No. 16305

UNITED STATES OF AMERICA and COLOMBIA

Loan Agreement relating to the development of inland waters fisheries and aquaculture in Colombia (with annex). Signed at Bogotá on 24 December 1975

Authentic text: English. Registered by the United States of America on 27 January 1978.

ÉTATS-UNIS D'AMÉRIQUE et COLOMBIE

Accord de prêt relatif au développement de la pêche et de l'aquiculture dans les eaux intérieures de la Colombie (avec annexe). Signé à Bogotá le 24 décembre 1975

Texte authentique : anglais. Enregistré par les États-Unis d'Amérique le 27 janvier 1978.

FISHERIES RESEARCH LOAN) BETWEEN THE INSTITU-TO DE RECURSOS NATURALES RENOVABLES AND THE UNITED STATES OF AMERICA

Dated: December 24, 1975

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AID Loan No. 514-T-078

LOAN AGREEMENT dated the 24th day of December, 1975, between the NATIONAL INSTITUTE FOR RENEWABLE NATURAL RESOURCES ("INDERENA") ("Borrower") and the UNITED STATES OF AMERICA, acting through the AGENCY FOR INTERNATIONAL DEVELOPMENT ("A.I.D.").

Article L. THE LOAN

Section 1.01. The Loan. A.I.D. agrees to lend to the Borrower in furtherance of the Alliance for Progress and pursuant to section 1.03 of the Foreign Assistance Act of 1961, as amended, an amount not to exceed two million two hundred thousand dollars (\$2,200,000) ("Loan") to assist the Borrower in carrying out the program referred to in section 1.02 ("Program"). The Loan shall be used to finance local currency costs of goods and services required for the Program ("Local Currency Costs") and dollar costs of equipment procurement, training and technical assistance ("Dollar Costs"). The aggregate amount of disbursements under the Loan is hereinafter referred to as "Principal".

Section 1.02. The Program. The Program shall consist of: the local cost for construction of physical facilities and the research program and the dollar costs of the required equipment for the research facilities as well as the training and technical assistance.

The Program is more fully described in Annex I, attached hereto, which Annex may be modified by mutual agreement of the Parties in writing. The procedures for securing goods and services to be financed under the Loan shall be described in the Implementation Letters referred to in section 9.03 ("Implementation Letters").

Article II. LOAN TERMS

Section 2.01. Interest. The Borrower shall pay to A.I.D. interest which shall accrue at the rate of two percent (2%) per annum for ten years following the date of the first disbursement hereunder and at the rate of three percent (3%) per annum thereafter on the outstanding balance of Principal and on any due and unpaid interest. Interest on the outstanding balance shall accrue from the date of each respective disbursement (as such date is defined in section 7.04) and shall be computed on the basis of a 365-day year. Interest shall be payable semiannually.

¹ Came into force on 24 December 1975, by signature, in accordance with section 9.06.

The first payment of interest shall be due and payable no later than six (6) months after the first disbursement hereunder, on a date to be specified by A.I.D.

Section 2.02. Repayment. The Borrower shall repay to A.I.D. the Principal within forty (40) years from the date of the first disbursement hereunder in sixty-one (61) approximately equal semiannual installments of Principal and interest. The first installment of Principal shall be payable nine and one-half (9¹/₂) years after the date on which the first interest payment is due in accordance with section 2.01. A.I.D. shall provide the Borrower with an amortization schedule in accordance with this section after the final disbursement under the Loan.

Section 2.03. Application, currency and place of payment. All payments of interest and Principal hereunder shall be made in United States dollars and shall be applied first to the payment of interest due and then to the repayment of Principal. Except as A.I.D. may otherwise agree in writing, all such payments shall be made to the Agency for International Development, Cashier, SER/CONT, Washington, D.C. 20523, and shall be deemed made when received by A.I.D. at this address.

Section 2.04. *Prepayment*. Upon payment of all interest and refunds then due, the Borrower may prepay, without penalty, on any date on which interest is due, all or any part of the Principal. Any such prepayment shall be applied in the order prescribed in section 2.03 and, to the extent applied to Principal, shall be applied *pro rata* to the remaining installments thereof.

Article III. CONDITIONS PRECEDENT TO DISBURSEMENT

Section 3.01. Conditions precedent to initial disbursement of Loan funds. Prior to any disbursement or to the issuance of the first Letter of Commitment under the Loan, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

- (a) an opinion or opinions of the Legal Advisor of the Borrower or such other counsel as A.I.D. may agree to, demonstrating that this Agreement has been duly authorized or ratified by, and executed and delivered on behalf of, Borrower, and constitutes a valid binding obligation of Borrower in accordance with its terms;
- (b) evidence of the authority of the person or persons who will act as representative or representatives of Borrower, pursuant to section 9.02, together with a specimen signature of each such person duly certified as to its authenticity;
- (c) evidence that the Government of Colombia (Guarantor) has issued a valid and legally binding full faith and credit guaranty of repayment with respect to this Loan;
- (d) a time-phased project implementation plan which shall include a schedule showing how the construction, training and technical assistance components of the project will be coordinated; and
- (e) a technical assistance plan to USAID for its approval. This plan shall list the kinds of technical assistance desired and their proposed sources.

Section 3.02. Conditions precedent for disbursement for participant training. Prior to any disbursement or to the issuance of any Letter of Commitment under the Loan for Participant Training, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D. evidence that a Participant Selection Committee in which A.I.D. shall be represented has been formed.

Section 3.03. Conditions precedent for disbursement for construction. Prior to any disbursement or to the issuance of any Letter of Commitment under the Loan for construction of any given subproject, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D. all pertinent construction plans, designs, specifications and final cost estimates for such subproject for A.I.D. approval.

Section 3.04. Terminal dates for meeting conditions precedent to disbursement. (a) If all of the conditions specified in sections 3.01 and 3.02 shall not have been met within sixty (60) days from the date of this Agreement, and within one hundred and twenty (120) days from the date of this Agreement for section 3.03 or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may terminate this Agreement by giving written notice to the Borrower. Upon the giving of such notice, this Agreement and all obligations of the Parties hereunder shall terminate.

