

Bibliografía

Un * indica que la versión en Español del documento está disponible también.

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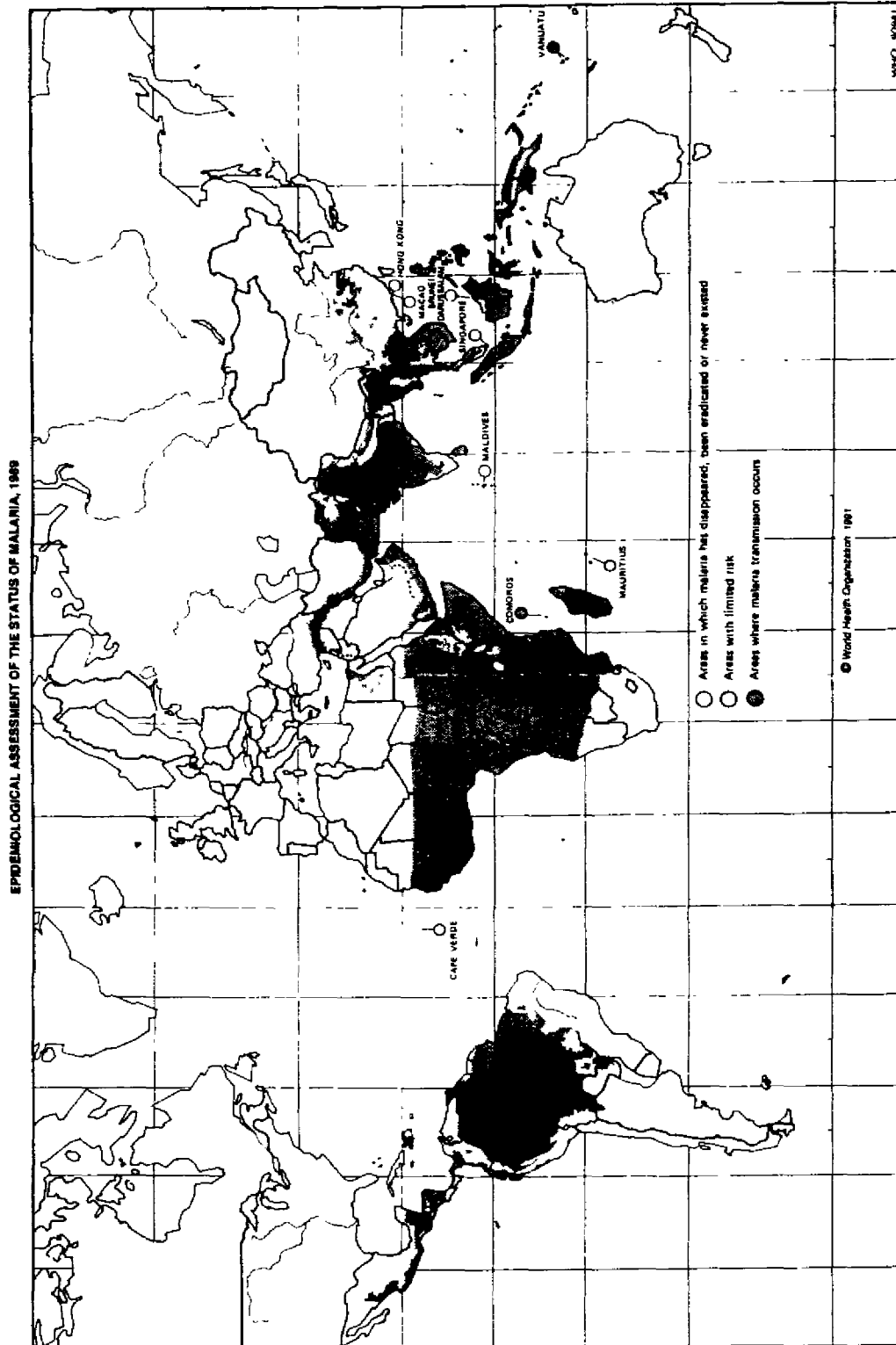
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Directrices para la cooperación intersectorial

