

# 第一回集団研究実施協議調査団報告書

ワルクアイ・紙パルプ

平成元年6月

ワルクアイ・紙パルプ

LIBRARY

90-70



# 第三国集団研修実施協議調査団報告書

—ウルグアイ・紙パルプ—

JICA LIBRARY



1090908(3)

22516

平成元年6月

国際協力事業団

国際協力事業団

22516

## 序 文

第三国研修とは、社会的、文化的、言語的に共通の基礎をもつ同一の開発途上地域に研修実施国を選定し、そこに当該地域の途上国から研修員を受入れて、より現地事情に適合した適性技術、知識の移動を図り、これにより開発途上国間技術協力（TCDC）の推進に寄与し、将来的には実施国が独自に研修員受入事業を実施できるよう支援協力することを目的としている。我が国は1974年度（昭和49年度）、タイのコラート養蚕研究研修センターで初めて第三国集団研修を実施して以来、開発途上国からの第三国研修実施協力要請は増え続け、1988年度には17カ国で40コースの集団研修を実施した。

ウルグアイにおける第三国研修の実施は今回が初めてである。

1986年（昭和61年）3月、我が国プロジェクト方式技術協力による「ウルグアイ東方共和国紙パルプ品質改善協力事業」が終了したが、この成果を活用し、もってラテンアメリカ地域の中小規模紙パルプ産業の育成に協力するとの観点から、日本側より製紙先進国であるアルゼンティン、ブラジル、チリ等を除いたラテンアメリカ各国を対象に、高度技術を要し大量生産型である新聞紙を除く一般製紙技術に関するセミナー形式の第三国研修を提案、さらに周辺諸国のニーズ調査を行ったところ、強い要望が寄せられたため、1988年11月ウルグアイ国政府より、本件第三国研修の正式要請がなされたものである。

当事業団は右要請を受け、1989年（平成元年）6月24日から7月5日まで、実施協議調査団をウルグアイに派遣したところ、本報告書はその結果及び協議内容を取りまとめたものである。

本報告書が関係者各位のさらに深い御理解のもとに、第三国研修のより良い今後の展開に資することが出来れば幸いである。

最後に本調査団の派遣に際し、ご協力を賜った外務省、通商産業省、在ウルグアイ日本大使館及び日本製紙連合会に対し、深甚な謝意を表する次第である。

平成元年6月

研 修 事 業 部 長



# 目 次

1. 実施協議調査団の派遣 .....	1
1. 1 派遣の経緯と目的 .....	1
1. 2 調査団の構成 .....	1
1. 3 調査日程 .....	2
1. 4 主要面談者 .....	3
2. 調査結果 .....	5
2. 1 研修計画 .....	5
2. 2 研修実施体制 .....	6
2. 3 日本側協力体制 .....	9
(添付資料)	
1. 討議議事録 (R/D) .....	13
2. G. I. 案 .....	23
3. 実施要請書及び実施計画書 .....	31
4. 関係周辺国データ一覧表 .....	53





## 1. 実施協議調査団の派遣

### 1. 1 派遣の経緯と目的

#### (1) 派遣に至る経緯

- ① 1986年3月、ウルグアイ東方共和国工業エネルギー省ウルグアイ技術研究所（LATU）に対する紙パルプ品質改善技術に係るプロジェクト方式技術協力（ウルグアイ東方共和国紙パルプ品質改善協力事業）終了。
- ② 1987年12月、上記プロジェクトの成果を踏まえ、「ウ」国はLATUが中南米の小規模紙パルプ生産国のモデルとして、それら小規模生産国に対して、紙生産の自給率向上ならびに紙の品質改善に係るセミナーの実施計画案を提出。LATUに派遣中の三上隆仁専門家を通じ第三国研修の実施可能性についての調査を非公式に依頼。
- ③ 1988年11月、「ウ」国政府はウルグアイ外務省を通じ、第三国集団研修実施に係る正式要請書を提出。
- ④ 上記の三上専門家による調査および同年11月のプロジェクト事後調査を通じ、本第三国研修のフレームワークに係る事前情報は十分に収集されたとの認識に立ち、今回の実施協議調査団の派遣に至る。

#### (2) 派遣の目的

第三国研修実施に関し、研修計画、実施手続、双方の分担事項等の実施細目について、ウルグアイ外務省、工業エネルギー省、大統領府予算企画庁、LATU等関係機関と協議し、R/Dを取り交わすことを目的とする。

### 1. 2 調査団の構成

団長（総括）	松木博之	JICA研修事業部研修第二課	課長代理
団員（研修計画）	片貝敬三	日本製紙連合会	副理事長
団員（研修運営）	岩谷寛	JICA研修事業部管理課	

### 1. 3 調 査 日 程

#### 6月24日(土)

19:00 成田発 (RG 835)

#### 6月25日(日)

07:35 リオ、デ、ジャネイロ着

09:30 リオ、デ、ジャネイロ発 (RG 910)

13:50 カラスコ空港着 (RG 910)

14:30 日程等打合せ

#### 6月26日(月)

09:30 広岡大使表敬及び大使館と事務打合せ (於大使館事務所)

10:50 大使館発

11:00 LATUピア所長表敬 (於LATU本部)

12:30 広岡大使主催昼食会 (於上海飯店)

14:10 ウ側との第一回協議 (於LATU分室)

日程等調整及びR/D案提示、説明

15:00 外務省ウビッシン第三地域部次長 (日本課長兼務) 等表敬 (於同省)

16:00 工業エネルギー省ノボア官房長表敬 (於同省)

17:00 予算企画庁ベルッホ国際協力部長表敬 (於大統領府)

#### 6月27日(火)

09:30 ウ側との第二回協議 (於日本大使館)

13:45 C I C S S A工場視察

14:30 同工場発

15:00 Cartonera Pando 工場視察

16:00 I P U S A工場視察

#### 6月28日(水)

10:00 FNP工場視察 (於コロニア県フアン・ラカッセ町)

11:00 同工場発

15:00 P A M E Rモンテヴィデオ工場視察

6月29日(木)

08:30 ウ側との第三回協議(於LATU新館)及び施設見学  
R/D最終案の合意及びタイプ  
20:30 調査団主催夕食会

6月30日(金)

12:00 ウ側主催昼食会  
15:00 工業エネルギー省ノボア官房長との間でR/D署名(於LATU本部)  
LATUピア所長、理事及び製紙工業会代表等同席  
16:00 広岡大使に報告及び大使館と事務打合せ(於大使館事務所)

7月1日(土)

資料整理

7月2日(日)

16:15 カラスコ空港発(PA 202)

7月3日(月)

07:10 ニューヨーク着

7月4日(火)

13:40 ニューヨーク発(JAL 005)

7月5日(水)

15:50 成田着

1.4 主要面談者

ウルグアイ側

Rafael Novoa

工業エネルギー省官房長官

Alberto Voss Rubio

外務省第2地域部部长

Tnes Ubici de Busso

〃 第3地域部次長(日本課長兼務)

Andres Cuba

〃 第1地域部

Jorge Pelufo Voiseau	大統領府予算企画庁国際協力部長
Roberto Augusto Neri	ウルグアイ製紙工業会事務局長
Enrique D. Bia	LATU所長
Fernando Stotz	" 紙パルプ研究室長
Rodolfo Montanez	" 紙パルプ研究室
Raul de Castro	" "
Dilvar Silva	" "
Norberto F. Cassella	FNP工場長
Edgardo Villanueva	FNP
Jose M. Boldrini	"
Alberto Calo Barbieri	PARMER会長
Andres Calo Barbieri	" 社長
Walter Isabella	I P U S A 生産部長
Carlos Terreno Torres	" 保守部長
Maria Mortola	C I C S S A
Bernardo Suzacq	Cartonera Pando
Alejandro Vanzguez	"
Guillermo Pianalto Facelli	"