Section 3.05. Notification of meeting of conditions precedent. A.I.D. shall notify the Borrower within thirty (30) days of the receipt of documents submitted in satisfaction of sections 3.01, 3.02 and 3.03 whether A.I.D. has determined that the conditions precedent to disbursement have been met.

Article IV. GENERAL COVENANTS AND WARRANTIES

Section 4.01. *Execution of the Program*. The Borrower shall carry out the Program with due diligence and efficiency, and in conformity with sound engineering, construction, financial, administrative principles, and also in accordance with all of the related plans, specifications, contracts, schedules, and other arrangements, including all modifications therein.

In this connection, the Borrower shall at all times employ suitably qualified and competent construction contractors to carry out construction subprojects, and shall employ suitably qualified and experienced consultants, where appropriate in connection with the Program set forth in Annex I, to be professionally responsible for the planning and execution of the Program.

A.I.D. reserves the right to review such plans, specifications, contracts, schedules, and other documents related to the Program, as may be appropriate.

Section 4.02. Funds and other resources to be provided by Borrower. Except as A.I.D. may otherwise agree in writing the Borrower shall provide or cause to be provided promptly as needed all funds, in addition to the Loan, and all other resources required for the punctual and effective carrying out of the Program. In cases where *force majeure* affects the original scope of the Program, the Borrower may request consultation with A.I.D.

Section 4.03. Continuing consultation. The Borrower and A.I.D. shall cooperate fully to assure that the purpose of the Loan will be accomplished. To this end, the Borrower and A.I.D. shall, from time to time, at the request of either Party exchange views through their representatives with regard to the progress of the Program, the performance by the Borrower of its obligations under this Agreement, 1978

the performance of the consultants, contractors, and suppliers engaged on the Program, and other matters relating to the Program.

Section 4.04. *Management*. The Borrower shall provide qualified and experienced management for the Program, and shall train such staff as may be appropriate for the organization, development, maintenance and operation of the Program.

Section 4.05. Operation and maintenance. The Borrower shall operate, maintain, and repair the facilities constructed and equipment procured under the Program in conformity with sound engineering, financial, administrative, and mechanical practices, and in such manner as to insure the continuing and successful achievement of the purpose of the Program.

Section 4.06. *Taxation.* This Agreement, the Loan and any evidence of indebtedness issued in connection herewith shall be free from, and the Principal and interest shall be paid without deduction for and free from, any taxation or fees imposed under the laws in effect within the country of the Borrower. To the extent that, any contractor, including any consulting firm, any personnel of such contractor financed hereunder and any property or transactions relating to such contracts and any commodity procurement transaction financed hereunder are not exempt from identifiable taxes, tariffs, duties, and other levies imposed under laws in effect in the country of the Borrower, the Borrower shall, as and to the extent prescribed in and pursuant to Implementation Letters, pay or reimburse the same under section 4.02 of this Agreement with funds other than those provided by Borrower under the Loan.

Section 4.07. Utilization of goods and services. (a) Goods and services financed under the Loan shall be used exclusively for the Program, except as A.I.D. may otherwise agree in writing. Upon completion of the Program, or at such other time as goods financed under the Loan can no longer usefully be employed for the Program, the Borrower may use or dispose of such goods in such manner as A.I.D. may agree to in writing prior to such use or disposition.

(b) Except as A.I.D. may otherwise agree in writing, no goods or services financed under the Loan shall be used to promote or assist any foreign aid project or activity associated with or financed by any country not included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time of such use.

Section 4.08. Disclosure of material facts and circumstances. The Borrower represents and warrants that all facts and circumstances that they have disclosed or caused to be disclosed to A.I.D. in the course of obtaining the Loan are accurate and complete, and that they have disclosed to A.I.D. accurately and completely, all facts and circumstances that might materially affect the Program and the discharge of their obligations under this Agreement. The Borrower shall promptly inform A.I.D. of any facts and circumstances that may hereafter arise that might materially affect, or that it is reasonable to believe might materially affect, the Program or the discharge of the Borrower's obligations under this Agreement.

Section 4.09. Commissions, fees and other payments. (a) The Borrower warrants and covenants that in connection with obtaining the Loan, or taking any action under or with respect to this Agreement, they have not paid, and will not pay or agree to pay, nor to the best of their knowledge has there been paid nor will there

be paid or agreed to be paid by any other person or entity, commissions, fees, or other payments of any kind, except as regular compensation to the Borrower's full-time officers and employees or as compensation for bona fide professional, technical, or comparable services. The Borrower shall promptly report to A.I.D. any payment or agreement to pay for such bona fide professional, technical or comparable services to which they are Parties or of which they have knowledge (indicating whether such payment has been made or is to be made on a contingent basis), and if the amount of any such payment is deemed unreasonable by A.I.D. the same shall be adjusted in a manner satisfactory to A.I.D.

(b) The Borrower warrants and covenants that no payments have been or will be received by the Borrower or any official of the Borrower, in connection with the procurement of goods and services financed hereunder, except commissions, fees, taxes, or similar payments legally established in the country of the Borrower.

Section 4.10. *Maintenance and audit of records*. The Borrower shall maintain, or cause to be maintained in accordance with sound accounting principles and practices consistently applied, books and records relating both to the Program and to this Agreement. Such books and records shall, without limitation, be adequate to show:

- (a) disbursement of Borrower's contribution in accordance with the provision of Annex I;
- (b) disbursements of funds made available under the Loan to the Borrower in accordance with the provisions of Annex I;
- (c) disbursements made by the Borrower of the funds received in accordance with the Program;
- (d) the receipt and use made of goods and services acquired with funds disbursed pursuant to this Agreement;
- (e) the nature and extent of solicitations of prospective suppliers of goods and services acquired;
- (f) the basis of the award of contracts and orders to successful bidders; and
- (g) the progress, both fiscal and qualitative, of the Program, in sufficient detail (as shall hereafter be specified in Implementation Letters) to enable A.I.D. to review requests for releases of Loan funds.

