No. 923

UNITED NATIONS
(UNITED NATIONS DEVELOPMENT PROGRAMME)
and
INTERNATIONAL FINANCE CORPORATION

Agreement for a Paraguay Tung Tree Replanting Project (with attachment). Signed at Washington on 13 April 1984 and at New York on 25 April 1984

Authentic text: English.

Filed and recorded by the Secretariat on 25 April 1984.

ORGANISATION DES NATIONS UNIES
(PROGRAMME DES NATIONS UNIES POUR LE DÉVELOPPEMENT)
et
SOCIÉTÉ FINANCIÈRE INTERNATIONALE

Accord pour un projet de reboisement (abrasins) au Paraguay (avec pièce jointe). Signé à Washington le 13 avril 1984 et à New York le 25 avril 1984

Texte authentique : anglais.

Classé et inscrit au répertoire par le Secrétariat le 25 avril 1984.

AGREEMENT[1] BETWEEN UNITED NATIONS DEVELOPMENT PROGRAMME AND INTERNATIONAL FINANCE CORPORATION FOR TUNG TREE REPLANTING PROJECT

Dated April 25, 1984

Agreement Number UNDP 3
(Paraguay)

This Agreement, entered into by and between the UNITED NATIONS DEVELOPMENT PROGRAMME (hereinafter called "UNDP") and INTERNATIONAL FINANCE CORPORATION, an affiliate of the World Bank (hereinafter called "IFC"),

WITNESSETH:

WHEREAS, UNDP and the Government of Paraguay have signed a Project Document whereby the Government has requested that certain funds from Paraguay's UNDP Indicative Planning Figure be used to finance the pre-investment feasibility study referred to herein; and

WHEREAS, IFC is willing and able to undertake the foregoing study, on the terms and conditions specified herein.

NOW, THEREFORE, UNDP and IFC agree as follows:

1. IFC, in connection with its consideration of financing the Tung Tree Replanting Project in Paraguay (hereinafter referred to as the "Investment Project"), will undertake the investment feasibility study (hereinafter referred to as the "Study") which is described in Attachment A. The purpose of the Study is to provide data necessary to assist IFC in making a prompt decision on whether or not to finance the Investment Project.

2. UNDP will make available from its Project No. PAR/83/003 (hereinafter referred to as the "PAR/83/003 Project") an amount of up to thirty-eight thousand five hundred U.S. dollars (US$38,500) for the purpose of financing the costs of the Study incurred by IFC. The obligation of UNDP to finance the costs of the Study is limited to the dollar amount referred to in this paragraph.

3. The Study will be conducted by IFC or by consultants engaged by IFC, which will be solely responsible as an independent contractor for all aspects of the Study. Consultants will be engaged in accordance with IFC's financial regulations, rules, practices and procedures, to the extent they are appropriate. Where such sources do not provide the required guidance, UNDP regulations, rules and directives shall apply. If requested by IFC, other arrangements for engaging consultants by UNDP's Office for Projects Execution will be as agreed between UNDP and IFC.

4. The Study is expected to be completed within three months of its commencement. If the Study does not commence within ninety (90) days after the date of this Agreement, UNDP may, after consultation with IFC, terminate or suspend its commitment to finance the Study without any financial liability on the part of UNDP or the PAR/83/003 Project.

[1] Came into force on 25 April 1984 by signature, in accordance with paragraph 8 (*e*).

5. In order to facilitate the administration of the financing of the Study, IFC will provide the following information to UNDP:

(*a*) Written notice of the date and manner of commencement of the Study, including a copy of any consultant's agreement;

(*b*) Relevant information on the status and progress of the Study, as requested by UNDP;

(*c*) Written notice of the date of completion of the Study;

(*d*) A copy of the final report resulting from the Study;

(*e*) Written notice of IFC's decision whether or not to proceed to finance the Investment Project; and

(*f*) If IFC proceeds to finance the Investment Project, written notice of IFC's receipt from the proposed borrower of the first request for disbursement of funds with respect to the Investment Project, and the anticipated date of such disbursement.

6. (*a*) UNDP will account separately for the amount referred to in paragraph 2 required to finance the Study and will make disbursements to IFC from the PAR/83/003 Project in accordance with the following schedule:

(i) Fifty per cent (50%) of the maximum amount specified in paragraph 2 upon receipt of notice from IFC that the Study has commenced, as contemplated by paragraph 5 (*a*); and

(ii) The remaining amount within one month after the submission of the Study's final report and evidence satisfactory to UNDP of expenditures incurred and duly certified by IFC.

(*b*) Disbursement to IFC by UNDP, on behalf of the PAR/83/003 Project, will be made into an account designated by IFC.

