

SUMMARY PROCEEDINGS:

**PROGRAM REVIEW OF
NIGERIAN ONCHOCERCIASIS CONTROL PROGRAM**

**Held at the Centers for Disease Control and Prevention
Atlanta, Georgia
November 16, 1995**



Participating Agencies:

Carter Center/Global 2000

Centers for Disease Control and Prevention

Federal Ministry of Health, Nigeria

Mectizan Donation Program

**River Blindness Foundation
UNICEF/Nigeria**

INTRODUCTION

This 1995 Program Review of the Nigerian Onchocerciasis Control Program (NOCP) was organized to take advantage of the presence in Atlanta for a training course of Drs. Jonathan Jiya, director of the NOCP; Emmanuel Miri, director of the River Blindness Foundation (RBF) project in Nigeria; and E.I. Gemade, who is the focal point for the onchocerciasis activities of the UNICEF mission to Nigeria. It was modeled after the Program Reviews which CDC and The Carter Center/Global 2000 have implemented during the global Guinea Worm Eradication Program. Unfortunately, only one-half day was available for conducting this Review, and neither of the RBF program directors from Cameroon or Uganda was able to attend, due to prior commitments.

The main purpose of the meeting was to review the status of the Nigerian Onchocerciasis Control Program, and make recommendations. This document is a summary of the presentations made by Drs. Jiya, Miri and Gemade at the Review, and of the discussions. (See Annex I, Meeting Agenda.)

As the successor to the River Blindness Foundation, The Carter Center/Global 2000's River Blindness Program plans to arrange similar reviews in 1996 of RBF projects in Cameroon, Nigeria and Uganda, in cooperation with the Centers for Disease Control and Prevention.

BACKGROUND

Nigeria has more cases of onchocerciasis than any other country. It is sometimes said to contain as much as 30-40% of the global burden of that disease, which affects some 18 million persons worldwide.

Nigeria was not part of the regional Onchocerciasis Control Program (OCP) in West Africa, which began over 20 years ago using a strategy of vector control. The OCP has greatly reduced the incidence of onchocerciasis throughout most of the eleven countries involved. The Nigerian Onchocerciasis Control Program (NOCP) was first launched in 1986, but the current program was revised and re-initiated on February 12, 1991 to use primarily a strategy of mass distribution of ivermectin (Mectizan[®]) to persons in endemic communities. Africare and the International Eye Foundation began assisting one of the first programs to distribute Mectizan[®] in Nigeria, in Kwara State (includes current Kwara and Kogi States) in 1989. The River Blindness Foundation began assisting the program in Plateau State 1992.

The director of the NOCP since April 1995 is Dr. Jonathan Y. Jiya, who also holds the position of deputy director of primary health care in the Federal Ministry of Health. Dr. Jiya reports to the director for disease control in the Nigerian Federal Ministry of Health, Dr. Ashley-Dejo, who chairs the National Onchocerciasis Task Force (NOTF). The NOTF includes four zonal representatives, representatives of UN agencies concerned (especially UNICEF and WHO), and the involved non-governmental development organizations (NGDOs): Africare, Christoffel-Blindenmission (CBM), International Eye Foundation (IEF),

International Foundation for Education and Self Help (IFESH), Lions International Sight First, the River Blindness Foundation (RBF), and World Vision. Dr. Emmanuel L. Gemade is responsible for onchocerciasis in UNICEF/Nigeria. Dr. Emmanuel M. Miri is director of the River Blindness Foundation program in Nigeria, and he is currently chairman of the national coalition of NGOs helping to prevent onchocerciasis in Nigeria and which was formalized in 1994. The National Onchocerciasis Task Force meets twice a year. (See organizational chart in the Appendix.)

EPIDEMIOLOGY

Estimates of the numbers of persons affected by onchocerciasis among Nigeria's approximately 100 million population have varied widely. Estimates based on surveys conducted in 1988-89 suggested that about 3.3 million Nigerians were infected with the parasite. That figure seems inordinately low, however, since Cameroon next door, with a population of less than 15 million, has a well-documented infected population of 1.1 million persons. Another estimate holds that some 15,000 Nigerian communities are affected at moderate or high levels of endemicity (Pond R., Mass Distribution of Ivermectin: A handbook for community treatment of onchocerciasis, Africare/IEF, Washington DC, 1991). More precise data should be available by the end of 1995, as a result of REMO and REA studies which are being completed, with assistance of WHO's TDR program and UNICEF/Nigeria. Detailed GIS maps showing the precise location of affected villages are also being prepared.