日 本 側

広岡大使	在ウ日本大使館
長島忠之	"
今津健彦	"
三上隆仁	J I C A 派遣専門家

## 2. 調査結果

### 2.1 研修計画

#### (1) コース名称

Small Scale Pulp and Paper Industry Development Seminar

(和文名) : 第三国研修「紙パルプ」)

#### (2) 目的

参加各国の紙パルプの自給率向上と紙類の品質改善に寄与する。

#### (3) 到達目標

(a) 紙パルプ技術の実務的知識を習得する。

(b) 品質管理の技術を習得する。

(c) 品質改善手法を理解する。

#### (4) 研修実施期間

初年度(1989年度)は、1990年3月12日から3月31日まで(20日間)

#### (5) 協力期間

1989年度から1993年度までの5年間

#### (6) カリキュラム

パート1 : 開講式、パルプ、抄造、コーティング、Q. C.

パート2 : 「ウ」国内の製紙会社の概要と工場視察

パート3 : 原料、「ウ」国の林業の現状と将来、開発計画と技術協力、閉講式

初年度は、紙パルプの概要を中心としたセミナーに近い形式とし、2年日以降の具体的内容については、第1回目コースの参加研修員からの要望・意見を聴取した上で決定することとする。

#### (7) 割当国

小規模紙生産国(自給率50%未満でありかつ年間紙生産量100,000トン未満の国)として、ボリビア、コスタ・リカ、ドミニカ共和国、エクアドル、エル・サルバドル、グアテマラ、ホンデュラス、パナマ、パラグアイの計9ヶ国。

#### (8) 定員

周辺国より20名、実施国より5名 計25名。

#### (9) 参加資格

(a) 各国政府が推薦した者

(b) 紙パルプ分野の一般的知識を有する者

(c) 現在公共或いは民間の関連業務に従事している者

- (d) 年齢50才以下の者
- (e) スペイン語に堪能な者
- (f) 心身共に健全な者

## 2. 2 研修実施体制

### (1) 実施機関

ウルグアイ国工業エネルギー省・ウルグアイ技術研究所（LATU）が実施する。

(a) 法的性格：LATUは、ウ国の伝統的産品（肉・羊毛等）及び非伝統的産品（魚類缶詰、柑橘類、紙パルプ等）を開発し、輸出を拡大することを目的として設立された法人団体であるが、工業エネルギー省の承認を得て予算を執行し、法令に定められた公共業務を遂行する点において他の国家機関と同等の役割りを担っている。

(b) 事業内容：LATUの主な事業内容は次の通りである。

- ① 原料生産工程改善のための実用的試験研究
- ② 国産原料の加工、及びその経済性の研究開発と副産物の利用
- ③ 品質管理
- ④ 輸出品の品質保証
- ⑤ 製品の分析試験
- ⑥ 企業に対する新技術の普及
- ⑦ その他情報サービス

