- Fernando Stotz (LATU)

Monday 1/7/85

- Ing. Agr. Rosario Pou (MIE)
- Ing. Ana Cazzadori (OPP)
- Ec. Gustavo Cola (OPP)
- Ing. Agr. Pedro Senyzsyn (Faculty of Agriculture)
- Cra. María Sisto (MAP)

JAPANESE SIDE

27/6. 28/6. 1/7

- Mr. Y. Mikami
- Mr. J. Morokuma
- Mr. T. Sato
- Mr. T. Sato (JICA)

ANNEX II

- Annex II-1 PRODUCTION/IMPORT/EXPORT/APPARENT CONSUMPTION OF PAPER AND PAPERBOARD IN THE WORLD BY REGION
- Annex II-2 PRODUCTION/IMPORT/EXPORT/APPARENT CONSUMPTION OF PAPER AND PAPERBOARD BY KIND IN LATIN AMERICAN COUNTRIES
- Annex II-3 RATES OF IMPORT/APPARENT CONSUMPTION OF NEWSPRINT IN MAJOR IMPORTING COUNTRIES (1972-1982)
- Annex II-4 PRODUCTION/IMPORT/EXPORT/APPARENT CONSUMPTION OF WOOD PULP IN THE WORLD BY REGION
- Annex II-5 PRODUCTION/IMPORT/EXPORT/APPARENT CONSUMPTION OF WOODPULP BY KIND IN LATIN AMERICAN COUNTRIES
- Annex II-6 RATES OF IMPORT/APPARENT CONSUMPTION OF PULP IN MAJOR IMPORTING COUNTRIES
- Annex II-7 PRODUCTO BRUTO INTERNO AL COSTO DE FACTORES, SEGUN SECTOR ECONOMICO DE ORIGEN
- Annex II-8 COTIZACION DE MONEDAS EXTRANJERAS
- Annex II-9 INDICES DE PRECIOS, EVOLUCION EN LOS ULTIMOS 12 MESES
- Annex II-10 NBKP/LBKP EXPORTS BY DESTINATION FROM USA, CANADA, AND BRAZIL
- Annex II-11 LBKP/NBKP IMPORTS BY ORIGIN
- Annex II-12 PHOTOGRAPH OF PULP FIBER AFTER BLEACHED

Annex II-1

PRODUCTION/IMPORT/EXPORT/
APPARENT CONSUMPTION OF PAPER AND PAPERBOARD
IN THE WORLD BY REGION

(NOTES)

1. Produc.: Production
Net Imp.: Net Import
Consump.: Apparent Consumption
2. Net Import = Import - Export
3. Apparent Consumption = Production + Import - Export
4. SS-Rate = Production/Apparent Consumption x 100
5. "EC" includes West Germany, France, Italy, the Netherlands, Belux, the U.K., Ireland and Denmark and Greece through 1972 to 1982, though the U.K., Ireland and Denmark joined in 1973 and Greece joined in 1981.
6. "Scandinavian 3" includes Finland, Norway and Sweden.

Table AII-1-1 Production/Import/Export/Apparent Consumption of Paper and Paperboard Total in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	137,582	151,895	172,301	172,471	165,360	100.0	100.0	100.0	2.0	1.7
	Import	25,175	27,733	33,574	33,804	33,498	100.0	100.0	100.0	2.0	3.8
	Export	25,247	28,293	35,088	35,559	33,767	100.0	100.0	100.0	2.3	3.6
	Consump.	137,510	151,335	170,787	170,716	165,091	100.0	100.0	100.0	1.9	1.8
EC	Produc.	21,415	22,634	24,606	24,205	23,341	15.6	14.9	14.1	1.1	0.6
	Import	10,408	11,406	13,648	14,101	14,024	41.3	41.1	41.9	1.8	4.2
	Export	2,926	4,071	5,347	5,631	5,651	11.6	14.4	16.7	6.8	6.8
	Net Imp.	7,482	7,335	8,301	8,470	8,373					
	Consump.	28,897	29,969	32,907	32,675	31,714	21.0	19.8	19.2	0.7	1.1
	SS-Rate	74	76	75	74	74					
Scandinavian 3	Produc.	10,861	10,866	13,474	13,722	13,128	7.9	7.2	7.9	0.0	3.9
	Import	241	292	399	414	424	1.0	1.1	1.3	3.9	7.7
	Export	8,289	8,390	10,542	10,646	10,375	32.8	29.7	30.7	0.2	4.3
	Net Imp.	-8,048	-8,098	-10,143	-10,232	-9,951					
	Consump.	2,813	2,768	3,331	3,490	3,177	2.0	1.8	1.9	-0.3	2.8
	SS-Rate	386	393	405	393	413					
Other W. Europe	Produc.	3,798	4,810	5,559	5,665	5,764	2.8	3.2	3.5	4.8	3.7
	Import	697	810	965	1,094	1,141	2.8	2.9	3.4	3.1	7.1
	Export	728	1,212	1,428	1,696	1,716	2.9	4.3	5.1	10.7	7.2
	Net Imp.	-31	-402	-463	-602	-575					
	Consump.	3,767	4,408	5,096	5,063	5,189	2.7	2.9	3.1	3.2	3.3
	SS-Rate	101	109	109	112	111					
Total W. Europe	Produc.	36,074	38,310	43,639	43,592	42,233	26.2	25.2	25.5	1.2	2.0
	Import	11,346	12,508	15,012	15,609	15,589	45.1	45.1	46.5	2.0	4.5
	Export	11,943	13,673	17,317	17,973	17,742	47.3	48.3	52.5	2.7	5.3
	Net Imp.	-597	-1,165	-2,305	-2,364	-2,153					
	Consump.	35,477	37,145	41,334	41,228	40,080	25.8	24.5	24.3	0.9	1.5
	SS-Rate	102	103	106	106	105					
Eastern Europe	Produc.	12,260	15,348	15,390	15,569	15,630	8.9	10.1	9.5	4.6	0.4
	Import	1,527	1,835	2,133	2,084	2,089	6.1	6.6	6.2	3.7	2.6
	Export	1,269	1,733	1,789	1,838	1,833	5.0	6.1	5.4	6.4	1.1
	Net Imp.	258	102	344	246	256					
	Consump.	12,518	15,450	15,734	15,815	15,886	9.1	10.2	9.6	4.3	0.6
	SS-Rate	98	99	98	98	98					

Table AII-1-1 Production/Import/Export/Apparent Consumption of Paper and Paperboard Total in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	62,859	64,946	72,847	74,066	67,471	45.7	42.8	40.8	0.7	0.8
	Import	7,143	7,017	8,118	7,595	7,303	28.4	25.3	21.8	-0.4	0.8
	Export	10,981	11,232	13,675	13,134	11,931	43.5	39.7	35.3	0.5	1.2
	Net Imp.	-3,838	-4,215	-5,557	-5,539	-4,628					
	Consump.	59,021	60,731	67,290	68,527	62,843	42.9	40.1	38.1	0.6	0.7
	SS-Rate	107	107	108	108	107					
Latin America	Produc.	4,246	5,536	7,727	7,434	7,697	3.1	3.6	4.7	5.4	6.8
	Import	1,805	2,066	2,343	2,435	2,386	7.2	7.4	7.1	2.7	2.9
	Export	110	222	410	575	476	0.4	0.8	1.4	15.1	16.5
	Net Imp.	1,695	1,844	1,933	1,860	1,910					
	Consump.	5,941	7,380	9,660	9,294	9,607	4.3	4.9	5.8	4.4	5.4
	SS-Rate	72	75	80	80	80					
Asia	Produc.	19,533	24,491	28,986	27,948	28,454	14.2	16.1	17.2	4.6	3.0
	Import	2,219	2,832	4,253	4,246	4,256	8.8	10.2	12.7	5.0	8.5
	Export	695	939	1,244	1,318	1,170	2.8	3.3	3.5	6.2	4.5
	Net Imp.	1,524	1,893	3,009	2,928	3,086					
	Consump.	21,057	26,384	31,995	30,876	31,540	15.3	17.4	19.1	4.6	3.6
	SS-Rate	93	93	91	91	90					
Oceania	Produc.	1,546	1,890	2,104	2,151	2,197	1.1	1.2	1.3	4.1	3.1
	Import	505	660	751	748	807	2.0	2.4	2.4	5.5	4.1
	Export	202	302	418	447	340	0.8	1.1	1.0	8.4	2.4
	Net Imp.	303	358	333	301	467					
	Consump.	1,849	2,248	2,437	2,452	2,664	1.3	1.5	1.6	4.0	3.5
	SS-Rate	84	84	86	88	83					
Africa	Produc.	1,064	1,374	1,608	1,712	1,678	0.8	0.9	1.0	5.2	4.1
	Import	630	815	965	1,088	1,068	2.5	2.9	3.2	5.3	5.6
	Export	47	193	235	274	276	0.2	0.7	0.8	32.6	7.4
	Net Imp.	583	622	730	814	792					
	Consump.	1,647	1,996	2,338	2,526	2,470	1.2	1.3	1.5	3.9	4.4
	SS-Rate	65	69	69	68	68					

Source: Yearbook of Forest Products, 1982 (FAO)

Notes: 1. SS-Rate: Self-sufficiency Rate (%)

2. Includes Newsprint, Printing and Writing Paper and Other Paper and Paperboard.

Table AII-1-2 Production/Import/Export/Apparent Consumption of Newsprint in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	21,678	22,473	26,181	27,385	25,966	100.0	100.0	100.0	0.7	2.9
	Import	11,175	11,278	12,702	12,926	12,409	100.0	100.0	100.0	0.2	1.9
	Export	10,752	10,520	12,329	13,002	11,559	100.0	100.0	100.0	-0.4	1.9
	Consump.	22,101	23,231	26,554	27,309	26,816	100.0	100.0	100.0	1.0	2.9
EC	Produc.	1,868	1,545	1,789	1,591	1,508	8.6	6.9	5.8	-3.7	-0.5
	Import	2,650	2,671	3,104	3,274	3,120	23.7	23.7	25.1	0.2	3.2
	Export	97	182	244	205	210	0.9	1.7	1.8	13.4	2.9
	Net Imp.	2,553	2,489	2,860	3,069	2,910					
	Consump.	4,421	4,034	4,649	4,660	4,418	20.0	17.4	16.5	-1.8	1.8
	SS-Rate	42	38	39	34	34					
Scandinavian 3	Produc.	2,894	2,525	3,692	3,999	3,492	13.3	11.2	13.4	-2.7	6.7
	Import	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
	Export	2,530	2,027	3,193	3,416	2,937	23.5	19.3	25.4	-4.3	7.7
	Net Imp.	-2,530	-2,027	-3,193	-3,416	-2,937					
	Consump.	364	498	499	583	555	1.6	2.1	2.1	6.5	2.2
	SS-Rate	795	507	740	686	629					
Other W. Europe	Produc.	434	450	494	504	485	2.0	2.0	1.9	0.7	1.5
	Import	130	107	120	173	211	1.2	0.9	1.7	-3.8	14.5
	Export	52	54	71	74	66	0.5	0.5	0.6	0.8	4.1
	Net Imp.	78	53	49	99	145					
	Consump.	512	503	543	603	630	2.3	2.2	2.3	-0.4	4.6
	SS-Rate	85	90	91	84	77					
Total W. Europe	Produc.	5,196	4,520	5,975	6,094	5,485	24.0	20.1	21.1	-2.7	3.9
	Import	2,780	2,778	3,224	3,447	3,331	24.9	24.6	26.8	0.0	3.7
	Export	2,679	2,263	3,508	3,695	3,213	24.9	21.5	27.8	-3.3	7.3
	Net Imp.	101	515	-284	-248	118					
	Consump.	5,297	5,035	5,691	5,846	5,603	24.0	21.7	20.9	-1.0	2.2
	SS-Rate	98	90	105	104	98					
Eastern Europe	Produc.	1,608	1,845	1,961	1,963	1,948	7.4	8.2	7.5	2.8	1.1
	Import	235	245	247	277	269	2.1	2.2	2.2	0.8	1.9
	Export	336	371	366	420	427	3.1	3.5	3.7	2.0	2.9
	Net Imp.	-101	-126	-119	-143	-158					
	Consump.	1,507	1,719	1,842	1,820	1,790	6.8	7.4	6.7	2.7	0.8
	SS-Rate	107	107	106	108	109					

Table AII-1-2 Production/Import/Export/Apparent Consumption of Newsprint in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	11,210	11,352	12,760	13,699	12,691	51.7	50.5	48.9	0.3	2.3
	Import	6,442	5,950	6,594	6,330	5,924	57.6	52.8	47.7	-1.6	-0.1
	Export	7,481	7,383	7,865	8,232	7,357	69.6	70.2	63.6	-0.3	-0.1
	Net Imp.	-1,039	-1,433	-1,271	-1,902	-1,433					
	Consump.	10,171	9,919	11,489	11,797	11,258	46.0	42.7	42.0	-0.5	2.6
	SS-Rate	110	114	111	116	113					
Latin America	Produc.	245	345	490	513	555	1.1	1.5	2.1	7.1	10.0
	Import	703	1,049	984	1,156	1,173	6.3	9.3	9.5	8.3	2.3
	Export	36	92	66	44	56	0.3	0.9	0.5	20.6	-9.5
	Net Imp.	667	957	918	1,112	1,117					
	Consump.	912	1,302	1,408	1,625	1,672	4.1	5.6	6.2	7.4	5.1
	SS-Rate	27	27	35	32	33					
Asia	Produc.	2,847	3,657	4,210	4,224	4,288	13.1	16.3	16.5	5.1	3.2
	Import	680	793	1,192	1,256	1,268	6.1	7.0	10.2	3.1	9.8
	Export	85	122	162	196	165	0.8	1.2	1.4	7.5	6.2
	Net Imp.	595	671	1,030	1,060	1,103					
	Consump.	3,442	4,328	5,240	5,284	5,391	15.6	18.6	20.1	4.7	4.5
	SS-Rate	83	85	80	80	80					
Oceania	Produc.	395	483	540	569	677	1.8	2.1	2.6	4.1	7.0
	Import	223	324	340	285	256	2.0	2.9	2.1	7.8	-4.6
	Export	124	190	242	234	160	1.2	1.8	1.4	8.9	-3.4
	Net Imp.	99	134	98	51	96					
	Consump.	494	617	638	620	773	2.2	2.7	2.9	4.5	4.6
	SS-Rate	80	78	85	92	88					
Africa	Produc.	177	271	245	323	322	0.8	1.2	1.2	8.9	3.5
	Import	112	139	122	175	188	1.0	1.2	1.5	4.4	6.2
	Export	12	99	120	180	180	0.1	0.9	1.6	52.5	12.7
	Net Imp.	100	40	2	-5	8					
	Consump.	277	311	247	318	330	1.3	1.3	1.2	2.3	1.2
	SS-Rate	64	87	99	102	98					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-1-3 Production/Import/Export/Apparent Consumption of Printing and Writing Paper in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	29,733	35,197	41,158	41,703	42,103	100.0	100.0	100.0	3.4	3.6
	Import	3,655	5,161	6,559	6,903	7,108	100.0	100.0	100.0	7.1	6.6
	Export	4,268	5,818	7,225	7,557	7,786	100.0	100.0	100.0	6.4	6.0
	Consump.	29,120	34,540	40,492	41,049	41,425	100.0	100.0	100.0	3.5	3.7
EC	Produc.	6,965	7,495	8,849	8,818	8,682	23.4	21.3	20.6	1.5	3.0
	Import	1,951	2,738	3,570	3,848	3,831	53.4	53.1	53.9	7.0	6.9
	Export	1,369	1,723	2,320	2,543	2,611	32.1	29.6	33.5	4.7	8.7
	Net Imp.	582	1,015	1,250	1,305	1,220					
	Consump.	7,547	8,510	10,099	10,123	9,902	25.9	24.6	23.9	2.4	3.1
	SS-Rate	92	88	88	87	88					
Scandinavian 3	Produc.	2,193	2,739	3,362	3,356	3,413	7.4	7.8	8.1	4.5	4.5
	Import	36	59	90	100	116	1.0	1.1	1.6	10.4	14.5
	Export	1,518	2,121	2,491	2,411	2,553	35.6	36.5	32.8	6.9	3.8
	Net Imp.	-1,482	-2,062	-2,401	-2,311	-2,437					
	Consump.	711	677	961	1,045	976	2.4	2.0	2.4	-1.0	7.6
	SS-Rate	308	405	350	321	350					
Other W. Europe	Produc.	1,213	1,524	1,706	1,728	1,713	4.1	4.3	4.1	4.7	2.4
	Import	115	210	303	332	347	3.1	4.1	4.9	12.8	10.6
	Export	415	669	695	811	786	9.7	11.5	10.1	10.0	3.3
	Net Imp.	-300	-459	-392	-479	-439					
	Consump.	913	1,065	1,314	1,249	1,274	3.1	3.1	3.1	3.1	3.6
	SS-Rate	133	143	130	138	135					
Total W. Europe	Produc.	10,371	11,758	13,917	13,902	13,808	34.9	33.4	32.8	2.5	3.3
	Import	2,102	3,007	3,963	4,280	4,294	57.5	58.3	60.4	7.4	7.4
	Export	3,302	4,513	5,506	5,765	5,950	77.4	77.6	76.4	6.4	5.7
	Net Imp.	-1,200	-1,506	-1,543	-1,485	-1,656					
	Consump.	9,171	10,252	12,374	12,417	12,152	31.5	29.7	29.3	2.3	3.5
	SS-Rate	113	115	113	112	114					
Eastern Europe	Produc.	1,981	2,262	2,274	2,294	2,304	6.7	6.4	5.5	2.7	0.4
	Import	288	345	443	426	466	7.9	6.7	6.6	3.7	6.2
	Export	208	230	273	298	325	4.9	4.0	4.2	2.0	7.2
	Net Imp.	80	115	170	128	141					
	Consump.	2,061	2,377	2,444	2,422	2,445	7.1	6.9	5.9	2.9	0.6
	SS-Rate	96	95	93	95	94					

Table AII-1-3 Production/Import/Export/Apparent Consumption of Printing and Writing Paper in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	11,998	13,811	15,227	15,282	15,390	40.4	39.2	36.6	2.9	2.2
	Import	293	591	779	770	823	8.0	11.5	11.6	15.1	6.8
	Export	534	719	865	858	843	12.5	12.4	10.8	6.1	3.2
	Net Imp.	-241	-128	-86	-88	-20					
	Consump.	11,757	13,683	15,141	15,194	15,370	40.4	39.6	37.1	3.1	2.4
	SS-Rate	102	101	101	101	100					
Latin America	Produc.	844	1,198	1,864	1,792	1,855	2.8	3.4	4.4	7.3	9.1
	Import	315	391	268	230	214	8.6	7.6	3.0	4.4	-11.4
	Export	26	77	179	235	211	0.6	1.3	2.7	24.3	22.3
	Net Imp.	289	314	89	-5	3					
	Consump.	1,133	1,512	1,953	1,787	1,858	3.9	4.4	4.5	5.9	4.2
	SS-Rate	75	79	95	100	100					
Asia	Produc.	4,194	5,743	7,292	7,816	8,180	14.1	16.3	19.4	6.5	7.3
	Import	367	428	609	622	661	10.0	8.3	9.3	3.1	9.1
	Export	168	256	361	366	422	3.9	4.4	5.4	8.8	10.5
	Net Imp.	199	172	248	256	239					
	Consump.	4,393	5,915	7,540	8,072	8,419	15.1	17.1	20.3	6.1	7.3
	SS-Rate	96	97	97	97	97					
Oceania	Produc.	154	192	243	276	253	0.5	0.5	0.6	4.5	5.7
	Import	152	163	210	252	325	4.2	3.2	4.6	1.4	14.8
	Export	23	10	18	16	15	0.5	0.2	0.2	-15.3	8.4
	Net Imp.	129	153	192	236	310					
	Consump.	283	345	435	512	563	1.0	1.0	1.4	4.0	10.3
	SS-Rate	54	56	56	54	45					
Africa	Produc.	192	234	341	341	314	0.6	0.7	0.7	4.0	6.1
	Import	138	237	287	323	324	3.8	4.6	4.6	11.4	6.5
	Export	8	13	23	19	19	0.2	0.2	0.2	10.2	7.9
	Net Imp.	130	224	264	304	305					
	Consump.	322	458	605	645	619	1.1	1.3	1.5	7.3	6.2
	SS-Rate	60	51	56	53	51					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-1-4 Production/Import/Export/Apparent Consumption of Other Paper and Paperboard in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	86,172	94,225	104,963	103,384	97,292	100.0	100.0	100.0	1.8	0.6
	Import	10,346	11,294	14,313	13,975	13,981	100.0	100.0	100.0	1.8	4.4
	Export	10,227	11,956	15,534	15,000	14,422	100.0	100.0	100.0	3.2	3.8
	Consump.	86,291	93,563	103,742	102,359	96,851	100.0	100.0	100.0	1.6	0.7
EC	Produc.	12,583	13,594	13,968	13,796	13,151	14.6	14.4	13.5	1.6	-0.7
	Import	5,810	5,997	6,976	6,981	7,074	56.2	53.1	50.6	0.6	3.4
	Export	1,459	2,367	2,784	2,880	2,830	14.3	19.8	19.6	10.2	3.6
	Net Imp.	4,351	3,630	4,192	4,101	4,244					
	Consump.	16,934	17,224	18,160	17,897	17,395	19.6	18.4	18.0	0.3	0.2
	SS-Rate	74	79	77	77	76					
Scandinavian 3	Produc.	5,774	5,602	6,420	6,367	6,223	6.7	5.9	6.4	-0.6	2.1
	Import	205	234	310	314	309	2.0	2.1	2.2	2.7	5.7
	Export	4,242	4,243	4,857	4,820	4,885	41.5	35.5	33.9	0.0	2.9
	Net Imp.	-4,037	-4,009	-4,547	-4,506	-4,576					
	Consump.	1,737	1,593	1,873	1,861	1,647	2.0	1.7	1.7	-1.7	0.7
	SS-Rate	332	352	343	342	378					
Other W. Europe	Produc.	2,151	2,836	3,359	3,433	3,566	2.5	3.0	3.7	5.7	4.7
	Import	450	493	540	586	580	4.3	4.4	4.1	1.8	3.3
	Export	260	289	663	812	862	2.5	2.4	6.0	2.1	24.4
	Net Imp.	190	204	-123	-226	-282					
	Consump.	2,341	3,040	3,236	3,207	3,284	2.7	3.2	3.4	5.4	1.6
	SS-Rate	92	93	104	107	109					
Total W. Europe	Produc.	20,508	22,032	23,747	23,596	22,940	23.8	23.4	23.6	1.4	0.8
	Import	6,465	6,724	7,826	7,881	7,963	62.5	59.5	57.0	0.8	3.4
	Export	5,961	6,899	8,304	8,512	8,577	58.3	57.7	59.5	3.0	4.5
	Net Imp.	504	-175	-478	-631	-614					
	Consump.	21,012	21,857	23,269	22,965	22,326	24.4	23.4	23.1	0.8	0.4
	SS-Rate	98	101	102	103	103					
Eastern Europe	Produc.	8,670	11,241	11,155	11,312	11,378	10.1	11.9	11.7	5.3	0.2
	Import	1,004	1,244	1,442	1,382	1,354	9.7	11.0	9.7	4.4	1.7
	Export	726	1,131	1,149	1,121	1,083	7.1	9.5	7.5	9.3	-0.9
	Net Imp.	278	113	293	261	271					
	Consump.	8,948	11,354	11,448	11,573	11,649	10.4	12.1	12.0	4.9	0.5
	SS-Rate	97	99	97	98	98					

Table All-1-4 Production/Import/Export/Apparent Consumption of Other Paper and Paperboard in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	39,651	39,783	44,860	45,085	39,390	46.0	42.2	40.5	0.1	-0.2
	Import	408	476	745	496	556	3.9	4.2	4.0	3.1	3.2
	Export	2,966	3,130	4,945	4,044	3,730	29.0	26.2	25.9	1.1	3.6
	Net Imp.	-2,558	-2,654	-4,200	-3,548	-3,174					
	Consump.	37,093	37,129	40,660	41,537	36,216	43.0	39.7	37.4	0.0	-0.5
	SS-Rate	107	107	110	109	109					
Latin America	Produc.	3,157	3,993	5,373	5,129	5,287	3.7	4.2	5.4	4.8	5.8
	Import	787	627	1,091	1,049	999	7.6	5.6	7.1	-4.4	9.8
	Export	48	52	164	296	208	0.5	0.4	1.4	1.6	32.0
	Net Imp.	739	575	927	753	791					
	Consump.	3,896	4,568	6,300	5,882	6,078	4.5	4.9	6.3	3.2	5.9
	SS-Rate	81	87	85	87	87					
Asia	Produc.	12,493	15,092	17,485	15,908	15,986	14.5	16.0	16.4	3.9	1.2
	Import	1,172	1,611	2,453	2,368	2,327	11.3	14.3	16.6	6.6	7.6
	Export	443	562	721	756	584	4.3	4.7	4.0	4.9	0.8
	Net Imp.	729	1,049	1,732	1,612	1,743					
	Consump.	13,222	16,141	19,217	17,520	17,729	15.3	17.3	18.3	4.1	1.9
	SS-Rate	95	94	91	91	90					
Oceania	Produc.	998	1,215	1,321	1,306	1,267	1.2	1.3	1.3	4.0	0.8
	Import	130	174	200	210	226	1.3	1.5	1.6	5.0	5.4
	Export	55	102	158	197	164	0.5	0.9	1.1	13.1	10.0
	Net Imp.	75	72	42	13	62					
	Consump.	1,073	1,287	1,363	1,319	1,329	1.2	1.4	1.4	3.7	0.6
	SS-Rate	93	94	97	99	95					
Africa	Produc.	695	870	1,022	1,048	1,043	0.8	0.9	1.1	4.6	3.7
	Import	380	439	556	590	556	3.7	3.9	4.0	2.9	4.8
	Export	27	81	92	75	76	0.3	0.7	0.5	24.6	-1.3
	Net Imp.	353	358	464	515	480					
	Consump.	1,048	1,228	1,486	1,563	1,523	1.2	1.3	1.6	3.2	4.4
	SS-Rate	66	71	69	67	69					

Source: Yearbook of Forest Products, 1982 (FAO)

Notes: 1. SS-Rate: Self-sufficiency Rate (%)

2. Includes Household and Sanitary Paper, Wrapping and Packing Paper and Paperboard, Paper and Paperboard NES, and others.