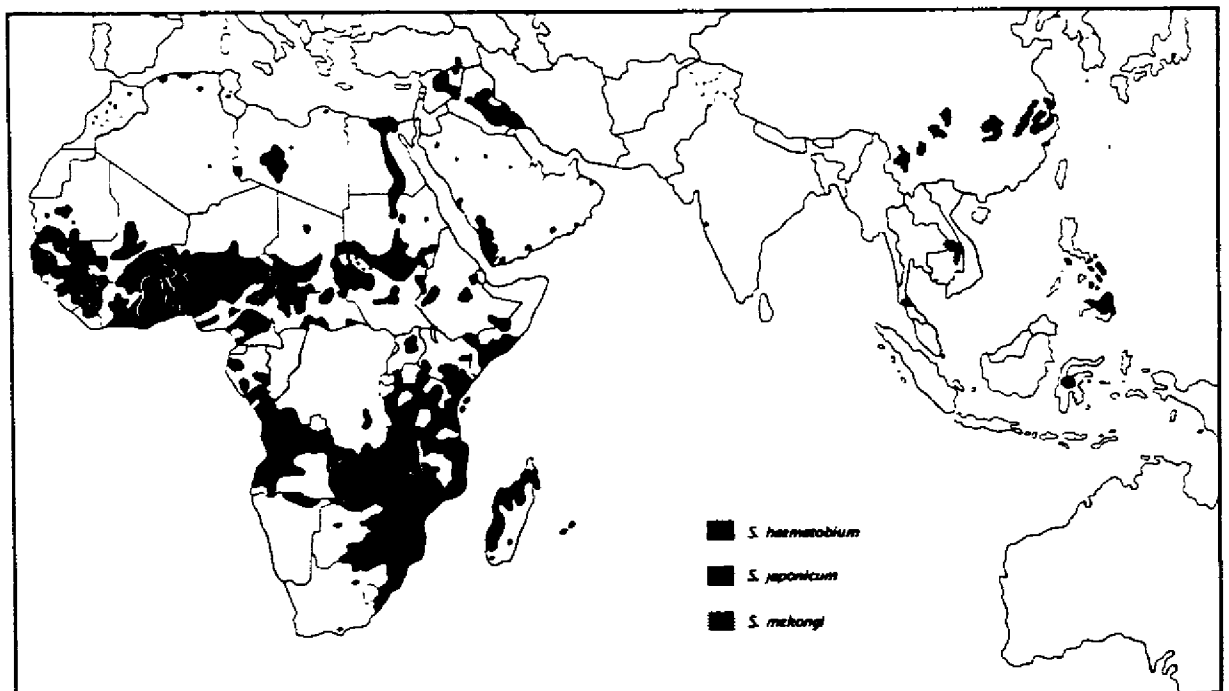
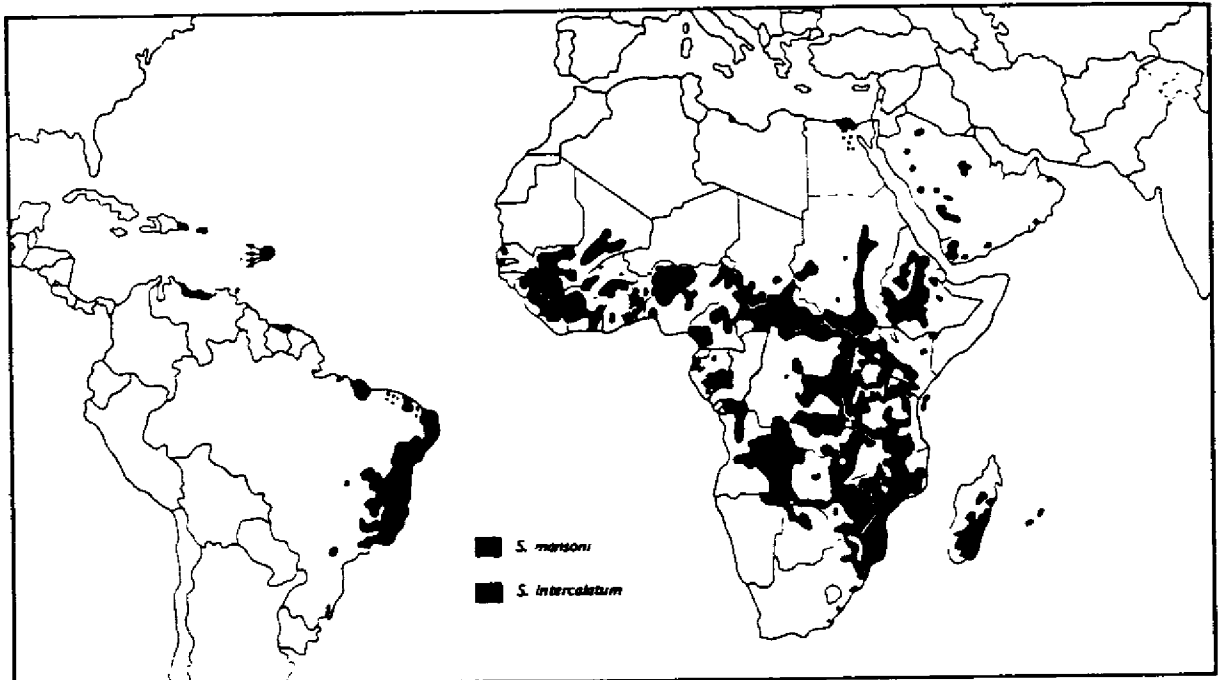
ANEXO 1

Mapas que muestran la distribución geográfica de cinco enfermedades principales transmitidas por artrópodos o por caracoles

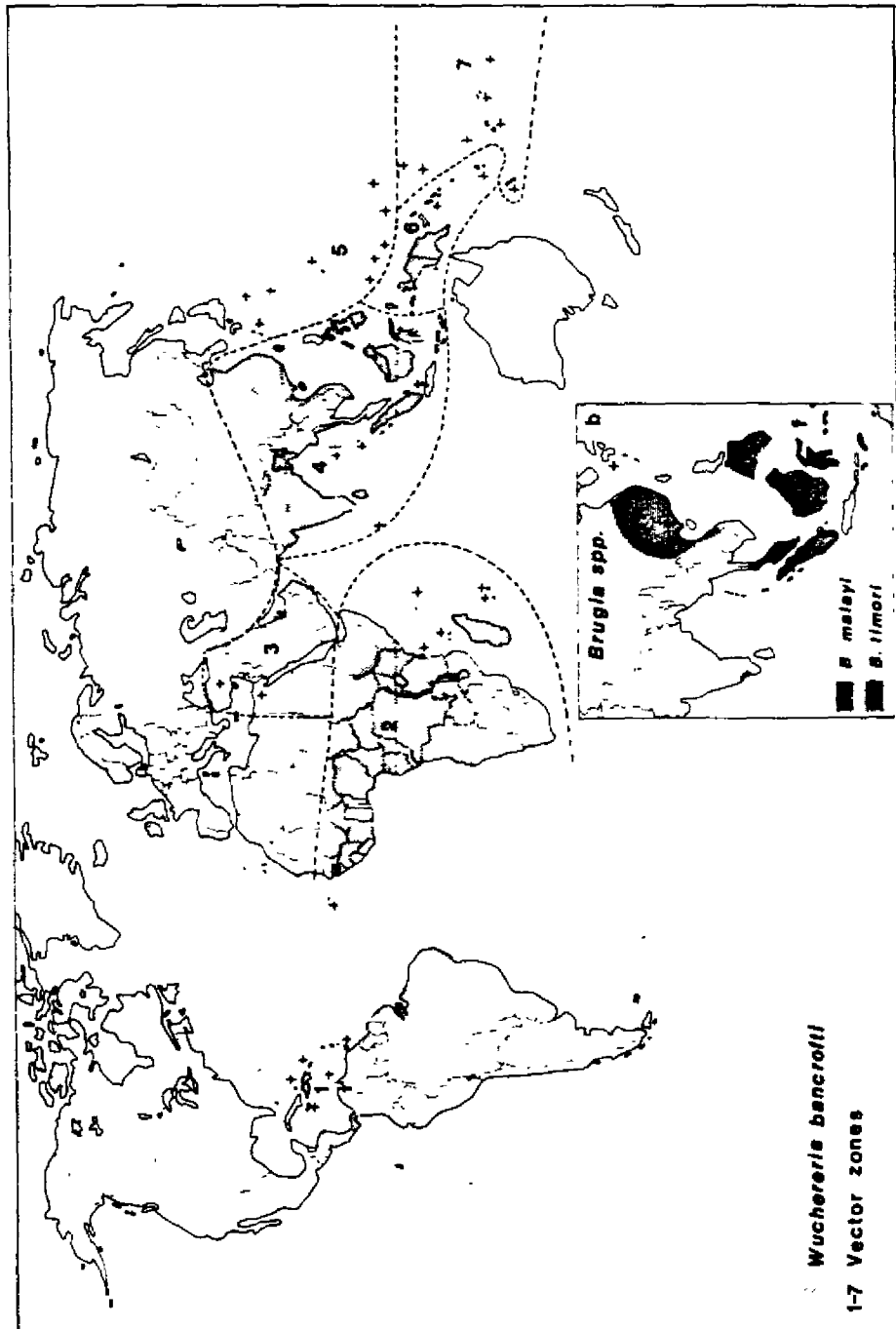
I. PALUDISMO (MALARIA)