(c) 組織及び人員配置：LATUは理事会の下に、事務部、輸出入一時管理部、及び技術部を持ち、約130名のスタッフを擁する。

#### ① 理事会

理事長（工業エネルギー省）	
事務局長（工業会議所）	
監査役（共和国銀行）	計 3名

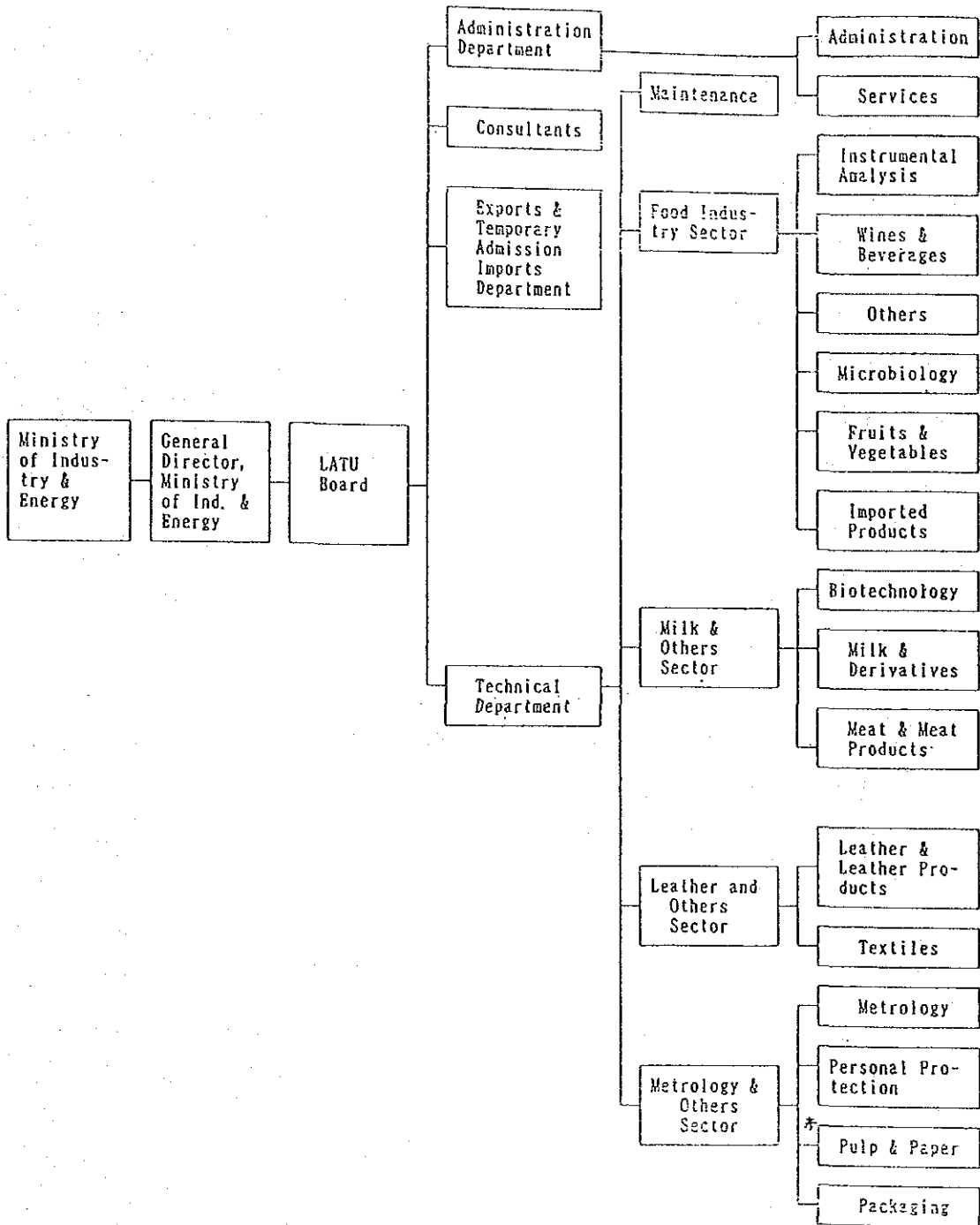
② 事務部 約40名

④ 輸出入一時管理部 約30名

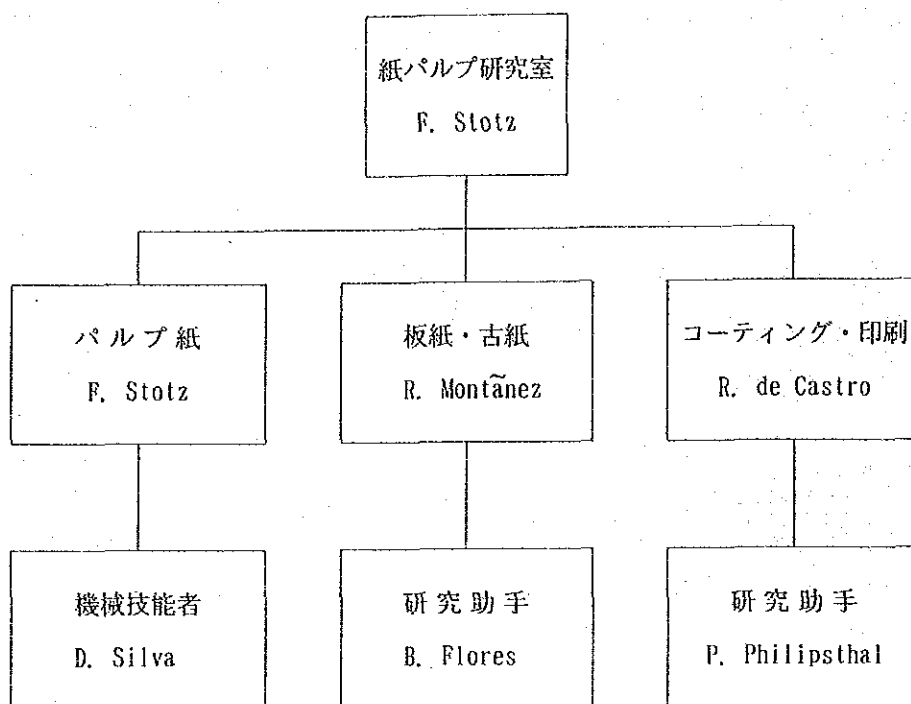
#### ④ 技術部

第 1 科：度量衡、材料試験、紙パルプ、包装	
第 2 科：牛乳・乳製品、肉・肉製品、バイオテクノロジー	
第 3 科：一般分析、果物、野菜、マイクロバイオロジー	
第 4 科：皮革、繊維	約60名

LATU組織図



## 紙パルプ研究室の人員配置



(d) 予算：LATUの運営資金の財源は、輸出入時に各産品に課される税金であり、その内訳は

- ① 非伝統産品の輸出の0.3%（総収入の約5.0%）、②輸入製品原料のC. I. F価格の1%（約4.0%）、③無税で輸入された資材のC. I. F価格の1%（約1.0%）である。

1988年度の総収入額は8,203千US\$である。

### (2) 研修施設、機材、教材

プロ技協供与機材として導入されたものを含めて、本研修実施のために必要な品質検査用機材等は完備しており、又、本年5月に開所したLATU新館には視聴覚設備の整備された会議室がある。

研修用テキスト及びビデオは、紙パルプ研究室スタッフが既にその製作に着手しており、問題ない。

### (3) 講師

LATU紙パルプ研究室のスタッフが主に担当する他、民間製紙会社（5社）の技術者が必要に応じて協力する予定。



#### (4) 実施手続き

第1回コース実施までの日・ウ双方の準備スケジュールは次のとおり。

	「ウ」側	日本側
1989年 6月	R/D署名	R/D署名
7月	G. I. 作成	
8月	G. I. 送付	
9月	専門家要請書提出	
10月		専門家人選
11月		B1フォーム提出
12月	研修員選考	
1月	受入回答、経費申請書提出 口座開設	
2月		経費支出
3月	コース実施	専門家派遣
4月	経費精算書提出、 コースレポート提出	(R/D ANNEX II)

### 2. 3 日本側協力体制

#### (1) 専門家派遣

初年度のコースは、全体的アドバイザー及び Fiber Raw Material and Production of Paper and Paperboard の専門家として短期専門家2名を派遣する。

次年度以降は、カリキュラムの詳細確定後再検討を要するが、必要に応じ短期専門家2名程度で対応する。

#### (2) カウンターパート受入れ

毎年度1名ずつ、計5名のカウンターパート受入れをする。

#### (3) その他留意すべき事項

ウルグアイにおいては、本コースが初の第三国研修であり、ウ側外務省、工業エネルギー省をはじめとする関係機関は実施に多大なる熱意を表明しているが、事務処理能力等には未知数のところもある。よって、とくに初回の実施にあたっては、在ウ日本大使館を通じ、細部にわたるマネジメントの指導を行う必要があると思われる。



## (添付資料)

1. 討議議事録 (R/D)
2. G. 1. (案)
3. 実施要請書及び実施計画書
4. 関係周辺国データ一覧表



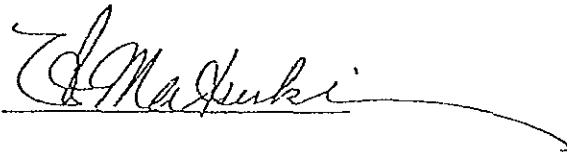
RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM  
AND THE AUTHORITIES CONCERNED OF THE ORIENTAL REPUBLIC OF URUGUAY ON  
THE THIRD COUNTRY TRAINING PROGRAMME.

The Japanese Implementation Survey Team (hereinafter referred to as "the Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Hiroyuki Matsuki visited the Oriental Republic of Uruguay from June 25 to the 1st. of July, 1989 for the purpose of formulating a training course in the field of Pulp and Paper Industry under the Third Country Training Programme of JICA.

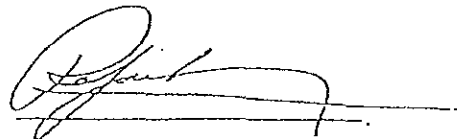
During its stay in the Oriental Republic of Uruguay, the Team had a series of discussions with the authorities concerned of the Oriental Republic of Uruguay, with respect to the framework of the above mentioned training course and the desirable measures to be taken by the Government of Japan and the Government of the Oriental Republic of Uruguay, to ensure its successful operation.

As a result of the discussions, both parts agreed to recommend to their respective Governments the matters referred to in the documents attached hereto.

Montevideo, June 30, 1989.



Mr. Hiroyuki Matsuki  
Leader  
Japanese Implementation  
Survey Team  
Japan International Cooperation  
Agency



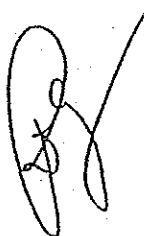
Dr. Rafael Novoa  
General Director  
Ministry of Industry and  
Energy  
The Oriental Republic of  
Uruguay

ATTACHED DOCUMENT

The Government of Japan and the Government of the Oriental Republic of Uruguay will cooperate with each other in organizing a training course in the field of small scale pulp and paper industry development, (hereinafter referred to as "the Course"), at the Technological Laboratory of Uruguay, under the Third Country Training Programme of JICA.

The Government of the Oriental Republic of Uruguay will conduct the Course with the support of the technical cooperation scheme of the Government of Japan. The Course will be held once a year from the Japanese fiscal year of 1989 to 1993, subject to annual consultation of both Governments.

The Course will be arranged in accordance with the following. Arrangements under items 3,4,5 and 8 supply for JFY 1989 alone and both parties will consult with each other to determine arrangements for the following years.



1. TITLE

The Course will be entitled "Small Scale Pulp and Paper Industry Development Seminar".