Table AII-1-5 Production/Import/Export/Apparent Consumption of Household and Sanitary Paper in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	6,863	7,574	8,994	9,235	8,817	100.0	100.0	100.0	2.0	3.1
	Import	253	178	357	327	335	100.0	100.0	100.0	-6.8	13.5
	Export	272	284	395	405	383	100.0	100.0	100.0	0.9	6.2
	Consump.	6,844	7,468	8,956	9,157	8,769	100.0	100.0	100.0	1.8	3.3
EC	Produc.	1,115	1,181	1,471	1,501	1,609	16.2	15.6	18.2	1.2	6.4
	Import	147	104	263	237	250	58.1	58.4	74.6	-6.7	19.2
	Export	86	72	112	125	128	31.6	25.4	33.4	-3.5	12.2
	Net Imp.	61	32	151	112	122					
	Consump.	1,176	1,213	1,622	1,613	1,731	17.2	16.2	19.7	0.6	7.4
	SS-Rate	95	97	91	93	93					
Scandinavian 3	Produc.	324	331	400	423	416	4.7	4.4	4.7	0.4	4.7
	Import	13	4	8	10	12	5.1	2.2	3.6	-21.0	24.6
	Export	126	117	115	121	123	46.3	41.2	32.1	-1.5	1.0
	Net Imp.	-113	-113	-107	-111	-111					
	Consump.	211	218	293	312	305	3.1	2.9	3.5	0.7	6.9
	SS-Rate	154	152	137	136	136					
Other W. Europe	Produc.	133	208	298	325	331	1.9	2.7	3.8	9.4	9.7
	Import	0	2	2	1	3	-	1.1	0.9	0.0	8.4
	Export	0	9	9	13	20	-	3.2	5.2	0.0	17.3
	Net Imp.	0	-7	-7	-12	-17					
	Consump.	133	201	291	313	314	1.9	2.7	3.6	8.6	9.3
	SS-Rate	100	104	102	104	105					
Total W. Europe	Produc.	1,572	1,720	2,169	2,249	2,356	22.9	22.7	26.7	1.8	6.5
	Import	160	110	273	248	265	63.2	61.8	79.1	-7.2	19.2
	Export	212	198	236	259	271	77.9	69.7	70.8	-1.4	6.5
	Net Imp.	-52	-88	37	-11	-6					
	Consump.	1,520	1,632	2,206	2,238	2,350	22.2	21.9	26.8	1.4	7.6
	SS-Rate	103	105	98	101	100					
Eastern Europe	Produc.	66	147	241	209	216	1.0	1.9	2.4	17.4	8.0
	Import	26	17	17	11	11	10.3	9.6	3.3	-8.1	-8.3
	Export	17	21	28	28	36	6.3	7.4	9.4	4.3	11.4
	Net Imp.	9	-4	-11	-17	-25					
	Consump.	75	143	230	192	191	1.1	1.9	2.2	13.8	6.0
	SS-Rate	88	103	105	109	113					

Table AII-1-5 Production/Import/Export/Apparent Consumption of Household and Sanitary Paper in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	3,934	4,219	4,581	4,604	4,023	57.3	55.7	45.6	1.4	-0.9
	Import	18	16	16	18	7	7.1	9.0	2.1	-2.3	-15.2
	Export	16	56	100	85	51	5.9	19.7	13.3	28.5	-1.9
	Net Imp.	2	-40	-84	-67	-44					
	Consump.	3,936	4,179	4,497	4,537	3,979	57.5	56.0	45.4	1.2	-1.0
	SS-Rate	100	101	102	102	101					
Latin America	Produc.	246	461	716	768	785	3.6	6.1	8.9	13.4	11.2
	Import	12	9	24	21	22	4.7	5.1	6.6	-5.6	19.6
	Export	0	4	10	12	9	0.0	1.4	2.3	0.0	17.6
	Net Imp.	12	5	14	9	13					
	Consump.	258	466	730	777	798	3.8	6.2	9.1	12.6	11.4
	SS-Rate	95	99	98	99	98					
Asia	Produc.	903	853	1,066	1,193	1,215	13.2	11.3	13.8	-1.1	7.3
	Import	17	19	20	21	21	6.7	10.7	6.3	2.2	2.0
	Export	14	4	6	13	9	5.1	1.4	2.3	-22.2	17.6
	Net Imp.	3	15	14	8	12					
	Consump.	906	868	1,080	1,201	1,227	13.2	11.6	14.0	-0.9	7.2
	SS-Rate	100	98	99	99	99					
Oceania	Produc.	104	124	149	140	151	1.5	1.6	1.7	3.6	4.0
	Import	10	3	1	1	2	4.0	1.7	0.6	-21.4	-7.8
	Export	11	0	0	0	0	4.0	0.0	0.0	-	-
	Net Imp.	-1	3	1	1	2					
	Consump.	103	127	150	141	153	1.5	1.7	1.7	4.3	3.8
	SS-Rate	101	98	99	99	99					
Africa	Produc.	38	51	72	72	72	0.6	0.7	0.8	6.1	7.1
	Import	10	6	7	8	8	4.0	3.4	2.4	-9.7	5.9
	Export	1	1	16	8	8	0.4	0.4	2.1	0.0	51.6
	Net Imp.	9	5	-9	0	0					
	Consump.	47	56	63	72	72	0.7	0.7	0.8	3.6	5.2
	SS-Rate	81	91	114	100	100					

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-1-6 Production/Import/Export/Apparent Consumption of Wrapping and Packing Paper and Paperboard in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	59,438	65,931	75,150	72,837	68,294	100.0	100.0	100.0	2.1	0.7
	Import	5,230	6,674	8,257	8,515	8,442	100.0	100.0	100.0	5.0	4.8
	Export	4,808	8,455	10,893	10,254	10,083	100.0	100.0	100.0	12.0	3.6
	Consump.	59,860	64,150	72,514	71,098	66,653	100.0	100.0	100.0	1.4	0.8
EC	Produc.	7,926	10,509	10,211	10,055	10,273	13.3	15.9	15.0	5.8	-0.5
	Import	4,079	4,116	4,901	4,962	4,895	78.0	61.7	58.0	0.2	3.5
	Export	593	1,274	1,634	1,777	1,743	12.3	15.1	17.3	16.5	6.5
	Net Imp.	3,486	2,842	3,267	3,185	3,152					
	Consump.	11,412	13,351	13,478	13,240	13,425	19.1	20.8	20.1	3.2	0.1
	SS-Rate	70	79	76	76	77					
Scandinavian 3	Produc.	4,814	4,618	5,304	5,291	5,166	8.1	7.0	7.6	-0.8	2.3
	Import	52	62	143	152	148	1.0	0.9	1.8	3.6	19.0
	Export	3,354	3,100	3,451	3,361	3,401	69.8	36.7	33.7	-1.6	1.9
	Net Imp.	-3,302	-3,038	-3,308	-3,209	-3,253					
	Consump.	1,512	1,580	1,996	2,082	1,913	2.5	2.5	2.9	0.9	3.9
	SS-Rate	318	292	266	254	270					
Other W. Europe	Produc.	1,422	2,248	2,358	2,387	2,480	2.4	3.4	3.6	9.6	2.0
	Import	0	391	429	438	383	0.0	5.9	4.5	-	-0.4
	Export	1	417	554	582	621	0.0	4.9	6.2	234.2	8.3
	Net Imp.	-1	-26	-125	-144	-238					
	Consump.	1,421	2,222	2,233	2,243	2,242	2.4	3.5	3.4	9.4	0.2
	SS-Rate	100	101	106	106	111					
Total W. Europe	Produc.	14,162	17,375	17,873	17,733	17,919	23.8	26.4	26.2	4.2	0.6
	Import	4,131	4,569	5,473	5,552	5,426	79.0	68.5	64.3	2.0	3.5
	Export	3,948	4,791	5,639	5,720	5,765	82.1	56.7	57.2	3.9	3.8
	Net Imp.	183	-222	-166	-168	-339					
	Consump.	14,345	17,153	17,707	17,565	17,580	24.0	26.7	26.4	3.6	0.5
	SS-Rate	99	101	101	101	102					
Eastern Europe	Produc.	1,740	2,333	2,150	2,058	2,050	2.9	3.5	3.0	6.0	-2.6
	Import	278	408	380	662	648	5.3	6.1	7.7	8.0	9.7
	Export	114	565	567	532	560	2.4	6.7	5.6	37.7	-0.2
	Net Imp.	164	-157	-187	130	88					
	Consump.	1,904	2,176	1,963	2,188	2,138	3.2	3.4	3.2	2.7	-0.4
	SS-Rate	91	107	110	94	96					

Table All-1-6 Production/Import/Export/Apparent Consumption of Wrapping and Packing Paper and Paperboard in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	33,699	32,643	38,088	38,280	33,444	56.7	49.5	49.0	-0.6	0.5
	Import	76	247	244	205	206	1.5	3.7	2.4	26.6	-3.6
	Export	537	2,658	4,069	3,357	3,096	11.2	31.4	30.7	37.7	3.1
	Net Imp.	-461	-2,411	-3,825	-3,152	-2,890					
	Consump.	33,238	30,232	34,263	35,128	30,554	55.5	47.1	45.8	-1.9	0.2
	SS-Rate	101	108	111	109	110					
Latin America	Produc.	1,832	2,966	3,945	3,859	4,056	3.1	4.5	5.9	10.1	6.5
	Import	326	414	738	700	659	6.2	6.2	7.8	4.9	9.7
	Export	2	14	74	131	93	0.0	0.2	0.9	47.6	46.0
	Net Imp.	324	400	664	569	566					
	Consump.	2,156	3,366	4,609	4,428	4,622	3.6	5.2	6.9	9.3	6.5
	SS-Rate	85	88	86	87	88					
Asia	Produc.	6,655	8,941	11,185	8,992	8,946	11.2	13.6	13.1	6.1	0.0
	Import	275	753	1,003	937	1,053	5.3	11.3	12.5	22.3	6.9
	Export	193	277	358	304	387	4.0	3.3	3.8	7.5	6.9
	Net Imp.	82	476	645	633	666					
	Consump.	6,737	9,417	11,830	9,625	9,612	11.3	14.7	14.4	6.9	0.4
	SS-Rate	99	95	95	93	93					
Oceania	Produc.	816	983	1,144	1,127	1,100	1.4	1.5	1.6	3.8	2.3
	Import	21	104	129	133	147	0.4	1.6	1.7	37.7	7.2
	Export	1	98	154	188	161	0.0	1.2	1.6	150.2	10.4
	Net Imp.	20	6	-25	-55	-14					
	Consump.	836	989	1,119	1,072	1,086	1.4	1.5	1.6	3.4	1.9
	SS-Rate	98	99	102	105	101					
Africa	Produc.	533	690	765	788	779	0.9	1.0	1.1	5.3	2.5
	Import	124	180	290	325	303	2.4	2.7	3.6	7.7	11.0
	Export	13	52	32	22	22	0.3	0.6	0.2	32.0	-15.8
	Net Imp.	111	128	258	303	281					
	Consump.	644	818	1,023	1,091	1,060	1.1	1.3	1.6	4.9	5.3
	SS-Rate	83	84	75	72	74					

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-1-7 Production/Import/Export/Apparent Consumption of Paper and Paperboard NES in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
World Total	Produc.	10,453	9,551	9,193	9,567	8,696	100.0	100.0	100.0	-1.8	-1.9
	Import	2,653	3,636	4,330	4,391	4,568	100.0	100.0	100.0	6.5	4.7
	Export	1,503	2,896	3,970	4,084	3,703	100.0	100.0	100.0	14.0	5.0
	Consump.	11,603	10,291	9,553	9,874	9,561	100.0	100.0	100.0	-2.4	-1.5
EC	Produc.	3,424	1,728	2,067	2,032	1,316	32.8	18.1	15.1	-12.8	-5.3
	Import	1,053	1,777	1,812	1,783	1,928	39.7	48.9	42.2	11.0	1.6
	Export	452	820	1,037	980	961	30.1	28.3	26.0	12.7	3.2
	Net Imp.	601	957	775	803	967					
	Consump.	4,025	2,685	2,842	2,835	2,283	34.7	26.1	23.9	-7.8	-3.2
	SS-Rate	85	64	73	72	58					
Scandinavian 3	Produc.	636	653	716	653	641	6.1	6.8	7.4	0.5	-0.4
	Import	140	168	158	152	150	5.3	4.6	3.3	3.7	-2.2
	Export	762	1,026	1,292	1,339	1,360	50.7	35.4	36.7	6.1	5.8
	Net Imp.	-622	-858	-1,134	-1,187	-1,210					
	Consump.	14	-205	-418	-534	-569	0.1	-2.0	-6.0	-14.6	22.7
	SS-Rate	4,543	-318	-171	-122	-113					
Other W. Europe	Produc.	596	381	703	722	756	5.7	4.0	8.7	-8.6	14.7
	Import	1	79	80	114	164	0.0	2.2	3.6	139.6	15.7
	Export	0	62	100	213	220	0.0	2.1	5.9	-	28.8
	Net Imp.	1	17	-20	-99	-56					
	Consump.	597	398	683	623	700	5.1	3.9	7.3	-7.8	12.0
	SS-Rate	100	96	103	116	108					
Total W. Europe	Produc.	4,656	2,762	3,486	3,407	2,713	44.5	28.9	31.2	-9.9	-0.4
	Import	1,194	2,024	2,050	2,049	2,242	45.0	55.7	49.1	11.1	2.1
	Export	1,214	1,908	2,429	2,532	2,541	80.8	65.9	68.6	9.5	5.9
	Net Imp.	-20	116	-379	-483	-299					
	Consump.	4,636	2,878	3,107	2,924	2,414	40.0	28.0	25.2	-9.1	-3.5
	SS-Rate	100	96	112	117	112					
Eastern Europe	Produc.	595	905	1,205	1,287	1,349	5.7	9.5	15.5	8.7	8.3
	Import	371	375	375	640	622	14.0	10.3	13.6	0.2	10.7
	Export	45	370	374	416	347	3.0	12.8	9.4	52.4	-1.3
	Net Imp.	326	5	1	224	275					
	Consump.	921	910	1,206	1,511	1,624	7.9	8.8	17.0	-0.2	12.3
	SS-Rate	65	100	100	85	83					

Table AII-1-7 Production/Import/Export/Apparent Consumption of Paper and Paperboard NES in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)			Average Growth Rate (%/y)	
							1972	1977	1982	1977/72	1982/77
North America	Produc.	2,018	2,921	2,191	2,201	1,923	19.3	30.6	22.1	7.7	-8.0
	Import	96	213	484	272	344	3.6	5.9	7.5	17.3	10.1
	Export	82	416	776	603	584	5.5	14.4	15.8	38.4	7.0
	Net Imp.	14	-203	-292	-331	-240					
	Consump.	2,032	2,718	1,899	1,870	1,683	17.5	26.4	17.6	6.0	-9.1
	SS-Rate	99	108	115	118	114					
Latin America	Produc.	787	509	679	529	488	7.5	5.3	5.6	-8.3	-0.8
	Import	185	173	296	284	272	7.0	4.8	6.0	-1.3	9.5
	Export	20	13	69	136	91	1.3	0.4	2.5	-8.3	47.6
	Net Imp.	165	160	227	148	181					
	Consump.	952	669	906	677	669	8.2	6.5	7.0	-6.8	0.0
	SS-Rate	83	76	75	78	73					
Asia	Produc.	2,294	2,304	1,530	2,029	2,132	21.9	24.1	24.5	0.1	-1.5
	Import	543	611	891	906	853	20.5	16.8	18.7	2.4	6.9
	Export	124	176	313	382	129	8.3	6.1	3.5	7.3	-6.0
	Net Imp.	419	435	578	524	724					
	Consump.	2,713	2,739	2,108	2,553	2,856	23.4	26.6	29.9	0.2	0.8
	SS-Rate	85	84	73	80	75					
Oceania	Produc.	78	108	27	39	16	0.7	1.1	0.2	6.7	-31.7
	Import	115	64	64	70	71	4.3	1.8	1.6	-11.1	2.1
	Export	14	4	4	9	3	0.9	0.1	0.1	-22.2	-5.6
	Net Imp.	101	60	60	61	68					
	Consump.	179	168	87	100	84	1.5	1.6	0.9	-1.3	-12.9
	SS-Rate	44	64	31	39	19					
Africa	Produc.	25	42	75	75	75	0.2	0.4	0.9	10.9	12.3
	Import	149	177	169	170	164	5.6	4.9	3.6	3.5	-1.5
	Export	4	10	5	7	7	0.3	0.3	0.2	20.1	-6.9
	Net Imp.	145	167	164	163	157					
	Consump.	170	209	239	238	232	1.5	2.0	2.4	4.2	2.1
	SS-Rate	15	20	31	32	32					

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Annex II-2

PRODUCTION/IMPORT/EXPORT
APPARENT CONSUMPTION OF PAPER AND PAPERBOARD
BY KIND IN LATIN AMERICAN COUNTRIES

(NOTES)

1. Sources: Yearbook of Forest Products, 1972-1982 (FAO)
2. Produc.: Production
Net Imp.: Net Import
Consump.: Apparent Consumption
3. Net Import = Import - Export
4. Apparent Consumption = Production + Import - Export
5. SS-Rate = Production/Apparent Consumption x 100
6. "Paper & Paperboard Total" includes "Newsprint",
"Printing & Writing Paper", and "Other Paper &
Paperboard".
7. "Other Paper & Paperboard" includes "Household &
Sanitary Paper", "Wrapping & Packing Paper &
Paperboard", "Paper & Paperboard NES", and others.

Table AII-2-1 Production/Import/Export/Apparent Consumption of Paper and Paperboard by Kind in Mexico

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	981	1,463	1,979	1,893	1,914	8.3	5.5
	Import	189	570	588	625	625	24.7	1.9
	Export	2	6	9	13	13	24.6	16.7
	Net Imp.	187	564	579	612	612		
	Consump.	1,168	2,027	2,558	2,505	2,526	11.7	4.5
	SS-Rate	84	72	77	76	76		
Newsprint	Produc.	40	90	116	129	125	17.6	6.8
	Import	55	297	200	351	351	40.1	3.4
	Export	0	0	0	0	0	-	-
	Net Imp.	55	297	200	351	351		
	Consump.	95	387	316	480	476	32.4	4.2
	SS-Rate	42	23	37	27	26		
Printing & Writing Paper	Produc.	141	304	526	427	452	16.6	8.3
	Import	125	233	65	46	46	13.3	-27.7
	Export	0	0	0	0	0	-	-
	Net Imp.	125	233	65	46	46		
	Consump.	266	537	591	473	498	15.1	-1.5
	SS-Rate	53	57	89	90	91		
Other Paper & Paperboard	Produc.	800	1,069	1,337	1,337	1,337	6.0	4.6
	Import	8	39	322	228	228	37.3	42.4
	Export	2	6	9	13	13	24.6	16.7
	Net Imp.	6	33	313	215	215		
	Consump.	806	1,102	1,650	1,552	1,552	6.5	7.1
	SS-Rate	99	97	81	86	86		
Household & Sanitary Paper	Produc.	71	126	184	224	248	12.2	14.5
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	71	126	184	224	248	12.2	14.5
	SS-Rate	100	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	616	881	1,109	1,120	1,106	7.4	4.7
	Import	0	35	250	177	177	-	38.3
	Export	0	0	0	0	0	-	-
	Net Imp.	0	35	250	177	177		
	Consump.	616	916	1,359	1,297	1,283	8.3	7.0
	SS-Rate	100	96	82	86	86		
Paper & Paperboard NES	Produc.	113	44	44	51	55	-17.2	4.6
	Import	0	4	72	50	50	-	65.7
	Export	0	0	0	0	0	-	-
	Net Imp.	0	4	72	50	50		
	Consump.	113	48	116	101	105	-15.7	16.9
	SS-Rate	100	92	38	50	52		

Table AII-2-2 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Argentina

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	748	539	713	669	745	-6.3	6.7
	Import	220	181	247	208	95	-3.8	-12.1
	Export	11	26	15	9	7	18.8	-23.1
	Net Imp.	209	155	232	199	88		
	Consump.	957	694	945	868	833	-6.2	3.7
	SS-Rate	78	78	75	77	89		
Newsprint	Produc.	3	16	97	110	90	39.8	41.3
	Import	182	160	174	137	49	-2.5	-21.1
	Export		1			1		
	Net Imp.	182	159	174	137	48		
	Consump.	185	175	271	247	138	-1.1	-4.6
	SS-Rate	2	9	36	45	65		
Printing & Writing Paper	Produc.	122	142	152	139	155	3.1	1.8
	Import	10	12	38	34	19	3.7	9.6
	Export	6	21	11	5	3	28.5	-32.2
	Net Imp.	4	-9	27	29	16		
	Consump.	126	133	179	168	171	1.1	5.2
	SS-Rate	97	107	85	83	91		
Other Paper & Paperboard	Produc.	623	381	464	420	500	-9.4	5.6
	Import	28	10	35	37	26	-18.6	21.1
	Export	5	5	4	5	3	0.0	-9.7
	Net Imp.	23	5	31	32	23		
	Consump.	646	386	495	452	523	-9.8	6.3
	SS-Rate	96	99	94	93	96		
Household & Sanitary Paper	Produc.	40	38	39	45	45	-1.0	3.4
	Import	0	0	0	0	0		
	Export	0	0	0	0	0		
	Net Imp.	0	0	0	0	0		
	Consump.	40	38	39	45	45	-1.0	3.4
	SS-Rate	100	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	178	270	377	352	400	8.7	8.2
	Import	0	0	5	10	3		
	Export	0	0	0	0	0		
	Net Imp.	0	0	5	10	3		
	Consump.	178	270	382	362	403	8.7	8.3
	SS-Rate	100	100	99	97	99		
Paper & Paperboard NES	Produc.	404	73	48	23	55	-29.0	-5.5
	Import	0	10	30	27	24		19.1
	Export	0	0	0	0	0		
	Net Imp.	0	10	30	27	24		
	Consump.	404	83	78	50	79	-27.1	-1.0
	SS-Rate	100	88	62	46	70		

Table AII-2-3 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Brazil

(Unit: 1,000 MT)

							Ave. Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1977/72	1982/77
Paper & Paperboard Total	Produc.	1345	2135	3362	3103	3228	9.7	8.6
	Import	255	270	266	242	225	1.2	-3.6
	Export	10	39	191	329	270	31.3	47.3
	Net Imp.	245	231	75	-87	-45		
	Consump.	1590	2366	3437	3016	3183	8.3	6.1
	SS-Rate	85	90	98	103	101		
Newsprint	Produc.	107	107	116	118	106	0.0	-0.2
	Import	139	234	221	218	206	11.0	-2.5
	Export	2	0	1	1	1	0.0	-
	Net Imp.	137	234	220	217	205		
	Consump.	244	341	336	335	311	6.9	-1.8
	SS-Rate	44	31	35	35	34		
Printing & Writing Paper	Produc.	362	476	860	864	898	5.6	13.5
	Import	91	17	18	5	3	-28.5	-29.3
	Export	7	32	128	201	187	35.5	42.3
	Net Imp.	84	-15	-110	-196	-184		
	Consump.	446	461	750	668	714	0.7	9.1
	SS-Rate	81	103	115	129	126		
Other Paper & Paperboard	Produc.	876	1552	2386	2121	2224	12.1	7.5
	Import	26	20	26	20	16	-5.1	-4.4
	Export	1	7	62	127	83	47.6	64.0
	Net Imp.	25	13	-36	-107	-67		
	Consump.	901	1565	2350	2014	2157	11.7	6.6
	SS-Rate	97	99	102	105	103		
Household & Sanitary Paper	Produc.	62	143	232	228	227	18.2	9.7
	Import	6	1	1	0	0	-30.1	-
	Export	0	0	3	5	4	-	-
	Net Imp.	6	1	-2	-5	-4		
	Consump.	68	144	230	223	223	16.2	9.1
	SS-Rate	91	99	101	102	102		
Wrapping & Packing Paper & Paperboard	Produc.	603	1053	1616	1479	1669	11.8	9.6
	Import	2	4	17			14.9	-
	Export	1	1	6	7	6	0.0	43.1
	Net Imp.	1	3	11	-7	-6		
	Consump.	604	1056	1627	1472	1663	11.8	9.5
	SS-Rate	100	100	99	100	100		
Paper & Paperboard NES	Produc.	211	355	538	414	328	11.0	-1.6
	Import	18	15	9	19	16	-3.6	1.3
	Export		6	53	115	73	-	64.8
	Net Imp.	18	9	-44	-96	-57		
	Consump.	229	364	494	318	271	9.7	-5.7
	SS-Rate	92	98	109	130	121		

Table AII-2-4 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Chile

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	281	296	374	327	317	1.0	1.4
	Import	12	0	0	0	0	-	-
	Export	47	100	89	65	73	16.3	-6.1
	Net Imp.	-35	-100	-89	-65	-73	-	-
	Consump.	246	196	285	262	244	-4.4	4.5
	SS-Rate	114	151	131	125	130	-	-
Newsprint	Produc.	95	132	131	131	124	6.8	-1.2
	Import	0	0	0	0	0	-	-
	Export	34	87	65	43	55	20.7	-8.8
	Net Imp.	-34	-87	-65	-43	-55	-	-
	Consump.	61	45	66	88	69	-5.9	8.9
	SS-Rate	156	293	198	149	180	-	-
Printing & Writing Paper	Produc.	50	44	48	48	48	-2.5	1.8
	Import	5	0	0	0	0	-	-
	Export	0	12	15	14	9	-	-5.6
	Net Imp.	5	-12	-15	-14	-9	-	-
	Consump.	55	32	33	34	39	-10.3	4.0
	SS-Rate	91	138	145	141	123	-	-
Other Paper & Paperboard	Produc.	136	120	195	148	145	-2.5	3.9
	Import	7	0	0	0	0	-	-
	Export	13	1	9	9	9	-40.1	55.2
	Net Imp.	-6	-1	-9	-9	-9	-	-
	Consump.	130	119	186	139	136	-1.8	2.7
	SS-Rate	105	101	105	106	107	-	-
Household & Sanitary Paper	Produc.	13	18	42	32	31	6.7	11.5
	Import	1	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	0	0	0	0	-	-
	Consump.	14	18	42	32	31	5.2	11.5
	SS-Rate	93	100	100	100	100	-	-
Wrapping & Packing Paper & Paperboard	Produc.	86	95	137	104	102	2.0	1.4
	Import	4	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	4	0	0	0	0	-	-
	Consump.	90	95	137	104	102	1.1	1.4
	SS-Rate	96	100	100	100	100	-	-
Paper & Paperboard NES	Produc.	37	7	16	12	12	-28.3	11.4
	Import	1	0	0	0	0	-	-
	Export	13	1	9	9	9	-40.1	55.2
	Net Imp.	-12	-1	-9	-9	-9	-	-
	Consump.	25	6	7	3	3	-24.8	-12.9
	SS-Rate	148	117	229	400	400	-	-