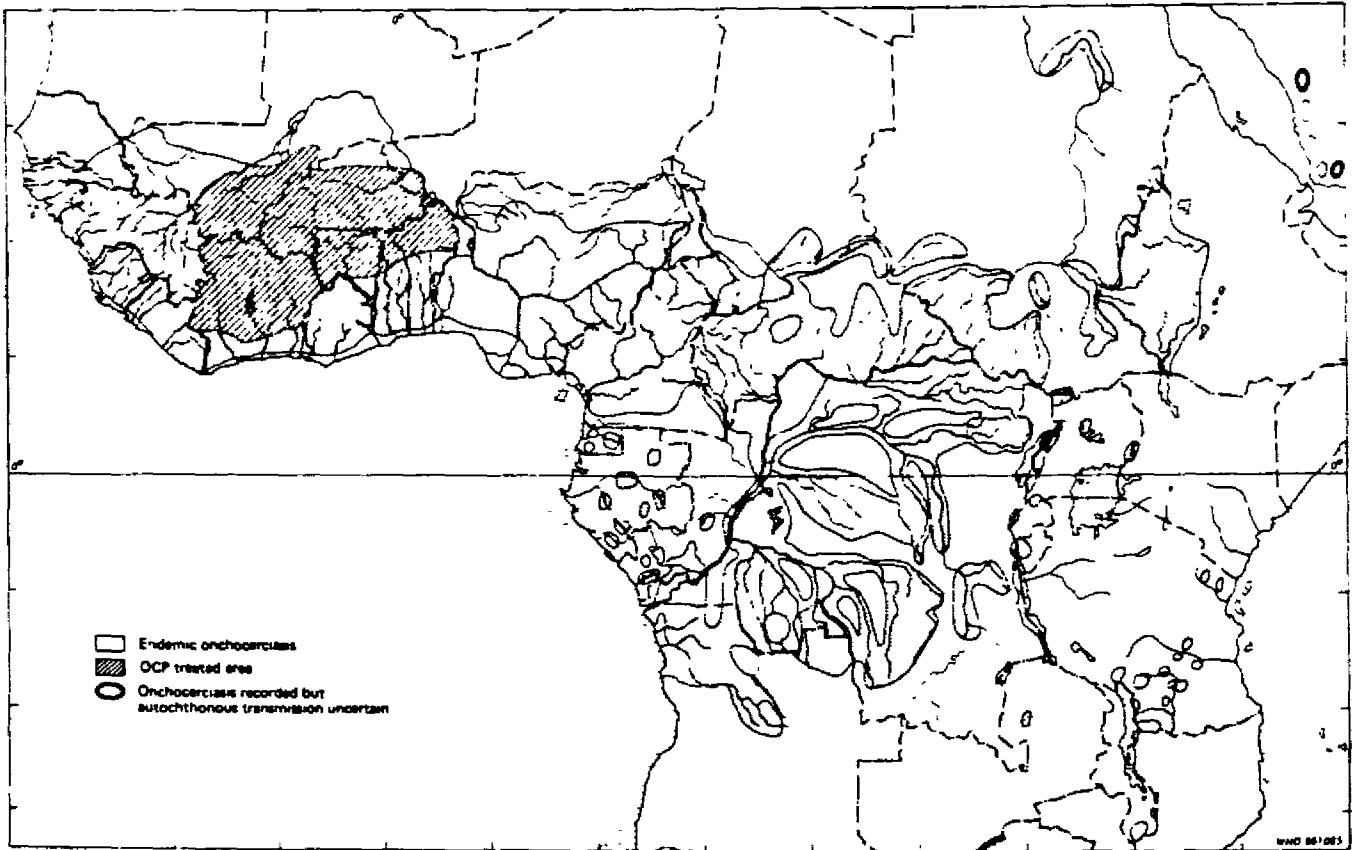
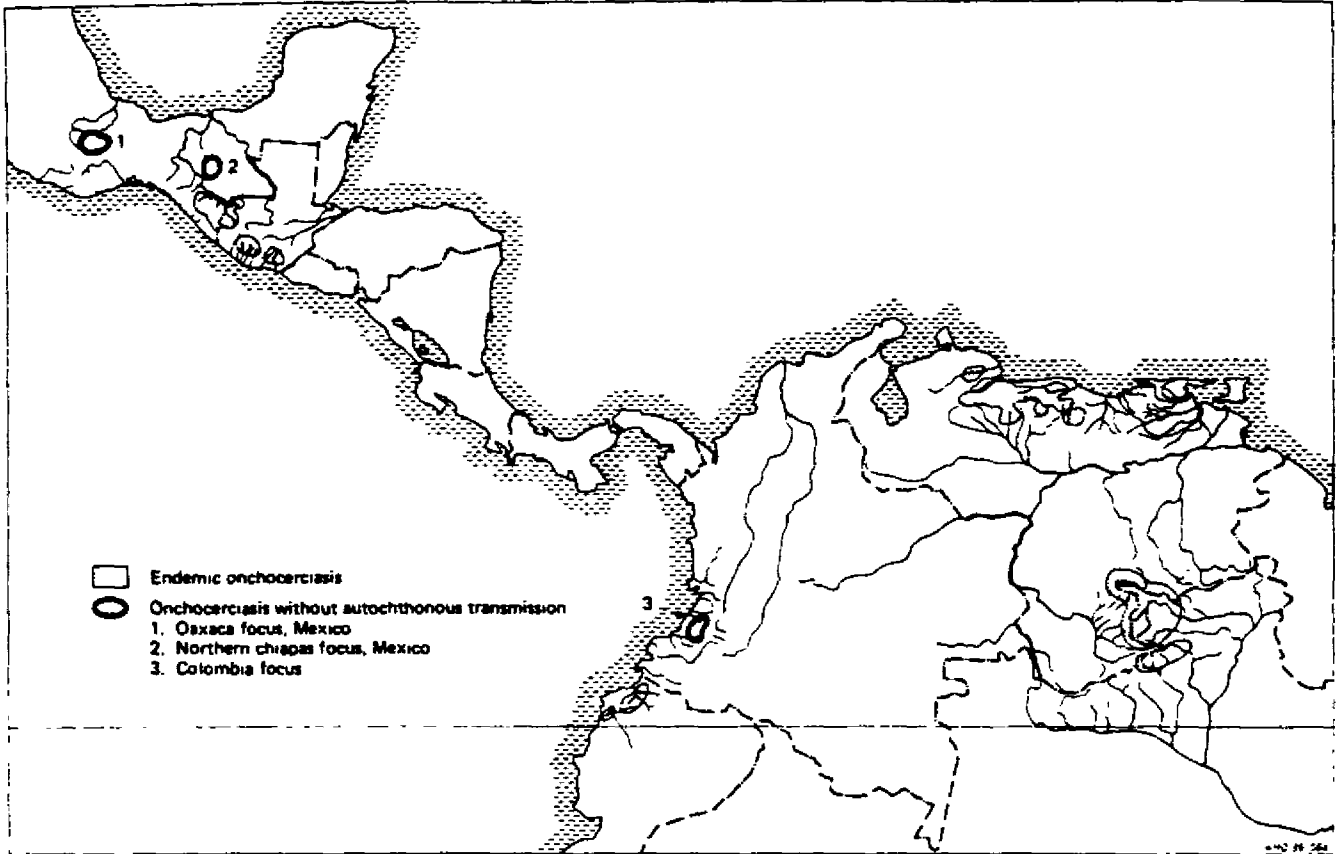
II. ESQUISTOSOMIASIS