2. PURPOSE

The purpose of the Course is to promote the development of the paper industry in small scale production countries of Latin America, and contribute to increase the self-sufficiency and improve the quality of paper and paperboard in those countries.

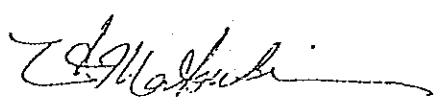
3. OBJECTIVES

At the end of the Course, the participants are expected to be able to:

- (1) get the practical knowledge of pulp and paper technology.
- (2) master the technical skill of the quality control.
- (3) understand how to approach the quality improvement.

4. DURATION

The first Course will be held from March 12 to March 31, 1990.



5. CURRICULUM

The tentative curriculum of the first Course is attached as ANNEX I.

6. INVITED COUNTRIES

The Governments of the following countries will be invited to apply for the Course by nominating their applicant(s):  
Bolivia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Panama and Paraguay.

7. NUMBER OF PARTICIPANTS

The number of participants from the invited countries shall not exceed twenty (20) in total. And the number of participants from the Oriental Republic of Uruguay shall not exceed five (5).

8. QUALIFICATIONS FOR APPLICANTS

Applicants for the first Course are:

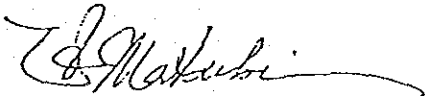
- 8-1 To be nominated by their respective Governments in accordance with the procedure mentioned in 10-1 below.
- 8-2 To have a general background in the pulp and paper field.
- 8-3 To be presently engaged in the related public or private sector.
- 8-4 To be under fifty (50) years of age in principle.
- 8-5 To have a good command of spoken and written Spanish and
- 8-6 To be in good health, both physically and mentally, to complete the Course.

9. FACILITIES AND INSTITUTIONS

Technological Laboratory of Uruguay.  
Ministry of Industry and Energy.  
The Oriental Republic of Uruguay.

10. PROCEDURE OF APPLICATION

- 10-1 The Government applying for the Course shall forward five (5) copies of the prescribed application form for each nominee to the Government of the Oriental Republic of Uruguay through its diplomatic channels not later than sixty (60) days before the commencement of the Course.




10-2 The Government of the Oriental Republic of Uruguay will inform the applying Governments through its diplomatic channels whether or not the applicant(s) is/are accepted to the Course not later than thirty (30) days before the commencement of the Course.

11. UNDERTAKINGS OF THE GOVERNMENTS OF JAPAN AND THE ORIENTAL REPUBLIC OF URUGUAY

In organizing and implementing the Course, both Governments will take the following measures in accordance with the relevant laws and regulations in force in each country. The schedule of the course operation for the first year is attached as ANNEX II.

11-1 The Government of the Oriental Republic of Uruguay

11-1-1 Ministry of Foreign Affairs.

- 
- (1) To forward the General Information brochures (G.I.) to the Governments of the invited countries through its diplomatic channels.
  - (2) To receive application forms and forward them to the Technological Laboratory of Uruguay and
  - (3) To notify the result of the selection to the respective Government through its diplomatic channels.

11-1-2 Technological Laboratory of Uruguay

- (1) To formulate the curriculum based of ANNEX I.
- (2) To draft and print the G.I..
- (3) To assign an adequate number of its staff as lecturers/instructors for the Course.
- (4) To provide its training facilities and equipment for the Course.
- (5) To select participants for the Course, and to inform the result of the selection to the Ministry of Foreign Affairs and the Embassy of Japan in the Oriental Republic of Uruguay (hereinafter referred to as "the Embassy").
- (6) To arrange accommodations for the participants.
- (7) To arrange international air tickets for the participants from the invited countries and to meet and see them off at the airport.
- (8) To arrange domestic study tour(s) to be included in the Course.
- (9) To take budgetary measures to bear the expenses necessary for conducting the Course excluding the expenses financed by JICA.

*T. Matsui*



- (10) To issue certificates to the participants who successfully completed the Course at the end of the Course.
- (11) To submit a course report and a statement of expenditures to the Embassy within thirty (30) days after the termination of the Course, and
- (12) To coordinate any matter related to the Course.

11-2 The Government of Japan

- (1) To dispatch short-term expert(s), following the regular procedures of its technical cooperation scheme, who will give advice to the Technological Laboratory of Uruguay and deliver lectures on such subjects as mentioned in ANNEX I.
- (2) To bear the following expenses through JICA. (The tentative estimate of expenses for the first Course is attached as ANNEX III).
  - a) Such expenses relevant to participants from the invited countries as international economy-class flight fare, accommodation, per-diem and medical insurance premiums,
  - b) Such expenses relevant to Technological Laboratory of Uruguay as honoraria for external lecturers, arrangement of meeting(s) and study tour(s), teaching aids, expendable supplies, copies and reprints and secretarial services.
- (3) To receive Uruguayan counterpart personnel(s) for training in Japan, following the regular procedure of its technical cooperation scheme, who will be an instructor of some subjects in the Course. This is subject to the annual budget of JICA, and whether a counterpart personnel is acceptable or not in each Japanese fiscal year will be notified through the Embassy of Japan by the end of the previous year.



*T. Matsubae*

12. PROCEDURE OF REMITTANCE AND EXPENDITURE

The remittance and expenditure of the funds for the expenses to be borne by JICA will be arranged in accordance with the following procedure:

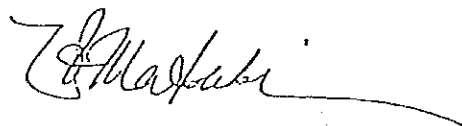
- 12-1 The Technological Laboratory of Uruguay (hereinafter referred to as "LATU") will open a bank account in the Oriental Republic of Uruguay to receive the fund remitted by JICA, and inform the Embassy of the name of the bank, the account code number, and the name of the account holder.
- 12-2 LATU will submit to the Embassy a bill of estimate for the expenses to be born by JICA not later than sixty (60) days before the commencement of the Course.
- 12-3 JICA will assess the bill of estimate and remit the assessed amount of expenses to the account mentioned in 12-1 above within thirty (30) days after the receipt of the bill of estimate.
- 12-4 LATU will submit to the Embassy a statement of expenditures within thirty (30) days after the termination of the Course.
- 12-5 In case any amount of the fund remitted by JICA remains unspent LATU will reimburse the unspent amount to JICA in accordance with the instructions given by JICA. The fund allocated for the flight fare, accomodation, per-diem and medical insurance premiums shall not be appropriated for any other purposes.
- 12-6 By the request of JICA, LATU will make available for JICA's reference all the receipts and other documentary evidence necessary to certify the expenditures stated in 12-4 above.

13. This Attached Document and the following Annexes attached hereto shall be deemed to be a part of the Record of Discussions:

ANNEX I : Tentative Curriculum of the Course (in the Japanese FY 1989).

ANNEX II : Schedule of the Course Operation (for the Japanese FY 1989).

ANNEX III: Tentative Estimated of Expenses to be borne by JICA (for the Japanese FY 1989).