Table AII-2-5 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Colombia

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	250	281	351	407	366	2.4	5.4
	Import	80	74	151	213	186	-1.5	20.2
	Export	6	1	43	106	68	-30.1	132.5
	Net Imp.	74	73	108	107	118		
	Consump.	324	354	459	514	484	1.8	6.5
	SS-Rate	77	79	76	79	76		
Newsprint	Produc.	0	0	0	0	0	-	-
	Import	61	44	52	96	95	-6.3	16.6
	Export	0	0	0	0	0	-	-
	Net Imp.	61	44	52	96	95		
	Consump.	61	44	52	96	95	-6.3	16.6
	SS-Rate	0	0	0	0	0		
Printing & Writing Paper	Produc.	55	61	71	84	70	2.1	2.8
	Import	1	8	24	6	7	51.6	-2.6
	Export	3	1	3	1	1	-19.7	0.0
	Net Imp.	-2	7	21	5	6		
	Consump.	53	68	92	89	76	5.1	2.2
	SS-Rate	104	90	77	94	92		
Other Paper & Paperboard	Produc.	195	220	280	323	296	2.4	6.1
	Import	19	22	74	111	84	3.0	30.7
	Export	3		40	105	67	-	-
	Net Imp.	16	22	34	6	17		
	Consump.	211	242	314	329	313	2.8	5.3
	SS-Rate	92	91	89	98	95		
Household & Sanitary Paper	Produc.	0	22	45	54	45	0.0	15.4
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	0	22	45	54	45	-	15.4
	SS-Rate	0	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	0	193	221	253	227	-	3.3
	Import	0	22	60	88	62	-	23.0
	Export	0	0	40	105	67	-	-
	Net Imp.	0	22	20	-17	-5		
	Consump.	0	215	241	236	222	-	0.6
	SS-Rate	0	90	92	107	102		
Paper & Paperboard NES	Produc.	0	5	14	16	24	-	36.9
	Import	0	0	15	24	22	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	15	24	22		
	Consump.	0	5	29	40	46	-	55.9
	SS-Rate	0	100	48	40	52		

Table AII-2-6 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Ecuador

(Unit: 1,000 MT)

							Ave. Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1977/72	1982/77
Paper & Paperboard Total	Produc.	13	34	26	31	34	21.2	0.0
	Import	163	67	65	66	66	-16.3	-0.3
	Export	0	0	0	0	0	-	-
	Net Imp.	163	67	65	66	66	-	-
	Consump.	176	101	91	97	100	-10.5	-0.2
	SS-Rate	7	34	29	32	34		
Newsprint	Produc.	0	0	0	0	0	-	-
	Import	16	28	33	32	32	11.8	2.7
	Export	0	0	0	0	0	-	-
	Net Imp.	16	28	33	32	32	-	-
	Consump.	16	28	33	32	32	11.8	2.7
	SS-Rate	0	0	0	0	0		
Printing & Writing Paper	Produc.	0	3	4	5	5	0.0	10.8
	Import	6	13	19	19	19	16.7	7.9
	Export	0	0	0	0	0	-	-
	Net Imp.	6	13	19	19	19	-	-
	Consump.	6	16	23	24	24	21.7	8.4
	SS-Rate	0	19	17	21	21		
Other Paper & Paperboard	Produc.	13	31	22	27	29	19.0	-1.3
	Import	141	26	14	16	16	-28.7	-9.3
	Export	0	0	0	0	0	-	-
	Net Imp.	141	26	14	16	16	-	-
	Consump.	154	57	36	43	45	-18.0	-4.6
	SS-Rate	8	54	61	63	64		
Household & Sanitary Paper	Produc.	0	5	12	16	17	-	27.7
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	0	5	12	16	17	-	27.7
	SS-Rate	0	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	0	26	8	9	10	-	-17.4
	Import	139	25	12	14	14	-29.0	-10.9
	Export	0	0	0	0	0	-	-
	Net Imp.	139	25	12	14	14	-	-
	Consump.	139	51	20	23	24	-18.2	-14.0
	SS-Rate	0	51	40	39	42		
Paper & Paperboard NES	Produc.	0	0	1	2	2	-	-
	Import	1	1	1	2	2	0.0	14.9
	Export	0	0	0	0	0	-	-
	Net Imp.	1	1	1	2	2	-	-
	Consump.	1	1	2	4	4	0.0	32.0
	SS-Rate	0	0	50	50	50		

Table AII-2-7 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Peru

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	155	149	205	272	357	-0.8	19.1
	Import	73	62	19	47	54	-3.2	-2.7
	Export	21	12	2	2	2	-10.6	-30.1
	Net Imp.	52	50	17	45	52		
	Consump.	207	199	222	317	409	-0.8	15.5
	SS-Rate	75	75	92	86	87		
Newsprint	Produc.	0	0	30	25	110	0.0	0.0
	Import	58	56	7	32	39	-0.7	-7.0
	Export	0	5	0	0	0	-	-
	Net Imp.	58	51	7	32	39		
	Consump.	58	51	37	57	149	-2.5	23.9
	SS-Rate	0	0	81	44	74		
Printing & Writing Paper	Produc.	33	41	42	68	68	4.4	10.6
	Import	6	0	3	6	6	-	-
	Export	5	0	0	0	0	-	-
	Net Imp.	1	0	3	6	6		
	Consump.	34	41	45	74	74	3.8	12.5
	SS-Rate	97	100	93	92	92		
Other Paper & Paperboard	Produc.	122	108	133	179	179	-2.4	10.6
	Import	9	6	10	9	9	-7.8	8.4
	Export	16	7	2	2	2	-15.2	-22.2
	Net Imp.	-7	-1	8	7	7		
	Consump.	115	107	141	186	186	-1.4	11.7
	SS-Rate	106	101	94	96	96		
Household & Sanitary Paper	Produc.	11	17	19	22	22	9.1	5.3
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	11	17	19	22	22	9.1	5.3
	SS-Rate	100	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	111	88	111	157	157	-4.5	12.3
	Import	0	1	7	2	2	-	14.9
	Export	0	6	1	1	1	-	-30.1
	Net Imp.	0	-5	6	1	1		
	Consump.	111	83	117	158	158	-5.6	13.7
	SS-Rate	100	106	95	99	99		
Paper & Paperboard NES	Produc.	0	3	3	0	0	-	-
	Import	0	5	3	7	7	-	7.0
	Export	0	1	1	1	1	-	0.0
	Net Imp.	0	4	2	6	6		
	Consump.	0	7	5	6	6	-	-3.0
	SS-Rate	0	43	60	0	0		

Table AII-2-8 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Uruguay

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	37	35	52	44	44	-1.1	4.7
	Import	14	13	25	26	26	-1.5	14.9
	Export	0	4	9	7	7	-	11.8
	Net Imp.	14	9	16	19	19	-	-
	Consump.	51	44	68	63	63	-2.9	7.4
	SS-Rate	73	80	76	70	70	-	-
Newsprint	Produc.	0	0	0	0	0	-	-
	Import	13	12	17	22	22	-1.6	12.9
	Export	0	0	0	0	0	-	-
	Net Imp.	13	12	17	22	22	-	-
	Consump.	13	12	17	22	22	-1.6	12.9
	SS-Rate	0	0	0	0	0	-	-
Printing & Writing Paper	Produc.	12	11	25	20	20	-1.7	12.7
	Import	0	0	4	2	2	-	-
	Export	0	4	8	6	6	-	8.4
	Net Imp.	0	-4	-4	-4	-4	-	-
	Consump.	12	7	21	16	16	-10.2	18.0
	SS-Rate	100	157	119	125	125	-	-
Other Paper & Paperboard	Produc.	25	24	27	24	24	-0.8	0.0
	Import	1	1	4	2	2	0.0	14.9
	Export	0	1	1	1	1	-	0.0
	Net Imp.	1	0	3	1	1	-	-
	Consump.	26	24	30	25	25	-1.6	0.8
	SS-Rate	96	100	90	96	96	-	-
Household & Sanitary Paper	Produc.	6	4	6	6	6	-7.8	8.4
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	6	4	6	6	6	-7.8	8.4
	SS-Rate	100	100	100	100	100	-	-
Wrapping & Packing Paper & Paperboard	Produc.	12	16	20	18	18	5.9	2.4
	Import	0	0	0	1	1	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	1	1	-	-
	Consump.	12	16	20	19	19	5.9	3.5
	SS-Rate	100	100	100	95	95	-	-
Paper & Paperboard NES	Produc.	7	4	0	0	0	-10.6	-
	Import	1	1	3	2	2	0.0	14.9
	Export	0	1	1	1	1	-	0.0
	Net Imp.	1	0	2	1	1	-	-
	Consump.	8	4	2	1	1	-12.9	-24.2
	SS-Rate	88	100	0	0	0	-	-

Table AII-2-9 Production/Import/Export/Apparent Consumption of Paper and Paperboard in Venezuela

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Ave. Growth Rate (%/y)	
							1977/72	1982/77
Paper & Paperboard Total	Produc.	276	464	479	479	479	10.9	0.6
	Import	132	196	226	226	226	8.2	2.9
	Export	0	0	0	0	0	-	-
	Net Imp.	132	196	226	226	226		
	Consump.	408	660	705	705	705	10.1	1.3
	SS-Rate	68	70	68	68	68		
Newsprint	Produc.	0	0	0	0	0	-	-
	Import	78	107	140	140	140	6.5	5.5
	Export	0	0	0	0	0	-	-
	Net Imp.	78	107	140	140	140		
	Consump.	78	107	140	140	140	6.5	5.5
	SS-Rate	0	0	0	0	0		
Printing & Writing Paper	Produc.	35	69	84	84	84	14.5	4.0
	Import	14	19	25	25	25	6.3	5.6
	Export	0	0	0	0	0	-	-
	Net Imp.	14	19	25	25	25		
	Consump.	49	88	109	109	109	12.4	4.4
	SS-Rate	71	78	77	77	77		
Other Paper & Paperboard	Produc.	241	395	395	395	395	10.4	0.0
	Import	40	70	61	61	61	11.8	-2.7
	Export	0	0	0	0	0	-	-
	Net Imp.	40	70	61	61	61		
	Consump.	281	465	456	456	456	10.6	-0.4
	SS-Rate	86	85	87	87	87		
Household & Sanitary Paper	Produc.	37	68	91	91	91	12.9	6.0
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	37	68	91	91	91	12.9	6.0
	SS-Rate	100	100	100	100	100		
Wrapping & Packing Paper & Paperboard	Produc.	195	309	309	309	309	9.6	0.0
	Import	0	20	19	19	19	-	-1.0
	Export	0	0	0	0	0	-	-
	Net Imp.	0	20	19	19	19		
	Consump.	195	329	328	328	328	11.0	-0.1
	SS-Rate	100	94	94	94	94		
Paper & Paperboard NES	Produc.	9	18	7	7	7	14.9	-17.2
	Import	0	50	42	42	42	-	-3.4
	Export	4	0	0	0	0	-	-
	Net Imp.	-4	50	42	42	42		
	Consump.	5	68	49	49	49	68.5	-6.3
	SS-Rate	180	26	14	14	14		

Annex II-3

RATES OF IMPORT/APPARENT CONSUMPTION
OF NEWSPRINT IN MAJOR IMPORTING COUNTRIES
(1972-1982)

(NOTE)

1. Assumption to select the major importing countries or exporting countries is that the volume of import or export in 1982 is more than the following figures excluding the centrally planned countries:

(Unit: 1,000 CUM)

	<u>Import</u>	<u>Export</u>
Pulpwood	400	400

Table AII-3-1 Rates of Import/Apparent Consumption of Newsprint in Major Importing Countries (1972-1982) (1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Mexico											
Import	55	105	139	186	191	297	97	110	200	351	351
Consump.	95	144	179	215	247	387	181	205	316	480	476
Rate (%)	58	73	78	87	77	77	54	54	63	73	74
U.S.A.											
Import	6,442	6,722	6,712	5,305	5,959	5,950	6,787	6,552	6,594	6,330	5,924
Consump.	9,442	9,772	9,621	8,308	8,928	9,031	9,919	9,933	10,570	10,838	10,219
Rate (%)	68	69	70	64	67	66	68	66	62	58	58
Brazil											
Import	139	127	115	30	73	234	225	203	221	218	206
Consump.	244	254	236	154	200	341	352	319	336	335	311
Rate (%)	57	50	49	19	37	69	64	64	66	65	66
Venezuela											
Import	78	86	100	86	91	107	133	135	140	140	140
Consump.	78	86	100	86	91	107	133	135	140	140	140
Rate (%)	100	100	100	100	100	100	100	100	100	100	100
Belux											
Import	109	114	146	105	111	129	128	137	134	119	117
Consump.	175	184	216	161	172	189	194	206	202	187	185
Rate (%)	62	62	68	65	65	68	66	67	66	64	63
Denmark											
Import	176	181	137	126	143	134	170	179	153	164	158
Consump.	176	181	136	126	143	134	169	178	152	164	157
Rate (%)	100	100	101	100	100	100	101	101	101	100	101
France											
Import	252	289	342	165	318	327	326	329	371	350	311
Consump.	580	592	614	402	570	586	611	599	628	612	555
Rate (%)	43	49	56	41	56	56	53	55	59	57	56
W.Germany											
Import	666	714	714	655	684	734	723	827	869	782	751
Consump.	1,145	1,205	1,149	1,077	1,103	1,189	1,164	1,350	1,394	1,372	1,323
Rate (%)	58	59	62	61	62	62	62	61	62	57	57
Nether-lands											
Import	216	246	268	257	262	280	306	349	332	288	287
Consump.	336	350	382	359	360	383	412	447	458	431	429
Rate (%)	64	70	70	72	73	73	74	78	72	67	67
Italy											
Import	2	8	11	12	12	19	23	32	64	99	122
Consump.	304	262	274	245	267	217	255	277	328	321	316
Rate (%)	1	3	4	5	4	9	9	12	20	31	39
U.K.											
Import	1,130	1,165	1,276	943	1,134	964	1,033	1,069	1,077	1,363	1,269
Consump.	1,598	1,604	1,657	1,257	1,451	1,252	1,331	1,395	1,382	1,463	1,346
Rate (%)	71	73	77	75	78	77	78	77	78	93	94

Table All-3-1 Rates of Import/Apparent Consumption of Newsprint in Major Importing Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Spain											
Import	68	77	109	102	81	66	48	58	58	101	140
Consump.	194	211	224	204	188	172	158	165	163	208	232
Rate (%)	35	36	49	50	43	38	30	35	36	49	60
Hong Kong											
Import	51	61	57	55	69	62	87	93	104	102	102
Consump.	50	58	55	54	63	59	84	90	90	88	88
Rate (%)	102	105	104	102	110	105	104	103	116	116	116
India											
Import	154	117	141	101	125	168	168	232	232	232	232
Consump.	196	161	196	153	182	224	217	285	279	279	279
Rate (%)	79	73	72	66	69	75	77	81	83	83	83
Japan											
Import	80	91	92	30	40	42	52	89	127	165	244
Consump.	2,089	2,153	2,213	2,083	2,285	2,317	2,444	2,555	2,703	2,638	2,838
Rate (%)	4	4	4	1	2	2	2	3	5	6	9
Australia											
Import	221	258	283	325	217	321	266	295	337	278	252
Consump.	403	457	484	521	423	528	471	503	557	524	606
Rate (%)	55	56	58	62	51	61	56	59	61	53	42

Source: Yearbook of Forest Products, 1982 (FAO)

Table AII-3-2 Rates of Export/Production of Newsprint in Major Exporting Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export	7,350	7,617	7,892	6,349	6,937	7,266	7,868	7,778	7,707	7,937	7,078
Produc.	8,079	8,351	8,711	7,010	8,062	8,154	8,812	8,709	8,625	8,946	8,117
Rate (%)	91	91	91	91	87	89	89	89	89	89	87
U.S.A.											
Export	131	88	171	150	115	117	75	65	159	245	279
Produc.	3,131	3,138	3,080	3,153	3,084	3,198	3,207	3,446	4,135	4,753	4,574
Rate (%)	4	3	6	5	4	4	2	2	4	5	6
Finland											
Export	1,310	1,321	1,137	776	867	840	1,113	1,392	1,432	1,542	1,339
Produc.	1,397	1,386	1,219	992	931	979	1,126	1,513	1,569	1,703	1,501
Rate (%)	94	95	93	78	87	86	99	92	91	91	89
W.Germany											
Export	25	25	87	64	82	89	80	88	81	90	103
Produc.	504	516	522	486	501	544	521	611	606	680	680
Rate (%)	5	5	17	13	16	16	15	14	13	13	16
Norway											
Export	452	451	459	381	380	340	369	462	523	573	567
Produc.	534	527	509	435	466	435	482	568	589	691	668
Rate (%)	85	86	90	88	82	78	77	81	89	83	85
Sweden											
Export	768	850	944	921	861	847	1,031	1,240	1,238	1,301	1,031
Produc.	963	1,076	1,223	1,213	1,164	1,111	1,258	1,484	1,534	1,605	1,323
Rate (%)	80	79	77	76	74	76	82	84	81	81	78
S.Africa											
Export	12	57	30	15	63	99	150	100	120	180	180
Produc.	164	217	200	210	212	254	212	226	224	300	300
Rate (%)	7	26	15	7	30	39	71	44	54	60	60
Japan											
Export	51	44	112	107	96	95	90	100	98	136	121
Produc.	2,060	2,106	2,233	2,160	2,341	2,370	2,482	2,566	2,674	2,609	2,715
Rate (%)	2	2	5	5	4	4	4	4	4	5	4
New Zealand											
Export	124	111	120	106	164	190	196	208	241	234	159
Produc.	213	218	209	219	275	276	277	260	319	323	322
Rate (%)	58	51	57	48	60	69	71	80	76	72	49

Source: Yearbook of Forest Products, 1982 (FAO)

Table AII-3-3 Rates of Import/Apparent Consumption of Printing and Writing Paper in Major Importing Countries (1972-1982) (1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada	Import	58	64	65	147	196	116	103	127	208	147
	Consump.	595	639	731	550	706	809	910	985	1,076	972
	Rate (%)	10	10	9	27	28	14	13	11	13	19
U.S.A.	Import	235	269	290	190	308	475	858	1,044	562	676
	Consump.	11,162	12,167	12,239	9,966	12,101	12,874	13,952	14,857	14,156	14,398
	Rate (%)	2	2	2	2	3	4	6	7	5	4
Belux	Import	242	299	302	156	240	249	296	338	338	352
	Consump.	327	415	456	284	392	390	448	509	486	500
	Rate (%)	74	72	61	55	61	64	66	69	70	70
Denmark	Import	62	69	116	92	121	119	134	141	136	136
	Consump.	122	124	174	136	176	176	193	201	191	189
	Rate (%)	51	56	67	68	69	68	69	70	71	68
France	Import	329	369	375	362	389	387	493	539	597	609
	Consump.	1,701	1,834	1,831	1,411	1,737	1,727	2,221	2,051	2,080	2,099
	Rate (%)	19	20	20	26	22	22	22	26	29	29
W.Germany	Import	687	724	638	605	832	851	960	1,062	1,154	1,107
	Consump.	2,226	2,361	2,490	2,043	2,570	2,638	2,891	3,107	3,271	3,093
	Rate (%)	31	31	28	30	32	32	33	34	33	35
Italy	Import	31	43	67	34	64	50	68	105	148	212
	Consump.	1,076	1,314	1,299	977	1,346	1,319	1,483	1,641	1,591	1,508
	Rate (%)	3	3	5	3	5	4	5	6	9	11
Nether-lands	Import	216	286	311	249	266	365	342	394	413	348
	Consump.	524	510	550	461	588	605	667	687	644	588
	Rate (%)	41	56	57	54	45	60	51	54	58	64
U.K.	Import	355	417	533	531	488	670	766	867	815	1,005
	Consump.	1,492	1,565	1,752	1,425	1,356	1,550	1,699	1,783	1,640	1,816
	Rate (%)	24	27	30	37	36	43	45	49	50	56
Spain	Import	22	29	47	53	57	63	60	82	94	111
	Consump.	425	469	588	510	571	575	520	756	714	735
	Rate (%)	5	6	8	10	10	11	12	10	11	13

Table AII-3-3 Rates of Import/Apparent Consumption of Printing and Writing Paper in Major Importing Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
S.Africa											
Import	47	105	151	74	80	66	60	49	93	104	104
Consump.	134	194	262	144	179	174	193	208	257	271	271
Rate (%)	35	54	58	51	45	38	31	24	36	38	38
Hong Kong											
Import	60	81	65	51	76	77	111	118	117	134	134
Consump.	57	72	61	47	70	77	111	118	112	129	129
Rate (%)	105	113	107	109	109	100	100	100	104	104	104
Australia											
Import	140	147	159	164	83	143	129	160	181	234	289
Consump.	247	267	316	311	193	303	271	336	375	455	492
Rate (%)	57	55	50	53	43	47	48	48	48	51	59

Source: Yearbook of Forest Products, 1982 (FAO)

Table AII-3-4 Rates of Export/Production of Printing and Writing Paper in Major Exporting Countries (1972-1982) (1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export	344	317	390	276	332	416	524	634	653	564	655
Produc.	881	892	1,056	679	842	1,109	1,316	1,525	1,511	1,432	1,480
Rate (%)	39	36	37	41	39	38	40	42	43	39	44
U.S.A.											
Export	190	234	320	366	383	303	280	210	212	294	188
Produc.	11,117	12,132	12,269	10,142	12,176	12,702	13,374	14,023	13,716	13,850	13,910
Rate (%)	2	2	3	4	3	2	2	1	2	2	1
Brazil											
Export	7	24	17	8	26	32	78	102	123	201	187
Produc.	362	369	430	417	445	476	627	755	860	864	898
Rate (%)	2	7	4	2	6	7	12	14	15	23	21
Belux											
Export	294	309	250	202	251	253	262	272	288	288	288
Produc.	379	425	444	330	403	394	414	429	436	436	436
Rate (%)	78	73	56	61	62	64	63	63	66	66	66
Finland											
Export	1,007	1,246	1,501	1,177	1,325	1,526	1,634	1,616	1,750	1,700	1,871
Produc.	1,303	1,627	1,833	1,340	1,527	1,686	1,906	1,877	2,027	2,093	2,171
Rate (%)	77	77	82	88	87	91	86	86	86	81	86
France											
Export	208	214	335	262	282	344	452	515	528	536	521
Produc.	1,580	1,679	1,791	1,311	1,630	1,684	2,180	2,027	2,011	2,009	2,011
Rate (%)	13	13	19	20	17	20	21	25	26	27	26
W. Germany											
Export	417	532	522	278	464	539	594	664	685	840	964
Produc.	1,956	2,169	2,314	1,716	2,202	2,326	2,525	2,709	2,879	2,950	2,950
Rate (%)	21	25	23	16	21	23	24	25	24	28	33
Italy											
Export	161	113	136	111	188	212	303	351	330	393	373
Produc.	1,206	1,384	1,368	1,054	1,470	1,481	1,718	1,887	1,799	1,806	1,669
Rate (%)	13	8	10	11	13	14	18	19	18	22	22
Nether-lands											
Export	207	307	316	194	196	261	216	251	284	269	260
Produc.	515	531	555	406	518	501	541	564	571	500	500
Rate (%)	40	58	57	48	38	52	40	45	50	54	52
Norway											
Export	214	231	231	163	187	193	232	238	231	169	158
Produc.	270	346	369	292	300	287	304	350	337	267	250
Rate (%)	79	67	63	56	62	67	76	68	69	63	63
Sweden											
Export	297	394	445	278	314	402	469	520	510	542	524
Produc.	620	788	579	448	506	766	907	999	998	996	992
Rate (%)	48	50	77	62	62	52	52	52	51	54	53

Table AII-3-4 Rates of Export/Production of Printing and Writing Paper in Major Exporting Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Austria											
Export	363	429	462	410	506	527	526	561	562	622	613
Produc.	502	557	602	523	601	594	596	624	618	646	661
Rate (%)	72	77	77	78	84	89	88	90	91	96	93
Japan											
Export	132	118	194	194	192	182	170	230	247	259	345
Produc.	2,448	2,820	2,937	2,772	3,050	3,103	3,416	3,771	4,137	4,589	4,847
Rate (%)	5	4	7	7	6	6	5	6	6	6	7

Source: Yearbook of Forest Products, 1982 (FAO)