Such books and records shall be regularly audited in accordance with sound auditing standards, for such period and at such interval as A.I.D. may require, and shall be maintained for five years after the date of the last disbursement by A.I.D. or until all sums due A.I.D. under this Agreement have been paid, whichever date shall first occur.

Section 4.11. *Reports.* The Borrower shall furnish to A.I.D. such information and reports relating to the Loan and to the Program as A.I.D. may request.

Section 4.12. *Inspections*. The authorized representative of A.I.D. shall have the right at all reasonable times to inspect the Program, the utilization of all goods, facilities and services financed by Loan funds or by Borrower's contribution, and the Borrower's books, records, and other documents relating to the Program and the Loan. The Borrower shall cooperate with A.I.D. to facilitate such inspections and shall permit representatives of A.I.D. to visit any part of the country of the Borrower 1978

for any purpose relating to the Loan. Prior to undertaking any inspections pursuant to the provisions of this section, however, A.I.D. hereby undertakes to advise the Borrower of its intent to exercise its rights hereunder. The Borrower shall: (a) upon request extend to A.I.D. the right to inspect the books, records and other documents relating to the Program; and (b) insert, or cause to be inserted in all contracts with private entities, whether financed directly or through an intermediary under the Loan, a clause extending to A.I.D. the right to make inspections in accordance with this section.

Article V. SPECIAL COVENANTS AND WARRANTIES

Section 5.01. Borrower's contribution. Borrower covenants that its contribution to the Program, as described in Annex I hereof, shall be provided in a timely manner, and in accordance with the provisions set forth therein.

Section 5.02. The Borrower covenants that it will present in a timely fashion the annual research plan for each station funded under this loan to A.I.D. for its approval.

Section 5.03. The Borrower covenants that such technical packages as may be forthcoming as a result of the research financed by this Loan will be disseminated to the appropriate target groups by the appropriate extension agencies and that all other steps necessary to the implementation of those packages will be taken.

Section 5.04. The Borrower covenants to continue to give consideration to the environmental impact of the project on lake and river management practices and to foster appropriate environmental practices among the fish farmers who will, over time, participate in this project.

Section 5.05. The Borrower covenants that the existing Project Committee composed of representatives of the Borrower, DNP, the Ministry of Agriculture and A.I.D. will continue to serve as the coordinating group for project implementation.

Article VI. PROCUREMENT

Section 6.01. Procurement from selected free world countries. Except as A.I.D. may otherwise agree in writing, and except as provided in section 6.08 (c) hereof with respect to marine insurance, disbursements made pursuant to section 7.01 shall be used exclusively to finance the procurement for the Program of goods and services, except motor vehicles, having both their source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time the orders are placed or contracts are entered into for such goods and services ("Selected Free World Goods and Services"). All ocean shipping financed under the Loan shall have both its source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time the Loan shall have both its source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time the Loan shall have both its source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time the Loan shall have both its source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time of shipment.

Section 6.02. *Procurement from Colombia*. Disbursements made pursuant to section 7.02 shall be used exclusively to finance the procurement for the Program of goods and services having both their source and origin in Colombia.

Section 6.03. *Eligibility date*. Except as A.I.D. may otherwise agree in writing, no goods or services may be financed under the Loan which are procured pursuant to orders or contracts firmly placed or entered into prior to the date of this Agreement.

Section 6.04. Implementation of procurement requirements. The definitions applicable to the eligibility requirements of section 6.01 will be set forth in detail in Implementation Letters.

Section 6.05. *Plans, specifications and contracts.* The Borrower shall furnish or cause to be furnished to A.I.D. upon request, all plans, specifications, construction schedules, bid documents, and contracts relating to the Program, and any modifications therein, relating to goods and services to be financed under the Loan.

Section 6.06. *Reasonable price*. No more than reasonable prices shall be paid for any goods or services financed, in whole or in part, under the Loan. Such items shall be procured on a fair and, except for professional services, on a competitive basis in accordance with established procedures.

Section 6.07. Goods and services not financed under the Loan. Goods and services procured for the Program, but not financed under the Loan, shall have their source and origin in countries included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time orders are placed for such goods and services.

Section 6.08. Shipping and insurance. (a) Selected Free World Goods financed under the Loan shall be transported to Colombia on flag carriers of any country included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time of shipment. No such goods may be transported on any ocean vessel (or aircraft) (i) which A.I.D. in a notice to the Borrower has designated as ineligible to carry A.I.D.-financed goods or (ii) which has been chartered for the carriage of A.I.D.-financed goods unless such charter has been approved by A.I.D.

(b) Unless A.I.D. shall determine that privately owned United States-flag commercial vessels are not available at fair and reasonable rates for such vessels, (i) at least fifty percent (50%) of the gross tonnage of Selected Free World Goods financed under the Loan and transported on ocean vessels from United States ports (computed separately for dry bulk carriers, dry cargo liners and tankers) shall be transported on privately owned United States-flag commercial vessels; and at least fifty percent (50%) of the gross freight revenue generated by ocean shipment of Selected Free World Goods financed under the Loan and transported on dry cargo liners from United States ports shall be paid to or for the benefit of privately owned United States-flag commercial vessels; (ii) at least fifty percent (50%) of the gross tonnage of all Selected Free World Goods financed under the Loan and transported on ocean vessels from non-United States ports (computed separately for dry bulk carriers, dry cargo liners and tankers) shall be transported on privately owned United States-flag commercial vessels; and at least fifty percent (50%) of the gross freight revenue generated by ocean shipments of Selected Free World Goods financed under the Loan and transported on dry cargo liners from non-United States ports shall be paid to or for the benefit of privately owned United States-flag commercial vessels.