The most plausible provisional estimates are that about 7-10 million Nigerians are infected with onchocerciasis, and approximately 40 million are risk of the disease. Approximately 150,000 are believed to be blind as a result of onchocerciasis in Nigeria.

Areas with the highest prevalence of blinding onchocerciasis are found mainly in parts of nine northern and middle savannah states: Adamawa, Bauchi, Benue, southern Borno, Kogi, Kwara, Niger, Plateau and Taraba. States with the lowest prevalence are Jigawa, Kano, Katsina, Lagos, Ogun, and Rivers (see Map 1 and Table). High prevalences of onchocerciasis are also found in some forested areas in the southeast of the country, but the disease there is usually not blinding. As in other affected countries, this disease is found among populations in remote, impoverished rural areas.

INTERVENTIONS

The stated goal of the Nigerian Government is to eliminate onchocerciasis as a public health problem in the country by 2008.

The main strategy of the NOCP is mass distribution of Mectizan® to populations in endemic areas, once a year, beginning with the villages of highest prevalence. Beginning in 1995, the program has commemorated its re-launching on February 12, 1991 by celebrating National Onchocerciasis Day each year on that date, as a means of raising awareness about the

disease and its prevention in the country. The second annual celebration is being planned for February 12, 1996, when a Trust Fund for donations to the program will be inaugurated.

Three main pillars of the NOCP in Nigeria are the various levels of the Government of Nigeria, UNICEF/Nigeria, and the national coalition of NGDOs named above. A new training manual that was developed with the leadership last year of the RBF and the Steering Committee of the NOTF will be finalized by the end of this year. UNICEF and IEF have developed a Management Information System, which is being field tested for further dissemination. Earlier this year, UNICEF/Nigeria agreed to facilitate the importation and clearance of Mectizan for all parties in Nigeria. The various states where UNICEF and NGDOs are assisting Nigerian health authorities in distributing Mectizan* are listed in the Table and illustrated in Map 2. Not all endemic Local Government Areas (LGAs) are covered in all of the endemic states which are receiving assistance, however. The NOCP plans to expand activities to all endemic states and LGAs. So far in 1995 (January-September), a total of 2,225,576 persons at risk have received Mectizan* treatment in Nigeria, in 3,041 endemic villages (see Table). A total of 2,229,884 persons were treated in Nigeria in all of 1994.

Lack of funding has been a major constraint for the program. At present, the Federal Ministry of Health allocates the equivalent of about US\$8,000 per quarter to the program, but that does not include significant in-kind contributions of personnel and other resources at Federal, state and local levels. Other key issues and concerns include procurement of Mectizan, inadequate political support for the NOCP, lack of statewide coverage by many NGDOs, integration with Primary Health Care, cost recovery, program evaluation, reliability of epidemiological data and use of standardized indices.

WHO's TDR program is supporting studies of sustainable distribution of Mectizan*, in which the villagers themselves assume more responsibility for organizing distribution of the drug. Since 1995, the program in Plateau State has been implemented mainly by that state ministry of health, with on-going funding by RBF. Community based distributors (CBDs) of Mectizan* are not paid but rather are compensated by in-kind contributions of their neighbors; this is an important element of sustainability. It is also planned to study whether villagers are willing to assume responsibility for collecting the drug annually from a central source, bringing it back to the village, and distributing it properly. The program in Plateau State also is regularly monitoring several sentinel endemic villages.

DISCUSSION

There was considerable discussion of the size of the infected and at-risk populations in Nigeria, and of the critical importance of completing the REMO studies immediately. Results of that survey are said to have been validated in all but five of the thirty states, and the Federal Capital Territory (Abuja). There was some discussion of REMO and REA activities using leopard skin as an index, but it was noted that indices will be based on nodule rates, not leopard skin. UNICEF is convening a workshop intended to complete

compilation of the final results of the REMO study later in November, 1995. Various means of estimating the

infected and at-risk populations were presented, using different assumptions and census figures.

It was suggested that endemic countries should ideally focus their mass distribution efforts on the eligible population at-risk. The latter excludes persons in urban areas or non-endemic rural areas, children under five years old, and pregnant women. That eligible at-risk population is the most appropriate target of mass distribution programs, and that number is the most appropriate denominator for estimating the percentage coverage of the target group in the country.