Table AII-3-5 Rates of Import/Apparent Consumption of Other Paper and Paperboard in Major Importing Countries (1972-1982)(1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Import	190	238	294	384	358	234	201	193	133	170	183
Consump.	2,633	2,762	2,932	2,229	2,508	2,214	2,326	2,361	2,191	2,388	2,084
Rate (%)	7	8	10	17	14	11	9	8	6	7	9
Mexico											
Import	8	14	37	7	45	39	41	112	322	228	228
Consump.	806	937	1,059	904	1,036	1,102	1,197	1,335	1,650	1,552	1,552
Rate (%)	1	1	3	1	4	4	3	8	20	15	15
U.S.A.											
Import	218	283	240	139	161	242	424	429	612	325	374
Consump.	34,460	35,192	33,620	29,687	33,652	34,915	35,896	39,311	38,469	39,148	34,133
Rate (%)	1	1	1	0	0	1	1	1	2	1	1
Belux											
Import	444	508	537	371	499	478	514	525	511	511	542
Consump.	641	693	714	541	674	621	669	703	675	675	706
Rate (%)	69	73	75	69	74	77	77	75	76	76	77
Denmark											
Import	276	326	319	268	320	311	321	345	336	347	353
Consump.	415	459	431	358	448	441	449	454	385	371	377
Rate (%)	67	71	74	75	71	71	71	76	87	94	94
France											
Import	917	992	1,101	709	1,050	897	970	1,108	1,141	1,130	1,164
Consump.	3,240	3,435	3,699	2,965	3,336	3,205	3,059	3,579	3,488	3,469	3,446
Rate (%)	28	29	30	24	31	28	32	31	33	33	34
W.Germany											
Import	1,630	1,711	1,554	1,194	1,503	1,561	1,681	1,829	1,794	1,797	1,855
Consump.	4,746	4,952	4,588	3,824	4,557	4,608	4,694	5,051	4,963	4,952	4,860
Rate (%)	34	35	34	31	33	34	36	36	36	36	38
Italy											
Import	470	548	598	275	348	379	479	621	649	538	525
Consump.	2,490	2,787	2,873	2,222	2,869	2,755	3,092	3,320	3,350	3,139	2,969
Rate (%)	19	20	21	12	12	14	15	19	19	17	18
Nether-lands											
Import	332	385	414	305	572	426	620	720	709	734	776
Consump.	1,000	1,073	1,114	836	995	1,015	987	1,079	1,044	1,014	1,093
Rate (%)	33	36	37	36	57	42	63	67	68	72	71
U.K.											
Import	1,570	1,638	1,916	1,180	1,485	1,760	1,697	1,791	1,619	1,680	1,614
Consump.	4,057	4,368	4,460	3,341	4,128	4,349	4,256	4,351	3,811	3,824	3,578
Rate (%)	39	38	43	35	36	40	40	41	42	44	45

Table AII-3-5 Rates of Import/Apparent Consumption of Other Paper and Paperboard in Major Importing Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Hong Kong Import	258	257	194	199	299	290	368	365	378	366	366
Consump.	249	239	183	196	295	300	373	381	370	358	358
Rate (%)	104	108	106	102	101	97	97	96	102	102	102
Australia Import	96	115	180	163	136	157	154	177	177	192	206
Consump.	876	930	989	949	940	1,030	1,019	1,090	1,176	1,138	1,109
Rate (%)	11	12	18	17	14	15	15	16	15	17	19
Iran Import	105	98	95	201	184	210	210	210	210	210	210
Consump.	137	138	126	235	223	249	249	243	243	243	243
Rate (%)	77	71	75	86	83	84	84	86	86	86	86
Japan Import	56	173	234	110	145	211	338	289	455	419	444
Consump.	8,903	10,875	10,356	8,373	9,784	10,052	10,571	11,389	11,313	9,672	10,005
Rate (%)	1	2	2	1	1	2	3	3	4	4	4

Source: Yearbook of Forest Products, 1982 (FAO)

Table AII-3-6 Rates of Export/Production of Other Paper and Paperboard in Major Exporting Countries (1972-1982) (1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export	635	781	813	533	737	908	1,033	1,084	1,196	1,007	909
Produc.	3,078	3,335	3,451	2,378	2,887	2,888	3,158	3,252	3,254	3,225	2,810
Rate (%)	21	23	24	22	26	31	33	33	37	31	32
U.S.A.											
Export	2,331	2,217	2,670	2,053	2,371	2,222	1,343	2,556	3,749	3,037	2,821
Produc.	36,573	37,126	36,050	31,601	35,862	36,895	36,815	41,438	41,606	41,860	36,580
Rate (%)	6	6	7	6	7	6	4	6	9	7	8
Belux											
Export	114	126	135	99	116	123	141	158	162	162	162
Produc.	311	311	312	269	291	266	296	336	326	326	326
Rate (%)	37	41	43	37	40	46	48	47	50	50	50
Finland											
Export	1,770	1,918	1,965	1,183	1,506	1,449	1,553	1,736	1,686	1,664	1,689
Produc.	2,271	2,440	2,471	1,662	2,032	1,955	2,108	2,348	2,323	2,339	2,223
Rate (%)	78	79	80	71	74	74	74	74	73	71	76
France											
Export	297	358	395	295	378	389	407	482	533	541	526
Produc.	2,620	2,801	2,993	2,551	2,664	2,697	2,496	2,953	2,880	2,880	2,808
Rate (%)	11	13	13	12	14	14	16	16	19	19	19
W.Germany											
Export	383	537	719	455	663	687	791	902	926	1,011	1,161
Produc.	3,499	3,778	3,753	3,085	3,717	3,734	3,804	4,124	4,095	4,166	4,166
Rate (%)	11	14	19	15	18	18	21	22	23	24	28
Nether-lands											
Export	252	336	385	257	540	412	647	669	624	620	583
Produc.	920	1,024	1,085	788	963	1,001	1,014	1,028	959	900	900
Rate (%)	27	33	35	33	56	41	64	65	65	69	65
Norway											
Export	308	324	351	230	280	284	296	317	294	277	260
Produc.	523	530	567	420	491	484	454	482	447	415	387
Rate (%)	59	61	62	55	57	61	65	66	66	67	67
Sweden											
Export	2,164	2,487	2,600	1,706	2,222	2,510	2,870	3,033	2,877	2,879	2,336
Produc.	2,980	3,340	3,703	2,812	3,335	3,183	3,537	3,798	3,650	3,613	3,613
Rate (%)	73	74	70	61	67	79	81	80	79	80	81
U.K.											
Export	185	230	323	183	235	289	253	269	296	229	229
Produc.	2,672	2,980	2,867	2,344	2,878	2,878	2,812	2,829	2,488	2,373	2,193
Rate (%)	7	8	11	8	8	10	9	10	12	10	10
Austria											
Export	195	233	242	216	250	232	253	292	285	336	324
Produc.	531	611	657	584	640	659	676	770	822	847	865
Rate (%)	37	38	37	37	39	35	37	38	35	40	37

Table AII-3-6 Rates of Export/Production of Other Paper and Paperboard in Major Exporting Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Portugal											
Export	14	20	50	89	110	115	103	148	130	130	130
Produc.	184	199	242	302	273	370	356	402	376	393	393
Rate (%)	8	10	21	29	40	31	29	37	35	33	33
Spain											
Export	25	35	41	36	54	66	105	157	114	207	249
Produc.	1,107	1,240	1,321	1,229	1,365	1,452	1,480	1,695	1,741	1,765	1,888
Rate (%)	2	3	3	3	4	5	7	9	7	12	13
Switzer-land											
Export	27	43	76	51	85	77	86	122	136	139	159
Produc.	330	376	395	277	338	355	362	407	420	428	420
Rate (%)	8	11	19	18	25	22	24	30	32	32	38
Japan											
Export	293	347	353	405	364	388	368	424	419	390	245
Produc.	9,140	11,049	10,475	8,668	10,003	10,229	10,601	11,524	11,277	9,643	9,806
Rate (%)	3	3	3	5	4	4	3	4	4	4	2

Source: Yearbook of Forest Products, 1982 (FAO)

Annex II-4

PRODUCTION/IMPORT/EXPORT/
APPARENT CONSUMPTION OF WOOD PULP
IN THE WORLD BY REGION

(NOTES)

1. Produc.: Production
Net Imp.: Net Import
Consump.: Apparent Consumption
2. Net Import = Import - Export
3. Apparent Consumption = Production + Import - Export
4. SS-Rate = Production/Apparent Consumption x 100
5. "EC" includes West Germany, France, Italy, the Netherlands, Belux, the U.K., Ireland and Denmark and Greece through 1972 to 1982, though the U.K., Ireland and Denmark joined in 1973 and Greece joined in 1981.
6. "Scandinavian 3" includes Finland, Norway and Sweden.

Table AII-4-1 Production/Import/Export/Apparent Consumption of Total Woodpulp
in the World by Region (1)
(Unit: 1,000 MT)

Region	Item	1972	1977	1980	1981	1982	Share (%)		Average Growth Rate (%/y)
							1972	1977	
World Total	Produc.	108,018	116,695	126,031	126,609	128,517	100.0	100.0	1.6
	Import	16,361	16,691	20,579	19,562	18,093	100.0	100.0	0.4
	Export	16,456	17,105	21,222	20,236	18,477	100.0	100.0	0.8
	Consump.	107,923	116,281	125,388	125,935	128,133	100.0	100.0	0.7
EC	Produc.	5,601	5,522	5,455	5,323	5,348	5.2	4.7	-0.3
	Import	8,165	7,705	9,103	8,627	7,765	49.9	46.2	-1.2
	Export	443	508	584	501	492	2.7	3.0	2.8
	Net Imp.	7,722	7,197	8,519	8,126	7,273			
	Consump.	13,323	12,719	13,974	13,449	12,621	12.3	10.9	-0.9
	SS-Rate	42	43	39	40	42			-0.2
Scandinavian 3	Produc.	16,590	14,411	17,427	17,482	15,943	15.4	12.3	-2.8
	Import	251	226	438	395	371	1.5	1.4	-2.1
	Export	6,138	4,968	5,520	5,131	4,439	37.3	29.0	-4.1
	Net Imp.	-5,879	-4,742	-5,082	-4,736	-4,068			
	Consump.	10,711	9,669	12,345	12,746	11,875	9.9	8.3	-2.0
	SS-Rate	155	149	141	137	134			4.2
Other W. Europe	Produc.	2,418	2,951	3,421	3,483	3,446	2.2	2.5	4.1
	Import	694	763	808	774	784	4.2	4.6	1.9
	Export	592	547	913	929	889	3.6	3.2	-1.6
	Net Imp.	102	216	-105	-155	-105			10.2
	Consump.	2,520	3,167	3,316	3,328	3,335	2.3	2.7	4.7
	SS-Rate	96	93	103	105	103			1.0
Total W. Europe	Produc.	24,609	22,884	26,303	26,288	24,731	22.8	19.6	-1.4
	Import	9,110	8,694	10,349	9,796	8,920	55.7	52.1	-0.9
	Export	7,165	6,023	7,017	6,561	5,828	43.5	35.2	-3.4
	Net Imp.	1,945	2,671	3,332	3,235	3,100			-0.7
	Consump.	26,554	25,555	29,635	29,523	27,831	24.6	22.0	-0.8
	SS-Rate	93	90	89	89	89			1.7
Eastern Europe	Produc.	10,653	13,196	13,025	13,150	13,303	9.9	11.3	4.4
	Import	995	1,311	1,439	1,323	1,258	6.1	7.9	5.7
	Export	688	787	983	996	1,090	4.2	4.6	2.7
	Net Imp.	307	524	456	327	188			6.7
	Consump.	10,960	13,720	13,481	13,477	13,471	10.2	11.8	4.6
	SS-Rate	97	96	97	98	99			-0.4

Table AII-4-1 Production/Import/Export/Apparent Consumption of Total Woodpulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)						Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1977	1982	1977/72	1982/77	
North America	Produc.	57,321	62,255	66,124	66,880	62,151	53.1	53.3	51.6	1.7	0.0
	Import	3,455	3,545	3,794	3,824	3,442	21.1	21.2	19.0	0.5	-0.6
	Export	7,581	8,509	10,636	10,074	9,183	46.1	49.7	49.7	2.3	1.5
	Net Imp.	-4,126	-4,964	-6,842	-6,250	-5,741					
	Consump.	53,195	57,291	59,282	60,630	56,410	49.3	49.3	47.0	1.5	-0.3
	SS-Rate	108	109	112	110	110					
Latin America	Produc.	1,977	3,133	4,652	4,516	4,574	1.8	2.7	3.8	9.6	7.9
	Import	707	501	753	784	756	4.3	3.0	4.2	-6.7	8.6
	Export	262	433	1,306	1,362	1,287	1.6	2.5	7.0	10.6	24.3
	Net Imp.	445	68	-553	-578	-531					
	Consump.	2,422	3,201	4,099	3,938	4,043	2.2	2.8	3.4	5.7	4.8
	SS-Rate	82	98	114	115	113					
Asia	Produc.	11,391	12,328	12,459	12,184	12,185	10.5	10.6	10.1	1.6	-0.2
	Import	1,702	2,143	3,654	3,275	3,185	10.4	12.8	17.6	4.7	8.2
	Export	102	182	134	182	138	0.6	1.1	0.7	12.3	-5.4
	Net Imp.	1,600	1,961	3,520	3,093	3,047					
	Consump.	12,991	14,289	15,979	15,277	15,232	12.0	12.3	12.7	1.9	1.3
	SS-Rate	88	86	78	80	80					
Oceania	Produc.	1,127	1,712	1,819	1,908	1,887	1.0	1.5	1.6	8.7	2.0
	Import	247	282	285	287	264	1.5	1.7	1.5	2.7	-1.3
	Export	114	452	475	518	421	0.7	2.6	2.3	31.7	-1.4
	Net Imp.	133	-170	-190	-231	-157					
	Consump.	1,260	1,542	1,629	1,677	1,730	1.2	1.3	1.4	4.1	2.3
	SS-Rate	89	111	112	114	109					
Africa	Produc.	941	1,188	1,649	1,682	1,686	0.9	1.0	1.4	4.8	7.3
	Import	145	216	307	273	268	0.9	1.3	1.5	8.3	4.4
	Export	544	719	670	543	540	3.3	4.2	2.9	5.7	-5.6
	Net Imp.	-399	-503	-363	-270	-272					
	Consump.	542	685	1,286	1,412	1,414	0.5	0.6	1.2	4.8	15.6
	SS-Rate	174	173	128	119	119					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-2 Production/Import/Export/Apparent Consumption of Mechanical Woodpulp in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1982/77			
World Total	Produc.	24,330	27,740	26,606	28,043	26,566	100.0	100.0	2.7	-0.9	
	Import	1,245	1,218	1,313	1,162	1,090	100.0	100.0	-0.4	-2.2	
	Export	1,143	1,173	1,249	1,075	1,004	100.0	100.0	0.5	-3.1	
	Consump.	24,432	27,785	26,670	28,130	26,652	100.0	100.0	2.6	-0.8	
EEC	Produc.	2,506	2,447	2,652	2,541	2,537	10.3	8.8	9.5	-0.5	0.7
	Import	812	641	576	464	423	65.2	52.6	38.8	-4.6	-8.0
	Export	6	29	35	4	5	0.5	2.5	0.5	37.0	-29.6
	Net Imp.	806	612	541	460	418					
	Consump.	3,312	3,059	3,193	3,001	2,955	13.6	11.0	11.1	-1.6	-0.7
SS-Rate	76	80	83	85	86						
Scandinavian 3	Produc.	4,550	4,064	5,227	5,297	4,969	18.7	14.7	18.7	-2.2	4.1
	Import	0	4	6	6	7	0.0	0.3	0.6	0.0	11.8
	Export	856	534	617	505	473	74.9	45.5	47.1	-9.0	-2.4
	Net Imp.	-856	-530	-611	-499	-466					
	Consump.	3,694	3,534	4,616	4,798	4,503	15.1	12.7	16.9	-0.9	5.0
SS-Rate	123	115	113	110	110						
Other W. Europe	Produc.	533	578	611	636	595	2.2	2.1	2.2	1.6	0.6
	Import	31	30	26	20	14	2.5	2.5	1.3	-0.7	-14.1
	Export	1	9	8	11	21	0.1	0.8	2.1	55.2	18.5
	Net Imp.	30	21	18	9	-7					
	Consump.	563	599	629	645	588	2.3	2.2	2.2	1.2	-0.4
SS-Rate	95	97	97	99	101						
Total W. Europe	Produc.	7,589	7,089	8,490	8,474	8,101	31.2	25.6	30.5	-1.4	2.7
	Import	843	675	608	490	444	67.7	55.4	40.7	-4.3	-8.0
	Export	863	572	660	520	499	75.5	48.8	49.7	-7.9	-2.7
	Net Imp.	-20	103	-52	-30	-55					
	Consump.	7,569	7,192	8,438	8,444	8,046	31.0	25.9	30.2	-1.0	2.3
SS-Rate	100	99	101	100	101						
Eastern Europe	Produc.	2,449	2,649	2,547	2,579	2,574	10.1	9.5	9.7	1.6	-0.6
	Import	27	15	29	16	16	2.2	1.2	1.5	-11.1	1.3
	Export	0	7	3	1	1	-	0.6	0.1	-	-32.2
	Net Imp.	27	8	26	15	15					
	Consump.	2,476	2,657	2,573	2,594	2,589	10.1	9.6	9.7	1.4	-0.5
SS-Rate	99	100	99	99	99						

Table AII-4-2 Production/Import/Export/Apparent Consumption of Mechanical Woodpulp
in the World by Region (2)
(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977/72	1982/77			
North America	Produc.	11,243	14,165	11,679	12,457	11,436	46.2	51.1	43.0	4.7	-4.2
	Import	179	141	135	144	131	14.4	11.6	12.0	-4.7	-1.5
	Export	263	350	324	277	281	23.0	29.8	28.0	5.9	-4.3
	Net Imp.	-84	-209	-189	-133	-150					
	Consump.	11,159	13,956	11,490	12,324	11,286	45.7	50.2	42.3	4.6	-4.2
	SS-Rate	101	102	102	101	101					
Latin America	Produc.	387	359	418	407	410	1.6	1.3	1.5	-1.5	2.7
	Import	34	19	51	102	96	2.7	1.6	8.8	-11.0	38.3
	Export	7	2	4	4	5	0.6	0.2	0.5	-22.2	20.1
	Net Imp.	27	17	47	98	91					
	Consump.	414	376	465	505	501	1.7	1.4	1.9	-1.9	5.9
	SS-Rate	94	96	90	81	82					
Asia	Produc.	2,072	2,569	2,257	2,908	2,772	8.5	9.3	10.4	4.4	1.5
	Import	141	353	479	405	399	11.3	29.0	36.6	20.1	2.5
	Export	3	0	0	0	0	0.3	0.0	0.0	-	-
	Net Imp.	138	353	479	405	399					
	Consump.	2,210	2,922	2,736	3,313	3,171	9.0	10.5	11.9	5.7	1.6
	SS-Rate	94	88	83	88	87					
Oceania	Produc.	412	709	778	800	855	1.7	2.6	3.2	11.5	3.8
	Import	12	5	4	3	1	1.0	0.4	0.1	-16.1	-27.5
	Export	8	242	259	273	218	0.7	20.6	21.7	97.8	-2.1
	Net Imp.	4	-237	-255	-270	-217					
	Consump.	416	472	523	530	638	1.7	1.7	2.4	2.6	6.2
	SS-Rate	99	150	149	151	134					
Africa	Produc.	178	200	437	418	418	0.7	0.7	1.6	2.4	15.9
	Import	8	11	7	2	2	0.6	0.9	0.2	6.6	-28.9
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	8	11	7	2	2					
	Consump.	186	211	444	420	420	0.8	0.8	1.6	2.6	14.8
	SS-Rate	96	95	98	100	100					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-3 Production/Import/Export/Apparent Consumption of Semi-chemical Woodpulp in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	Share (%)						Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1972	1977	1982	1977/72	1982/77
World Total	Produc.	7,953	7,346	7,644	7,257	6,852	100.0	100.0	100.0	100.0	-1.6	-2.0
	Import	132	138	146	154	150	100.0	100.0	100.0	100.0	0.9	1.7
	Export	128	87	108	101	95	100.0	100.0	100.0	100.0	-7.4	1.8
	Consump.	7,957	7,397	7,682	7,310	6,707	100.0	100.0	100.0	100.0	-1.4	-1.9
EC	Produc.	668	559	492	445	423	8.4	7.6	6.4	6.4	-3.5	-5.4
	Import	112	81	94	102	93	84.8	58.7	62.0	62.0	-6.3	2.8
	Export	78	48	62	61	55	60.9	55.2	57.9	57.9	-9.3	2.8
	Net Imp.	34	33	32	41	38						
	Consump.	702	592	524	486	461	8.8	8.0	6.9	6.9	-3.4	-4.9
	SS-Rate	95	94	94	92	92						
Scandinavian 3	Produc.	767	608	681	641	609	9.6	8.3	9.2	9.2	-4.5	0.0
	Import	0	1	1	4	5	0.0	0.7	3.3	3.3	0.0	38.0
	Export	49	39	46	40	39	38.3	44.8	41.1	41.1	-4.5	0.0
	Net Imp.	-49	-38	-45	-36	-34						
	Consump.	718	570	636	605	575	9.0	7.7	8.6	8.6	-4.5	0.2
	SS-Rate	107	107	107	106	106						
Other W. Europe	Produc.	19	104	88	80	70	0.2	1.4	1.1	1.1	40.5	-7.6
	Import	2	0	0	0	0	1.5	0.0	0.0	0.0	-	-
	Export	1	0	0	0	1	0.8	0.0	1.1	1.1	0.0	0.0
	Net Imp.	1	0	0	0	0						
	Consump.	20	104	88	80	70	0.3	1.4	1.0	1.0	38.8	-7.7
	SS-Rate	95	101	101	101	101						
Total W. Europe	Produc.	1,454	1,271	1,261	1,166	1,102	18.3	17.3	16.6	16.6	-2.7	-2.8
	Import	114	81	94	105	98	86.4	58.7	65.3	65.3	-6.6	3.9
	Export	128	87	108	101	95	100.0	100.0	100.0	100.0	-7.4	1.8
	Net Imp.	-14	-6	-14	4	3						
	Consump.	1,440	1,265	1,247	1,170	1,105	18.1	17.1	16.5	16.5	-2.6	-2.7
	SS-Rate	101	101	101	100	100						
Eastern Europe	Produc.	366	630	686	696	686	4.6	8.6	10.3	11.5	11.5	1.7
	Import	1	0	0	0	0	0.8	0.0	0.0	0.0	-	-
	Export	0	0	0	0	0	0.0	0.0	0.0	0.0	-	-
	Net Imp.	1	0	0	0	0						
	Consump.	367	630	686	696	686	4.6	8.5	10.2	11.4	11.4	1.7
	SS-Rate	100	100	100	100	100						

Table AII-4-3 Production/Import/Export/Apparent Consumption of Semi-chemical Woodpulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1982	1977	1977/72	1982/77			
North America	Produc.	3,772	3,525	3,986	3,882	3,611	47.4	48.0	54.3	-1.3	0.5
	Import	1	14	2	2	7	0.8	10.1	4.7	69.5	-12.9
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	1	14	2	2	7					
	Consump.	3,773	3,539	3,988	3,884	3,618	47.4	47.8	53.9	-1.3	0.4
	SS-Rate	100	100	100	100	100					
Latin America	Produc.	205	205	304	312	293	2.6	2.8	4.4	0.0	7.4
	Import	5	3	9	6	6	3.8	2.2	4.0	-9.7	14.9
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	5	3	9	6	6					
	Consump.	210	208	313	318	299	2.6	2.8	4.5	-0.2	7.5
	SS-Rate	98	99	97	98	98					
Asia	Produc.	1,878	1,366	1,028	836	621	23.6	18.6	9.3	-6.2	-14.6
	Import	4	37	32	36	37	3.0	26.8	24.7	56.0	0.0
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	4	37	32	36	37					
	Consump.	1,882	1,403	1,060	872	658	23.7	19.0	9.8	-5.7	-14.1
	SS-Rate	100	97	97	96	94					
Oceania	Produc.	226	221	285	274	249	2.8	3.0	3.7	-0.4	2.4
	Import	0	1	3	3	1	0.0	0.7	0.7	0.0	0.0
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	0	1	3	3	1					
	Consump.	226	222	288	277	250	2.8	3.0	3.7	-0.4	2.4
	SS-Rate	100	100	99	99	100					
Africa	Produc.	52	128	94	92	91	0.7	1.7	1.4	19.7	-6.6
	Import	7	2	6	2	2	5.3	1.4	1.3	-22.2	0.0
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	7	2	6	2	2					
	Consump.	59	130	100	94	93	0.7	1.8	1.4	17.1	-6.5
	SS-Rate	88	99	94	98	98					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-4 Production/Import/Export/Apparent Consumption of Chemical Woodpulp
in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	Share (%)						Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1972	1977	1982	1977/72	1982/77
World Total	Produc.	70,718	76,907	87,067	86,721	82,976	100.0	100.0	100.0	1.7	1.5
	Import	13,505	13,998	17,627	16,970	15,650	100.0	100.0	100.0	0.7	2.3
	Export	13,309	14,141	18,218	17,434	16,003	100.0	100.0	100.0	1.2	2.5
	Consump.	70,914	76,764	86,476	86,257	82,623	100.0	100.0	100.0	1.6	1.5
EC	Produc.	2,062	2,185	2,027	2,039	2,090	2.9	2.8	2.5	1.2	-0.9
	Import	6,512	6,460	7,882	7,607	6,786	48.2	46.1	43.4	-0.2	1.0
	Export	332	390	426	393	396	2.5	2.8	2.5	3.3	0.3
	Net Imp.	6,180	6,070	7,456	7,214	6,390	11.6	10.8	10.3	0.0	0.5
	Consump.	8,242	8,255	9,483	9,253	8,480	11.6	10.8	10.3	0.0	0.5
SS-Rate	25	27	21	22	25						
Scandinavian 3	Produc.	10,587	9,235	11,067	11,111	9,964	15.0	12.0	12.0	-2.7	1.5
	Import	246	220	400	349	299	1.8	1.6	1.9	-2.2	6.3
	Export	4,709	3,966	4,469	4,200	3,601	35.4	28.0	22.5	-3.4	-1.9
	Net Imp.	-4,463	-3,746	-4,069	-3,851	-3,302	8.6	7.2	8.1	-2.2	3.9
	Consump.	6,124	5,489	6,998	7,260	6,662	8.6	7.2	8.1	-2.2	3.9
SS-Rate	173	168	158	153	150						
Other W. Europe	Produc.	1,723	2,108	2,549	2,592	2,613	2.4	2.7	3.1	4.1	4.4
	Import	637	670	755	719	746	4.7	4.8	4.8	1.0	2.2
	Export	589	536	894	906	858	4.4	3.8	5.4	-1.9	9.9
	Net Imp.	48	134	-139	-187	-112					
	Consump.	1,771	2,242	2,410	2,405	2,501	2.5	2.9	3.0	4.8	2.2
SS-Rate	97	94	106	108	105						
Total W. Europe	Produc.	14,372	13,528	15,643	15,742	14,667	20.3	17.6	17.7	-1.2	1.6
	Import	7,395	7,350	9,037	8,675	7,831	54.8	52.5	50.0	-0.1	1.3
	Export	5,630	4,892	5,789	5,499	4,855	42.3	34.6	30.3	-2.8	-0.2
	Consump.	16,137	15,986	18,891	18,918	17,643	22.8	20.8	21.4	-0.2	2.0
SS-Rate	89	85	83	83	83						
Eastern Europe	Produc.	6,732	8,618	8,587	8,660	8,825	9.5	11.2	10.6	5.1	0.5
	Import	857	1,124	1,331	1,268	1,206	6.3	8.0	7.7	5.6	1.4
	Export	601	754	964	980	1,068	4.5	5.3	6.7	4.6	7.2
	Net Imp.	256	370	367	288	188					
	Consump.	6,988	8,988	8,954	8,948	8,963	9.9	11.7	10.8	5.2	-0.1
SS-Rate	96	96	96	97	99						