(c) Marine insurance on Selected Free World Goods may be financed under the Loan with disbursements made pursuant to section 7.01, provided (i) such insurance is placed at the lowest available competitive rate in Colombia or in a country included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time of placement, and (ii) claims thereunder are payable in freely convertible currency. If in connection with the placement of marine insurance on shipments financed under United States legislation authorizing assistance to other nations, the 1978

country of the Borrower, by statute, decree, rule or regulation, favors any marine insurance company of any country over any marine insurance company authorized to do business in any state of the United States of America, Selected Free World Goods financed under the Loan shall during the continuance of such discrimination be insured against marine risk in the United States of America with a company or companies authorized to do a marine insurance business in any state of the United States of America.

(d) The Borrower shall insure, or cause to be insured, all Selected Free World Goods financed under the Loan against risks incident to their transit to the point of their use in the Program. Such insurance shall be issued upon terms and conditions consistent with sound commercial practice, shall insure the full value of the goods, and shall be payable in the currency in which such goods were financed or in any freely convertible currency. Any indemnification received by the Borrower under such insurance shall be used to replace or repair any material damage or any loss of the goods insured or shall be used to reimburse the Borrower for the replacement or repair of such goods. Any such replacements shall have their source and origin in countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time orders are placed or contracts are entered into for such replacements, and shall be otherwise subject to the provisions of this Agreement.

Section 6.09. Notification to potential suppliers. In order that all United States firms shall have the opportunity to participate in furnishing procurement to be financed under the Loan pursuant to section 7.01, the Borrower shall furnish to AID such information with regard thereto, and at such times, as A.I.D. may request in Implementation Letters.

Section 6.10. United States Government-owned excess property. The Borrower shall utilize, with respect to goods financed under the Loan to which the Borrower takes title at the time of procurement, such reconditioned United States Government-owned excess property as may be consistent with the requirements of the Program and as may be available within a reasonable period of time. The Borrower shall seek assistance from A.I.D. and A.I.D. will assist the Borrower in ascertaining the availability of and in obtaining such excess property. A.I.D. will make arrangements for any necessary inspection of such property by the Borrower or its representative. The cost of inspection and of acquisition, and all charges incident to the transfer to the Borrower of such Excess Property, may be financed under the Loan.

Article VII. DISBURSEMENTS

Section 7.01. Disbursement for United States dollar costs — Letter of Commitment to United States banks. Upon satisfaction of conditions precedent, the Borrower may, from time to time, request A.I.D. to issue Letters of Commitment for specified amounts to one or more United States banks, satisfactory to A.I.D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, through the use of Letter of Credit or otherwise, for dollar costs of goods procured for the Program in accordance with the terms and conditions of this Agreement. Payment by a bank to a contractor or supplier will be made by the bank upon presentation of such supporting documentation as A.I.D. may prescribe in Letters of Commitment and Implementation Letters.

Banking charges incurred in connection with Letters of Commitment and Letters of Credit shall be for the Account of the Borrower and may be financed under the Loan.

Section 7.02. Disbursements for peso costs. Upon satisfaction of conditions precedent A.I.D. shall make available to the Borrower, upon Borrower's request, an advance of local currency for local currency costs for goods and services for the Program of not to exceed \$100,000. Such amount shall, thereafter, be replenished, up to the original advance, upon written request by the Borrower and supported by such documentation as A.I.D. may reasonably request, on a reimbursement basis.

All of Borrower's requests for reimbursement by A.I.D. will be accompanied by satisfactory evidence of its claimed expenditures. Regular financial reports and certified copies of payment orders for goods and services purchased in support of the subprojects of this loan will be accepted as satisfactory evidence.

Section 7.03. Other forms of disbursement. Disbursements of the Loan may also be made through such other means as the Borrower and A.I.D. may agree to in writing.

Section 7.04. *Date of disbursement*. Disbursements by A.I.D. shall be deemed to occur, on the date on which A.I.D. disburses the pesos to the Borrower or its designee.

Section 7.05. Terminal date of disbursement. (a) Except as A.I.D. may otherwise agree in writing, no Letter of Commitment, or other commitment documents which may be called for by another form of disbursement under section 7.03 or amendment thereto, shall be issued in response to requests received by A.I.D. more than thirty (30) months after initial conditions precedent have been met, and no disbursement shall be made against documentation received by A.I.D., or any bank described in section 7.01 more than thirty-six (36) months after said conditions have been met. A.I.D., at its option, may at any time or times after such date reduce the Loan by all or any part thereof for which documentation was not received by such date.

Article VIII. CANCELLATION AND SUSPENSION

Section 8.01. Cancellation by the Borrower. The Borrower may, with the prior written consent of A.I.D. and by written notice to A.I.D., cancel any part of the Loan (i) which, prior to the giving of such notice, A.I.D. has not disbursed or committed itself to disburse, or (ii) which has not then been utilized through the issuance of irrevocable Letters of Credit or through bank payments made other than under irrevocable Letter of Credit.

Section 8.02. *Events of default; acceleration.* If any one or more of the following events ("Events of Default") shall occur:

- (a) the Borrower shall have failed to pay when due any interest or installment of Principal required under this Agreement;
- (b) the Borrower shall have failed to comply with any other provision of this Agreement, including, but without limitation, the obligation to carry out the Program with due diligence and efficiency;
- (c) the Borrower shall have failed to pay when due any interest or any installment of Principal or any other payment required under any other loan agreement,

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any guaranty agreement, or any other agreement between the Borrower or any of its agencies and A.I.D. or any of its predecessor agencies;

then A.I.D. may, at its option, give the Borrower notice that all or any part of the unrepaid Principal shall be due and payable sixty (60) days thereafter, and, unless the Event of Default is cured within such sixty (60) days:

- (i) such unrepaid Principal and any accrued interest hereunder shall be due and payable immediately; and
- (ii) the amount of any further disbursements made under the then outstanding irrevocable Letters of Credit or otherwise shall become due and payable as soon as made.