Other potential programmatic indices to monitor progress include the percentage of at-risk or of high-risk communities assessed and/or treated.

Participants discussed the many difficulties associated with the importation of donated Mectizan into Nigeria before UNICEF/Nigeria agreed to facilitate its importation for all NGOs and the Government activities, as well as for the UNICEF-assisted projects. Dr. Stefanie Meredith of the Mectizan Donation Program and Dr. Bruce Dull of the Mectizan Expert Committee (MEC) reviewed the various steps involved in processing applications for Mectizan, and in shipping the drug once an application has been approved by the MEC. It was stressed that the MEC will NOT approve a "buffer" stock of Mectizan for Nigeria or any other country, so the Nigerian program must seek to avoid shortages of the drug by allowing sufficient lead time, estimating its needs as accurately as possible, and insuring that its application is complete, so as to minimize time needed for responding to additional queries by the MEC. The NOCP was also advised to estimate its quarterly needs for any one calendar year, since that would permit shipments in smaller allotments -- a significant consideration in Nigeria especially, where the total amounts needed are so large. It was also suggested that the national secretariat should keep track of the status of all requests for and shipments of Mectizan* for all groups distributing the drug in the country, and periodically circulate a written summary of that. The importance of prompt reporting of any serious adverse reactions was mentioned, as well as the need to compare coverage achieved to the original targets.

The need for the NOCP to maintain oversight of onchocerciasis activities in all states, not just some, was emphasized. It was mentioned that NOCP should also keep track of all orders of Mectizan for use in the country, and that it should be the repository of data collected.

It was mentioned that an external evaluation of the program in 1996 would be useful. To facilitate integration of community based distribution with other primary health care activities, village-based health workers should be prepared for carrying out polyvalent activities.

Priorities for 1996 included publicizing results of the REMO studies, ordering adequate supplies of Mectizan on time, working to secure greater support of the program by the Government of Nigeria, and preparing Nigeria's proposal to the new World Bank-supported African Program for Onchocerciasis Control (APOC). Some concern was expressed that current political difficulties might hamper Nigeria's participation in the APOC. Lastly, it was noted that additional states and new LGAs may be created. If so, it would be that much more important to have REMO data tied to specific latitude and longitude locations, rather than changing political administrative boundaries.

CONCLUSIONS

If there are 7-10 million persons suffering from onchocerciasis in Nigeria, and if half of the 2.2 million persons treated with Mectizan* in Nigeria in 1994 were actually infected (not just at risk), then between 11% and 15.7% of infected persons were treated in Nigeria in 1994.

If 40 million Nigerians are at risk of onchocerciasis, and 75% of those are eligible for treatment with Mectizan (after under five year olds and pregnant women are excluded), then 30 million eligible Nigerians at risk need to be treated annually when the NOCP is fully operational. Currently, the program is reaching about 2.2 million of those per year, or about 7%.

Onchocerciasis control activities in all states must be of concern to the NOCP.

RECOMMENDATIONS

1. NOCP and its partners should publicize the results of the REMO studies, including the updated estimate of Nigeria's infected and at-risk populations, ideally in association with the National Onchocerciasis Day celebrations. The numbers of persons treated in 1995 should also be publicized then. The REMO data and a map, however incomplete, should be available before February 12, 1996.
2. The NOCP should endeavor to ensure that adequate supplies of Mectizan* for all NGDOs and others concerned are requested from the Mectizan Expert Committee with sufficient lead time so as to prevent shortages of the drug from impeding program activity. Adequate supplies of Mectizan* for the beginning of 1996 should be available in country by February 12, 1996.
3. The NOCP should prepare to submit its proposal for external assistance under the APOC as soon as the new program is ready to receive such proposals. Federal Government of Nigeria support provided in-kind should be estimated in preparation for submission of Nigeria's proposal to APOC.

4. The NOCP should regularly monitor the proportion of targeted communities that are reached, as well as the proportion of targeted eligible at risk persons that are covered by mass distribution of Mectizan.