## ANNEX I

## TENTATIVE CURRICULUM OF THE COURSE (IN THE JAPANESE FY 1989)

DATE	SUBJECTS	ASSIGNED TO
	<u>Part-1: Laboratory activities</u>	
1 (Mon) 3/12	Arrival	L
2 (Tue) 3/13	Opening Ceremony	L I
3 (Wed) 3/14	Pulping	L I
4 (Thu) 3/15	Paper-making	L I
5 (Fri) 3/16	Coating	L I
6 (Sat) 3/17	(Holiday)	
7 (Sun) 3/18	(Holiday)	
8 (Mon) 3/19	Q.C. of Paper	L I
9 (Tue) 3/20	Q.C. of Paperboard and Corrugated Box	L I
	<u>Part-2: Mill visits</u>	
10 (Wed) 3/21	Explanation of the Five Paper Companies	I
11 (Thu) 3/22	Visit to FNP	L I
12 (Fri) 3/23	Visit to FAMER	L I
13 (Sat) 3/24	(Holiday)	
14 (Sun) 3/25	(Holiday)	
15 (Mon) 3/26	Visit to IPUSA, CICSSA and PC	L I
	<u>Part-3: Lectures and Discussions</u>	
16 (Tue) 3/27	Fiber Raw Materials and Produc- tion of Paper and Paperboard	J
17 (Wed) 3/28	History, Actual Situation and Perspective of forestation in Uruguay	I
18 (Thu) 3/29	Development Plan and Technical Cooperation	J
19 (Fri) 3/30	Closing Ceremony	L
20 (Sat) 3/31	Departure	L

(Remarks) L: Staff of LATU, I: Staff of Uruguayan Industry  
J: Japanese Expert

*E. Makubi*

## ANNEX II

## SCHEDULE OF THE COURSE OPERATION (FOR THE JAPANESE FY 1989)

MONTH	URUGUAYAN SIDE	JAPANESE SIDE
June 1989	1. Signing of Record of Discussions	1. Signing of Record of Discussions
July "	1. Preparation of G.I.	
August "	1. Distribution of G.I. and Application Form	
September "	1. Submission of form A-1	
October "		1. Recruitment of Expert(s)
November "		1. Submission of Form B-1
December "	1. Selection of the participants	
January 1990	1. Notification of the selection of the Participants 2. Opening of Bank Account 3. Submission of Bill of Estimate	
February "		1. Remittance of Expenses
March "	1. Implementation of the Course	1. Dispatch of Expert(s)
April "	1. Submission of statement of Expenditures 2. Submission of Course Report	

*T. Matsui*

## ANNEX III

TENTATIVE ESTIMATE OF EXPENSES TO BE BORNE BY JICA  
(FOR THE JAPANESE FY 1989)

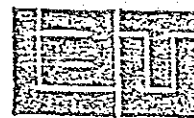
ITEM OF EXPENSES	BREAKDOWN	AMOUNT (US\$)
I. Invitation Expenses		
1. Airfare (round trip)	for 20 persons	18.000
2. Per-diem	20 x 20 pers. x 22 days	8.800
3. Accommodation	25 x 20 pers. x 21 days	10.500
4. Medical Insurance Premiums	35 x 20 pers.	700
SUB TOTAL		38.000
II. Training Expenses		
1. Honoraria for External Lecturers	20 x 2 h x 10 pers.	400
2. Employment Fee Secretary	400 x 2,5 months x 1 pers.	1.000
3. Transportation		
3.1 Study Tour		
3.1. Bus Rental	100 x 15 days	1.500
3.2 Study Tour		
(1) Per-diem for Uru- guayan Participants	20 x 5 pers. x 6 days	600
(2) Accommodation for Uruguayan partici- pants	25 x 5 pers. x 5 days	625
(3) Bus rental	300 x 5 days	1.500
4. Material Procurement		5.000
5. Textbook		2.000
6. Meeting Expenses		
Opening Ceremony		1.500
Closing Ceremony		1.500
SUB TOTAL		15.625
GRAND TOTAL		53.625

*T. Masubuchi*





Agencia de Cooperación  
Internacional del Japón



Laboratorio Tecnológico  
del Uruguay

PRIMER SEMINARIO INTERNACIONAL SOBRE  
DESARROLLO DE LA INDUSTRIA EN PEQUEÑA ESCALA  
DE PULPA DE CELULOSA Y PAPEL

INFORMACION GENERAL

12 AL 31 DE MARZO DE 1990

MONTEVIDEO - URUGUAY

PROGRAMA DE COOPERACION TECNICA  
JAPON - URUGUAY

PRIMER SEMINARIO INTERNACIONAL SOBRE DESARROLLO DE LA INDUSTRIA EN  
PEQUEÑA ESCALA DE PULPA DE CELULOSA Y PAPEL

- ORGANIZAN -

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON  
ASOCIACION DE FABRICANTES DE PAPEL DEL URUGUAY  
LABORATORIO TECNOLOGICO DEL URUGUAY

- AUSPICIAN -

EMBAJADA DEL JAPON EN URUGUAY  
MINISTERIO DE INDUSTRIA Y ENERGIA DEL URUGUAY  
OFICINA DE PLANEAMIENTO Y PRESUPUESTO DEL URUGUAY  
MINISTERIO DE RELACIONES EXTERIORES DEL URUGUAY



PRIMER SEMINARIO INTERNACIONAL SOBRE DESARROLLO DE LA INDUSTRIA EN  
PEQUEÑA ESCALA DE PULPA DE CELULOSA Y PAPEL

12 AL 31 DE MARZO DE 1990

MONTEVIDEO

1 INTRODUCCION

Con el propósito de promover la cooperación internacional entre los países en vías de desarrollo, la Agencia de Cooperación Internacional del Japón (JICA) canaliza su ayuda a través del Programa de capacitación para terceros países.

Desde 1981 el Gobierno del Uruguay en colaboración con el Gobierno del Japón han establecido en el Laboratorio Tecnológico del Uruguay (LATU) un laboratorio especializado en pulpa de celulosa, papel y cartón. El mencionado laboratorio fue instalado en el marco del Proyecto para la mejora de la calidad de la pulpa de celulosa y el papel llevado a cabo con JICA y cumple con el papel de asistencia a la industria como laboratorio oficial y como laboratorio central de las fábricas.

2 Objetivo

El objetivo del Seminario es contribuir al desarrollo de la industria de la pulpa de celulosa y el papel en otros países latinoamericanos. Está dirigido a los países fabricantes en pequeña escala o no fabricantes que deseen desarrollar dicha industria. Se hará particular énfasis en los aspectos prácticos tanto de las actividades de laboratorio como industriales.

### 3 Duración

El Seminario se desarrollará desde el 12 al 31 de marzo de 1990.

### 4 Idioma

Español y ocasionalmente inglés.

### 5 Sede

Laboratorio Tecnológico del Uruguay  
Avda. Italia 6201 Montevideo, Uruguay

### 6 Países invitados

Se invita a postular a candidatos de los siguientes países de habla hispana: Paraguay, Panamá, El Salvador, Guatemala, Ecuador, República Dominicana, Costa Rica, Honduras y Bolivia.

### 7 Número de participantes

El total de participantes será de máximo 20.

### 8 Requisitos de los candidatos

- 1 - Poseer conocimientos básicos en la especialidad.
- 2 - Dominio del español y comprensión del inglés escrito.
- 3 - Edad máxima: 50 años.
- 4 - Salud compatible con las exigencias del curso.