Section 8.03. Suspension of disbursement. In the event that at any time:

(a) an event of default has occurred;

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- (b) an event occurs that A.I.D. determines to be an extraordinary situation that makes it improbable either that the purpose of the Loan will be attained or that the Borrower will be able to perform its obligations under this Agreement;
- (c) any disbursement by A.I.D. would be in violation of the legislation governing A.I.D.;
- (d) the Borrower shall have failed to pay when due any interest or any installment of Principal or any other payment required under any other loan agreement, any guaranty agreement, or any other agreement between the Borrower or any of its agencies and the Government of the United States or any of its agencies;
- (e) satisfactory progress is not being made in carrying out all or any part of the Program in accordance with the terms of this Agreement;

then A.I.D. may, at its option:

- (i) suspend or cancel outstanding commitment documents to the extent that they have not been utilized through the issuance of irrevocable Letters of Credit, through bank payments made other than under irrevocable Letters of Credit, in which event A.I.D. shall give notice to the Borrower promptly;
- (ii) decline to make disbursements other than under outstanding commitment documents;
- (iii) decline to issue additional commitment documents;
- (iv) at A.I.D.'s expense, direct that title to goods financed under the Loan shall be transferred to A.I.D. if the goods are from a source outside the country of the Borrower, are in a deliverable state and have not been off-loaded in ports of entry of Colombia.

Any disbursement made or to be made under the Loan with respect to such transferred goods shall be deducted from Principal.

Section 8.04. Cancellation by A.I.D. Following any suspension of disbursements pursuant to section 8.03, if the cause or causes for such suspension of disbursements shall not have been eliminated or corrected within sixty (60) days from the date of such suspension, A.I.D. may, at its option, at any time or times thereafter, cancel all or any part of the Loan that is not then either disbursed or subject to irrevocable Letters of Credit. Section 8.05. Continued effectiveness of Agreement. Notwithstanding any cancellation, suspension of disbursement, or acceleration of repayment, the provisions of this Agreement shall continue in full force and effect until the payment in full of all Principal and any accrued interest hereunder.

Section 8.06. *Refunds.* (a) In the case of any disbursement not supported by valid documentation in accordance with the terms of this Agreement, or of any disbursement not made or used in accordance with the terms of this Agreement, A.I.D., notwithstanding the availability or exercise of any of the other remedies provided for under this Agreement, may require the Borrower to refund such amount in United States dollars to A.I.D. within thirty (30) days after receipt of a request therefor. Such amount shall be made available first for the cost of goods and services procured for the Program hereunder, to the extent justified; the remainder, if any, shall be applied to the installments of Principal in the inverse order of their maturity and the amount of the Loan shall be reduced by the amount of such remainder. Notwithstanding any of the provisions in this Agreement, A.I.D.'s right to require a refund with respect to any disbursement.

(b) In the event that A.I.D. receives a refund from any contractor, supplier, or banking institution, or from any other third Party connected with the Loan, with respect to goods or services financed under the Loan, and such refund relates to an unreasonable price for goods or services, or to goods that did not conform to specifications, or to services that were inadequate, A.I.D. shall first make such refund available for the cost of goods and services procured for the Program hereunder, to the extent justified, the remainder to be applied to the installments of Principal in the inverse order of their maturity and the amount of the Loan shall be reduced by the amount of such remainder.

Section 8.07. *Expenses of collection*. All reasonable costs incurred by A.I.D. other than salaries of its staff, in connection with the collection of any refund or in connection with amounts due A.I.D. by reason of occurrence of any of the events specified in section 8.02, may be charged to the Borrower and reimbursed to A.I.D. in such manner as A.I.D. may specify.

Section 8.08. *Nonwaiver of remedies*. No delay in exercising or omission to exercise any right, power, or remedy accruing to A.I.D. under this Agreement shall be construed as a waiver of any such rights, powers or remedies.

Article IX. MISCELLANEOUS

Section 9.01. *Communications*. Any notice, request, document, or other communication given, made or sent by the Borrower, or A.I.D. pursuant to this Agreement shall be in writing or by telegram, cable or radiogram and shall be deemed to have been duly given, made or sent to the Party by hand or by mail, telegram, cable or radiogram at the following addresses:

To the Borrower:

Mail address Avenida Caracas No. 25-A-66 Bogotá, Colombia Cable address INDERENA Bogotá [, Colombia]

To A.I.D.:

Mail address USAID Mission to Colombia American Embassy Bogotá, Colombia Cable address: AMEMBASSY Bogotá, Colombia

Other addresses may be substituted for the above upon the giving [of] notice. All notices, requests, communications, and documents submitted to A.I.D. hereunder shall be in English, except as A.I.D. may otherwise agree in writing.

Section 9.02. *Representatives*. For all purposes relative to this Agreement, the Borrower will be represented by the individual holding or acting in the office of General Manager, INDERENA, and A.I.D. will be represented by the individual holding or acting in the Office of Mission Director, USAID Mission to Colombia. Such individuals shall have authority to designate additional representatives by written notice. In the event of any replacement or other designation of a representative hereunder, Borrower shall submit a statement of the representative's name and specimen signature in form and substance satisfactory to A.I.D. Until receipt by A.I.D. of written notice of revocation of the authority of any of the duly authorized representatives of the Borrower, designated pursuant to this section, it may accept the signature of any such representative or representatives on any instrument as conclusive evidence that any action effected by such instrument is fully authorized.

Section 9.03. *Implementation Letters*. A.I.D. shall from time to time issue Implementation Letters that will prescribe the procedures applicable hereunder in connection with the implementation of this Agreement. Nothing set forth in such Letter of Implementation shall either modify or alter the terms of this Agreement.

Section 9.04. *Promissory notes*. At such time or times as A.I.D. may request, the Borrower shall issue promissory notes or such other evidences of indebtedness with respect to the Loan, in such form, containing such terms and supported by such legal opinions as A.I.D. may reasonably request.