5. The program should work to secure greater support of the NOCP by the Government of Nigeria.

Table 1 - Provisional Data on Endemicity and Treatment Activities in Nigerian States

State	NGDO Partner	State* Endemicity	LGA† Endemicity	1988/89 Max.Pre v%	1994 Treated	1995** Treated
Abia	Lions/RBF	moderate	spor/low	---	122,232	166,126
Adamawa	Africare	high	---	---	---	42,566
Akwa Ibom	---	moderate	spor/low	2.4	---	---
Anambra	Lions/RBF	moderate	hypo	29.6	---	88,000
Bauchi	UNICEF	high	hyper	63.7	45,279	57,475
Benue	UNICEF	high	hyper	61.2	147,300	188,343
Borno	Africare	high	meso	41	132,344	110,726
Cross River	UNICEF	moderate	hypo	14	45,000	195,000
Delta	Lions/RBF	moderate	spor/low	---	53,616	143,202
Edo	Lions/RBF	moderate	meso	---	181,417	134,852
Enugu	Lions/RBF	moderate	hypo	---	---	101,360
Federal Capital Territory (Abjua)	CBM/UNICEF	moderate	hypo	20	---	---
Imo	Lions/RBF	moderate	spor/low	11.4	307,099	180,254
Jigawa	CBM	low	spor/low	---	---	---
Kaduna	Sightsavers	moderate	meso	51.6	197,709	328,104
Kano	CBM	low	spor/low	2.1	---	---
Katsina	Needs Sponsor	low	spor/low	.6	---	---
Kebbi	Sightsavers	moderate	---	---	---	39,594
Kogi	Africare	high	hypo	---	102,266	161,529
Kwara	Africare	high	hypo	27.6	121,540	91,414
Lagos	---	low	spor/low	.47	---	810
Niger	UNICEF	high	hypo	72.5	81,239	---
Ogun	---	low	spor/low	27.2	---	410
Ondo	UNICEF	moderate	meso	15.2	133,351	89,545
Osun	UNICEF/IFESH	moderate	spor/low	---	57,722	25,034
Oyo	WorldVision/ IFESH UNICEF	moderate	spor/low	5.4	56,495	81,232
Plateau	RBF	high	hyper	85.5	445,275	---
Rivers	---	low	spor/low	.33	---	---
Sokoto	Sightsavers	moderate	---	8.3	---	---
Taraba	Africare	high	hypo	---	---	---
Yobe	CBM	moderate	---	---	---	---
Totals					2,229,884	2,225,576

Definitions:

*Endemicity levels for states were collectively decided upon during the program review.

†Endemicity calculated as follows: Hyper = 60% or above, Meso = 40-59%, Hypo = 16-39%, Spor/low = sporadic/low endemicity = 1-15%.

**Provisional, January-September, 1995.

Sources:

NGDOs, Endemicity level, LGA Endemicity, and maximum prevalence figures were obtained from the 1993 National Onchocerciasis Control Program Plan of Action.

1995 and 1994 Treatment figures were obtained from the Communique of the 7th National Onchocerciasis Task Force (October 31, 1995).

Annex I

Agenda

*A review of the river blindness control effort in Nigeria
November 16, 1995*

8:30 - 8:45	Introduction	Dr. F. Richards, Global 2000, The Carter Center
8:45 - 9:15	Nigerian Federal Government Activities	Dr. J. Jiya National Onchocerciasis Control Programme
9:15 - 9:45	Program of the River Blindness Foundation	Dr. E. Miri Director, RBF/Nigeria
9:45 - 10:15	Coffee Break	
10:15 - 10:45	Program of UNICEF	Dr. E.I. Gemade UNICEF Nigeria Country Office
10:45 - 11:00	Mectizan Donation Program Issues	Dr. S. Meredith Associate Director, MDP Dr. B. Dull Executive Secretary, The Mectizan Expert Committee
11:00 - 12:15	General Discussion Topics - At risk populations - Monitoring indices - Mectizan ordering - Priorities for 1996	
12:15 - 12:30	Summary	Dr. D. Hopkins Global 2000, Carter Center

Annex II

LIST OF PARTICIPANTS

REVIEW OF THE RIVER BLINDNESS CONTROL EFFORT IN NIGERIA

NOVEMBER 16, 1995

Nigeria:

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Dr. Emmanuel Miri
Dr. E.I. Gemade

Global 2000:

Dr. Donald Hopkins
Dr. Frank Richards
Dr. Ernesto Ruiz
Mr. Rick Robinson
Ms. Nwando Diallo
Ms. Joni Lawrence
Ms. Mary Wiecynski
Ms. Christiane Levine