13 Otras informaciones

Montevideo está al nivel del mar

Mes	Temperatura media °C	Humedad media (%)	Precipitación media (mm)
Mayo	13,5	78%	76
Junio	12,8	81%	132

Por cualquier información adicional escribir directamente a:

Presidente del LATU

Ing. Enrique D. Bía

Avda. Italia 6201 Montevideo, Uruguay

ANEXO I

Programa tentativo del Seminario para el primer año

Parte I: Actividades de laboratorio	1 (L)	Llegada
	2 (Ma)	Ceremonia de apertura, visita al LATU
	3 (Mi)	Fabricación de pulpa de celulosa
	4 (J)	Fabricación de papel
	5 (V)	Recubrimientos superficiales
	6 (S)	Libre
	7 (D)	Libre
	8 (L)	Control de calidad en pulpa de celulosa y papel
	9 (Ma)	Control de calidad en cartón y cajas de cartón corrugado
Parte II: Visitas a Fábrica	10 (Mi)	Introducción a las cinco fábricas de papel
	11 (J)	Visita a FNP
	12 (V)	Visita a PAMER
	13 (S)	Libre
	14 (D)	Libre
Parte III: Conferencias y discusiones	15 (L)	Visita a IPUSA, CICSSA y Cartonera Pando
	16 (Ma)	Materias primas fibrosas para la fabrica de papel, producción de papeles y carton
	17 (Mi)	Historia, situación actual y perspectiva de la forestación en Uruguay
	18 (J)	Planes de desarrollo y de cooperación té nica *
	19 (V)	Ceremonia de clausura
	20 (S)	Salida

Notas: \* Conferencistas japoneses enviados por JICA

ANEXO II

Solicitud de Postulación

1. ....

Nombres y Apellidos

2. ....

Fecha de nacimiento (día, mes, año)

sexo

3. Resumen de estudios

.....  
.....  
.....

4. Actividad actual

.....  
.....  
.....

5. Brevemente indique sus razones para postular a este curso

.....  
.....  
.....

6. Comprensión de inglés es aceptable: .....

7. Examen médico .....

firma (médico)

8. Institución que lo postula

Nombre: . . . . .

Dirección: . . . . .

Actividad: . . . . .

9. En caso de emergencia notificar a:

Nombre: . . . . .

Dirección: . . . . .

10. Domicilio, teléfono y télex en el país de origen del postulante para toda comunicación relativa a esta solicitud

Domicilio: . . . . .

Teléfono: . . . . .

Télex: . . . . .

Fecha: . . . . .

Firma del postulante

*Ministerio de Relaciones Exteriores*

52/88 SGD3

IU/mb

El Ministerio de Relaciones Exteriores presenta sus más atentos saludos a la Embajada de Japón y tiene el honor de hacer referencia al Proyecto de Mejoramiento de la calidad de pulpa de celulosa y papel en el Uruguay, suscripto el 8 de setiembre de 1981, entre los Gobiernos de la República Oriental del Uruguay y Japón.

Como resultado de dicha cooperación el Laboratorio Tecnológico del Uruguay (LATU) ha instalado un laboratorio especializado que cumple asistencia a la industria nacional.

Al respecto, las autoridades nacionales y los industriales de dicho sector han coincidido en la conveniencia de la realización de un seminario anual sobre pulpa de celulosa, papel y cartón en el LATU, dirigido a países latinoamericanos, fabricantes en pequeña escala o no productores.

El Ministerio de Relaciones Exteriores estima valioso posibilitar contactos directos y permanentes entre las fábricas de la región y el LATU con los expertos japoneses que impartirían dicha capacitación.

En consideración a lo expuesto, esta Cancillería tiene el honor de solicitar, en nombre del Gobierno de la República --- Oriental del Uruguay, cooperación técnica del Gobierno de Japón para un Seminario sobre "Desarrollo de la Industria en pequeña escala de pulpa - de celulosa y papel", en el marco del programa de capacitación para terceros países de la Agencia de Cooperación Internacional de Japón (JICA).

El Ministerio de Relaciones Exteriores quedará - agradecido si la Embajada de Japón confirma la aceptación por parte del Gobierno de Japón de la proposición antes mencionada.

El Ministerio de Relaciones Exteriores hace propicia la oportunidad para reiterar a la Embajada de Japón las seguridades de su más alta consideración.

Montevideo, 16 de noviembre de 1988.



Technical Cooperation Proposal

Towards

Small Scale Pulp and Paper Industry Development Seminar

By

JICA Third-Country Training Programme

October, 1988

Technological Laboratory of Uruguay  
Ministry of Industry and Energy  
The Oriental Republic of Uruguay



## Contents

	Page
I Seminar Title	1
II Host Organization of Seminar	1
III Objective of Seminar	1
IV Background Informations	2
V Scope of Work	3
1 Quinquennial plan	3
2 Year plan	4
3 Countries with the possibilities of participation	4
4 Objectives	4
5 Effects	5
6 Implementation system	5
7 JICA Third-Country Training Programme	6
8 Estimation for expenses shouldered by JICA	7
9 Invitation of Japanese experts	8
10 Training of Uruguayan personnel in Japan	8
11 Draft of schedule of 1st year seminar	9
VI Appendix	10

## Technical Cooperation Proposal

### Towards

#### Small Scale Pulp and Paper Industry Development Seminar

The present text is a technical cooperation proposal concerning a small scale pulp and paper industry development seminar by JICA Third-Country Training Programme. It is submitted by the Government of The Oriental Republic of Uruguay to the Government of Japan.

#### I Seminar Title

Small Scale Pulp and Paper Industry Development Seminar

#### II Host Organization of Seminar

Technological Laboratory of Uruguay  
Ministry of Industry and Energy  
The Oriental Republic of Uruguay

#### III Objective of Seminar

The Technological Laboratory of Uruguay (hereinafter referred to as "LATU") established the Pulp and Paper Laboratory (hereinafter referred to as "the Laboratory") through the Pulp and Paper Quality Improvement Project from 1981 to 1986 by the cooperation of the Japan International Cooperation Agency (hereinafter referred to as "JICA"). It is playing an important role as the central laboratory of pulp and paper industry as well as the official laboratory in Uruguay. Accordingly LATU wants to hold the Small Scale Pulp and Paper Industry Development Seminar (hereinafter referred to as "the Seminar") by the

facilities and manpowers of the Laboratory in cooperation with the Uruguayan Pulp and Paper Association by the JICA Third-Country Training Programme (hereinafter referred to as "the Programme"). The objective of the Seminar is to contribute to the development of the pulp and paper industry in other Latin-American Countries.

#### IV Background Informations

The consumption of paper and paperboard increases with the growth rate of Gross Domestic Product (GDP) of a country.

Accordingly the development of pulp and paper industry is one of the projects with highest priority in the strategy of national economic development of developing countries with high growth rate of GDP.

Uruguayan Government established a well-equipped pulp and paper laboratory in LATU in cooperation with Japanese Government to assist the development of the pulp and paper industry in the country and it is playing an important role not only as the official laboratory but also as the central laboratory of the industry.

In order to contribute to the development of the pulp and paper industry in other Latin-American countries, LATU analyzed the feasibility of the technical cooperation on pulp and paper to other Latin-American countries, based on the data of Forest Products World Outlook Projections 1985-2000 by FAO, and the conclusion is as follows.

- (1) Big increase of paper and paperboard consumption in each Latin-American country can be expected from 1985 to 1995 as shown in Table-1-4.
- (2) The production (t/year) and degree of self-sufficiency (production/consumption x 100%) of each country in 1984 were shown in Table-5. Then each country was classified by production scale and range of degree of self-sufficiency and the result is shown in Table-6.

Large scale production (more than 1,000,000 t/y) and middle scale production (100,000-1,000,000 t/y) countries have a degree of self-sufficiency of more than 75% except for Cuba and Venezuela. On the contrary small scale production (less than 100,000 t/y) countries have a degree of self-sufficiency of less than 50% except for Uruguay of which the one is 97%.

Accordingly Uruguay is the only country with high degree of self-sufficiency of paper and paperboard in the small scale production countries in Latin-America and its pulp and paper industry structure can be a useful model for other small scale production countries and non-production countries aiming to develop their pulp and paper industry.