7. (*a*) If IFC notifies UNDP, pursuant to paragraph 5 (*e*), that it intends to proceed with financing the Investment Project, IFC will pay to the PAR/83/003 Project, by means of the deposit to a bank account specified by UNDP, in U.S. dollars, an amount equal to all amounts previously paid from the PAR/83/003 Project pursuant to paragraph 6, concurrently with IFC's first disbursement of funds for the Investment Project. However, if such disbursement of funds shall not have occurred within twenty-four (24) months from the date of this Agreement, IFC will consult with UNDP from time to time as necessary to keep UNDP fully informed of the reasons for the delay in disbursement and the efforts being made to resolve any existing problems.

(*b*) If IFC notifies UNDP that it does not intend to proceed with financing the Investment Project, whether pursuant to paragraph 5 (*e*) or, after an initial positive notification, upon the failure to implement an appropriate agreement, IFC will specify, to the extent requested by UNDP, the reasons for IFC's adverse decision. In any such case, IFC shall have no obligation to make the payment referred to in (*a*) above, unless IFC subsequently finances the Investment Project. Should any other financial institution or agency subsequently use the Study in deciding to finance the Investment Project, IFC will endeavor to assist the PAR/83/003 Project in recovering the costs of the Study from such institution or agency.

(*c*) If IFC does not elect to finance the Investment Project, IFC will not take any action that will interfere with the further use of the Study by UNDP, the Government of Paraguay or the PAR/83/003 Project.

8. (*a*) This Agreement or any date referred to herein may be modified only by written agreement between the Parties hereto. Any relevant matter for which no provision is made in this Agreement, and any controversy between the Parties hereto, shall be settled in keeping with the relevant agreement between IFC ind UNDP or the relevant resolutions and decisions of the appropriate organs of the United Nations, as may be necessary in the particular case. Each Party will also give full and sympathetic consideration to any proposal advanced by the other under this sub-paragraph.

(*b*) Nothing in or relating to this Agreement or the Study shall be deemed a waiver of any of the privileges and immunities of the UNDP, the United Nations (including its subsidiary organs), or IFC. It is understood that performance hereunder shall be subject to the confidentiality requirements of all Parties.

(*c*) This Agreement may be terminated by either Party by written notice to the other, provided that such termination shall become effective with respect to ongoing activities only with the concurrence of both Parties.

(*d*) This Agreement shall survive its expiration or termination to the extent necessary to permit an orderly settlement of accounts between the Parties.

(*e*) This Agreement shall enter into force upon signature by the Parties.

IN WITNESS WHEREOF the authorized representatives of the Parties hereto have signed this Agreement in New York, New York, on the dates indicated beneath their respective signatures.

International Finance Corporation:

By: [*Signed*]
Name: M. V. DEHEJIA
Title: Vice President

Date: April 13, 1984

United Nations Development Programme:

By: [*Signed*]
Name: MICHAEL GUCOVSKY
Title: Deputy Assistant Administrator, Regional Bureau for Latin America
Date: April 25, 1984

ATTACHMENT A

REQUEST FOR FINANCIAL SUPPORT FROM THE UNDP AND FAO FOR A FEASIBILITY STUDY

PARAGUAY: TUNG TREES REPLANTING PROJECT WITH COOPERATIVA COLONIAS UNIDAS (UNICOOP)

Project Profile

Description

The scope covers reforestation of 10,000 to 15,000 hectares owned by several members of UNICOOP with high-yielding varieties of tung trees. The fruit from the plantation is to be processed by UNICOOP's oil extraction mills. The appropriate project size and the replanting schedule is to be suggested/determined by the consultants, based on UNICOOP's financing capabilities, market and processing constraints.

Technology

UNICOOP is expected to use modern planting and tree maintenance methods. The consultants will be asked to suggest appropriate sources and the structure of such technical assistance. Potential sources of technical assistance are the research station in Posadas, Argentina, or the one in Juan Caballero, Paraguay.

Capital cost

The project cost is estimated to be between $10-15 million equivalent, depending on its size and planting schedule.

Market

Tung oil is a high quality, rapid-drying oil used in printing ink, varnishes, enamels and other protective coatings such as linoleum, oilcloth and electrical insulation. World consumption has decreased from about 144,000 tons in 1967 to about 90,000 tons in 1982 and is expected to continue to decrease as a result of lower levels of worldwide production caused by ageing of the trees, which have not been replaced. Prices have increased substantially from $0.46 per kg CIF N.Y. in 1971 to about $2.80 per kg in mid-1983, making efficient tung oil operations very profitable.

Technical partner

UNICOOP is expected to manage the project with external technical assistance, as appropriate (see "Technology", above).