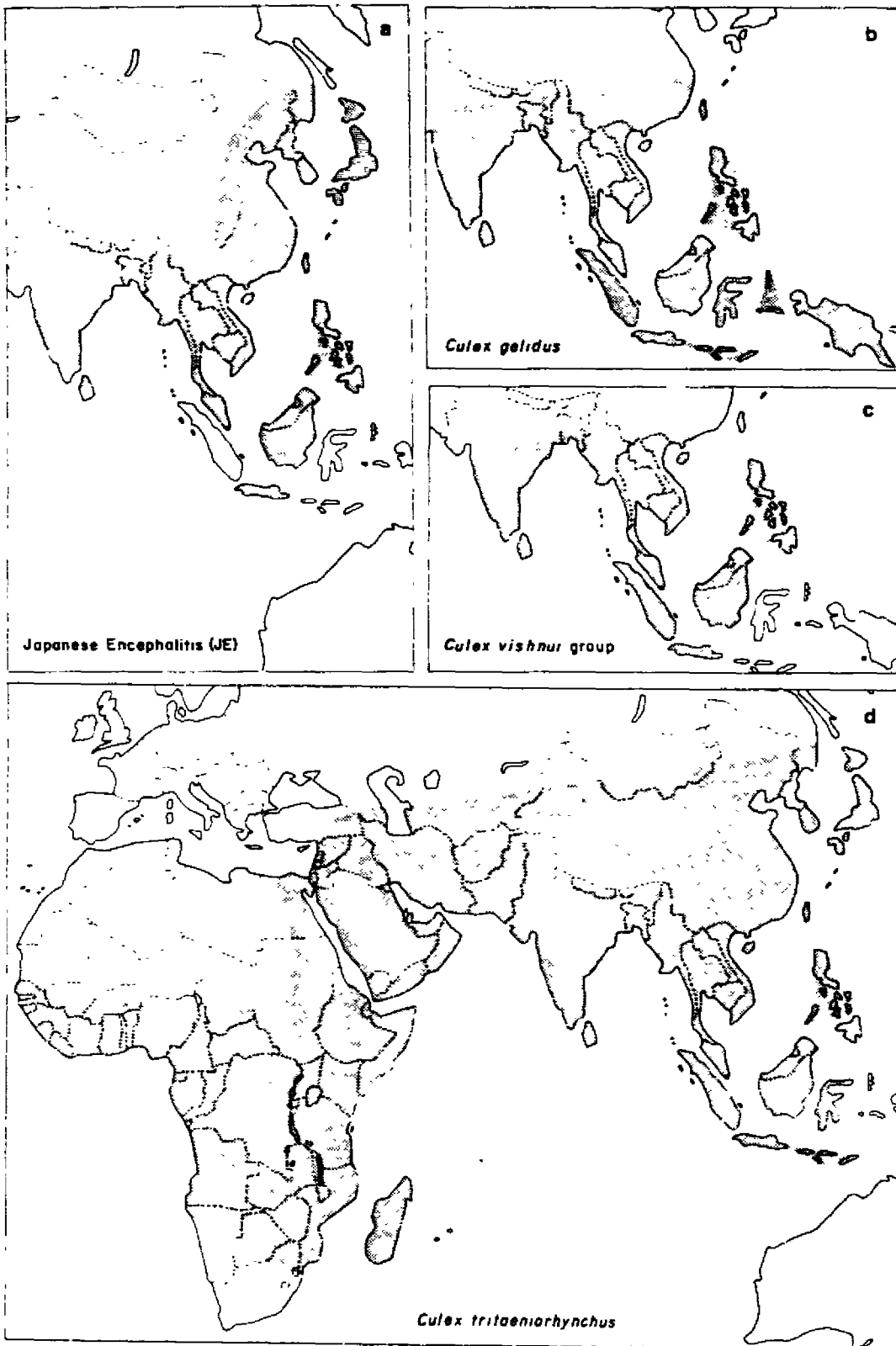
III. FILARIASIS



IV. ONCOCERCOSIS



V. ENCEFALITIS JAPONESA



ANEXO 2

LISTA DE LAS PRINCIPALES MEDIDAS PARA LA PREVENCIÓN Y LUCHA CONTRA LAS ENFERMEDADES TRANSMITIDAS POR VECTORES EN CADA FASE DE UN PROYECTO DE DESARROLLO DE RECURSOS HÍDRICOS