Section 9.05. Successors to rights of A.I.D. If by operation of any law of the United States, or by virtue of assignment, any corporate or other agency of the United States Government succeeds to the rights and obligations of A.I.D. under this Agreement, such agency shall be deemed to be A.I.D. for purposes of this Agreement.

Section 9.06. *Effective date of Agreement*. This Agreement shall enter into effect on the day and year first above written.

Section 9.07. *Termination upon full payment*. Upon payment in full of the Principal and of any accrued interest, this Agreement and all obligations of the Borrower and A.I.D. under this Loan Agreement shall terminate.

IN WITNESS WHEREOF, Borrower, and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

Instituto de Recursos Naturales Renovables: [Signed] By: JULIO CARRIZOSA UMAÑA Title: General Manager INDERENA United States of America:

[Signed]

By: VIRON P. VAKY

Title: Ambassador of the United States of America to Colombia

[Signed]

By: JAMES MEGELLAS

Title: Director

USAID Mission to Colombia

ANNEX I

DESCRIPTION OF THE PROGRAM

This Program is to assist the Government of Colombia in carrying out the Plan for the Development of Inland Waters Fisheries and Aquaculture. The AID Loan will support Borrower's investment in research to improve the management of the inland water fishery and aquaculture development.

1. PROGRAM GOAL

The Program goal is to achieve the progressive nutritional well-being of the Colombian population — particularly of those segments with the fewest resources — by satisfying its basic dietary necessities with respect to quantity and quality of food consumed. The sub-goal of the Program is to increase the production of freshwater fish, which is viewed as an attractive, low-cost alternative protein source.

2. PROGRAM PURPOSE

The purpose of the Program is to develop economically and technically sound aquaculture systems suitable primarily, but not exclusively, for small farmer use, and to produce a package of management recommendations designed to rationalize the exploitation and, thus, ensure the persistence of the fish population of the lower Magdalena River, a package which will be appropriate for use by artesan fishermen.

3. The target group

Since the major thrust of the Program is the development of economic aquaculture practices, the first group of beneficiaries will be those small farmers who adopt the technological package derived from the research. These farmers should benefit both from improved family nutrition as a result of home consumption, and increased incomes from sales of fish as they expand the productive capacity of their ponds. As widespread development occurs, consumers will increasingly benefit from the impact of an increased supply of fish from this source.

The lake and river management improvement portion of this loan will provide direct future benefits to the majority of the 200,000 artesan fishermen of Colombia. Since approximately 60 percent of the fish consumed in Colombia come from inland waters, the GOC estimates that the majority of artesan fishermen are actively fishing in inland waters. These fishermen will benefit from the use of improved fishing techniques designed to assure continuance, if not increase in the present levels of production. These improved techniques will be developed as a result of research funded under this Loan.

In the future, and as a result of the preparatory work to be accomplished in both elements of this Program, consumers should expect to benefit from increased availability of fish. The distribution of consumer benefits by income group is difficult to estimate since this will depend on, *inter alia*, what production increases are feasible, how much retail prices can be lowered, and how consumption patterns will evolve among various income groups. Clearly, however, there is a specific desire by both the Borrower and AID to reach lower-income consumers with fish protein at price levels those groups can afford. The specific activities to be supported under the Loan are:

A. Development of research and demonstration facilities

1. Repelón fishculture station

a. Construction and equipment. The Borrower has given first priority to developing aquaculture in warm-water areas since it has been determined that those areas have the greatest aquaculture potential. The North Coast of Colombia, in particular, shows considerable promise for aquaculture development since it is an area of many small farmers and abundant water resources. Aquaculture, in constructed or existing farm ponds and in existing "ox-bow" type lakes, would complement the agricultural activity of the region by utilizing land which is not suitable for agriculture and by rotating fish growing with crops. The North Coast possesses the additional advantage of markets in Cartagena and Barranquilla as well as proximity to the large market in Medellín.

The Loan will finance installation of an additional 8 hectares of earthern ponds as well as construction and equipment of the laboratory, fingerling house, and staff housing. Construction costs are estimated at US\$406,588 of which the Borrower will provide US\$247,612 (60.9%) and the Loan, US\$158,967 (39.1%). The equipment, valued at US\$157,437, will be entirely Loan financed.

b. The research program. The research program at the Repelón Station will begin in late 1975, when the first 2.7 hectares of ponds are completed. First priority will be given to research on *bocachico* and *lisa* species. The work will consist of experiments designed to determine the optimum stocking rate per cubic meter of water, optimum level of fertilization of ponds and some limited feeding trials. Borrower will conduct an economic and technical evaluation of the results of these experiments in order to provide the information for some on-farm trials in both existing cattle watering ponds and constructed ponds in the region. The purpose of the on-farm trials will be to test the production results obtained at the research station and to provide additional information regarding economics of size, feeding, etc. Borrower's evaluation of these results will provide the basis for a broad-scale extension program among the small farmers of the region. Based on the Brazilian experience, it is anticipated that the technical package can be developed by 1978 and that farmers will be using it by 1979.

While the primary emphasis of the research program will be to develop a technical package for small farmers, work will also be carried out on fish diseases, fish nutrition and induced spawning of other native species of the region. This work will provide complementary as well as additional information which will aid the extension program in the long run.

A time-phased research implementation plan for Repelón will be presented to AID for approval on an annual basis. Since the objective of AID's assistance to the station at Repelón is primarily to support the development of a package of aquaculture practices suitable for small farmers, the research plan will be evaluated in terms of how well it is oriented toward that objective. Specifically, AID will require that the economic aspects of the research results be carefully evaluated to ensure that the cost of experimental inputs (feeds, fertilizer, etc.) does not exceed the value of the increment of fish produced. Also, AID will require that experiments be conducted first on fish for which the technique for inducing artificial spawning is already known and, to the extent possible, on fish which feed low on the food chain. The reason for this requirement is that the management requirements for such species are simpler than for species higher up the food chain which might require special feeds, etc. In evaluating the research plan for Repelón, AID will also insure that experiments are being conducted to determine the minimum economic pond size. Finally, AID will verify that experiments are not using inputs which are expensive, difficult to obtain or available only in large quantities, which require very precise management, or which are otherwise beyond the reach and capabilitics of small farmers.