Local sponsors

UNICOOP is a multi-purpose cooperative of mostly farmers, founded in 1952 and located in the Southeast of Paraguay in Obligado, Department of ITAPUA, about 40 km from Encarnación. UNICOOP includes about 1,700 families largely of German extraction, living in the towns of Hohenau (settled in 1900), Obligado (1905) and Bella Vista (1920), with an aggregate total population of about 50,000. UNICOOP provides various technical, processing, marketing and other services to its members, and it is currently replacing an old vegetable oil extraction plant built in 1953 with a modern, solvent, double-purpose plant, with a capacity of 90 tpd of tung kernels or 150 tpd of soybeans.

IFC's role

IFC has ascertained the financial and economic attractiveness of the project based on available information, and, in general, IFC is seeking to assist UNICOOP in carrying out a project that will optimise UNICOOP's and Paraguay's benefits. In particular IFC is promoting the undertaking of the feasibility study by a qualified group of consultants who would assist UNICOOP in defining the project based on modern replanting techniques, on UNICOOP's financing and processing constraints, and on the tung oil long-term market outlook. IFC has prepared the Terms of Reference for the work of the consultants and will play an important role in assuring an adequate structure for the efficient implementation and management of the project. Eventually, IFC could also participate in the funding of this Project.

Government support

Full support is expected from the Government, given the substantial benefits that this project would bring to UNICOOP and Paraguay.

Developmental merits

(i) Important demonstration effect through the introduction of modern technology in the tung oil industry in Paraguay, historically an important subsector in Paraguay's agricultural exports.

(ii) Generation of satisfactory level of income to UNICOOP and its members, and of substantial foreign exchange to the country.

(iii) Project will be an important source of employment urgently sought by the communities involved.

Feasibility study: scope and cost

The report should include:

1) Analysis of UNICOOP'S present activities, management and technical know-how; relationships with members; past technical and financial performance by activity;

2) Analysis of existing situation of the region's (Paraguay's and Argentina's) tung oil industry and that under UNICOOP control;

3) Market analysis of local and worldwide historical patterns and of the future outlook of demand, supply and prices of tung oil;

4) Project analysis: Determination of optimal levels of soybean and tung kernel intake for UNICOOP's oil extraction plants; reforestation location, schedule and total size; project management and varieties of plant material; project cost; project financing; detailed operating costs and benefits, including that of existing operations;

5) Evaluation: Financial projections of project and of UNICOOP on a consolidated basis. Risk analysis of various aspects of project.

The study is to be undertaken by a team of consultants, to be selected and approved by IFC in collaboration with the FAO Investment Centre, and is expected to take about 10-12 weeks to substantially complete it. Apart from nominated specialists from the FAO, the team is likely to include a tung expert and a local marketing specialist. The study should provide a sound basis for IFC's eventual field appraisal work.

Based on the attached terms of reference, the consultants' fee is estimated at $30,000; in addition, another $10,000 is expected to be spent on travel and out-of-pocket costs making a total cost of around $40,000.

TUNG TREE REPLANTING PROJECT

TERMS OF REFERENCE FOR FEASIBILITY STUDY

I. *Analysis of UNICOOP*

1) Brief history of UNICOOP.

2) Activities:

- Analysis of main activities sources of net cash flow, domestic and foreign exchange (historical importance of each activity, variability, potential for improvement);
- Analysis of historical overall sources and uses of funds on a yearly basis to assess UNICOOP's financial strength/risk and mitigants.

3) Management:

- Management structure and organization including CVs of the important members of the management team;
- Management selection procedure and terms;
- Evaluation of management's strengths and weaknesses in technical aspects, financial management, marketing and in the overall control of operations.

4) Relations of UNICOOP with its members:

- Price fixing of members' products, and of UNICOOP's services to its members;
- Evaluation of the risk that UNICOOP may lose patronage by members;
- Capitalization method of UNICOOP;
- Government regulations affecting UNICOOP's activities and relations with members;
- In general, evaluate the extent by which UNICOOP can rely on the financial support of its members.

II. *Tung Oil — Existing situation in the area (Paraguay and Argentina)*

1) Surface area under tung trees, estimate of their age, yields and total production:

- In Paraguay;
- In Argentina;
- Are areas easily accessible distance to Hohenau?

2) Destination of local raw material supply, and estimate of quantities sold or purchased:

- Buyers and exporters of whole kernels;
- Processors of kernels;
- Location and capacity of existing plants;
- Plants under construction;
- Buyers and exporters of tung oil.

III. *Market*

1) Production and trade statistics of local (Paraguayan and Argentinian) tung kernel/oil production, supplies, export destination and prices since industry started in this area.

2) Comparison of production, supply, destination and prices of (1) above with other international suppliers.

3) Estimate and/or forecast of short- and long-term world demand for kernel/oil by country.

4) Potential sources and supplies to satisfy demand (3).

5) Future of local (Paraguayan and Argentinian) supply situation:

- Short- and long-term production of existing plantations;
- Need for replanting, because of age of existing plantations; extent of replanting necessary to maintain present production level or to fill possible gap in local and/or world production;
- Replanting programs recently completed, on-going, or in the planning stage: surface areas involved, estimated yields and production.