- (3) Furthermore, as above mentioned, LATU has a well-equipped pulp and paper laboratory.

Accordingly it is a useful work for LATU to contribute to the development of the pulp and paper industry in other Latin-American countries with small scale production and non-production aiming to develop it through the Seminar.

## V Scope of Work

The plan of the Seminar is described as follows.

### 1 Quinquennial plan

The Seminar has the quinquennial plan in which the subjects of the Seminar are as follows.

1st year: General guidance of pulp and paper

2nd year: Corrugated board

3rd year: Printing paper

4th year: Packaging paper and carton board

5th year: Sanitary paper and others

## 2 Year Plan

The contents of year plan are as follows.

### (1) Programme

Part-1: Laboratory activities : about 10 days  
Part-2: Mill visits : about 5 days  
Part-3: Lectures and Discussions: about 5 days

---

Total: about 20 days

Considering the opinions of the participants, next year plan will be arranged at the ending of each Seminar.

### (2) Number of participants

Foreign participants : 20 persons  
Domestic participants: 5 persons

---

Total: 25 persons

## 3 Countries with the possibility of participation

### (1) Small scale production countries (8 countries)

Paraguay, Panama, El Salvador, Jamaica, Guatemala, Ecuador,  
Dominican RP, Costa Rica.

### (2) Non-production countries with a projected consumption of more than 25.000 t/y in 1995 (5 countries)

Honduras, Trinidad Tob., Bolivia, Suriname, Martinique.

## 4 Objectives

(1) Increase of the degree of self-sufficiency of paper and paperboard (expansion of production).

(2) Improvement of the quality of paper and paperboard.

## 5 Effects

- (1) Substitution of imports
- (2) Saving of foreign currency
- (3) Expansion of employment
- (4) Regional development
- (5) Improvement of the relation between producers and consumers
- (6) Promotion of education

## 6 Implementation system

LATU will implement the Seminar in cooperation with the Uruguayan Paper Association.

### (1) LATU

LATU has the following equipment and personnel.

#### 1) Equipment:

- (a) Bench plant of pulping, paper-making and coating processes
- (b) Testers of physical and optical properties of paper and paperboard
- (c) Printability tester
- (d) Corrugated box testers

#### 2) Staffs

- (a) 3 researchers
- (b) 2 technical assistants
- (c) 1 mechanician

### (2) Paper Association

There are five paper companies in the Paper Association.

#### 1) FNP

Daily output capacity: pulp 100 t/d

paper and paperboard 155 t/d

Products : Printing and writing paper, packaging paper

2) PAMER

Daily output capacity: Pulp 25 t/d

Paper and paperboard 85 t/d

Products : Corrugated board and box, packaging paper, printing and writing paper, tissue paper

3) IPUSA

Daily output capacity: Pulp 4 t/d

Paper and paperboard 58 t/d

Products : Carton board, packaging paper, tissue paper, printing and writing paper, notebook, napking, etc.

4) CICSSA

Daily output capacity: Paper and paperboard 50 t/d

Products : Corrugated board and box, packaging paper.

5) CP

Daily output capacity: Paper and paperboard 22 t/d

Products : Carton board, packaging paper, printing and writing paper.

7 JICA Third-Country Training Programme

Based on the JICA Third-Country Training Programme, the items in charge of Uruguayan and Japanese Governments are as follows.

(1) Uruguayan Government

- a) Provision of training facilities and equipment
- b) Formulation of curriculum
- c) Arrangement of lecturers, instructors and a coordinator
- d) Preparation of textbooks and other training aids

- e) Drafting and distribution of General Information brochure
- f) Screening of applicants and notification of acceptance
- g) Arrangement for oversea travel and accommodations of participants
- h) Operation and administration of the course
- i) Submission of financial report and course report

(2) Japanese Government

- a) Advising with regard to b), d), e), f), h) in the article (1)
- b) Dispatch of expert(s) for advising and guidance
- c) Preparation of textbooks and other training aids that are not locally available
- d) Payment of expenses for oversea travel and accommodations incurred to participants
- e) Payment of operational expenses (i.c. honoraria, transportation, meeting, material procurement) incurred to the training institution.

8 Estimation for expenses shouldered by JICA

The estimation for expenses shouldered by JICA in a year is shown in Table-7.

(1) Estimation for expenses in a year \*

Expenses of Foreign Participants:	U\$S 46.700
Operational Expenses	: U\$S 46.150

---

Total: U\$S 92.850

(2) Estimation for expenses in five years \*

Expenses of Foreign Participants:	U\$S 46.700 x 5 years = 233.500
Operational Expenses	: U\$S 46.150 x 5 years = 230.750

---

Total: U\$S 464.250

(Remarks) \*: In addition of the expenses for the assignment of Japanese experts and the training of Uruguayan personnel in Japan



9 Invitation of Japanese experts

1st year: 2 persons x 2 months

2nd year: 1 person x 2 months

3th year: 1 person x 2 months

4th year: 1 person x 2 months

5th year: 1 person x 2 months

---

Total: 6 persons x 2 months

All expense is shouldered by Japanese Government.

10 Training of Uruguayan personnel in Japan

1st year: 1 person x 1 month

2nd year: 2 persons x 1 month

3rd year: 1 person x 1 month

4th year: 1 person x 1 month

5th year: 1 person x 1 month

---

Total: 6 persons x 1 month

All expense is shouldered by Japanese Government.

11 Draft of schedule of 1st year seminar

	Date	Performance
Part-1: Laboratory activities	1 (Mon)	Arrival
	2 (Tue)	Opening ceremony (speeches by President of LATU, delegate of Paper Association, etc.) tour in LATU
	3 (Wed)	Pulping
	4 (Thu)	Paper-making
	5 (Fri)	Coating
	6 (Sat)	Holiday
	7 (Sun)	as above
	8 (Mon)	Quality control of pulp and paper
	9 (Tue)	Quality control of paperboard and corrugated box
Part-2: Mill visits	10 (Wed)	Explanation of the five paper companies
	11 (Thu)	Visit to FNP
	12 (Fri)	Visit to PAMER
	13 (Sat)	Holiday
	14 (Sun)	as above
Part-3: Lectures and Discussions	15 (Mon)	Visit to IPUSA, CICSSA and PC
	16 (Tue)	Raw materials of fiber for paper-making and production of paper and paperboard *
	17 (Wed)	History, actual situation and perspective of forestation in Uruguay **
	18 (Thu)	Development plan and technical cooperation *
	19 (Fri)	Closing ceremony
	20 (Sat)	Departure

(Remarks)

\* : Japanese speakers assigned by JICA

\*\* : Speakers invited from Forestry Department of Uruguay

## VI Appendix

Table - 1

Total Consumption of Paper and Paperboard in 1984 and Its Projection  
in 1995

Country	1984 (1,000 t)	1995 (1,000 t)	Increase Rate (%)
Argentina	1,031	1,354	31
Bahamas	1	5	400
Barbados	7	16	128
Bolivia	18	34	88
Brazil	3,281	6,814	107
Belize	1	2	100
Chile	298	422	42
Colombia	447	897	100
Costa Rica	130	348	167
Cuba	280	463	65
Dominican RP	75	124	65
Ecuador	181	263	45
El Salvador	51	99	94
Guadeloupe	10	17	70
Guatemala	81	208	156
Guyana	5	10	100
Haiti	5	7	40
Honduras	48	92	91
Jamaica	58	76	31
Martinique	15	29	93
Mexico	2,476	3,746	51
Neth Antille	5	9	80
Nicaragua	13	21	61
Panama	124	169	36