Table AII-4-4 Production/Import/Export/Apparent Consumption of Chemical Woodpulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)						Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1972	1977	1982	1977/72	1982/77
North America	Produc.	40,433	43,026	48,778	48,950	45,753	57.2	55.9	55.1	1.3	1.2
	Import	3,059	3,190	3,365	3,391	3,083	22.7	22.8	19.7	0.8	-0.7
	Export	6,315	7,306	9,380	8,864	8,156	47.4	51.7	51.0	3.0	2.2
	Net Imp.	-3,256	-4,116	-6,015	-5,473	-5,073					
	Consump.	37,177	38,910	42,763	43,477	40,680	52.4	50.7	49.2	0.9	0.9
	SS-Rate	109	111	114	113	113					
Latin America	Produc.	1,384	2,517	3,883	3,750	3,824	2.0	3.3	4.6	12.7	8.7
	Import	597	439	666	660	638	4.4	3.1	4.1	-6.0	7.8
	Export	256	431	1,302	1,358	1,282	1.9	3.0	8.0	11.0	24.4
	Net Imp.	341	8	-636	-698	-644					
	Consump.	1,725	2,525	3,247	3,052	3,180	2.4	3.3	3.8	7.9	4.7
	SS-Rate	80	100	120	123	120					
Asia	Produc.	6,841	7,924	8,722	8,032	8,366	9.7	10.3	10.1	3.0	1.1
	Import	1,247	1,421	2,663	2,429	2,369	9.2	10.2	15.1	2.6	10.8
	Export	98	176	133	181	136	0.7	1.2	0.8	12.4	-5.0
	Net Imp.	1,149	1,245	2,530	2,248	2,233					
	Consump.	7,990	9,169	11,252	10,280	10,599	11.3	11.9	12.8	2.8	2.9
	SS-Rate	86	86	78	78	79					
Oceania	Produc.	490	782	756	834	783	0.7	1.0	0.9	9.8	0.0
	Import	231	271	272	278	259	1.7	1.9	1.7	3.2	-0.9
	Export	106	210	217	245	203	0.8	1.5	1.3	14.7	-0.7
	Net Imp.	125	61	55	33	56					
	Consump.	615	843	811	867	839	0.9	1.1	1.0	6.5	-0.1
	SS-Rate	80	93	93	96	93					
Africa	Produc.	466	512	698	753	758	0.7	0.7	0.9	1.9	8.2
	Import	120	204	294	269	264	0.9	1.5	1.7	11.2	5.3
	Export	303	371	433	307	304	2.3	2.6	1.9	4.1	-3.9
	Net Imp.	-183	-167	-139	-38	-40					
	Consump.	283	345	559	715	718	0.4	0.4	0.9	4.0	15.8
	SS-Rate	165	148	125	105	106					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-5 Production/Import/Export/Apparent Consumption of Unbleached Sulphite Pulp
in the World by Region (1)

Region	Item	Production/Import/Export/Apparent Consumption (1,000 MT)						Share (%)		Average Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1972	1977	1977/72	1982/77	
World Total	Produc.	6,734	6,019	5,838	5,788	5,333	100.0	100.0	100.0	-2.2	-2.4
	Import	642	478	597	556	445	100.0	100.0	100.0	-5.7	-1.4
	Export	882	570	678	482	505	100.0	100.0	100.0	-8.4	-2.4
	Consump.	6,494	5,927	5,757	5,862	5,273	100.0	100.0	100.0	-1.8	-2.3
EC	Produc.	134	59	16	12	12	2.0	1.0	0.2	-15.1	-27.3
	Import	410	254	220	173	171	63.9	53.1	38.4	-9.1	-7.6
	Export	4	2	8	20	20	0.5	0.4	4.0	-12.9	58.5
	Net Imp.	406	252	212	153	151					
	Consump.	540	311	228	165	163	8.3	5.2	3.1	-10.4	-12.1
	SS-Rate	25	19	7	7	7					
Scandinavian 3	Produc.	1,349	738	700	631	537	20.0	12.3	10.1	-11.4	-6.2
	Import	2	7	25	24	19	0.3	1.5	4.3	28.5	22.1
	Export	445	210	202	177	123	50.5	36.8	24.4	-13.9	-10.1
	Net Imp.	-443	-203	-177	-153	-104					
	Consump.	906	535	523	478	433	14.0	9.0	8.2	-10.0	-4.1
	SS-Rate	149	138	134	132	124					
Other W. Europe	Produc.	146	67	50	48	46	2.2	1.1	0.9	-14.4	-7.2
	Import	48	33	25	26	19	7.5	6.9	4.3	-7.2	-10.5
	Export	11	8	9	6	8	1.2	1.4	1.6	-6.2	0.0
	Net Imp.	37	25	16	20	11					
	Consump.	183	92	66	68	57	2.8	1.6	1.1	-12.8	-9.1
	SS-Rate	80	73	76	71	81					
Total W. Europe	Produc.	1,629	864	766	691	595	24.2	14.4	11.2	-11.9	-7.2
	Import	460	294	270	223	209	71.7	61.5	47.0	-8.6	-6.6
	Export	460	220	219	203	151	52.2	38.6	29.9	-13.7	-7.3
	Net Imp.	0	74	51	20	58					
	Consump.	1,629	938	817	711	653	25.1	15.8	12.4	-10.5	-7.0
	SS-Rate	100	92	94	97	91					
Eastern Europe	Produc.	2,643	2,824	2,684	2,746	2,751	39.2	46.9	51.6	1.3	-0.5
	Import	36	41	51	52	57	5.6	8.6	12.8	2.6	6.8
	Export	315	261	327	181	244	35.7	45.8	48.3	-3.7	-1.3
	Net Imp.	-279	-220	-276	-129	-187					
	Consump.	2,364	2,604	2,408	2,617	2,564	36.4	43.9	48.6	2.0	-0.3
	SS-Rate	112	108	112	105	107					

Table AII-4-5 Production/Import/Export/Apparent Consumption of Unbleached Sulphite Pulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1982/77	1982/77		
North America	Produc.	2,043	2,000	2,182	2,181	1,756	30.3	33.2	32.9	-0.4	-2.6
	Import	97	51	99	82	45	15.1	10.7	10.1	-12.1	-2.5
	Export	102	89	132	97	108	11.6	15.6	21.4	-2.7	3.9
	Net Imp.	-5	-38	-33	-15	-63					
	Consump.	2,038	1,962	2,149	2,166	1,693	31.4	33.1	32.1	-0.8	-2.9
	SS-Rate	100	102	102	101	104					
Latin America	Produc.	65	64	104	97	101	1.0	1.1	1.9	-0.3	9.6
	Import	8	1	3	1	1	1.2	0.2	0.2	-34.0	0.0
	Export	6	1	1	1	2	0.7	0.2	0.4	-30.1	14.9
	Net Imp.	2	0	2	0	-1					
	Consump.	67	64	106	97	100	1.0	1.1	1.9	-0.9	9.3
	SS-Rate	97	100	98	100	101					
Asia	Produc.	354	255	90	57	113	5.3	4.2	2.1	-6.4	-15.0
	Import	23	67	164	190	125	3.6	14.0	28.1	23.8	13.3
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	23	67	164	190	125					
	Consump.	377	322	254	247	238	5.8	5.4	4.5	-3.1	-5.9
	SS-Rate	94	79	35	23	48					
Oceania	Produc.	0	12	12	10	12	0.0	0.2	0.2	-	0.0
	Import	11	11	2	1	1	1.7	2.3	0.2	0.0	-38.1
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	11	11	2	1	1					
	Consump.	11	23	14	11	13	0.2	0.4	0.2	15.9	-10.8
	SS-Rate	0	52	86	91	92					
Africa	Produc.	0	0	0	5	5	0.0	0.0	0.1	-	-
	Import	6	13	9	7	7	0.9	2.7	1.6	16.7	-11.6
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	6	13	9	7	7					
	Consump.	6	13	9	12	12	0.1	0.2	0.2	16.7	-1.6
	SS-Rate	0	0	0	42	42					

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-6 Production/Import/Export/Apparent Consumption of Bleached Sulphite Pulp in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1972	1982/77			
World Total	Produc.	5,635	5,112	5,197	4,871	4,298	100.0	100.0	-1.9	-3.4	
	Import	2,243	2,187	2,224	2,246	2,025	100.0	100.0	-0.5	-1.5	
	Export	1,806	2,083	1,710	2,000	1,282	100.0	100.0	2.9	-9.3	
	Consump.	6,072	5,216	5,711	5,117	5,041	100.0	100.0	-3.0	-0.7	
EC	Produc.	754	840	942	877	877	13.4	16.4	20.4	2.2	0.9
	Import	1,130	922	854	865	756	50.4	42.2	37.3	-4.0	-3.9
	Export	108	154	163	150	133	6.0	7.4	10.4	7.4	-2.9
	Net Imp.	1,022	768	691	715	623					
	Consump.	1,776	1,608	1,633	1,592	1,500	29.2	30.8	29.8	-2.0	-1.4
	SS-Rate	43	52	58	55	59					
Scandinavian 3	Produc.	1,595	1,103	1,045	928	759	28.3	21.6	17.7	-7.1	-7.2
	Import	18	7	22	45	45	0.8	0.3	2.2	-17.2	45.1
	Export	952	627	470	406	316	52.7	30.1	24.6	-8.0	-12.8
	Net Imp.	-934	-620	-448	-361	-271					
	Consump.	661	483	597	567	488	10.9	9.3	9.7	-6.1	0.2
	SS-Rate	241	228	175	164	156					
Other W. Europe	Produc.	517	568	734	712	710	9.2	11.1	16.5	1.9	4.6
	Import	270	270	298	279	254	12.0	12.3	12.5	0.0	-1.2
	Export	144	188	339	323	296	8.0	9.0	23.1	5.5	9.5
	Net Imp.	126	82	-41	-44	-42					
	Consump.	643	650	693	668	668	10.6	12.5	13.3	0.2	0.5
	SS-Rate	80	87	106	107	106					
Total W. Europe	Produc.	2,866	2,511	2,721	2,517	2,346	50.9	49.1	54.6	-2.6	-1.4
	Import	1,418	1,199	1,174	1,189	1,055	63.2	54.8	52.1	-3.3	-2.5
	Export	1,204	969	972	879	745	66.7	46.5	58.1	-4.2	-5.1
	Net Imp.	214	230	202	310	310					
	Consump.	3,080	2,741	2,923	2,827	2,656	50.7	52.5	52.7	-2.3	-0.6
	SS-Rate	93	92	93	89	88					
Eastern Europe	Produc.	424	402	433	373	348	7.5	7.9	8.1	-1.1	-2.8
	Import	342	416	493	519	464	15.2	19.0	22.9	4.0	2.2
	Export	10	0	49	49	49	0.6	0.0	3.8	-	-
	Net Imp.	332	416	444	470	415					
	Consump.	756	818	877	843	763	12.5	15.7	15.1	1.6	-1.4
	SS-Rate	56	49	49	44	46					

Table AII-4-6 Production/Import/Export/Apparent Consumption of Bleached Sulphite Pulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)						Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1977	1972	1982/77		
North America	Produc.	2,184	2,021	1,730	1,702	1,407	38.8	39.5	32.7	-1.5	-7.0
	Import	299	419	289	321	255	13.3	19.2	12.6	7.0	-9.5
	Export	574	1,112	687	1,070	485	31.8	53.4	37.8	14.1	-15.3
	Net Imp.	-275	-693	-398	-749	-230					
	Consump.	1,909	1,328	1,332	953	1,177	31.4	25.5	23.3	-7.0	-2.4
	SS-Rate	114	152	130	179	120					
Latin America	Produc.	91	103	120	107	120	1.6	2.0	2.8	2.5	3.1
	Import	22	9	7	9	9	1.0	0.4	0.4	-16.4	0.0
	Export	0	1	1	2	3	0.0	0.0	0.2	0.0	24.6
	Net Imp.	22	8	6	7	6					
	Consump.	113	111	126	114	126	1.9	2.1	2.5	-0.4	2.6
	SS-Rate	81	93	95	94	95					
Asia	Produc.	71	48	160	144	49	1.3	0.9	1.1	-7.5	0.4
	Import	118	114	217	182	213	5.3	5.2	10.5	-0.7	13.3
	Export	13	1	1	0	0	0.7	0.0	0.0	-40.1	-
	Net Imp.	105	113	216	182	213					
	Consump.	176	161	376	326	262	2.9	3.1	5.2	-1.8	10.2
	SS-Rate	40	30	43	44	19					
Oceania	Produc.	0	27	33	28	28	0.0	0.5	0.7	-	0.7
	Import	35	17	21	13	15	1.6	0.8	0.7	-13.4	-2.5
	Export	5	0	0	0	0	0.3	0.0	0.0	-	-
	Net Imp.	30	17	21	13	15					
	Consump.	30	44	54	41	43	0.5	0.8	0.9	8.0	-0.5
	SS-Rate	0	61	61	68	65					
Africa	Produc.	0	0	0	0	0	0.0	0.0	0.0	-	-
	Import	10	13	23	14	14	0.4	0.6	0.7	5.4	1.5
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	10	13	23	14	14					
	Consump.	10	13	23	14	14	0.2	0.2	0.3	5.4	1.5
	SS-Rate	0	0	0	0	0					

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-7 Production/Import/Export/Apparent Consumption of Unbleached Sulphate Pulp
in the World by Region (1)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1982/77			
World Total	Produc.	29,132	31,907	33,753	33,319	31,376	100.0	100.0	1.8	-0.3	
	Import	1,622	1,601	1,687	1,539	1,353	100.0	100.0	-0.3	-3.3	
	Export	1,914	2,227	2,372	2,390	2,131	100.0	100.0	3.1	-0.9	
	Consump.	28,840	31,281	33,078	32,468	30,598	100.0	100.0	1.6	-0.4	
EC	Produc.	466	478	398	449	416	1.6	1.5	1.3	0.5	-2.7
	Import	675	520	539	404	315	41.6	32.5	23.3	-5.1	-9.5
	Export	1	1	6	12	13	0.1	0.0	0.6	0.0	67.0
	Net Imp.	674	519	533	392	302	4.0	3.2	2.3	-2.6	-6.4
	Consump.	1,140	997	931	841	718	4.0	3.2	2.3	-2.6	-6.4
SS-Rate	41	48	43	53	58						
Scandinavian 3	Produc.	3,654	3,010	3,521	3,323	2,949	12.5	9.4	9.4	-3.8	-0.4
	Import	118	129	176	172	147	7.3	8.1	10.9	1.8	2.6
	Export	814	607	563	417	365	42.5	27.3	17.1	-5.7	-9.7
	Net Imp.	-696	-478	-387	-245	-218					
	Consump.	2,958	2,532	3,134	3,078	2,731	10.3	8.1	8.9	-3.1	1.5
SS-Rate	124	119	112	108	108						
Other W. Europe	Produc.	510	701	701	685	701	1.8	2.2	2.2	6.6	0.0
	Import	45	52	47	44	50	2.8	3.2	3.7	2.9	-0.8
	Export	117	89	161	111	85	6.1	4.0	4.0	-5.3	-0.9
	Net Imp.	-72	-37	-114	-67	-35					
	Consump.	438	664	587	618	666	1.5	2.1	2.2	8.7	0.1
SS-Rate	116	106	119	111	105						
Total W. Europe	Produc.	4,630	4,189	4,620	4,457	4,066	15.9	13.1	13.0	-2.0	-0.6
	Import	838	701	762	620	512	51.7	43.8	37.8	-3.5	-6.1
	Export	932	697	730	540	463	48.7	31.3	21.7	-5.6	-7.9
	Net Imp.	-94	4	32	80	49					
	Consump.	4,536	4,193	4,652	4,537	4,115	15.7	13.4	13.4	-1.6	-0.4
SS-Rate	102	100	99	98	99						
Eastern Europe	Produc.	3,155	4,694	4,553	4,631	4,737	10.8	14.7	15.1	8.3	0.2
	Import	81	101	123	99	105	5.0	6.3	7.8	4.5	0.8
	Export	197	439	523	678	677	10.3	19.7	31.8	17.4	9.1
	Net Imp.	-116	-338	-400	-579	-572					
	Consump.	3,039	4,356	4,153	4,052	4,165	10.5	13.9	13.6	7.5	-0.9
SS-Rate	104	108	110	114	114						

Table AII-4-7 Production/Import/Export/Apparent Consumption of Unbleached Sulphate Pulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982					
North America	Produc.	17,789	18,369	19,780	19,547	17,863	56.9	0.6	-0.6		
	Import	324	222	130	150	120	20.0	13.9	8.9	-7.3	-11.6
	Export	447	399	313	379	321	23.4	17.9	15.1	-2.2	-4.3
	Net Imp.	-123	-177	-183	-229	-201					
	Consump.	17,666	18,192	19,537	19,318	17,662	61.3	58.2	57.7	0.6	-0.6
	SS-Rate	101	101	101	101	101					
Latin America	Produc.	608	1,188	1,427	1,685	1,684	2.1	3.7	5.4	14.3	7.2
	Import	104	57	64	59	55	6.4	3.6	4.1	-11.3	-0.7
	Export	123	236	318	391	314	6.4	10.6	14.7	13.9	5.9
	Net Imp.	-19	-179	-254	-332	-259					
	Consump.	589	1,009	1,173	1,353	1,425	2.0	3.2	4.7	11.4	7.1
	SS-Rate	103	118	122	125	118					
Asia	Produc.	2,335	2,708	2,576	2,144	2,182	8.0	8.5	7.0	3.0	-4.2
	Import	191	394	492	472	429	11.8	24.6	31.7	15.6	1.7
	Export	0	1	9	14	7	0.0	0.0	0.3	-	47.6
	Net Imp.	191	393	483	458	422					
	Consump.	2,526	3,101	3,059	2,602	2,604	8.8	9.9	8.5	4.2	-3.4
	SS-Rate	92	87	84	82	84					
Oceania	Produc.	300	424	384	419	408	1.0	1.3	1.3	7.2	-0.8
	Import	83	120	103	115	108	5.1	7.5	8.0	7.7	-2.1
	Export	99	151	152	173	134	5.2	6.8	6.3	8.8	-2.4
	Net Imp.	-16	-31	-49	-58	-26					
	Consump.	284	393	335	361	382	1.0	1.3	1.2	6.7	-0.6
	SS-Rate	106	108	115	116	107					
Africa	Produc.	316	335	413	436	436	1.1	1.0	1.4	1.2	5.4
	Import	1	7	23	24	25	0.1	0.4	1.8	47.6	29.0
	Export	116	305	327	216	216	6.1	13.7	10.1	21.3	-6.7
	Net Imp.	-115	-298	-304	-192	-191					
	Consump.	201	37	109	244	245	0.7	0.1	0.8	-28.7	45.9
	SS-Rate	157	905	379	179	178					

Sources: Yearbook of Forest Products, 1972-1982

Note: SS-Rate: Self-sufficiency Rate (%)

Table All-4-8 Production/Import/Export/Apparent Consumption of Bleached Sulphate Pulp in the World by Region (1)
(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1972	1977/72 1982/77		
World Total	Produc.	28,114	32,336	40,351	40,860	40,084	100.0	100.0	2.8	4.4
	Import	8,109	9,112	12,328	11,910	11,127	100.0	100.0	2.4	4.1
	Export	8,322	9,203	13,415	12,529	12,062	100.0	100.0	2.0	5.6
	Consump.	27,901	32,245	39,264	40,241	39,149	100.0	100.0	2.9	4.0
EC	Produc.	708	808	671	701	785	2.5	2.5	2.0	2.7
	Import	4,253	4,763	6,269	6,169	5,547	52.4	52.3	49.9	2.3
	Export	220	231	248	212	231	2.6	2.5	1.9	1.0
	Net Imp.	4,033	4,532	6,021	5,957	5,316				
	Consump.	4,741	5,340	6,692	6,658	6,101	17.0	16.6	15.6	2.4
	SS-Rate	15	15	10	11	13				
Scandinavian 3	Produc.	3,989	4,384	5,801	6,229	5,719	14.2	13.6	14.3	1.9
	Import	109	79	177	109	88	1.3	0.9	0.8	-6.2
	Export	1,868	2,519	3,235	3,200	2,797	22.4	27.4	23.2	6.2
	Net Imp.	-1,759	-2,440	-3,058	-3,091	-2,709				
	Consump.	2,230	1,944	2,743	3,138	3,010	8.0	6.0	7.7	-2.7
	SS-Rate	179	226	212	199	190				
Other W. Europe	Produc.	549	772	1,064	1,147	1,156	2.0	2.4	2.9	7.1
	Import	277	315	385	365	420	3.4	3.5	3.8	2.6
	Export	946	256	387	467	468	11.4	2.8	3.9	-23.0
	Net Imp.	-669	59	-2	-102	-48				
	Consump.	-120	831	1,062	1,045	1,108	-0.4	2.6	2.8	-6.9
	SS-Rate	-457	93	100	110	104				
Total W. Europe	Produc.	5,246	5,964	7,536	8,077	7,660	18.7	18.4	19.1	2.6
	Import	4,639	5,157	6,831	6,643	6,055	57.2	56.6	54.4	2.1
	Export	3,034	3,006	3,870	3,879	3,496	36.5	32.7	29.0	-0.2
	Net Imp.	1,605	2,151	2,961	2,764	2,559				
	Consump.	6,851	8,115	10,497	10,841	10,219	24.6	25.2	26.1	3.4
	SS-Rate	77	74	72	75	75				
Eastern Europe	Produc.	225	382	513	557	635	0.8	1.2	1.6	11.2
	Import	142	256	339	350	338	1.8	2.8	3.0	12.5
	Export	26	15	36	52	90	0.3	0.2	0.7	-10.4
	Net Imp.	116	241	303	298	248				
	Consump.	341	623	816	855	883	1.2	1.9	2.3	12.8
	SS-Rate	66	61	63	65	72				

Table AII-4-8 Production/Import/Export/Apparent Consumption of Bleached Sulphate Pulp in the World by Region (2) (Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)			
		1972	1977	1980	1981	1982	1977/72	1982/77		
North America	Produc.	18,417	20,636	25,086	25,520	24,727	65.5	61.7	2.3	3.7
	Import	2,388	2,498	2,846	2,839	2,663	28.8	27.4	1.3	1.3
	Export	5,193	5,705	8,248	7,319	7,242	62.4	62.0	1.9	4.9
	Net Imp.	-2,855	-3,207	-5,402	-4,480	-4,579				
	Consump.	15,562	17,429	19,684	21,040	20,148	55.8	54.1	2.3	2.9
	SS-Rate	118	118	127	121	123				
Latin America	Produc.	603	1,114	2,177	1,798	1,856	2.1	3.4	4.6	13.1
	Import	157	131	202	188	177	1.9	1.4	1.6	-3.6
	Export	6	194	983	964	962	0.1	2.1	8.0	100.4
	Net Imp.	151	-63	-781	-776	-785				
	Consump.	754	1,051	1,396	1,022	1,071	2.7	3.3	2.7	6.9
	SS-Rate	80	106	156	176	173				
Asia	Produc.	3,280	3,755	4,477	4,268	4,603	11.7	11.6	11.5	2.7
	Import	664	805	1,756	1,551	1,568	8.2	8.8	14.1	3.9
	Export	31	172	123	167	129	0.4	1.9	1.1	40.9
	Net Imp.	633	633	1,633	1,384	1,439				
	Consump.	3,913	4,388	6,110	5,652	6,042	14.0	13.6	15.4	2.3
	SS-Rate	84	86	73	76	76				
Oceania	Produc.	190	323	327	377	335	0.7	1.0	0.8	11.2
	Import	102	122	145	149	136	1.3	1.3	1.2	3.6
	Export	3	59	64	72	69	0.0	0.6	0.6	81.4
	Net Imp.	99	63	81	77	67				
	Consump.	289	386	408	454	402	1.0	1.2	1.0	6.0
	SS-Rate	66	84	80	83	83				
Africa	Produc.	153	162	236	263	268	0.5	0.5	0.7	1.2
	Import	67	144	209	192	191	0.8	1.6	1.7	16.5
	Export	31	51	92	77	73	0.4	0.6	0.6	10.5
	Net Imp.	36	93	117	115	118				
	Consump.	189	255	353	378	386	0.7	0.8	1.0	6.2
	SS-Rate	81	64	67	70	69				

Sources: Yearbook of Forest Products, 1972-1982 (FAO)
 Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-9 Production/Import/Export/Apparent Consumption of Dissolving Woodpulp
in the World by Region (1)