6) Evaluation of the following risks:

- Risk of world oversupply resulting in low prices arising from current high prices which may encourage excess planting; discussion of mitigants;
- Risk of world "oversupply" if People's Republic of China starts exporting good quality tung oil;
- Risk of a future discovery of a cost effective substitute. What would then be the price range of Tung oil given that it would compete against many other products used for the same purposes?

IV. *The project*

Assuming that the Cooperative* goes ahead with an extensive tung tree replanting program (to be carried out by its members) to guarantee the raw material supply for its new oil pressing plant, the project will consist of the replanting of about 10-15,000 ha (yet to be determined) of high-yielding varieties of tung.

A. *Determination of optimal soybean and tung kernel intakes, and raw material requirement/supply.*

1. Determine capacity of new processing plant for oil extraction of tung and other oil seeds (especially soybeans).

* Cooperativa Colonias Unidas Agricola Limitada, Obligado, Paraguay.

2. Determine world-market for tung oil and which part of that could be supplied by the Cooperative (based on maintaining historic level of supply, as well as on possible increase in supply, to fill gap of dwindling supplies by other producers).
3. Determine profitability of processing and marketing tung oil and soybean oil, separately.
4. Determine most profitable combination of tung and soybean oil processing for new plant, (considering profitability determined under (3), and fluctuation and/or trends in annual supplies of seeds and kernels).
5. Determine annual requirement of tung kernel supply.

B. *Oil pressing plant*

1. Evaluate adequacy of new plant for processing both tung and soybean oil, as determined under (A), above.
2. The necessary modifications, if any, and their estimated costs.
3. Determine if the old, existing plant can be used for stand-by purposes with modifications, if necessary; otherwise, estimate the salvage value, if any, for the old plant.
4. Operating cost of new plant, assuming operating at 50%, 75% and 100% capacity, combining processing both tung and soybean oil at various ratios.
5. Costs of refining, packing and transport of both tung and soybean oil.

C. *Replanting program*

1. Determine surface area to be replanted, considering production potential of existing plantings.
2. Divide replanting program (and all investment costs thereof) into two parts:
   (*a*) Replanting of existing stands, i.e., following cutting-down of present tung tree plantings; and
   (*b*) Planting on virgin forest area or on land previously used for annual cropping.

Provide parameters and best estimates of costs, broken down by (i) labor (man-days), (ii) machine-hours (type, fuel consumption, maintenance and operation), and (iii) material (tools, plant material, agricultural chemicals and fertilizers, bags, etc.) of:

- Land clearing, soil preparation, terracing or bunding, contouring, lining and holing;
- Preparation and maintenance of nursery, planting of seed, transplanting into plastic bags, budding (if necessary), fertilizing, disease and pest control, weeding, etc.;
- Transplanting into field (state plant density in plants/ha) and in-filling;
- Field maintenance: like weeding by hand and chemical, pruning and shaping of trees, fertilizing, cultivating, disease and pest control;
- Harvesting, bagging, transport of kernels to factory;
- Other activities involved in tung-growing.

3. Investments in:

- Agricultural machinery (tractors, trailers, cultivators, etc.) and vehicles;
- Fertilizers and chemicals;
- Workshop and tools;
- Construction (housing for labor and supervisory staff, office, warehousing and kernel storage, etc.).

4. Estimates of yields, by year.
5. Field maintenance and operating costs from land-clearing and planting until first harvest.

6. Annual operating cost of bearing plantations, plus harvesting cost per ton of fruit or kernel.
7. Organization of planting/replanting by cooperative members; supervision and management of replanting program; technical assistance provided by UNICOOP and/or local government, parastatal, or private institutions; need for outside technical assistance; and costs thereof.
8. Planting program by year and areas to be planted; and estimate of total production of new and old plantings by year.
9. Specific technical considerations:

- Source of seed or plant material;
- Availability of fertilizers, chemicals and other production inputs;
- Special care to be excrcised to guarantee kernels of proper quality (including dryness and maturity).

D. *Kernel supply*

1. Arrangement of purchasing kernels, including purchase price, transport cost, terms (credit, if appropriate).

Project cost

Summary of project cost by main item year by year, showing separately reserves for contingencies and escalation, interest during construction, and working capital requirements.

Project financing

Summary of the various sources of financing for the project, including cash generation from UNICOOP and discussing the sources (activities) and the basis supporting the estimate of the projected cash generation.

Data sheet

An annex should include in an organized fashion to detail all the information and assumptions regarding say, investment costs, operating costs, yields, prices, and transport costs for the tung oil, and the other UNICOOP activities considered for financial projections of the project and for the consolidated projections of UNICOOP.

V. *Evaluation*

Financial projections of the project, and of UNICOOP on a consolidated basis.