Local costs associated with the research program at Repelón are estimated at US\$285,499, of which the Borrower will finance US\$173,869 (60.9%), and the Loan, US\$111,630 (39.1%).

(000 dollars)							
· · · · · · · · · · · · · · · · · · ·	1975 July-Dec.	1976	1977	1978 JanJune	Total		
1. Local costs							
Construction	270.0	136.0			406.6		
Borrower	164.4	83.2	_	_	247.6		
AID	105.6	53.4	—	—	159.0		
Research program	28.8	97.8	103.0	55.9	285.5		
Borrower	17.5	59.6	62.7	34.1	173.9		
AID	11.3	38.2	40.3	21.8	111.6		
2. Dollar costs							
Equipment	157.4		_	_	157.4		

2. Magangué Fishery Management Improvement Center

a. Construction and equipment. Approximately 40 percent of Colombia's total marine and freshwater fish catch comes from the Magdalena River. Magangué, located about 200 miles south of the north coast where the Cauca River empties into the Magdalena, is the single most important fishing area, not only along the tremendously rich Magdalena, but also in the entire country. Thus, whatever improvements can be made in current management practices will have their greatest impact in this area.

Funds from the Loan will be used to construct a headquarters building and small laboratory facility and to purchase equipment for the Magangué Fishery Management Improvement Center. Estimated construction costs have been calculated on the basis of usual per-unit costs in the Magangué area and amount to US\$21,757, of which the Borrower will provide US\$13,250 (60.9%) and the Loan, US\$8,507 (39.1%). The necessary equipment valued at US\$110,599 will be entirely Loan financed.

b. The inland fisheries research program. Management recommendations to insure persistence of the fishery and to improve its exploitation cannot be made without a better understanding of the dynamics of the fish stocks and of the socio-economic factors affecting the fishermen. As a result, the research program initially must be broadly based, to develop a general understanding of the dynamics of the fish stocks, of the economics of harvesting and marketing, and of other socio-economic factors influencing the fishery. Assessments of fluctuations in quantity, size and species composition of the catches will be compared for different areas and rates of exploitation. Conservation and management recommendations will be developed from such data.

The Magangué Fishery Management Improvement Center will submit its research plan to AID annually for approval. AID will generally determine that the kinds of experiments to be conducted will produce the kinds of data necessary to formulate recommendations rationalizing exploitation of the river system's fish resources. For example, AID will verify that efforts to gather information on population dynamics, sizes of catches, etc., are oriented towards determining whether or not exploitation may be increased without over-fishing the river. In addition, AID will require that experiments concerned with fishing techniques are conducted with gear within the technical and financial grasp of the artesan fishermen for whom the package of improved management techniques is to be designed.

Local costs associated with the Magangué research program are estimated at US\$140,979, of which the Borrower will provide US\$85,856 (60.9%) and the Loan, US\$55,123 (39.1%).

MAGANGUÉ CENTER COSTS (000 dollars)							
	1975 July-Dec.	1976	1977	1978 JanJune	Total		
1. Local costs							
Construction	11.9	9.9	_		21.8		
Borrower	7.3	6.0	_		13.3		
AID	4.6	3.9		_	8.5		
Research program	18.3	44.8	51.1	26.8	141.0		
Borrower	11.1	27.3	31.1	16.3	85.8		
AID	7.2	17.5	20.0	10.5	55.2		
2. Dollar costs							
Equipment	110.6	—	—	— <u>.</u>	110.6		

3. Eastern plains (Llanos) fishculture station

1978

a. Construction equipment. Funds from the Loan will be used to construct and equip a full-scale fishculture station in the Llanos similar to, but somewhat smaller than, the Repelón Station. The engineering designs will be completed by Borrower and approved by an independent contractor. Estimates for construction costs have been based upon costs of the Repelón Station. Since the site has not yet been selected, construction will not begin until the second year of the Loan. Construction costs are estimated at US\$278,824, of which the Borrower will provide US\$169,804 (60.9%) and the Loan US\$109,020 (39.1%). The necessary equipment, valued at US\$164,992, will be completely Loan financed.

b. The research program. The areas of influence of the Llanos Station will be primarily the Orinoco River basin and, to a lesser degree, the Amazon basin. The fish in these fiver systems are different from those found in other systems such as the Magdalena River and almost no biological research has been done on them. Applied biological studies will begin immediately following completion of the station; the first step in the research program will be to induce artificial spawning in the species identified. Then, a program similar to that described for the Repelón Station will be carried out in order to develop a technical package for aquaculture. It is not anticipated, however, that this package will be available until 1980.

In conducting its annual review of the research plan for the Llanos fishculture station, AID will determine whether or not the experiments being planned are likely to lead to identification of the minimum economic pond size. AID will also require that the inputs being used in the experiments are readily available. The bulk in which the inputs must be purchased will be a less important factor in the Llanos than in the area of influence of the Repelón or Upper Magdalena stations. The reason for this is that land is relatively abundant and farm sizes larger in the Llanos than in the North Coast or Upper Magdalena areas. Thus, it is anticipated that the average aquaculture pond size in the Llanos may well be larger, too.

AID will still require that experiments be focused, to the extent possible, on fish which feed relatively low on the food chain. Management considerations are less important here — because of the low concentration of small farmers in the Llanos — than is the fact that such fish

provide the best hope for an aquaculture system which will produce a cheap source of protein for wide consumption.

The local costs associated with the Llanos research program are estimated at US\$206,132, of which the Borrower will provide US125,535 (60.9%) and the Loan, US80,597 (39.1%).