Region	Item	Production/Import/Export/Apparent Consumption of Dissolving Woodpulp in the World by Region (1)						Share (%)		Average Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1972	1977	1982	1977/72	1982/77
World Total	Produc.	5,018	4,703	4,715	4,588	4,324	100.0	100.0	100.0	-1.3	-1.7
	Import	1,480	1,338	1,494	1,276	1,204	100.0	100.0	100.0	-2.0	-2.1
	Export	1,876	1,704	1,647	1,625	1,377	100.0	100.0	100.0	-1.9	-4.2
EC	Consump.	4,622	4,337	4,562	4,239	4,151	100.0	100.0	100.0	-1.3	-0.9
	Produc.	366	331	284	298	298	7.3	7.0	6.9	-2.0	-2.1
	Import	731	525	552	456	464	49.4	39.2	38.5	-6.4	-2.4
Scandinavian 3	Export	28	42	63	41	34	1.5	2.5	2.5	8.4	-4.1
	Net Imp.	703	483	489	415	430	23.1	18.8	17.5	-5.3	-2.2
	Consump.	1,069	814	773	713	728	23.1	18.8	17.5	-5.3	-2.2
Other W. Europe	SS-Rate	34	41	37	42	41					
	Produc.	686	504	452	433	401	13.7	10.7	9.3	-6.0	-4.5
	Import	4	1	33	36	60	0.3	0.1	5.0	-24.2	126.8
Total W. Europe	Export	517	429	388	387	325	27.6	25.2	23.6	-3.7	-5.4
	Net Imp.	-513	-428	-355	-351	-265	3.7	1.8	3.3	-15.2	12.3
	Consump.	173	76	97	82	136	3.7	1.8	3.3	-15.2	12.3
Eastern Europe	SS-Rate	397	663	466	528	295					
	Produc.	142	161	173	175	162	2.8	3.4	3.7	2.5	0.1
	Import	24	61	26	33	22	1.6	4.6	1.8	20.5	-18.5
Total W. Europe	Export	0	0	9	12	12	0.0	0.0	0.9	0.0	0.0
	Net Imp.	24	61	17	21	10	3.6	5.1	4.1	6.0	-5.0
	Consump.	166	222	190	196	172	3.6	5.1	4.1	6.0	-5.0
Eastern Europe	SS-Rate	86	73	91	89	94					
	Produc.	1,194	986	909	906	861	23.8	21.2	19.9	-3.6	-2.9
	Import	759	587	611	525	546	51.3	43.9	45.3	-5.0	-1.4
Total W. Europe	Export	545	471	460	440	371	29.1	27.6	26.9	-2.9	-4.7
	Net Imp.	214	116	151	85	175	30.5	25.6	25.0	-4.6	-1.4
	Consump.	1,408	1,112	1,060	991	1,036	30.5	25.6	25.0	-4.6	-1.4
Eastern Europe	SS-Rate	85	90	86	91	83					
	Produc.	1,106	1,299	1,205	1,215	1,218	22.0	27.6	28.2	3.3	-1.3
	Import	109	172	78	40	37	7.4	12.9	3.1	9.6	-26.5
Total W. Europe	Export	87	26	16	16	21	4.6	1.5	1.5	-21.5	-4.2
	Net Imp.	22	146	62	24	16	24.4	33.3	29.7	5.1	-3.1
	Consump.	1,128	1,445	1,267	1,239	1,234	24.4	33.3	29.7	5.1	-3.1
Total W. Europe	SS-Rate	98	90	95	98	99					

Table AII-4-9 Production/Import/Export/Apparent Consumption of Dissolving Woodpulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1982/77			
North America	Produc.	1,873	1,539	1,681	1,591	1,351	37.3	32.7	31.2	-3.9	-2.6
	Import	216	200	292	286	221	14.6	14.9	18.4	-1.5	2.0
	Export	1,003	852	932	932	746	53.5	50.0	54.2	-3.2	-2.6
	Net Imp.	-787	-652	-640	-646	-525					
	Consump.	1,086	887	1,041	945	826	23.5	20.5	19.9	-4.0	-1.4
	SS-Rate	173	174	162	168	164					
Latin America	Produc.	0	52	47	47	47	0.0	1.1	1.1	-	-2.0
	Import	72	39	27	16	16	4.9	2.9	1.3	-11.5	-16.3
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	72	39	27	16	16					
	Consump.	72	91	74	63	63	1.6	2.1	1.5	4.8	-7.1
	SS-Rate	0	57	64	75	75					
Asia	Produc.	600	469	453	409	427	12.0	10.0	9.9	-4.8	-1.9
	Import	310	332	480	405	380	20.9	24.8	31.6	1.4	2.7
	Export	1	7	1	1	2	0.1	0.4	0.1	47.6	-22.2
	Net Imp.	309	325	479	404	378					
	Consump.	909	794	932	813	805	19.7	18.3	19.4	-2.7	0.3
	SS-Rate	66	59	49	50	53					
Oceania	Produc.	0	0	0	0	0	0.0	0.0	0.0	-	-
	Import	4	7	6	3	3	0.3	0.5	0.2	11.8	-15.6
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	4	7	6	3	3					
	Consump.	4	7	6	3	3	0.1	0.2	0.1	11.8	-15.6
	SS-Rate	0	0	0	0	0					
Africa	Produc.	245	348	420	420	420	4.9	7.4	9.7	7.3	3.8
	Import	9	0	0	0	0	0.6	0.0	0.0	-	-
	Export	241	348	237	236	236	12.8	20.4	17.1	7.6	-7.5
	Net Imp.	-232	-348	-237	-236	-236					
	Consump.	13	0	133	184	184	0.3	0.0	4.4	-	-
	SS-Rate	1,885	-	230	228	228					

Source: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-4-10 Production/Import/Export/Apparent Consumption of Other Fiber Pulp
in the World by Region (1)

Region	Item	Production/Import/Export/Apparent Consumption (1)						Share (%)			Average Growth Rate (%/y)
		1972	1977	1980	1981	1982	1972	1977	1982		
World Total	Produc.	6,010	7,449	8,620	8,618	8,626	100.0	100.0	100.0	4.4	3.0
	Import	147	182	202	208	193	100.0	100.0	100.0	4.4	1.2
	Export	176	226	198	166	139	100.0	100.0	100.0	5.1	-9.3
	Consump.	5,981	7,405	8,624	8,660	8,680	100.0	100.0	100.0	4.4	3.2
EC	Produc.	798	560	404	310	303	13.3	7.5	3.5	-6.8	-11.6
	Import	75	46	59	61	64	51.0	25.3	33.2	-9.3	6.8
	Export	17	7	17	6	5	9.7	3.1	3.6	-16.3	-6.5
	Net Imp.	58	39	42	55	59					
	Consump.	856	599	446	365	362	14.3	8.1	4.2	-6.9	-9.6
	SS-Rate	93	94	91	85	84					
Scandinavian 3	Produc.	0	0	0	0	0	0.0	0.0	0.0	-	-
	Import	1	0	3	7	6	0.7	0.0	3.1	-	-
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	1	0	3	7	6					
	Consump.	1	0	3	7	6	0.0	0.0	0.1	-	-
	SS-Rate	0	0	0	0	0					
Other W. Europe	Produc.	185	186	153	155	147	3.1	2.5	1.7	0.1	-4.6
	Import	7	-3	16	2	1	4.8	-1.6	0.5	-0.4	-0.3
	Export	0	11	3	3	4	0.0	4.9	2.9	0.0	-18.3
	Net Imp.	7	-14	13	-1	-3					
	Consump.	192	172	166	154	144	3.2	2.3	1.7	-2.2	-3.5
	SS-Rate	96	108	92	101	102					
Total W. Europe	Produc.	983	746	557	465	450	16.4	10.0	5.2	-5.4	-9.6
	Import	83	43	78	70	71	56.5	23.6	36.8	-12.3	10.6
	Export	17	18	20	9	9	9.7	8.0	6.5	1.2	-12.9
	Net Imp.	66	25	58	61	62					
	Consump.	1,049	771	615	526	512	17.5	10.4	5.9	-6.0	-7.9
	SS-Rate	94	97	91	88	88					
Eastern Europe	Produc.	520	561	492	511	494	8.7	7.5	5.7	1.5	-2.5
	Import	2	10	10	6	5	1.4	5.5	2.6	38.0	-12.9
	Export	73	103	6	2	0	41.5	45.6	0.0	7.1	-
	Net Imp.	-71	-93	4	4	5					
	Consump.	449	468	496	515	499	7.5	6.3	5.7	0.8	1.3
	SS-Rate	116	120	99	99	99					

Table AII-4-10 Production/Import/Export/Apparent Consumption of Other Fiber Pulp
in the World by Region (2)

(Unit: 1,000 MT)

Region	Item	Share (%)					Average Growth Rate (%/y)				
		1972	1977	1980	1981	1982	1977	1982/77			
North America	Produc.	630	610	790	790	790	10.5	8.2	9.2	-0.6	5.3
	Import	28	48	26	25	24	19.0	26.4	12.4	11.4	-12.9
	Export	50	67	135	120	95	28.4	29.6	68.3	6.0	7.2
	Net Imp.	-22	-19	-109	-95	-71					
	Consump.	608	591	681	695	719	10.2	8.0	8.3	-0.6	4.9
	SS-Rate	104	103	116	114	110					
Latin America	Produc.	492	662	746	805	807	8.2	8.9	9.4	6.1	4.0
	Import	1	1	1	2	1	0.7	0.5	0.5	0.0	0.0
	Export	4	9	0	0	0	2.3	4.0	0.0	17.6	-
	Net Imp.	-3	-8	1	2	1					
	Consump.	489	654	747	807	808	8.2	8.8	9.3	6.0	4.3
	SS-Rate	101	101	100	100	100					
Asia	Produc.	3,242	4,738	5,800	5,823	5,857	53.9	63.5	67.9	7.9	4.3
	Import	30	26	49	48	46	20.4	14.3	23.8	-2.8	12.1
	Export	15	12	21	19	19	8.5	5.3	13.7	-4.4	9.6
	Net Imp.	15	14	28	29	27					
	Consump.	3,257	4,752	5,828	5,852	5,884	54.5	64.2	67.8	7.8	4.4
	SS-Rate	100	100	100	100	100					
Oceania	Produc.	0	2	5	5	9	0.0	0.0	0.1	-	35.1
	Import	0	1	2	2	1	0.0	0.5	0.5	-	0.0
	Export	0	0	0	0	0	0.0	0.0	0.0	-	-
	Net Imp.	0	1	2	2	1					
	Consump.	0	3	7	7	10	0.0	0.0	0.1	-	27.2
	SS-Rate	-	67	71	71	90					
Africa	Produc.	144	129	230	219	219	2.4	1.7	2.5	-2.2	11.2
	Import	3	53	36	56	44	2.0	29.1	22.8	77.5	-3.7
	Export	17	16	16	16	16	9.7	7.1	11.5	-1.2	0.0
	Net Imp.	-14	37	20	40	28					
	Consump.	130	166	250	259	247	2.2	2.2	2.8	5.0	8.3
	SS-Rate	111	78	92	85	89					

Sources: Yearbook of Forest Products, 1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Annex II-5

PRODUCTION/IMPORT/EXPORT/APPARENT CONSUMPTION
OF WOODPULP BY KIND IN LATIN AMERICAN COUNTRIES

(NOTES)

1. Produc.: Production
Net Imp.: Net Import
Consump.: Apparent Consumption
2. Net Import = Import - Export
3. Apparent Consumption = Production + Import - Export
4. SS-Rate = Production/Apparent Consumption x 100
5. "Woodpulp Total" includes "Chemical Woodpulp",
"Mechanical Woodpulp", "Semi-chemical Woodpulp" and
"Dissolving Woodpulp"
6. "Chemical Woodpulp" includes "Unbleached Sulphite Pulp",
"Bleached Sulphite Pulp", "Unbleached Sulphate Pulp",
"Bleached Sulphate Pulp", and other chemical woodpulp.

Table AII-5-1 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Mexico (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Woodpulp Total	Produc.	328	437	447	462	457	5.9	0.9
	Import	113	70	208	223	214	-9.1	25.0
	Export	0	0	0	0	0	-	-
	Net Imp.	113	70	208	223	214	-	-
	Consump.	441	507	655	685	671	2.8	5.8
	SS-Rate	74	86	68	67	68	-	-
Chemical Wood-pulp	Produc.	266	379	397	408	400	7.3	1.1
	Import	68	55	181	194	187	-4.2	27.7
	Export	0	0	0	0	0	-	-
	Net Imp.	68	55	181	194	187	-	-
	Consump.	334	434	578	602	587	5.4	6.2
	SS-Rate	80	87	69	68	68	-	-
Unbleached Sulphite Pulp	Produc.	12	5	10	8	9	-16.1	12.5
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	12	5	10	8	9	-16.1	12.5
	SS-Rate	100	100	100	100	100	-	-
Bleached Sulphite Pulp	Produc.	7	9	2	2	2	5.2	-26.0
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	7	9	2	2	2	5.2	-26.0
	SS-Rate	100	100	100	100	100	-	-
Unbleached Sulphate Pulp	Produc.	152	224	160	178	182	8.1	-4.1
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	152	224	160	178	182	8.1	-4.1
	SS-Rate	100	100	100	100	100	-	-
Bleached Sulphate Pulp	Produc.	94	141	224	222	209	8.4	8.2
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	94	141	224	222	209	8.4	8.2
	SS-Rate	100	100	100	100	100	-	-

Table AII-5-1 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Mexico (2)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Mechanical Woodpulp	Produc.	62	54	46	50	53	-2.7	-0.4
	Import	25	11	27	29	27	-15.1	19.7
	Export	0	0	0	0	0	-	-
	Net Imp.	25	11	27	29	27		
	Consump.	87	65	73	79	80	-5.7	4.2
	SS-Rate	71	83	63	63	66		
Dissolving Woodpulp	Produc.	0	4	4	4	4	-	0.0
	Import	19	4	0	0	0	-26.8	-
	Export	0	0	0	0	0	-	-
	Net Imp.	19	4	0	0	0		
	Consump.	19	8	4	4	4	-15.9	-12.9
	SS-Rate	0	50	100	100	100		
Other Fiber Pulp	Produc.	155	239	230	285	295	9.0	4.3
	Import	0	0	0	0	0	-	-
	Export	4	9	0	0	0	17.6	-
	Net Imp.	-4	-9	0	0	0		
	Consump.	151	230	230	285	295	8.8	5.1
	SS-Rate	103	104	100	100	100		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-2 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Argentina (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	239	265	309	254	308	2.1	3.1
	Import	149	86	116	128	148	-10.4	11.5
	Export	0	0	0	0	0	-	-
	Net Imp.	149	86	116	128	148		
	Consump.	388	351	425	382	456	-2.0	5.4
	SS-Rate	62	75	73	66	68		
Chemical Wood-pulp	Produc.	136	171	164	104	160	4.7	-1.3
	Import	123	70	102	120	135	-10.7	14.0
	Export	0	0	0	0	0	-	-
	Net Imp.	123	70	102	120	135		
	Consump.	259	241	266	224	295	-1.4	4.1
	SS-Rate	53	71	62	46	54		
Unbleached Sulphite Pulp	Produc.	0	2	2	1	2	-	0.0
	Import	6	0	1	0	1	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	6	0	1	0	1		
	Consump.	6	2	3	1	3	-19.7	8.4
	SS-Rate	0	100	67	100	67		
Bleached Sulphite Pulp	Produc.	35	31	29	18	28	-2.4	-2.0
	Import	11	3	2	2	2	-22.9	-7.8
	Export	0	0	0	0	0	-	-
	Net Imp.	11	3	2	2	2		
	Consump.	46	34	31	20	30	-5.9	-2.5
	SS-Rate	76	91	94	90	93		
Unbleached Sulphate Pulp	Produc.	49	88	80	51	78	12.4	-2.4
	Import	59	10	24	23	28	-29.9	22.9
	Export	0	0	0	0	0	-	-
	Net Imp.	59	10	24	23	28		
	Consump.	108	98	104	74	106	-1.9	1.6
	SS-Rate	45	90	77	69	74		
Bleached Sulphate Pulp	Produc.	52	50	53	34	52	-0.8	0.8
	Import	47	57	75	95	104	3.9	12.8
	Export	0	0	0	0	0	-	-
	Net Imp.	47	57	75	95	104		
	Consump.	99	107	128	129	156	1.6	7.8
	SS-Rate	53	47	41	26	33		

Table AII-5-2

Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Argentina (2)

(Unit: 1,000 MT)

							Average Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1977/72	1982/77
Mechanical Woodpulp	Produc.	41	34	22	19	22	-3.7	-8.3
	Import	4	2	3	3	5	-12.9	20.1
	Export	0	0	0	0	0	-	-
	Net Imp.	4	2	3	3	5	-	-
	Consump.	45	36	25	22	27	-4.4	-5.6
	SS-Rate	91	94	88	86	81		
Semi-chemical Woodpulp	Produc.	62	54	118	126	121	-2.7	17.5
	Import	1	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	0	0	0	0	-	-
	Consump.	63	54	118	126	121	-3.0	17.5
	SS-Rate	98	100	100	100	100		
Dissolving Woodpulp	Produc.	0	6	5	5	5	-	-3.6
	Import	22	14	11	6	8	-8.6	-10.6
	Export	0	0	0	0	0	-	-
	Net Imp.	22	14	11	6	8	-	-
	Consump.	22	20	16	11	13	-1.9	-8.3
	SS-Rate	0	30	31	45	38		
Other Fiber Pulp	Produc.	44	74	45	44	45	11.0	-9.5
	Import	1	0	1	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	0	1	0	0	-	-
	Consump.	45	74	46	44	45	10.5	-9.5
	SS-Rate	98	100	98	100	100		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-3 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Brazil (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	974	1649	2911	2833	2929	11.1	12.2
	Import	148	68	60	33	15	-14.4	-26.1
	Export	141	95	890	951	825	-7.6	54.1
	Net Imp.	7	-27	-830	-918	-810		
	Consump.	981	1622	2081	1915	2119	10.6	5.5
	SS-Rate	99	102	140	148	138		
Chemical Wood-pulp	Produc.	674	1347	2520	2452	2536	14.9	13.5
	Import	117	54	53	27	12	-14.3	-26.0
	Export	134	93	888	948	820	-7.0	54.5
	Net Imp.	-17	-39	-835	-921	-808		
	Consump.	657	1308	1685	1531	1728	14.8	5.7
	SS-Rate	103	103	150	160	147		
Unbleached Sulphite Pulp	Produc.	40	42	74	72	74	1.0	12.0
	Import	1	0	0	0	0	-	-
	Export	6	1	1	1	2	-30.1	14.9
	Net Imp.	-5	-1	-1	-1	-2		
	Consump.	35	41	73	71	72	3.2	11.9
	SS-Rate	114	102	101	101	103		
Bleached Sulphite Pulp	Produc.	49	63	89	87	90	5.2	7.4
	Import	8	2	2	2	2	-24.2	0.0
	Export	0	1	1	2	3	-	24.6
	Net Imp.	8	1	1	0	-1		
	Consump.	57	64	90	87	89	2.3	6.8
	SS-Rate	86	98	99	100	101		
Unbleached Sulphate Pulp	Produc.	267	588	772	751	777	17.1	5.7
	Import	17	19	12	8	3	2.2	-30.9
	Export	123	73	120	182	79	-9.9	1.6
	Net Imp.	-106	-54	-108	-174	-76		
	Consump.	161	534	664	577	701	27.1	5.6
	SS-Rate	166	110	116	130	111		
Bleached Sulphate Pulp	Produc.	318	654	1585	1542	1595	15.5	19.5
	Import	92	33	39	17	7	-18.5	-26.7
	Export	6	19	766	762	735	25.9	107.7
	Net Imp.	86	14	-727	-745	-728		
	Consump.	404	668	858	797	867	10.6	5.4
	SS-Rate	79	98	185	193	184		

Table AII-5-3 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Brazil (2)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Mechanical Woodpulp	Produc.	180	140	207	201	208	-4.9	8.2
	Import	1	0	0	0	0	-	-
	Export	7	2	3	3	5	-22.2	20.1
	Net Imp.	-6	-2	-3	-3	-5	-	-
	Consump.	174	138	204	198	203	-4.5	8.0
	SS-Rate	103	101	101	102	102	-	-
Semi-chemical Woodpulp	Produc.	120	120	146	142	147	0.0	4.1
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	120	120	146	142	147	0.0	4.1
	SS-Rate	100	100	100	100	100	-	-
Dissolving Woodpulp	Produc.	0	42	38	38	38	-	-2.0
	Import	30	14	7	6	4	-14.1	-22.2
	Export	0	0	0	0	0	-	-
	Net Imp.	30	14	7	6	4	-	-
	Consump.	30	56	45	44	42	13.3	-5.6
	SS-Rate	0	75	84	86	90	-	-
Other Fiber Pulp	Produc.	60	88	150	150	150	8.0	11.3
	Import	0	1	1	1	1	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	1	1	1	1	-	-
	Consump.	60	89	151	151	151	8.2	11.2
	SS-Rate	100	99	99	99	99	-	-

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-4 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Chile (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	345	599	763	743	667	11.7	2.2
	Import	7	3	0	0	0	-15.6	-
	Export	121	339	416	411	462	22.9	6.4
	Net Imp.	-114	-336	-416	-411	-462		
	Consump.	231	263	347	332	205	2.6	-4.9
	SS-Rate	149	228	220	224	325		
Chemical Wood- pulp	Produc.	243	474	632	618	552	14.3	3.1
	Import	6	0	0	0	0	-	-
	Export	121	338	415	410	462	22.8	6.5
	Net Imp.	-115	-338	-415	-410	-462		
	Consump.	128	136	217	208	90	1.2	-7.9
	SS-Rate	190	349	291	297	613		
Unbleached Sulphite Pulp	Produc.	13	15	18	16	16	2.9	1.3
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	13	15	18	16	16	2.9	1.3
	SS-Rate	100	100	100	100	100		
Unbleached Sulphate Pulp	Produc.	91	190	299	*1 295	*1 263	15.9	6.7
	Import	0	0	0	0	0	-	-
	Export	0	163	198	209	235	0.0	7.6
	Net Imp.	0	-163	-198	-209	-235		
	Consump.	91	27	101	86	28	-21.6	0.7
	SS-Rate	100	704	296	343	939		
Bleached Sul- phate Pulp	Produc.	139	269	315	*1 307	*1 273	14.1	0.3
	Import	0	0	0	0	0	-	-
	Export	0	175	217	201	227	-	5.3
	Net Imp.	0	-175	-217	-201	-227		
	Consump.	139	94	98	106	46	-7.5	-13.3
	SS-Rate	100	286	321	290	593		
Mechanical Woodpulp	Produc.	102	125	131	125	115	4.2	-1.7
	Import						0.0	0.0
	Export		1	1	1		0.0	0.0
	Net Imp.	0	-1	-1	-1	0		
	Consump.	102	124	130	124	115	4.0	-1.5
	SS-Rate	100	101	101	101	100		

Table AII-5-4 Production/Import/Export/Apparent Consumption
of Pulpwood by Kind in Chile (2)

(Unit: 1,000 MT)

							Average Growth Rate (%/y)	
		1972	1977	1980	1981	1982	1977/72	1982/77
Dissolving Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	1	3	0	0	0	24.6	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	3	0	0	0	-	-
	Consump.	1	3	0	0	0	24.6	0.0
	SS-Rate	0	0	0	0	0		

Sources: Yearbook of Forest Products, 1971-1982 (FAO)

Notes: 1. SS-Rate: Self-sufficiency Rate (%)

2. *1 Divided UKP Production in 1981 (602,000 MT) and in 1982 (536,000 MT) by
FAO's data to UKP and BKP on the assumption that the production rate of
BKP to UKP is the same to that in 1980.