Paraguay	26	54	107
Peru	185	422	128
Suriname	13	47	261
Trinidad Tob.	38	91	139
Uruguay	48	86	79
Venezuela	763	1.160	52

Table - 2

## Consumption of Newsprint in 1984 and its projection in 1995

Country	1984 (1.000 t)	1995 (1.000 t)	Increase Rate (%)
Argentina	223	292	30
Bahamas	1	5	400
Barbados	2	3	50
Bolivia	7	11	57
Brazil	270	520	92
Chile	60	94	56
Colombia	78	150	92
Costa Rica	10	18	80
Cuba	39	60	53
Dominican RP	14	21	50
Ecuador	32	51	59
El Salvador	13	23	76
Guatemala	13	27	107
Guyana	1	2	100
Honduras	5	9	80
Jamaica	4	7	75
Mexico	266	381	43
Neth Antille	2	2	0
Nicaragua	4	6	50
Panama	6	7	16
Paraguay	6	12	100
Peru	48	87	81
Trinidad Tob.	10	15	50
Uruguay	9	19	111
Venezuela	156	227	45

Table - 3

Consumption of Printing and Writing Paper in 1984 and its projection  
in 1995

Country	1984 (1.000 t)	1995 (1.000 t)	Increase Rate (%)
Argentina	208	311	49
Barbados	2	4	100
Bolivia	6	12	100
Brazil	787	1.755	122
Chile	74	102	37
Colombia	76	178	134
Costa Rica	7	17	142
Cuba	49	99	102
Dominican RP	28	50	78
Ecuador	34	50	47
Guatemala	24	49	104
Honduras	1	7	600
Jamaica	7	12	71
Mexico	559	937	67
Neth Antille	1	2	100
Nicaragua	4	6	50
Panama	19	20	5
Paraguay	6	13	116
Peru	39	105	169
Suriname	2	6	200
Trinidad Tob.	4	9	125
Uruguay	11	28	154
Venezuela	121	181	49

Table - 4

Consumption of Other Paper and Paperboard in 1984 and Its Projection  
in 1995

Country	1984 (1.000 t)	1995 (1.000 t)	Increase Rate (%)
Argentina	600	752	25
Barbados	4	9	125
Bolivia	6	10	66
Brazil	2.224	4.539	104
Belize	1	2	100
Chile	164	225	37
Colombia	293	569	94
Costa Rica	113	312	176
Cuba	192	304	58
Dominican RP	33	52	57
Ecuador	115	163	41
EL Salvador	39	76	94
Guadeloupe	10	17	70
Guatemala	44	132	200
Guyana	4	8	100
Haiti	5	7	40
Honduras	43	76	76
Jamaica	47	57	21
Martinique	15	29	93
Mexico	1.651	2.428	47
Neth Antille	2	4	100
Nicaragua	6	10	66
Panama	100	142	42
Paraguay	14	30	114
Peru	98	230	134
Suriname	11	41	272
Trinidad Tob.	24	66	175
Uruguay	29	39	34
Venezuela	487	752	54

Table - 5

## Degree of Self-sufficiency in Each Country in 1984

	Production (1,000 t)	Consumption (1,000 t)	Degree of Self- sufficiency (%)
Argentina	946	1.031	91
Bahamas	-	1	0
Barbados	-	7	0
Bolivia	-	18	0
Brazil	3.768	3.281	114
Belize	-	1	0
Chile	375	298	125
Colombia	366	447	81
Costa Rica	14	130	11
Cuba	109	280	38
Dominican RP	9	75	12
Ecuador	34	181	18
El Salvador	16	51	31
Guadeloupe	-	10	0
Guatemala	17	81	20
Guyana	-	5	0
Haiti	-	5	0
Honduras	-	48	0
Jamaica	18	58	31
Martinique	-	15	0
Mexico	2.191	2.476	88
Neth Antille	-	5	0
Nicaragua	-	13	0
Panama	43	124	34
Paraguay	13	26	50
Peru	146	185	78
Suriname	-	13	0
Trinidad Tob.	-	38	0
Uruguay	47	48	97
Venezuela	557	763	73



Table - 6

Classification of the Latin-American Countries by Pulp and Paper  
Industry Structure

Degree of Self-sufficiency Production	less than 10%	10 - 50%	50 - 75%	75 - 100%	more than 100%
(I) Large Scale more than 1,000,000 t/y				* Mexico	* Brazil
(II) Medium Scale 100,000 - 1,000,000 t/y		Cuba	Venezuela	* Argentina Colombia Peru	* Chile
(III) Small Scale less than 100,000 t/y		Paraguay Panama El Salvador Jamaica Guatemala Ecuador Dominican RP Costa Rica		Uruguay	
(IV) Non-production	Honduras Trinidad Tob. Bolivia Suriname Martinique Nicaragua Guadeloupe Barbados Guyana Haiti Neth Antille Bahamas Belize				

(Remarks) \*: Newsprint production country

Table - 7

Estimation for Expenses shouldered by JICA in a year \*

Type of Expense	Description	Quantity (U\$S)
<b>I Expenses of Foreign Participants</b>		
1 Airplane ticket	900 x 20 persons	18.000
2 Traveling expense	35 x 20 persons x 20 days	14.000
3 Lodging	35 x 20 persons x 20 days	14.000
4 Medical insurance	35 x 20 persons	700
Sub-Total		46.700
<b>II Operational Expenses</b>		
1 Study tour		
1.1 Traveling expense for Uruguayan participants	35 x 5 persons x 5 days	875
1.2 Lodging for Uruguayan participants	35 x 5 persons x 5 days	875
1.3 Rent of microbus	300 x 5 days	1.500
2 Equipment, parts and materials		
2.1 Equipment		20.000
2.2 Parts		10.000
2.3 Materials		5.000
3 Honoraria for Instructors	20 x 10 persons x 2 hours	400
4 Textbook		2.000
5 Transportation	100 x 15 days	1.500
6 Expenses of presentation		
6.1 Opening ceremony		1.500
6.2 Closing ceremony		1.500
7 Didactic materials		1.000
Sub-Total		46.150
TOTAL		92.850

U\$S  
45.000

(Remarks) \*: In addition to the above expenses, the expenses of the assignment of Japanese experts and the training of Uruguayan personnel in Japan is shouldered by Japanese Government.



関係周辺国データ一覧表

(1987年)

国名	人口 千人	1人当り 紙消費量 kg/年/人	紙・板紙 生産量 1,000t/年	紙・板紙 工場数 (パルプ工場)	備考
Bolivia	6,200	3	1	1	輸入量 20 輸出量 0
Costa Rica	2,655	45	12	2 (1)※	輸入量 110 輸出量 0 ※機械パルプ
Dominica	6,588	10	9	2	輸入量 55 輸出量 0
Ecuador	10,000	10	67	5 (1)	輸入量 30 輸出量 0
El Salvador	5,072	13	29	3	輸入量 40 輸出量 2
Guatemala	8,070	12	35	4 (1)※	輸入量 65 輸出量 5 ※現在休止中
Honduras	4,500	6.5	—	—	輸入量 29.3 輸出量 0
Panama	2,038	40	28	3	輸入量 55 輸出量 0
Paraguay	3,722	7	13	3	輸入量 13 輸出量 0
Uruguay	3,000	17	48	5 (2)	輸入量 18 輸出量 12

出所：紙パルプ世界展望1988年版