LLANOS STATION COSTS (000 dollars)					
·····	1975 July-Dec.	1976	1977	1978 JanJune	Total
1. Local costs					
Construction	—	158.8	120.0	_	278.8
Borrower	_	96.7	73.1	_	169.8
AID		62.1	46.9	—	109.0
Research program		48.8	101.0	56.3	206.1
Borrower	_	29.7	61.5	34.3	125.5
AID	_	19.1	39.5	22.0	80.6
2. Dollar costs					
Equipment		165.0	—	_	165.0

4. Upper Magdalena fishculture station

a. Construction and equipment. Funds from the Loan will be used to construct and equip a station in the Upper Magdalena Area consisting of a laboratory, hatchery, handling house, staff quarters, and earthen ponds on a site which will be selected by the end of the first half of 1976. Engineering plans will be prepared by Borrower and approved by an independent contractor. Cost estimates for this station have been based on the costs of the Repelón Station to which it will be very similar. Construction costs are estimated at US\$153,529 of which the Borrower will provide US\$93,500 (60.9%) and the Loan, US\$60,030 (39.1%). The necessary equipment, valued at US\$81,772, will be entirely Loan financed.

The research program. The Upper Magdalena fishculture station will reproduce the hybrid Tilapia and conduct research to develop the technical package for the end of the first half of 1977; the extension package will not be available until 1980.

In view of the high concentration of small farmers in the area of influence of the Upper Magdalena Station, AID will use the same criteria for evaluation of its annual research plan as it will use for evaluating the Repelón research plan.

The local costs associated with the Upper Magdalena research program are estimated at US\$91,121, of which the Borrower will finance US\$57,929 (60.9%) and the Loan, US\$37,192 (39.1%).

	UPPER MAGDALENA STATION COSTS (000 dollars)						
		1975 July-Dec.	1976	1977	1978 JanJune	Total	
1.	Local costs						
	Constructions	_	63.5	90.0	_	153.5	
	Borrower		38.7	54.8	_	93.5	
	AID	—	24.8	35.2		60.0	
	Research program		24.7	44.6	25.8	95.1	
	Borrower		15.0	27.2	15.7	57.9	
	AID	—	9.7	17.4	10.1	37.2	
2.	Dollar costs						
	Equipment	_	81.8	—	—	81.8	

LINDER MACRALINIA STATION COS

B. Contracts

Loan funds will be used to finance a number of contracts between Borrower and various universities, regional development corporations, and other public and private entities engaged in inland fisheries development. AID will review the contracts to ensure that the studies and other tasks to be undertaken do not duplicate work already underway. The costs for these contracts are estimated at US\$189,404, of which the Borrower will finance US\$115,347 (60.9%) and the Loan, US\$74,057 (39.1%).

The objective of the contracts with the University of Caldas and the Cauca Valley Corporation will be to conduct a thorough analysis of their existing small aquaculture extension programs and of the economic return to the small farmers who are implementing their recommendations. The nature and causes of deviations from the recommended practices will also be investigated in order to determine factors inhibiting small farmer receptivity to aquaculture. Results from these studies will provide important benefits to aquaculture research being conducted in the stations at Repelón, along the Upper Magdalena, and in the Llanos.

The University of Córdoba will be contracted to carry out research activities in fisheries nutrition concentrating on *bocachico, lisa* (mullet), *nicuro* and *capaz*. It will also carry out regional field trials based on promising results from the Repelón Station. The University of Valle will be contracted to work in fisheries biology as well as to conduct regional field trials based on findings of the CVC and the University of Caldas research programs. The contract with INCORA will finance some on-farm trials along the Pacific Coast for small farmer production of *macrobrachium*, a species of freshwater shrimp.

Borrower will present these contracts to AID for approval. All contracts should be submitted to AID by December 1975.

C. Training

The Loan provides US\$334,800 for long-term academic training in the U.S., primarily at the Masters level, in general aquaculture, fish nutrition, fish diseases, fishery economics and marketing, fish extension and lake management. Approximately 17 people will be trained at this level under the Loan, including personnel from Borrower as well as from Universities and other agencies working in this area. Approximately US\$15,200 will also be provided for 12 manmonths of special short courses in such fields as fish nutrition and production.

Secondly, an in-country training program will be established through a Loan-funded contract. The contract will provide for: two or three of the Contract personnel, each in a different area of specialization, to visit Colombia two or three times a year, for several weeks each. During each of these visits two types of work will be done. First, a review of research results with the Contractor's assistance in their interpretation and a review with constructive criticism of the designs of future research programs. Secondly, a formal short-course will be given by the Contract personnel for Borrower technicians, university personnel and other private organizations. These may take place on the stations or be centrally located in order to facilitate transportation. The detailed programs of training will be worked jointly by Borrower and the Contractor, prior to negotiating the contract. The total cost of the in-country training program is US\$60,000.

A participant selection committee consisting of representatives from the Planning Office of the Ministry of Agriculture (OPSA), the National Planning Department (DNP), Borrower and AID will be formed. This committee will review each candidate's application and make the final selection.

It is estimated that three full-time technicians for a total of 90 manmonths plus approximately 20 manmonths of short-term consultants will be required. The three long-term technicians will be specialists in the following areas:

1. aquaculture development with experience in fish farm management;

- 2. general aquaculturalists with experience in research station management; and
- 3. a lake and river management expert.

Short-term consultants will be needed in the areas of station design, research design, fish diseases, fish nutrition, and hatchery operation. The precise job descriptions will be finalized with Borrower once the FAO project becomes clearly defined.

TECHNICAL ASSISTANCE COST ESTIMATE

90 mm of full-time technicians at US\$5,500/mm including overhead, housing, per diem, etc.	\$495,000
20 mm of short-term consultants at US\$4,000/mm including international travel, per diem, etc.	80,000
TOTAL	\$575,000
Rounded to	\$580,000