FASE DE PLANIFICACION

1. Revisión de la información existente sobre temas de salud y asuntos afines.
 - a) Epidemiología: índices de morbilidad y mortalidad, distribución geográfica, ecología de vectores.
 - b) Servicios de salud y médicos, instalaciones, personal, proyectos y programas especiales: grado de desarrollo, capacidad y cobertura.
 - c) Población humana y sus características: agrícola, migrante, nómada, etc. Crecimiento demográfico, importancia del movimiento migratorio, desplazamientos dentro del área del proyecto.
 - d) Ganado: cantidad e importancia económica, enfermedades prevalentes.
 - e) Patrones comunitarios y de vivienda: ubicación, diseño, materiales de construcción.
 - f) Abastecimiento de agua, instalaciones para la eliminación de excretas y desechos sólidos.
 - g) Clima: temperatura, precipitación pluvial, humedad, viento, etc.
 - h) Agua: aguas superficiales y aguas subterráneas, calidad, contaminación, abundancia y variaciones estacionales, crecidas y sequías, variaciones estacionales de la temperatura.
 - i) Suelo: características físicas y químicas, incluyendo permeabilidad, estabilidad, salinidad, etc.

- j) **Vegetación acuática y terrestre, natural y cultivada; animales domésticos y salvajes.**
- k) **Economía: nacional y local; fuentes y niveles de ingresos.**
- 1) **Mapas topográficos: curvas de nivel, carreteras, poblaciones etc. de la región. Mapa de agua, diseño de planos de la propuesta del proyecto, etc.**
- 2. **Encuestas: para verificar la información disponible o recabar la que no existe; acopio y evaluación de datos básicos, por especialistas.**
 - a) **Epidemiología detallada de las enfermedades principales existentes; biología y ecología de los vectores principales.**
 - b) **Servicios de salud y médicos, programas y actividades de lucha contra enfermedades y vectores; evaluación de la efectividad y recursos.**
 - c) **Movimientos humanos y del ganado: corrientes migratorias, sus orígenes y trayectorias.**
 - d) **Saneamiento: recursos actuales y potenciales para el abastecimiento de agua. Investigación de recursos de aguas subterráneas: fuentes actuales y potenciales y vías de contaminación, prácticas que suponen contacto con el agua y métodos para la eliminación de desechos, abrevaderos para ganado y eliminación del estiércol.**
 - e) **Cultivos y prácticas agrícolas existentes y previstas; métodos de irrigación, cultivos adecuados, cultivo y riego en rotación; uso de plaguicidas y fertilizantes, su clase y cantidad.**
 - f) **Economía local: estado actual y perspectivas de desarrollo.**
 - g) **Normas socioculturales: estado actual y posible alteración causada por el proyecto.**
 - h) **Reconocimiento de ingeniería y operativo, y cartografía para estudios ecológicos, hidrológicos y geológicos o de suelo.**

Directrices para la cooperación intersectorial

- i) **Contacto con organismos que actúan en el área del proyecto, tipo de actividades y posibilidades de asistencia y coordinación.**
3. **Adopción de decisiones para la prevención de enfermedades y para la lucha contra ellas.**
 - a) **Revisión de proposiciones de proyecto y diseños preliminares y opciones.**
 - b) **Identificación de problemas de salud existentes.**
 - c) **Predicción de posibles problemas futuros y sus efectos sobre la salud.**
 - d) **Determinación de la importancia y magnitud de los problemas de salud actuales y potenciales, para establecer un orden de prioridades en las actividades de prevención y lucha.**
 - e) **Estudios de factibilidad de medidas de lucha, inclusive análisis de costo-eficacia y costo-beneficio.**
 - f) **Selección de sitios de población, tipos de abastecimiento de agua e instalaciones para la eliminación de desechos.**
 - g) **Selección de métodos para la lucha contra vectores y enfermedades, y estimaciones de los requisitos de mano de obra y de organización.**
 - h) **Organización de ensayos en el terreno y proyectos piloto**
 - i) **Asentamientos de la población desplazada e inmigrante, y estimaciones para el abastecimiento de agua, instalaciones de saneamiento y otros tipos de instalaciones.**

FASE DE DISEÑO.

1. **Establecimiento de criterios de diseño para reducir al mínimo los riesgos para la salud y lograr los objetivos del programa de salud.**
2. **Evaluación de diseños preliminares del proyecto, y de alternativas.**

3. **Establecimiento de prácticas propuestas de administración de sistemas de agua y de sus efectos en los hábitats de vectores.**
- 4- **Diseño preliminar y opciones para el revestimiento de canales, pasos peatonales y otras estructuras de protección de la salud.**
5. **Diseño detallado final de obras en la represa.**
 - a) **Modificación y mejoramiento de las orillas.**
 - b) **Tala y eliminación de árboles y matorrales, estructuras y cercados artificiales**
 - c) **Reubicación de carreteras, poblaciones, cementerios, santuarios.**
 - d) **Estructuras de desagüe, de tamaño suficiente para la regulación del nivel de agua y la evacuación de grandes volúmenes de agua.**
6. **Diseño detallado final de obras de proyectos de irrigación.**
 - a) **Depósitos de regulación y estanques de almacenamiento nocturno, cuando sean necesarios.**
 - b) **Canales y desagües.**
 - c) **Estructuras de regulación, compuertas, esclusas, etc. y cámaras de distribución.**
 - d) **Uso del agua en el campo.**
 - e) **Uso y regulación de aguas subterráneas.**
 - f) **Posibilidad de incorporación de abastecimiento doméstico de agua.**
7. **Diseño detallado final de medidas y obras en comunidades.**