Table AII-5-5 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Colombia (1)

(Unit: 1,000 MT)

Item	1972	1977	1980	1981	1982	Average Growth Rate (%/y)		
						1977/72	1982/77	
Pulpwood Total	Produc.	70	110	123	126	115	9.5	0.9
	Import	52	20	52	66	55	-17.4	22.4
	Export	0	0	0	0	0	-	-
	Net Imp.	52	20	52	66	55	-	-
	Consump.	122	130	175	192	170	1.3	5.5
	SS-Rate	57	85	70	66	68	-	-
Chemical Wood-pulp	Produc.	49	81	86	85	93	10.6	2.8
	Import	51	14	45	61	50	-22.8	29.0
	Export	0	0	0	0	0	-	-
	Net Imp.	51	14	45	61	50	-	-
	Consump.	100	95	131	146	143	-1.0	8.5
	SS-Rate	49	85	66	58	65	-	-
Bleached Sulphate Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	1	4	3	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	1	4	3	-	-
	Consump.	0	0	1	4	3	-	-
	SS-Rate	0	0	0	0	0	-	-
Unbleached Sulphate Pulp	Produc.	49	81	86	85	93	10.6	2.8
	Import	0	2	10	16	10	-	38.0
	Export	0	0	0	0	0	-	-
	Net Imp.	0	2	10	16	10	-	-
	Consump.	49	83	96	101	103	11.1	4.4
	SS-Rate	100	98	90	84	90	-	-
Bleached Sulphate Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	11	34	41	37	-	27.5
	Export	0	0	0	0	0	-	-
	Net Imp.	0	11	34	41	37	-	-
	Consump.	0	11	34	41	37	-	27.5
	SS-Rate	0	0	0	0	0	-	-
Mechanical Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	1	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	0	0	0	0	-	-
	Consump.	1	0	0	0	0	-	-
	SS-Rate	0	0	0	0	0	-	-

Table AII-5-5 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Colombia (2)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Semi-chemical Woodpulp	Produc.	21	29	37	41	22	6.7	-5.4
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	21	29	37	41	22	6.7	-5.4
	SS-Rate	100	100	100	100	100		
Dissolving Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	0	6	7	5	5	-	-3.6
	Export	0	0	0	0	0	-	-
	Net Imp.	0	6	7	5	5		
	Consump.	0	6	7	5	5	0.0	-3.6
	SS-Rate	0	0	0	0	0		
Other Fiber Pulp	Produc.	75	68	84	88	79	-1.9	3.0
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	75	68	84	88	79	-1.9	3.0
	SS-Rate	100	100	100	100	100		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-6 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Ecuador (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	0	0	0	0	0	-	-
	Import	0	2	8	57	57	-	95.4
	Export	0	0	0	0	0	-	-
	Net Imp.	0	2	8	57	57	-	-
	Consump.	0	2	8	57	57	-	95.4
	SS-Rate	0	0	0	0	0	-	-
Chemical Wood- pulp	Produc.	0	0	0	0	0	-	-
	Import	0	2	6	4	11	-	40.6
	Export	0	0	0	0	0	-	-
	Net Imp.	0	2	6	4	11	-	-
	Consump.	0	2	6	4	11	-	40.6
	SS-Rate	0	0	0	0	0	-	-
Unbleached Sulphite Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	1	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	1	0	0	-	-
	Consump.	0	0	1	0	0	-	-
	SS-Rate	0	0	0	0	0	-	-
Unbleached Sulphate Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	2	3	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	2	3	0	0	-	-
	Consump.	0	2	3	0	0	-	-
	SS-Rate	0	0	0	0	0	-	-
Bleached Sul- phate Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	2	4	11	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	2	4	11	-	-
	Consump.	0	0	2	4	11	-	-
	SS-Rate	0	0	0	0	0	-	-
Mechanical Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	0	52	46	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	52	46	-	-
	Consump.	0	0	0	52	46	-	-
	SS-Rate	0	0	0	0	0	-	-

Table AII-5-6 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Ecuador (2)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Dissolving Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	2	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	2	0	0	-	-
	Consump.	0	0	2	0	0	-	-
	SS-Rate	0	0	0	0	0		
Other Fiber Pulp	Produc.	4	7	5	5	5	11.8	-6.5
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	4	7	5	5	5	11.8	-6.5
	SS-Rate	100	100	100	100	100		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-7

Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Peru (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	0	13	15	15	15	-	2.9
	Import	43	39	32	24	24	-1.9	-9.3
	Export	1	0	0	0	0	-	-
	Net Imp.	42	39	32	24	24	-	-
	Consump.	42	52	47	39	39	4.4	-5.6
	SS-Rate	0	25	32	38	38	-	-
Chemical Wood- pulp	Produc.	0	13	15	15	15	-	2.9
	Import	43	38	30	24	24	-2.4	-8.8
	Export	1	0	0	0	0	-	-
	Net Imp.	42	38	30	24	24	-	-
	Consump.	42	51	45	39	39	4.0	-5.2
	SS-Rate	0	25	33	38	38	-	-
Bleached Sul- phite Pulp	Produc.	0	0	0	0	0	-	-
	Import	0	1	1	1	1	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	1	1	1	1	-	-
	Consump.	0	1	1	1	1	0.0	0.0
	SS-Rate	0	0	0	0	0	-	-
Unbleached Sulphate Pulp	Produc.	0	7	11	*1 11	*1 11	-	0.0
	Import	26	22	14	12	12	-3.3	-11.4
	Export	0	0	0	0	0	-	-
	Net Imp.	26	22	14	12	12	-	-
	Consump.	26	29	25	23	23	2.2	-4.5
	SS-Rate	0	24	44	48	48	-	-
Bleached Sul- phate Pulp	Produc.	0	0	0	0	0	-	-
	Import	16	15	15	12	12	-1.3	-4.4
	Export	0	0	0	0	0	-	-
	Net Imp.	16	15	15	12	12	-	-
	Consump.	16	15	15	12	12	-1.3	-4.4
	SS-Rate	0	0	0	0	0	-	-
Mechanical Woodpulp	Produc.	0	0	0	0	0	-	-
	Import	0	0	3	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	3	0	0	-	-
	Consump.	0	0	3	0	0	-	-
	SS-Rate	0	0	0	0	0	-	-

Table AII-5-7 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Peru (2)

(Unit: 1,000 MT)

Item	1972	1977	1980	1981	1982	Average Growth Rate (%/y)		
						1977/72	1982/77	
Semi-chemical Woodpulp	Produc.	0	0	0	0	-	-	
	Import	0	1	0	0	-	-	
	Export	0	0	0	0	-	-	
	Net Imp.	0	1	0	0	-	-	
	Consump.	0	1	0	0	-	-	
	SS-Rate	0	0	0	0	0	-	-
Other Fiber Pulp	Produc.	91	98	155	155	155	1.5	9.6
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	91	98	155	155	155	1.5	9.6
	SS-Rate	100	100	100	100	100	-	-

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Notes: 1. SS-Rate: Self-sufficiency Rate (%)

2. *1 Assumed to be the same level to 1980's production. (The production is not available in the FAO's Yearbook.

Table AII-5-8 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Uruguay (1)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	5	14	24	24	24	22.9	11.4
	Import	9	8	9	7	7	-2.3	-2.6
	Export	0	0	0	0	0	-	-
	Net Imp.	9	8	9	7	7	-	-
	Consump.	14	22	33	31	31	9.5	7.1
	SS-Rate	36	64	73	77	77		
Chemical Wood-pulp	Produc.	0	10	19	18	18	-	12.5
	Import	8	8	9	7	7	0.0	-2.6
	Export	0	0	0	0	0	-	-
	Net Imp.	8	8	9	7	7	-	-
	Consump.	8	18	28	25	25	17.6	6.8
	SS-Rate	0	56	68	72	72		
Unbleached Sulphite Pulp	Produc.	0	0	0	0	0	-	-
	Import	1	1	1	1	1	0.0	0.0
	Export	0	0	0	0	0	-	-
	Net Imp.	1	1	1	1	1	-	-
	Consump.	1	1	1	1	1	0.0	0.0
	SS-Rate	0	0	0	0	0		
Bleached Sulphite Pulp	Produc.	0	0	0	0	0	-	-
	Import	2	2	1	1	1	0.0	-12.9
	Export	0	0	0	0	0	-	-
	Net Imp.	2	2	1	1	1	-	-
	Consump.	2	2	1	1	1	0.0	-12.9
	SS-Rate	0	0	0	0	0		
Unbleached Sulphate Pulp	Produc.	0	10	19	18	18	-	12.5
	Import	2	2	2	2	2	0.0	0.0
	Export	0	0	0	0	0	-	-
	Net Imp.	2	2	2	2	2	-	-
	Consump.	2	12	21	20	20	43.1	10.8
	SS-Rate	0	83	90	90	90		
Bleached Sulphate Pulp	Produc.	0	0	0	0	0	-	-
	Import	2	4	6	4	4	14.9	0.0
	Export	0	0	0	0	0	-	-
	Net Imp.	2	4	6	4	4	-	-
	Consump.	2	4	6	4	4	14.9	0.0
	SS-Rate	0	0	0	0	0		

Table AII-5-8 Production/Import/Export/Apparent Consumption
of Woodpulp by Kind in Uruguay (2)

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Mechanical Woodpulp	Produc.	2	2	2	3	3	0.0	8.4
	Import	1	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	1	0	0	0	0	-	-
	Consump.	3	2	2	3	3	-7.8	8.4
	SS-Rate	67	100	100	100	100		
Semi-chemical Woodpulp	Produc.	2	2	3	3	3	0.0	8.4
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	2	2	3	3	3	0.0	8.4
	SS-Rate	100	100	100	100	100		
Other Fiber Pulp	Produc.	4	4	NA	NA	NA	-	-
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0	-	-
	Consump.	4	4	0	0	0	-	-
	SS-Rate	100	100	0	0	0		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: SS-Rate: Self-sufficiency Rate (%)

Table AII-5-9 Production/Import/Export/Apparent Consumption of Woodpulp by Kind in Venezuela

(Unit: 1,000 MT)

		1972	1977	1980	1981	1982	Average Growth Rate (%/y)	
							1977/72	1982/77
Pulpwood Total	Produc.	16	46	56	56	56	23.5	4.0
	Import	133	151	173	173	173	2.6	2.8
	Export	0	0	0	0	0	-	-
	Net Imp.	133	151	173	173	173		
	Consump.	149	197	229	229	229	5.7	3.1
	SS-Rate	11	23	24	24	24		
Chemical Wood-pulp	Produc.	16	42	50	50	50	21.3	3.5
	Import	131	148	155	155	155	2.5	0.9
	Export	0	0	0	0	0	-	-
	Net Imp.	131	148	155	155	155		
	Consump.	147	190	205	205	205	5.3	1.5
	SS-Rate	11	22	24	24	24		
Mechanical Woodpulp	Produc.	0	3	6	6	6	-	14.9
	Import	1	3	18	18	18	24.6	43.1
	Export	0	0	0	0	0	-	-
	Net Imp.	1	3	18	18	18		
	Consump.	1	6	24	24	24	43.1	32.0
	SS-Rate	0	50	25	25	25		
Other Fiber Pulp	Produc.	23	46	46	46	46	14.9	0.0
	Import	0	0	0	0	0	-	-
	Export	0	0	0	0	0	-	-
	Net Imp.	0	0	0	0	0		
	Consump.	23	46	46	46	46	14.9	0.0
	SS-Rate	100	100	100	100	100		

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Notes: 1. SS-Rate: Self-sufficiency Rate (%)

2. Breakdown of production and import of chemical pulp to USP, BSP, UKP and BKP is not available in the FAO's Yearbook.

Annex II-6

RATES OF IMPORT/APPARENT CONSUMPTION
OF PULP
IN MAJOR IMPORTING COUNTRIES

(NOTE)

1. Assumption to select the major importing countries or exporting countries is that the volume of import or export in 1982 is more than the following figures excluding the centrally planned countries:

	(Unit: 1,000 MT)	
	<u>Import</u>	<u>Export</u>
Unbleached Sulphite Pulp	10	10
Bleached Sulphite Pulp	30	30
Unbleached Sulphate Pulp	30	30
Bleached Sulphate Pulp	50	50

Table AII-6-1 Rates of Import/Apparent Consumption of Unbleached Sulphite Pulp in Major Importing Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S.A.											
Import	87	133	110	55	69	51	61	101	99	82	45
Consump.	398	466	455	351	453	410	341	422	424	433	351
Rate (%)	22	29	24	16	15	12	18	24	23	19	13
Belux											
Import	23	31	36	6	6	5	7	7	18	18	18
Consump.	38	48	46	11	10	7	9	8	19	19	19
Rate (%)	61	65	78	55	60	71	78	88	95	95	95
France											
Import	55	75	89	53	48	44	35	28	27	22	20
Consump.	121	113	103	60	64	59	41	30	29	23	21
Rate (%)	45	66	86	88	75	75	85	93	93	96	95
W.Germany											
Import	26	27	26	16	18	30	26	39	33	30	28
Consump.	60	62	70	49	52	64	47	51	41	34	37
Rate (%)	43	44	37	33	35	47	55	76	80	88	76
Italy											
Import	87	117	116	65	82	73	85	77	67	48	58
Consump.	102	132	133	80	92	79	92	79	67	34	39
Rate (%)	85	89	87	81	89	92	92	97	100	141	149
Norway											
Import	2	5	21	5	4	5	17	24	23	21	15
Consump.	129	173	156	117	106	95	88	102	101	84	63
Rate (%)	2	3	13	4	4	5	19	24	23	25	24
U.K.											
Import	143	131	140	87	84	60	55	50	49	37	33
Consump.	143	131	140	87	84	60	55	50	48	37	33
Rate (%)	100	100	100	100	100	100	100	100	102	100	100

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Table AII-6-2 Rates of Export/Production of Unbleached Sulphite Pulp in Major Exporting Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export	100	107	139	83	91	81	83	104	108	86	101
Produc.	1,730	1,770	1,865	1,443	1,654	1,633	1,805	1,833	1,833	1,819	1,443
Rate (%)	6	6	7	6	6	5	5	6	6	5	7
Finland											
Export	232	283	214	150	119	106	129	138	93	76	60
Produc.	607	618	621	515	382	268	230	237	229	210	169
Rate (%)	38	46	34	29	31	40	56	58	41	36	36
Sweden											
Export	195	306	309	165	140	103	115	116	106	95	57
Produc.	597	666	720	602	543	379	374	405	390	352	314
Rate (%)	33	46	43	27	26	27	31	29	27	27	18

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Table AII-6-3 Rates of Import/Apparent Consumption of Bleached Sulphite Pulp in Major Importing Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S.A.	Import	293	322	409	271	327	378	436	288	320	254
	Consump.	1,746	1,698	1,786	1,494	1,611	1,501	1,475	1,319	1,345	1,190
	Rate (%)	17	19	23	18	20	24	25	30	22	24
Belux	Import	89	82	67	48	75	88	89	90	90	90
	Consump.	112	108	97	71	103	109	106	107	107	107
	Rate (%)	79	76	69	68	73	81	84	84	84	84
France	Import	187	205	215	159	167	143	152	131	107	98
	Consump.	309	293	336	293	257	277	251	313	248	254
	Rate (%)	61	70	64	54	65	58	61	42	43	39
W.Germany	Import	147	152	185	139	159	186	162	170	170	167
	Consump.	575	580	677	584	627	638	666	704	665	666
	Rate (%)	26	26	27	24	25	29	24	24	26	25
Greece	Import	59	67	52	48	50	34	23	34	37	37
	Consump.	59	67	52	48	50	34	23	34	37	37
	Rate (%)	100	100	100	100	100	100	100	100	100	100
Italy	Import	226	244	243	143	210	217	276	217	247	206
	Consump.	232	251	250	148	213	220	288	244	322	281
	Rate (%)	97	97	97	97	99	99	99	89	77	73
Nether-lands	Import	100	109	102	58	88	68	68	57	44	41
	Consump.	100	109	102	56	83	67	67	55	44	39
	Rate (%)	100	100	100	104	106	101	101	104	100	105
Sweden	Import	13	12	4	7	3	1	2	10	31	32
	Consump.	262	228	271	375	386	231	312	305	302	297
	Rate (%)	5	5	1	2	1	0	1	3	10	11
U.K.	Import	311	313	320	231	297	206	193	139	144	107
	Consump.	378	383	385	285	358	262	243	160	143	106
	Rate (%)	82	82	83	81	83	79	79	87	101	101
Austria	Import	48	51	65	26	44	43	36	35	43	38
	Consump.	353	376	391	327	353	345	391	361	335	351
	Rate (%)	14	14	17	8	12	12	9	10	13	11
Switzer-land	Import	27	37	44	25	16	191	182	216	206	193
	Consump.	57	76	81	58	49	218	243	285	272	258
	Rate (%)	47	49	54	43	33	88	75	75	76	75
Japan	Import	87	114	128	67	71	110	102	111	91	119
	Consump.	119	142	127	97	102	146	169	259	223	156
	Rate (%)	73	80	101	69	70	75	60	43	41	76

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Table AII-6-4 Rates of Export/Production of Bleached Sulphite Pulp in Major Exporting Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export *1	419	432	600	464	580	633	570	540	444	424	285
Produc.	526	507	734	516	609	574	462	407	407	430	281
Rate (%)	80	85	82	90	95	110	123	133	109	99	105
U.S.A.											
Export	205	266	260	223	166	176	173	199	292	247	190
Produc.	1,658	1,642	1,637	1,446	1,450	1,447	1,296	1,238	1,323	1,272	1,126
Rate (%)	12	16	16	15	11	12	13	16	22	19	17
Finland											
Export	230	253	201	133	201	170	156	167	192	166	124
Produc.	479	483	452	380	433	350	300	334	372	347	231
Rate (%)	48	52	44	35	46	49	52	50	52	48	54
France											
Export	39	64	67	36	66	64	66	81	74	79	64
Produc.	161	152	188	170	156	180	200	180	256	220	220
Rate (%)	24	42	36	21	42	36	33	45	29	36	29
W.Germany											
Export	66	91	67	61	85	81	66	76	72	69	65
Produc.	494	519	559	506	553	574	518	580	606	564	564
Rate (%)	13	18	12	12	15	14	13	13	12	12	12
Norway											
Export	210	219	214	142	147	111	79	56	42	31	24
Prodeuc.	355	308	300	239	283	224	188	168	142	101	95
Rate (%)	59	71	71	59	52	50	47	33	30	31	25
Sweden											
Export	512	677	614	301	313	346	405	303	236	209	168
Produc.	761	893	881	669	696	529	635	613	531	480	433
Rate (%)	67	76	70	45	45	65	64	49	44	44	39
Austria											
Export	71	71	98	97	125	105	133	166	190	200	183
Produc.	376	396	424	398	434	437	435	521	516	492	496
Rate (%)	19	18	23	24	29	24	31	32	37	41	37
Switzer-land											
Export	8	10	12	9	8	16	13	29	24	24	25
Produc.	38	49	49	42	41	40	40	90	93	90	90
Rate (%)	21	20	24	21	20	40	33	32	26	27	28

Sources: Yearbook of Forest Products, 1972-1982 (FAO)
 Note: *1 Sources: Foreign Trade Statistics of Canada, 1972-1982

Table AII-6-5 Rates of Import/Apparent Consumption of Unbleached Sulphate Pulp in Major Importing Countries (1972-1982)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S.A.											
Import	324	334	310	154	226	222	181	152	130	150	120
Consump.	16,395	16,748	16,347	14,006	16,256	16,852	17,066	17,952	18,117	17,815	16,514
Rate (%)	2	2	2	1	1	1	1	1	1	1	1
France											
Import	137	180	165	100	129	105	122	129	169	94	80
Consump.	559	632	621	563	562	559	569	564	555	531	483
Rate (%)	25	28	27	18	23	19	21	23	30	18	17
H.Germany											
Import	136	137	161	94	100	89	104	91	79	68	62
Consump.	136	137	161	94	100	89	104	91	79	68	62
Rate (%)	100	100	100	100	100	100	100	100	100	100	100
Italy											
Import	188	281	222	133	195	150	166	168	157	111	82
Consump.	202	297	243	144	207	156	173	170	157	111	82
Rate (%)	93	95	91	92	94	96	96	99	100	100	100
Norway											
Import	115	194	134	184	137	126	149	208	172	167	145
Consump.	236	330	285	315	288	273	291	357	327	334	291
Rate (%)	49	59	47	58	48	46	51	58	53	50	50
U.K.											
Import	150	167	167	137	116	102	105	98	93	97	63
Consump.	150	167	167	137	116	102	105	98	91	89	55
Rate (%)	100	100	100	100	100	100	100	100	102	109	115
Japan											
Import	87	114	128	67	71	105	155	71	103	34	46
Consump.	2,253	2,627	2,719	2,236	2,499	2,528	2,502	2,534	2,423	1,876	1,910
Rate (%)	4	4	5	3	3	4	6	3	4	2	2
S.Korea											
Import	75	85	93	70	107	130	139	136	146	159	138
Consump.	80	90	98	74	111	137	139	136	146	159	138
Rate (%)	94	94	95	95	96	95	100	100	100	100	100
Turkey											
Import	2	13	11	7	3	7	0	6	4	17	33
Consump.	66	73	90	84	62	85	37	92	46	58	74
Rate (%)	3	18	12	8	5	8	0	7	9	29	45
Australia											
Import	83	101	108	122	109	120	93	94	103	115	108
Consump.	155	162	202	207	189	170	146	150	165	175	167
Rate (%)	54	62	53	59	58	71	64	63	62	66	65

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Table AII-5-6 Rates of Export/Production of Unbleached Sulphate Pulp in Major Exporting Countries (1972-1982)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
(Unit: 1,000 MT)											
Canada											
Export	377	448	371	331	262	295	243	241	210	287	231
Produc.	1,648	1,933	1,951	1,314	1,563	1,635	1,649	1,699	1,690	1,790	1,379
Rate (%)	23	23	19	25	17	18	15	14	12	16	17
U.S.A.											
Export	70	65	142	90	103	104	69	94	103	92	90
Produc.	16,141	16,479	16,179	13,942	16,133	16,734	16,954	17,894	18,090	17,757	16,484
Rate (%)	0	0	1	1	1	1	0	1	1	1	1
Brazil											
Export	123	173	128	145	127	73	131	131	120	182	79
Produc.	267	315	422	472	520	588	728	525	772	751	777
Rate (%)	46	55	30	31	24	12	18	25	16	24	10
Chile											
Export	0	0	0	52	69	163	202	205	198	209	235
Produc.	91	91	120	112	131	190	233	243	299	*1 295	*1 263
Rate (%)	0	0	0	46	53	86	87	84	66	71	89
Finland											
Export	265	208	164	125	160	158	149	204	187	139	92
Produc.	1,249	1,289	1,259	971	1,009	869	1,015	1,165	1,087	973	849
Rate (%)	21	16	13	13	16	18	15	18	17	14	11
Sweden											
Export	539	819	724	446	379	447	537	470	376	278	272
Produc.	2,274	2,489	2,526	2,078	2,149	1,992	2,273	2,372	2,279	2,183	1,953
Rate (%)	24	33	29	21	18	22	24	20	16	13	14
Austria											
Export	26	18	11	16	17	20	43	61	51	48	39
Produc.	157	165	208	200	210	223	248	281	275	282	281
Rate (%)	17	11	5	8	8	9	17	22	19	17	14
Portugal											
Export	93	107	75	30	73	46	29	57	74	36	36
Produc.	139	136	202	182	178	199	233	268	107	121	121
Rate (%)	67	79	37	16	41	23	12	21	69	30	30
S.Africa											
Export	115	134	134	134	142	181	215	230	169	58	58
Produc.	190	200	176	155	142	181	215	255	255	255	255
Rate (%)	61	67	76	86	100	100	100	90	66	23	23
Swaziland											
Export	0	0	0	90	180	123	150	161	156	157	157
Produc.	125	136	143	143	180	152	155	161	156	157	157
Rate (%)	0	0	0	63	100	81	97	100	100	100	100
New Zealand											
Export	99	126	146	148	153	151	167	158	152	173	134
Produc.	229	334	346	341	367	374	375	370	322	359	349
Rate (%)	43	38	42	43	42	40	45	43	47	48	38

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Note: *1 See notes of Table

Table AII-6-7 RATES OF IMPORT/APARENT CONSUMPTION OF BLEACHED SULPHATE PULP IN MAJOR IMPORTING COUNTRIES (1972-1982) (1)
(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Import	69	39	33	41	42	24	31	100	84	74	86
Consump.	1,439	1,682	1,668	1,581	1,950	2,171	1,766	2,297	1,958	2,321	1,876
Rate (%)	5	2	2	3	2	1	2	4	4	3	5
U.S.A.											
Import	2,269	2,482	2,494	2,029	2,423	2,474	2,670	2,869	2,762	2,765	2,576
Consump.	14,123	14,865	15,055	13,211	14,738	15,258	16,782	17,506	17,726	18,719	18,271
Rate (%)	16	17	17	15	16	16	16	16	16	15	14
Argentina											
Import	47	70	69	54	50	57	79	85	75	95	104
Consump.	99	125	137	121	130	107	148	181	128	129	156
Rate (%)	47	56	50	45	38	53	53	47	59	74	67
Belux											
Import	182	229	249	187	174	161	175	207	199	199	199
Consump.	227	236	294	248	194	210	190	245	249	249	249
Rate (%)	80	97	85	75	90	77	92	84	80	80	80
Denmark											
Import	40	43	47	31	36	36	61	76	68	68	78
Consump.	40	43	47	31	36	36	61	76	68	68	78
Rate (%)	100	100	100	100	100	100	100	100	100	100	100
France											
Import	762	836	931	716	878	878	1,114	1,195	1,264	1,319	1,135
Consump.	1,128	1,153	1,341	1,141	1,269	1,373	1,590	1,627	1,653	1,763	1,648
Rate (%)	68	73	69	63	69	64	70	73	76	75	69
W.Germany											
Import	1,164	1,294	1,353	1,098	1,385	1,435	1,647	1,780	1,938	1,957	1,950
Consump.	1,164	1,294	1,353	1,098	1,385	1,435	1,647	1,773	1,932	1,957	1,944
Rate (%)	100	100	100	100	100	100	100	100	100	100	100
Italy											
Import	629	650	677	530	724	716	1,001	1,119	1,177	1,040	907
Consump.	708	733	766	594	783	756	1,068	1,136	1,177	1,040	907
Rate (%)	89	89	88	89	92	95	94	99	100	100	100
Nether.											
Import	348	398	406	344	383	381	453	476	474	451	406
Consump.	346	396	403	341	377	377	452	470	472	448	405
Rate (%)	101	101	101	101	102	101	100	101	100	101	100
U.K.											
Import	1,123	1,076	1,139	1,004	1,166	1,128	1,179	1,220	1,099	1,105	866
Consump.	1,123	1,076	1,139	1,004	1,166	1,125	1,175	1,219	1,091	1,103	864
Rate (%)	100	100	100	100	100	100	100	100	101	100	100
Austria											
Import	63	94	109	93	97	94	97	91	119	136	144
Consump.	71	100	114	97	103	100	102	97	123	140	150
Rate (%)	89	94	96	96	94	94	95	94	97	97	96

Table AII-6-7 RATES OF IMPORT/APARENT CONSUMPTION OF BLEACHED SULPHATE PULP IN MAJOR IMPORTING COUNTRIES (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
S. Africa											
Import	66	76	64	54	100	108	113	113	186	168	168
Consump.	147	155	157	130	185	181	182	205	276	263	263
Rate (%)	45	49	41	42	54	60	62	55	67	64	64
Japan											
Import	390	601	777	547	554	507	925	1,046	1,326	1,046	1,102
Consump.	3,581	3,946	3,971	3,487	3,934	3,905	4,505	5,085	5,431	4,868	5,250
Rate (%)	11	15	20	16	14	13	21	21	24	21	21
S. Korea											
Import	213	152	111	94	123	163	237	231	241	271	226
Consump.	213	152	111	94	123	163	237	231	271	340	334
Rate (%)	100	100	100	100	100	100	100	100	89	80	68
Thailand											
Import	16	21	0	10	28	54	57	73	44	75	59
Consump.	16	21	0	10	28	54	57	73	44	75	59
Rate (%)	100	100	0	100	100	100	100	100	100	100	100
Australia											
Import	92	132	144	122	90	122	116	151	140	144	125
Consump.	178	218	190	168	135	225	219	253	249	261	231
Rate (%)	52	61	76	73	67	54	53	60	56	55	54

Sources: Yearbook of Forest Products, 1972-1982 (FAO)