Directrices para la cooperación intersectorial

- a) **Selección de sitios para comunidades nuevas, distantes de fuentes de agua.**
 - b) **Provisión de sistemas seguros, adecuados y cómodos de suministro de agua, y de alcantarillado.**
 - c) **Actividades recreativas: creación de estanques seguros como alternativa de colecciones de agua infectadas, terrenos deportivos, etc.**
 - d) **Otras medidas de protección tales como la colocación de mallas en las ventanas, drenaje de aguas superficiales, saneamiento general e instalaciones públicas de lavandería.**
- 8. Provisiones para actividades de mantenimiento y su financiamiento.**
- 9. Ordenamiento del medio.**
- a) **Estructuras de regulación para la medición y vigilancia de la descarga y de la velocidad del agua.**
 - b) **Compuertas requeridas para la desecación rápida y el flujo repentino de los subsistemas de irrigación.**
 - c) **Ajuste de la salinidad del agua en los criaderos de la zona costera, mediante la instalación y manejo de compuertas.**
 - d) **Regulación de los niveles de agua en pequeños depósitos por medio de aliviaderos de sifón automático.**
 - e) **Cruces y puentes de seguridad sobre canales y desagües.**
 - f) **Revestimiento de canales y desagües, conductos cerrados o subterráneos.**
- 10. Mejoramiento y simplificación de las medidas de lucha química y biológica.**

- a) **Diseño de dispositivos para al aplicación de compuestos químicos anexos o incorporados en las estructuras de regulación, a los rastrillos metálicos o a las mallas, contra los caracoles.**
 - b) **Caminos y vías de acceso para la vigilancia y rociamientos, rutas de agua limpias y desembarcaderos.**
11. **Educación sanitaria del público y desarrollo de la participación comunitaria.**
12. **Instalaciones de salud: dispensarios y hospitales.**

FASE DE CONSTRUCCION

- 1. **Protección de la salud del personal que se ocupa de la construcción.**
- 2. **Instalaciones especiales para la lucha contra las enfermedades y el tratamiento de las mismas en el sitio de la construcción.**
- 3. **Viviendas e instalaciones de saneamiento adecuadas para los trabajadores de la construcción y sus familias.**
- 4. **Vigilancia de infecciones en la mano de obra importada y en la población local.**
- 5. **Vigilancia, vacunación y tratamiento de la población local, y eliminación y lucha contra enfermedades endémicas, especialmente aquellas que pudieran intensificarse al entrar en funcionamiento el proyecto.**
- 6. **Protección del medio, erosión, derramamientos, contaminación del aire y del agua, eliminación de excretas, alteraciones estéticas.**
- 7. **Inspección para asegurarse de que la construcción se lleva a cabo de acuerdo con los diseños de salud.**
- 8. **Educación sanitaria del público y sistematización de la participación comunitaria.**

FASE DE FUNCIONAMIENTO

1. **Asignación de fondos, asignación de personal y aplicación de los programas de lucha contra enfermedades.**
2. **Vigilancia, detección y tratamiento de personas infectadas.**
3. **Establecimiento de curvas normativas y programas para el control de mosquitos, caracoles, moscas, maleza, etc.**
4. **Establecimiento de las prácticas y programas para la regulación de niveles de agua.**
5. **Mantenimiento y modernización de estructuras y otros trabajos.**
6. **Aplicación de métodos químicos y biológicos para la lucha contra vectores y malezas.**
7. **Drenaje de todas las acumulaciones de agua alrededor del depósito.**
8. **Prevención y corrección de filtraciones excesivas.**
9. **Administración del agua en la explotación agrícola.**
10. **Funcionamiento, mantenimiento, mejoramiento y ampliación de sistemas de abastecimiento de agua y eliminación de desechos, saneamiento general.**
11. **Educación sanitaria del público y fomento de la participación comunitaria.**
12. **Evaluación de los cambios en los vectores y enfermedades, eficacia de los programas de lucha, estudio y aplicación de correcciones o alteraciones para mejorar los resultados.**
13. **Preparación de informes periódicos y especiales con propósitos de difusión.**

Fuente: OMS, 1980.

ANEXO 3

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement entered into by and between

NATIONAL IRRIGATION ADMINISTRATION, herein represented by **ALFREDO L. JUNIO**, with offices at E. de los Santos Avenue, Quezon City, hereinafter referred to as the **NIA**

MINISTRY OF HEALTH, herein represented by **CLEMENTE S. GATMATAN, M.D.**, **M.P.H.** Minister with offices at San Lazaro Compound, Manila, hereinafter referred to as the **MOH**,

-WITNESSETH-

WHEREAS, the Government through the National Irrigation Administration has programmed the implementation of the Second Davao del Norte Irrigation Project in Davao del Norte, Mindanao, with a bank loan from the Asian Development Bank, hereinafter referred to as the **ADB**,

WHEREAS, in the implementation of the project, the **NIA**, being the project proponent is agreed to be the principal executing agency and the **MOH**, as the executing agency for Public Health,

WHEREAS, there is a need for a coordinative effort between the **NIA** and the **MOH** to effectively carry out the implementation of the project,

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereby agree as follows:

1. OBLIGATIONS OF NIA

1. In coordination with the **MOH**, to plan, design and construct the necessary drainage works to achieve the objective of the schistosomiasis control

2. To provide financing for the foreign currency requirements for the implementation of the health services and schistosomiasis control programme in the project, out of the loan proceeds obtained from the **ADB**.

3. Procure, on behalf of the **MOH**, the necessary laboratory equipment such as microscopes, vehicles, etc. and necessary drugs and chemicals reimbursable from and to the extent of the loan proceeds allocated to **MOH**, to effectively carry out the project.

4. **NIA** shall turn over to **MOH** the equipment, vehicles, and drugs purchased under the loan and such equipment and vehicles shall eventually become **MOH** property upon completion of the project.

5. Provide reasonable incentive/honorarium in accordance with the rates approved by **NIA** to appropriate number of personnel to be funded by **MOH** who will be actually involved in the schistosomiasis prevention and control within the project area to the extent that such incentives shall be allowed only during the prosecution and up to the completion of the Second Davao del Norte Irrigation Project

6. Provide technical assistance for the construction of the necessary health infrastructures and facilities like rural health centers, for the effective performance of the **MOH** personnel in their assigned tasks.

II. OBLIGATIONS OF MOH

1. **MOH** shall prepare and submit to **ADB**, in consultation with **NIA**, a detailed implementation plan for the health components of the project and assist or advise **NIA** in the preparation of its plans for drainage and for the operation and maintenance of canals in the project area in order to increase their impact on schistosomiasis control.

2. Provide financing for the local currency requirements of the health components including the construction of health infrastructures and facilities, out of its budget over the implementation period of about five years

3. Provide for the assignment of necessary personnel with adequate pecuniary and other incentives to assure the participation of sufficient personnel as well as to attract and complete the construction of health infrastructures required to meet the health service needs of the population in the project area.

4. Provide repair and maintenance services to the health infrastructures constructed including equipment and vehicles procured through this project, out of its own fund

5. Continue to provide personnel, equipment, and drugs and chemicals as necessary for general rural health care in the project area after project completion

IN WITNESS WHEREOF, the parties hereto have set their signatures this day of 1978.

(SGD.) CLEMENTE S. GATMATAN (SGD.) ALFREDO L. JUNIO
Minister Administrator
Ministry of Health National Irrigation Administration

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement entered into by and between:

The NATIONAL IRRIGATION ADMINISTRATION represented by FIORELLO R. ESTUAR, Administrator, with offices at E. de los Santos Avenue, Government Center, Quezon City, hereinafter referred to as the NIA;

The MINISTRY OF PUBLIC WORKS & HIGHWAYS represented by JESUS S. HIPO-LITO, Minister, with offices at Bonifacio Drive, Port Area, Manila, hereinafter referred to as the MPWH.

-WITNESSETH-

WHEREAS, the Philippine Government through the National Irrigation Administration has programmed the implementation of the Third Davao Irrigation Project in the province of Davao del Norte with a loan from the Asian Development Bank, hereinafter referred to as the ADB;

WHEREAS, the said loan has been provided on the terms and conditions stipulated in the Loan Agreement dated 3 November 1982 between the Republic of the Philippines and the Asian Development Bank;

WHEREAS, in the implementation of the project, the NIA being the project proponent has agreed to be the Principal Executing Agency, and the MPWH as the Executing Agency for Rural Water Supply System Component;

WHEREAS, there is a need for a coordinative effort between the NIA & the MPWH to effectively carry out the implementation of the project;

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereby agree as follows:

1 OBLIGATIONS OF MPWH.

1. In accordance with the provisions of Schedule 1 & 6 of the Loan Agreement, MPWH shall, in coordination with NIA, be responsible for the construction of approximately two hundred seventy four (274) units of Level I tubewells for installation in about 51 Barangays; construction of approximately 1050 Level I shallow wells for installation in the schizosomiasis endemic parts of the project; and construction of two (2) units of Level II systems for Mabaluran Poblacion at depths ranging from 30 m to 100 m.

2. MPWH shall submit to the Bank for approval, within three (3) months of the Effective Date of the Loan, a detailed implementation plan, including site selection, construction schedule and schedule for procurement of necessary equipment for the implementation of Rural Water Supply System Component of the project

3. In accordance with Section 6, Schedule 6 of the Loan Agreement, MPWH shall establish a suitably staffed Project Office at Taguin within three (3) months of the Effective Date of the Loan. This project office shall be headed by an Officer-in-Charge. The Officer-in-Charge shall coordinate with the NIA Project Manager on matters concerning the project.

4. MPWH shall be responsible for the procurement of the equipment and materials necessary for the implementation of the Rural Water Supply of the project. Such procurement shall be carried out in accordance with the procedures set forth in Schedule 1 of the Loan Agreement

5. MPWH shall be responsible for providing the local currency requirements of the Rural Water Supply System which shall be included in its yearly budgets covering the implementation period of the project and to assure that such funds shall be made available as and when needed to ensure the successful implementation of the project

6. MPWH shall maintain a separate record and accounts adequate to identify the goods and services financed out of the proceeds of the loan, to disclose the use thereof in the project, to record the progress and cost of the project and to reflect in accordance with consistently maintained sound accounting practices the operation and financial condition relevant to the implementation of the Rural Water Supply System components. These accounts will be audited annually, in accordance with sound auditing principles, by auditors acceptable to the Bank and certified copies of the audited accounts and the auditor's reports will be furnished to the Bank within six (6) months after the end of each fiscal year

7. All applications for withdrawal of loan proceeds from the loan account for the purpose of financing expenditures on the Rural Water Supply System of the project shall be made through NIA. MPWH shall be responsible for the preparation of all the necessary supporting documents. MPWH shall ensure that all goods financed out of such proceeds are used exclusively in carrying out the agency's respective components.

8. Pursuant to the provisions of Schedule 5 of the Loan Agreement, MPWH shall in coordination with NIA, be responsible in hiring and engaging the Consultants required for the implementation of Rural Water Supply Systems of the project.

9. Pursuant to the provisions of Section 17, Schedule 6 of the Loan Agreement, MPWH, through its Provincial Office and the Rural Water Works Development Corporation, shall organize water users' groups in the project area and provide assistance to these groups in the operation and maintenance of the water supply systems in the Project Area.

II OBLIGATIONS OF NIA

- 1 NIA shall provide assistance, as may be needed, in the implementation of the procedures to be followed relative to procurement of the equipment and materials for the rural water supply system of the project. Such procurements shall be carried out in accordance with the procedures set forth in Schedule 4 of the Loan Agreement.
- 2 For the purpose of withdrawal from the Loan proceeds, NIA shall be responsible for the submission of the applications to ADB for financing of expenditures on the Rural Water Supply System. NIA shall ensure that all goods financed out of such proceeds are used exclusively in carrying out the agency's respective components.
- 3 NIA shall provide coordination and other technical assistance as may be needed in the execution of the portion of the project for which MPWH is responsible.