Table AII-6-8 Rates of Export/Production of Bleached Sulphate Pulp in Major Exporting Countries (1972-1982) (1)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Canada											
Export	4,148	4,503	4,871	3,542	4,414	4,373	5,302	5,284	5,985	5,065	5,046
Produc.	5,518	6,146	6,506	5,082	6,322	6,520	7,037	7,481	7,859	7,312	6,836
Rate (%)	75	73	75	70	70	67	75	71	76	69	74
U.S.A.											
Export	1,045	1,117	1,389	1,377	1,288	1,332	1,355	1,578	2,263	2,254	2,196
Produc.	12,899	13,500	13,950	12,559	13,603	14,116	15,467	16,215	17,227	18,208	17,891
Rate (%)	8	8	10	11	9	9	9	10	13	12	12
Brazil											
Export	6	14	4	7	12	19	133	446	766	762	735
Produc.	318	376	417	370	507	654	903	1,078	1,585	1,542	1,595
Rate (%)	2	4	1	2	2	3	15	41	48	49	46
Chile											
Export	0	0	0	122	165	175	235	226	217	201	227
Produc.	139	138	180	199	244	269	283	308	315	*1 307	*1 307
Rate (%)	0	0	0	61	68	65	83	73	69	65	74
Belux											
Export	114	162	137	67	132	133	151	150	141	141	141
Produc.	159	169	182	128	152	182	166	188	191	191	191
Rate (%)	72	96	75	52	87	73	91	80	74	74	74
Finland											
Export	654	708	554	384	451	598	943	1,170	1,260	1,113	1,003
Produc.	1,488	1,563	1,527	1,306	1,461	1,576	2,094	2,574	2,709	2,819	2,638
Rate (%)	44	45	36	29	31	38	45	45	47	39	38
France											
Export	104	180	101	39	91	91	100	105	91	66	81
Produc.	470	497	511	464	482	586	576	537	480	510	594
Rate (%)	22	36	20	8	19	16	17	20	19	13	14
Norway											
Export	33	128	65	71	96	100	162	133	117	168	179
Produc.	80	85	150	175	190	120	61	18	3	158	167
Rate (%)	41	151	43	41	51	83	266	739	3,900	106	107
Sweden											
Export	1,181	2,172	2,177	1,893	1,985	1,821	2,183	2,062	1,858	1,919	1,615
Produc.	2,421	2,875	2,947	2,822	2,883	2,688	2,945	3,168	3,089	3,252	2,914
Rate (%)	49	76	74	67	69	68	74	63	60	59	55
Portugal											
Export	301	284	258	175	222	204	188	195	252	333	333
Produc.	307	326	316	298	219	229	279	340	437	456	456
Rate (%)	98	87	82	59	101	89	67	57	58	73	73
Spain											
Export	14	41	40	41	51	51	79	91	132	133	133
Produc.	234	287	337	408	471	537	565	540	621	686	694
Rate (%)	6	14	12	10	11	9	14	17	21	19	19

Table AII-6-8 Rates of Export/Production of Bleached Sulphate Pulp in Major Exporting Countries (1972-1982) (2)

(Unit: 1,000 MT)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Morocco											
Export	0	0	47	31	42	33	49	63	69	59	56
Produc.	37	49	50	53	42	55	66	82	83	75	80
Rate (%)	0	0	94	58	100	60	74	77	83	79	70
Japan											
Export	31	39	171	119	128	152	90	93	90	91	61
Produc.	3,222	3,384	3,365	3,059	3,508	3,550	3,670	4,132	4,195	3,913	4,209
Rate (%)	1	1	5	4	4	4	2	2	2	2	1
New Zealand											
Export	3	8	14	40	57	59	63	73	64	72	69
Produc.	104	122	148	203	193	220	215	193	218	260	229
Rate (%)	3	7	9	20	30	27	29	38	29	28	30

Sources: Yearbook of Forest Products, 1971-1982 (FAO)

Note: *1 See note of Table

Annex II-7

PRODUCTO BRUTO INTERNO AL COSTO DE FACTORES,
SEGUN SECTOR ECONOMICO DE ORIGEN

Table AII-7-1 PRODUCTO BRUTO INTERNO AL COSTO DE FACTORES, SEGUN SECTOR ECONOMICO DE ORIGEN
(EN MILLONES DE NUEVOS PESOS CORRIENTES)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
AGROPECUARIO	427	658	844	1,190	2,156	2,865	5,841	8,644	9,641	9,431	18,322
PESCA Y CAZAMARITIMA	2	3	7	16	36	81	179	216	346	410	729
INDUSTRIAS MANUFACTURERAS	488	947	1,756	2,658	4,132	6,363	13,603	20,603	24,152	22,845	35,837
ELECTRICIDAD GAS Y AGUA	41	83	145	215	249	366	562	1,125	1,774	2,170	3,780
CONSTRUCCION	81	155	336	504	725	1,326	2,544	4,182	5,565	5,815	6,278
COMERIO	313	582	1,098	1,700	2,940	4,359	8,503	12,273	15,436	13,860	21,944
TRANSPORTE Y ALMACENAMIENTO	142	266	475	726	1,080	1,531	2,710	4,644	6,325	6,704	9,690
COMUNICACIONES	21	53	67	89	115	178	283	439	657	852	1,468
BANCOS, SEG. Y OTROS INTER. FIN.	87	146	328	552	745	1,363	2,471	4,021	5,589	7,196	11,661
PROPIEDAD DE VIVIENDA	68	119	320	550	946	1,789	2,833	5,360	9,456	13,350	16,576
SERVICIOS DEL GOBIERNO GENERAL	294	555	881	1,364	1,872	2,914	4,856	8,490	12,958	15,599	18,235
OTROS SECTORES*	253	469	851	1,310	2,149	3,157	5,373	9,482	13,604	14,950	19,706
P.B.I. AL COSTO DE FACTORES	2,217	4,036	7,108	10,874	17,145	26,292	49,758	79,539	105,903	113,162	164,226
IMP. INDIR. NETOS DE SUBSIDIOS	344	510	1,058	1,764	2,770	4,638	7,867	12,665	16,550	15,355	22,063
P.B.I. A PRECIOS DE MERCADO	2,561	4,546	8,166	12,638	19,915	30,930	57,625	92,204	122,453	126,537	186,289

Note: *: INCLUYE CANTERAS Y MINAS Y SERVICIOS DIVERSOS

Table AII-7-2 PRODUCTO BRUTO INTERNO AL COSTO DE FACTORES, SEGUN SECTOR ECONOMICO DE ORIGEN
(EN MILLONES DE NUEVOS PESOS A PRECIOS DE 1978)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
AGROPECUARIO	2,730	2,822	2,971	3,019	3,102	2,865	2,816	3,275	3,439	3,051	3,114
PESCA Y CAZA MARITIMA	22	20	30	39	54	81	117	133	157	134	155
INDUSTRIAS MANUFACTURERAS	5,122	5,230	5,561	5,708	6,019	6,363	6,815	6,980	6,662	5,536	5,148
ELECTRICIDAD GAS Y AGUA	302	284	314	324	338	366	379	408	430	435	446
CONSTRUCCION	597	654	876	989	1,015	1,326	1,490	1,546	1,593	1,377	1,012
COMERCIO	3,239	3,465	3,644	3,975	4,063	4,359	4,677	5,183	5,327	4,182	3,689
TRANSPORTE Y ALMACENAMIENTO	1,335	1,360	1,412	1,501	1,539	1,531	1,695	1,838	1,819	1,593	1,493
COMUNICACIONES	144	143	151	163	173	178	190	203	206	218	231
PROPIEDAD DE VIVIENDA	1,755	1,744	1,746	1,742	1,764	1,789	1,798	1,830	1,848	1,861	1,874
OTROS SECTORES*	6,506	6,693	7,041	7,240	6,907	7,434	7,937	8,204	8,692	8,838	8,792
P.B.I. AL COSTO DE FACTORES	21,752	22,415	23,746	24,700	24,974	26,292	27,914	29,600	30,173	27,225	25,954
P.B.I. A PRECIOS DE MERCADO	25,579	26,383	27,930	29,043	29,384	30,930	32,838	34,808	35,469	32,028	30,532

Note: *; INCLUYE CANTERAS Y MINAS, BANCOS, SEGUROS Y OTROS INTERMEDIARIOS FINANCIEROS,
SERVICIOS DEL GOBIERNO GENERAL Y SERVICIOS DIVERSOS.

Table AII-7-3 PRODUCTO BRUTO INTERNO COSTO DE FACTORES SEGUN SECTOR ECONOMICO DE ORIGEN
(INDICES DE VOLUMEN FISICO, BASE 1978=100)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
AGROPECUARIO	95.3	98.5	103.7	105.4	108.3	100.0	98.3	114.3	120.0	106.5	108.7
PESCA Y CAZA MARITIMA	27.2	24.7	37.0	48.1	66.7	100.0	144.4	164.2	193.8	165.4	191.4
INDUSTRIAS MANUFACTURERAS	80.5	82.2	87.4	98.7	94.6	100.0	107.1	109.7	104.7	87.0	80.9
ELECTRICIDAD GAS Y AGUA	82.5	77.6	85.8	88.5	92.3	100.0	103.6	111.5	117.5	118.9	121.9
CONSTRUCCION	45.0	49.3	66.1	74.6	76.5	100.0	112.4	116.6	120.1	103.7	76.2
COMERCIO	74.3	79.5	83.6	91.2	93.2	100.0	107.3	118.9	122.2	95.9	84.6
TRANSPORTE Y ALMACENAMIENTO	87.2	88.8	92.2	98.0	100.5	100.0	110.7	120.1	118.8	104.1	97.6
COMUNICACIONES	80.9	80.3	84.8	91.6	97.2	100.0	106.7	114.0	115.7	122.5	129.8
PROPIEDAD DE VIVIENDA	98.1	97.5	97.6	97.4	98.6	100.0	100.5	102.3	103.3	109.5	110.2
OTROS SECTORES*	87.5	90.0	94.7	97.4	92.9	100.0	106.8	110.4	116.9	118.9	118.3
P.B.I. AL COSTO DE FACTORES	82.7	85.3	90.3	93.9	95.0	100.0	106.2	112.6	114.8	103.5	98.6

Note: * : INCLUYE CANTERAS Y MINAS, BANCOS, SEGUROS Y OTROS INTERMEDIARIOS FINANCIEROS,
SERVICIOS DEL GOBIERNO GENERAL Y SERVICIOS DIVERSOS.

Annex II-8

COTIZACION DE MONEDAS EXTRANJERAS

Table AII-8-1 COTIZACION DE MONEDAS EXTRANJERAS

(EN NUEVOS PESOS)

MERCADO DE CAMBIOS(1)		COTIZACIONES INTERBANCARIAS (BILLET) (2)							
		1 DOLAR USA		1 PESO ARGENTINO(3)					
		COMPRADOR	VENDEDOR	COMPRADOR	VENDEDOR				
1976	PROM	3.30	3.34	3.68	3.69	0.01530	0.01554	0.2701	0.2727
	DIC	3.94	3.98	3.99	4.00	0.01500	0.01500	0.2700	0.2700
1977	PROM	4.65	4.68	4.72	4.73	0.01174	0.01181	0.2774	0.2779
	DIC	5.38	5.39	5.37	5.38	0.00930	0.00930	0.2740	0.2746
1978	PROM	6.05	6.06	6.08	6.09	0.00767	0.00772	0.2820	0.2826
	DIC	6.97	6.98	7.01	7.01	0.00700	0.00700	0.2688	0.2693
1979	PROM	7.84	7.86	7.85	7.85	0.00602	0.00606	0.2526	0.2534
	DIC	8.41	8.43	8.39	8.39	0.00520	0.00520	0.1921	0.1930
1980	PROM	9.08	9.10	9.09	9.10	0.00492	0.00493	0.1613	0.1623
	DIC	9.92	9.95	9.94	9.94	0.00497	0.00498	0.1497	0.1507
1981	PROM	10.79	10.82	10.80	10.81	0.00253	0.00257	0.1079	0.1089
	DIC	11.50	11.53	11.55	11.55	0.00104	0.00109	0.0729	0.0739
1982	MAR	11.91	11.94	11.96	11.96	0.00107	0.00109	0.0604	0.0614
	JUN	12.39	12.42	12.43	12.43	0.00049	0.00051	0.0597	0.0606
	SET	13.09	13.12	13.15	13.15	0.00027	0.00028	0.0423	0.0428
	DIC	28.21	28.51	28.25	28.57	0.00044	0.00046	0.0704	0.0718
1983	PROM	13.85	13.91	13.90	13.93	0.00058	0.00061	0.0545	0.0553
	MAR	31.89	32.14	31.98	32.14	0.00037	0.00039	0.0497	0.0507
	ABR	33.53	33.78	33.59	33.84	0.00035	0.00037	0.0536	0.0546
	MAY	32.62	32.87	32.87	32.87	0.00034	0.00035	0.0494	0.0502
	JUN	32.16	32.32	32.15	32.31	3.18900	3.22300	0.0403	0.0407
	JUL	33.62	33.68	33.65	33.70	2.68000	2.69000	0.0390	0.0393
	AGO	35.13	35.18	35.18	35.23	2.17100	2.18300	0.0329	0.0332
	SET	36.05	36.10	36.10	36.15	1.70700	1.71800	0.0311	0.0312
	OCT	37.11	37.16	37.19	37.24	1.49100	1.49800	0.0309	0.0310
	NOV	38.25	38.30	38.29	38.34	1.65000	1.66000	0.0324	0.0325
	DIC	42.50	42.73	42.50	42.73	1.74100	1.74900	0.0343	0.0346
1984	PROM	34.38	34.54	34.39	34.55	2.78600	2.86800	0.0426	0.0433
	ENE	45.66	45.88	45.65	45.86	1.48900	1.49600	0.0388	0.0390
	FEB	46.76	46.85	46.74	46.83	1.16000	1.16900	0.0351	0.0352
	MAR	50.54	50.72	50.58	50.75	1.01800	1.02800	0.0355	0.0358
	ABR	51.48	51.73	51.48	51.73	0.97300	0.98200	0.0353	0.0358
	MAY	53.87	54.12	53.87	54.12	0.84900	0.84900	0.0332	0.0337
	JUN	53.72	53.97	53.72	53.97	0.78600	0.79400	0.0310	0.0314
	JUL	55.36	55.61	55.36	55.61	0.73700	0.74300	0.0290	0.0294
	AGO	56.18	56.43	56.07	56.32	0.57600	0.58200	0.0254	0.0258

Notes: (1) MERCADO COMERCIAL - HASTA 27 DE NOVIEMBRE DE 1979 INCLUSIVE.
 COTIZACION INTERBANCARIA FONDO B.C.U. - DESDE 26 DE NOVIEMBRE DE 1982.
 (2) MERCADO FINANCIERO - HASTA 27 DE NOVIEMBRE DE 1979 INCLUSIVE.
 (3) DESDE JUNIO DE 1983 - 1 PESO ARGENTINO=10.000 PESOS (LEY 18.188).

Annex II-9

INDICES DE PRECIOS, EVOLUCION EN
LOS ULTIMOS 12 MESES

Table AII-9-1 INDICES DE PRECIOS. EVOLUCION EN LOS ULTIMOS 12 MESES

		DEL CONSUMO *1	AL POR MAYOR DE PRODUCTOS NACIONALES *2		AL POR MAYOR DE PROD. IMPORTADOS *1	COSTO DE LA CONSTRUCCION *1	
		NIVEL GENERAL	NIVEL GENERAL	MANUFACTURADOS	AGROPECUARIOS	NIVEL GENERAL	NIVEL GENERAL
1981	AGO	32.7	21.8	27.3	5.7	22.7	35.9
	SET	32.7	25.2	29.7	11.9	13.0	33.5
	OCT	30.1	21.8	25.0	12.3	15.0	24.7
	NOV	30.4	19.0	21.5	11.7	9.8	20.3
	DIC	29.4	14.9	18.1	5.2	9.4	21.1
1982	ENE	27.9	14.6	17.0	6.5	22.2	23.0
	FEB	25.4	12.4	14.1	6.5	5.4	13.3
	MAR	22.3	11.9	12.4	10.1	-1.6	12.7
	ABR	21.9	12.2	12.2	12.3	5.8	14.2
	MAY	20.7	12.0	12.1	11.8	-5.1	11.7
	JUN	18.9	14.0	13.4	16.2	0.2	12.8
	JUL	18.6	12.1	12.8	9.5	11.6	7.7
	AGO	16.3	10.8	11.7	7.6	14.7	8.1
	SET	14.7	9.3	10.2	6.1	21.6	8.9
	OCT	13.5	7.3	9.3	0.9	22.0	9.0
	NOV	11.0	5.4	9.9	-8.6	27.6	9.2
	DIC	20.5	33.5	37.9	17.9	70.0	30.7
1983	ENE	37.7	55.9	55.7	56.8	166.9	41.6
	FEB	40.8	57.8	57.6	58.6	114.1	43.7
	MAR	42.9	60.0	59.3	62.6	165.4	45.0
	ABR	46.1	67.4	65.1	76.3	154.2	44.8
	MAY	45.9	69.5	68.9	72.0	144.3	45.8
	JUN	47.2	67.0	67.0	67.1	145.8	44.1
	JUL	46.6	67.7	64.9	78.4	118.9	44.2
	AGO	48.9	73.9	66.7	100.5	121.8	43.6
	SET	55.1	84.1	81.0	95.3	119.7	50.7
	OCT	61.8	96.3	88.4	124.4	130.7	57.5
	NOV	62.8	103.0	91.8	145.7	129.4	56.7
	DIC	51.5	73.8	62.9	118.6	78.2	28.8
1984	ENE	40.7	60.7	58.1	69.8	17.9	30.9
	FEB	42.5	67.2	64.6	76.8	62.1	38.1
	MAR	43.9	67.7	63.1	84.7	39.8	39.9
	ABR	44.7	69.6	65.2	84.9	61.1	42.7
	MAY	50.1	74.0	67.3	98.8	60.4	42.7
	JUN	56.2	84.0	77.4	108.0	65.3	52.7
	JUL	62.0	87.0	80.9	107.9	69.5	55.4
	AGO	63.4	86.8	84.8	93.2	66.6	-

Notes: *1 FUENTE - DIRECCION GENERAL DE ESTADISTICA Y CENSOS.

*2 FUENTE - BANCO CENTRAL DEL URUGUAY.

Annex II-10

NBKP/LBKP EXPORTS BY DESTINATION
FROM USA, CANADA AND BRAZIL

Table AII-10-1 MBKP EXPORTS FROM THE U.S.A. BY DESTINATION (1)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Canada	MT 47,038	18,529	12,217	8,059	6,377	9,635	45,462	57,699	71,721	58,316	69,403	70,534
	\$/T 155.5	187.2	256.4	388.0	389.4	425.4	345.6	417.9	408.8	579.9	559.7	479.2
Mexico	MT 2,438	11,170	26,008	8,549	9,725	23,718	9,015	24,028	98,749	77,041	108,660	110,185
	\$/T 139.4	211.6	264.1	371.4	345.5	334.6	341.0	427.8	416.2	431.5	468.1	371.9
Guatemala	MT 80	80	2,136	3,934	2,479	2,790	2,929	4,217	5,031	3,592	1,943	2,428
	\$/T 158	250.0	387.2	306.0	392.5	332.6	330.8	407.4	502.7	509.2	390.1	374.0
El Salvador	MT 158	513	1,357		880	880	678	933	3,419	3,907	2,704	1,414
	\$/T 158.2	206.6	326.5		335.2	335.2	283.2	481.2	512.7	451.8	416.1	375.5
Costa Rica	MT 134							361	1,609	598	894	506
	\$/T 186.6							387.8	295.8	478.3	491.1	448.6
Panama	MT 270	177	295	138	150	318	162	234	309	169	338	312
	\$/T 140.7	220.3	311.9	500.0	420.0	424.5	432.1	538.5	686.1	716.0	594.7	503.2
Nicaragua	MT 90	132	124									
	\$/T 188.9	204.5	258.1									
Jamaica	MT 269	812	699	107	245	369	363	368	343	259	259	242
	\$/T 141.3	236.5	300.4	654.2	489.8	536.6	487.6	503.2	588.9	633.2	606.2	512.4
Dominica	MT 1,172	120			404	269		3,116	554			165
	\$/T 94.7	158.3			363.9	368.0		314.5	429.6			478.8
Trinidad	MT 277	277	388	186	239	232	464	502	834	548	667	489
	\$/T 267.1	267.1	270.6	715.1	493.7	504.3	433.2	433.2	521.6	583.9	629.7	507.2
Tobago	MT 2,715	9,680	7,511	3,476	3,618	4,154	2,111	3,626	3,150	4,513	4,185	4,769
	\$/T 148.8	169.0	344.8	414.3	419.8	370.0	416.9	453.1	526.7	576.1	541.7	470.7
Venezuela	MT 16,928	33,823	26,861	30,375	45,697	35,787	32,456	41,054	72,201	50,802	55,672	24,726
	\$/T 149.3	194.6	334.4	391.6	340.7	301.7	314.7	384.2	466.2	468.1	392.4	386.6
Ecuador	MT 117	84	88	726	259	805	1,877	1,984	1,705	2,119	1,549	923
	\$/T 136.8	226.2	352.3	381.5	451.7	411.2	367.6	456.1	486.8	584.7	493.2	484.3
Peru	MT 4,099	5,541	4,296	1,190	1,966	7,559	778	1,599	2,290	1,970	10,009	5,412
	\$/T 138.8	172.2	378.3	505.9	387.6	339.9	440.9	377.1	487.3	498.0	455.9	452.7
Chile	MT							171	189	593	507	263
	\$/T							456.1	566.1	627.3	597.6	490.5
Brazil	MT 8,705	5,726	24,716	9,147	3,653	782	2,601	553	1,993	2,263	279	370
	\$/T 140.8	205.4	366.3	398.9	514.6	441.2	529.4	462.9	535.4	586.8	469.5	543.2
Uruguay	MT									721	423	
	\$/T									883.5	463.4	
Argentina	MT 4,280	6,902	3,392	2,157	539	405	193	887	3,804	9,373	3,200	443
	\$/T 151.6	217.3	381.5	416.3	508.3	567.9	632.1	584.0	405.1	564.6	575.3	629.8
Sweden	MT 3,118	566		386			1,533	3,915	5,706	5,771	4,407	1,167
	\$/T 144.3	174.9		414.5			305.3	371.1	459.0	524.7	501.9	528.7
Norway	MT		2,301	1,996			1,048					
	\$/T		394.2	352.2			276.7					

Table AII-10-1 NBKP EXPORTS FROM THE U.S.A. BY DESTINATION (2)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Denmark												
MT				462								
\$/T	36,041	18,634	41,205	41,908	34,659	51,873	60,952	76,394	73,708	78,355	85,465	80,193
U.K.												
MT	161.7	202.6	307.1	377.2	390.5	363.4	315.4	396.6	465.9	510.3	460.9	395.6
\$/T	704		187	609	1,784	414	514	616	418	1,290	538	422
Ireland												
MT	149.1		620.3	284.1	293.7	396.1	375.5	418.8	559.8	543.4	600.4	466.8
\$/T	26,279	31,231	35,747	24,909	31,046	42,157	57,955	61,198	64,001	63,443	59,111	39,746
Netherlands												
MT	175.8	205.4	348.6	392.1	386.9	365.4	312.1	367.8	466.5	477.0	416.6	382.1
\$/T	18,299	32,808	14,462	21,334	21,005	30,781	32,361	51,363	99,576	108,472	83,122	97,717
Belux												
MT	159.3	167.8	272.6	341.9	370.3	337.9	293.5	385.0	459.5	502.3	438.4	381.3
France												
MT	35,719	39,764	48,763	74,435	74,485	86,506	86,404	106,879	122,970	141,199	145,497	125,667
\$/T	168.1	190.3	327.0	386.1	361.1	350.9	292.9	382.0	463.5	488.4	469.9	405.5
W.Germany												
MT	63,648	83,059	85,767	78,536	91,257	102,092	124,471	164,380	222,012	235,321	237,591	276,497
\$/T	176.8	190.8	309.1	390.1	394.8	376.3	327.2	400.4	479.7	515.0	474.3	410.7
Italy												
MT	39,493	46,505	55,571	51,841	64,433	71,899	87,578	117,821	172,069	132,359	111,765	140,245
\$/T	166.5	185.7	340.2	398.0	375.1	351.4	316.9	394.6	470.9	494.5	434.0	374.0
Greece												
MT	4,444	918	2,420	2,361	5,013	3,773	1,907	4,071	4,427	4,414	9,959	7,326
\$/T	144.0	168.8	502.1	335.9	385.6	301.1	393.8	434.3	454.0	465.8	418.7	388.6
Indonesia												
MT	373	934	546	920	1,056	3,567	3,150	6,360	4,367	10,457	14,206	11,474
\$/T	152.8	235.5	558.6	426.1	382.6	369.2	292.4	427.2	488.2	435.6	332.7	304.5
China												
MT		508		10,138								
\$/T		316.9		224.7								
S.Korea												
MT	12,575	16,465	11,167	18,009	7,107	16,813	8,548	23,591	33,184	58,263	41,408	36,692
\$/T	167.6	242.8	333.8	274.4	309.8	226.8	286.4	413.6	485.4	447.9	377.3	377.7
Japan												
MT	73,090	114,136	169,304	123,643	101,310	118,922	112,173	140,065	190,038	168,812	180,521	227,426
\$/T	176.4	215.5	330.2	376.7	375.4	359.1	312.6	398.5	485.2	511.5	451.9	401.3
S.Africa												
MT	24,866	14,392	26,288	12,853	27,674	17,145	8,481	18,442	49,956	55,067	45,236	49,860
\$/T	155.7	165.9	345.6	203.7	288.1	372.9	345.2	442.7	511.8	503.6	456.5	401.2
Other Countries												
MT	92,518	63,338	71,051	90,861	118,686	114,436	96,155	81,604	149,771	157,182	157,864	120,532
\$/T	160.4	190.8	379.4	377.8	323.9	322.9	293.3	405.2	471.5	467.5	424.6	399.3
Total												
MT	519,579	556,822	674,867	620,973	655,163	750,077	782,322	999,740	1,485,536	1,493,424	1,443,324	1,444,961
\$/T	163.6	196.9	331.5	373.2	362.4	348.6	315.0	397.5	467.2	493.5	452.3	398.6

Sources: U.S. Exports, 1972-1983