IN WITNESS WHEREOF, the parties hereto have set their signatures this 1st day of February 1983

(SGD.) JESUS S. HIPOLITO (SGD.) FIORELLO R. ESTUAR
Minister Administrator
Ministry of Public Works & Highways National Irrigation Administration

MEMORANDUM OF AGREEMENT

This AGREEMENT made and entered into this day of June 1980 at Diliman, Quezon City, Metro Manila by and between:

The NATIONAL IRRIGATION ADMINISTRATION, with principal office at E de los Santos Avenue, Diliman, Quezon City, represented herein by the Administrator, FIORELLO R. Estuar, hereinafter referred to as NIA,

and

The MINISTRY OF HEALTH, with principal office at San Lazaro Compound, Sta. Cruz, Manila, represented herein by the Minister, ENRIQUE M. Garcia, hereinafter referred to as MOH;

- WITNESSETH -

WHEREAS the World Bank has granted the NIA on 29 March 1980 a US\$ 71.0 M loan to partially finance the Philippine Medium Scale Irrigation Project which would provide for the construction of irrigation facilities to benefit some 38 000 hectares of rice land in the Provinces of Oriental Mindoro, Occidental Mindoro and Palawan,

WHEREAS, the strengthening of the Malaria Control Unit in Palawan is an integral component of the project,

WHEREAS, the project envisages a provision of US\$ 400 000 to strengthen the anti-malaria campaign in Palawan specifically in the Municipalities of Aborlan and Narra where the Malagaog and Bawang-Bawang River Irrigation Projects are situated,

WHEREAS, the Malaria Eradication Service of the MOH which is responsible for monitoring and control of the disease in the affected area would direct the program under the project,

WHEREAS, provision would be made under the project for an information campaign to alert the population to the dangers of the disease and supply information on prevention and treatment,

WHEREAS, the NIA and MOH must enter into an agreement acceptable to the World Bank by 31 December 1980, for the implementation of the malarial control component of the Project,

WHEREAS, the NIA will commence with the implementation of the Philippine Medium Scale Irrigation Project on 1 July 1980,

NOW, THEREFORE, for an consideration of the terms and conditions set forth, the parties have agreed as follows

I Project Personnel

1 Considering the limited tenure of five years and the location of the project, it would be difficult for MOH to attract qualified personnel at the government civil service salaries and to overcome this problem, the Malaria Control Team personnel below the same chief category would be employed and paid by NIA based on the following NIA standard position and qualification and would be detailed to MOH

NIA Equivalent

- | | | |
|----------------|----------------|---------------------------|
| a Sector Chief | Const Foreman | College Graduate |
| b Med Lab Tech | Lab Technician | College Graduate |
| c Squad Leader | Leadman | High Sch. Graduate |
| d Driver | Driver | (Complete primary grades) |

<p>2. That while on detail, all personnel will be under the administrative control and technical supervision of the MOH.</p> <p>3. That personnel from some chief category and above who will be engaged in the implementation of the program would be paid by MOH, however, NIA would provide honoraria which would be fixed by the Director, MES, MOH and NIA Project Manager</p> <p>4. That the recruitment and fielding of personnel would be made in time for the 1 July 1980 start of the activities.</p> <p style="text-align: center;">II. Disbursement of Fund</p> <p>5. Payment of salaries, wages, honoraria and travelling expenses of aforesaid personnel will be made through the NIA disbursing officer after approval of MOH and NIA officer. The NIA officer will see to it that expenditures are properly costed. Semi-annual and annual reports of disbursement would be made available for evaluation.</p> <p style="text-align: center;">III. Procurement of Equipment, Supplies and Materials</p> <p>6. Procurement of all equipment, supplies and materials would be made through the NIA. MOH would program the uses and submit to NIA requisition and issue voucher in due time.</p> <p style="text-align: center;">IV. Use of Vehicle and Equipment</p> <p>7. Vehicles and equipment would continue to be used by MOH after the project completion or during the operation and maintenance phase of the irrigation system. Memorandum receipt of all items turned over to MOH would be prepared</p> <p>8. Since project implementation will start on 1 July 1980 when vehicles, equipment, supplies and materials are still in the procurement process, MOH would furnish priority requirements needed to be replaced when procured stock will be available</p> <p>9. That NIA would provide the requirements for fuel and oil, maintenance and minor repairs of the vehicle duly assigned by MOH as stipulated in Item 1B-8 of this agreement, based on the NIA rules and regulations in the control of the usage of vehicle.</p> <p style="text-align: center;">V. Monitoring and Reporting</p> <p>10. MOH would furnish NIA a program of work picturing target quantities and work schedules as well as materials and supplies needed. In case a revision of the plan has been made, a revised program should be furnished. The implementation schedule in the form of a bar chart would be very helpful.</p>	<p>11. A monthly status report of activities and accomplishments would be furnished by MOH to NIA.</p> <p>12. Communications to NIA pertaining to project implementation should be addressed to the Project Manager, Philippine Medium Scale Irrigation Project, and to the Director, Malaria Eradication Service for the MOH and that communications at the provincial level or the project area should be addressed to the Unit Chief, MES, Puerto Princesa, Palawan, for MOH and to the Division Chief of NIA at Narra, Palawan</p> <p style="text-align: center;">VI. Mutual Requirement</p> <p>13. That both parties would designate project coordinators to facilitate monitoring of project activities.</p> <p>14. That NIA and MOH shall regularly inform each other on the latest development concerning the project.</p> <p>15. That this agreement may be modified any time upon subsequent written agreement between the parties</p> <p style="text-align: center;">In witness whereof, the parties have hereunto set their hands and seal this day of June 1980 at Quinson City, Metro Manila, Philippines.</p>	<p style="text-align: center;">NATIONAL IRRIGATION ADMINISTRATION</p> <p style="text-align: center;">(SGD.) FIORELLO R. ESTUAR Acting Administrator</p> <p style="text-align: center;">MINISTRY OF HEALTH</p> <p style="text-align: center;">(SGD.) ENRIQUE M. GARCIA Minister</p>
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