CDC:

Dr. Michael Malison
Ms. Lori De Ravello
Mr. Paul Abamonte
Mr. Wayne Duncan

River Blindness Foundation:

Dr. B.O.L. Duke
Amb. Donald Easum
Ms. Bernadette McKinney
Dr. Donald Hopkins
Dr. Frank Richards

Mectizan Donation Program:

Dr. Stefanie Meredith
Dr. Mike Heisler
Dr. Bruce Dull

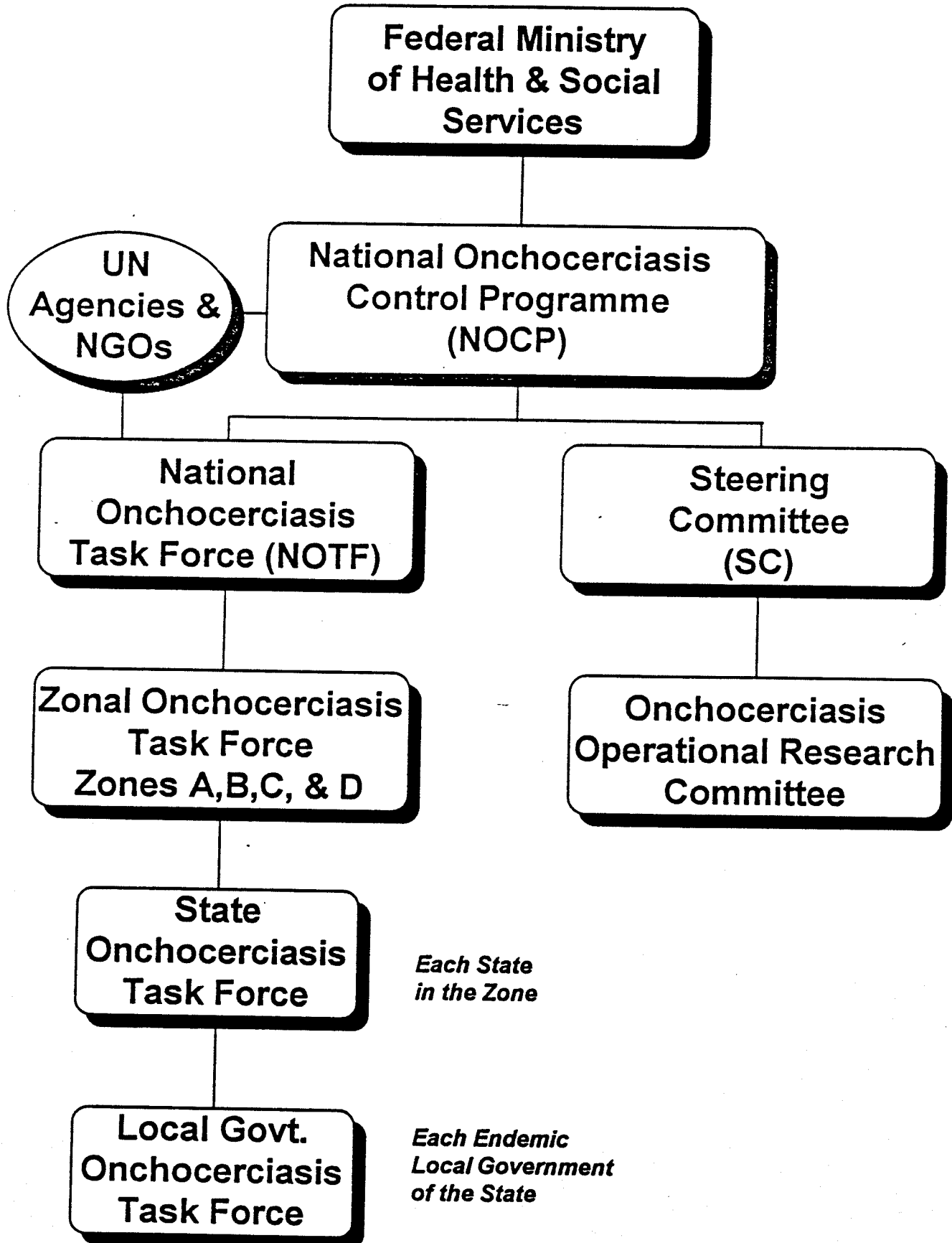
OEPA:

Dr. Zea Flores

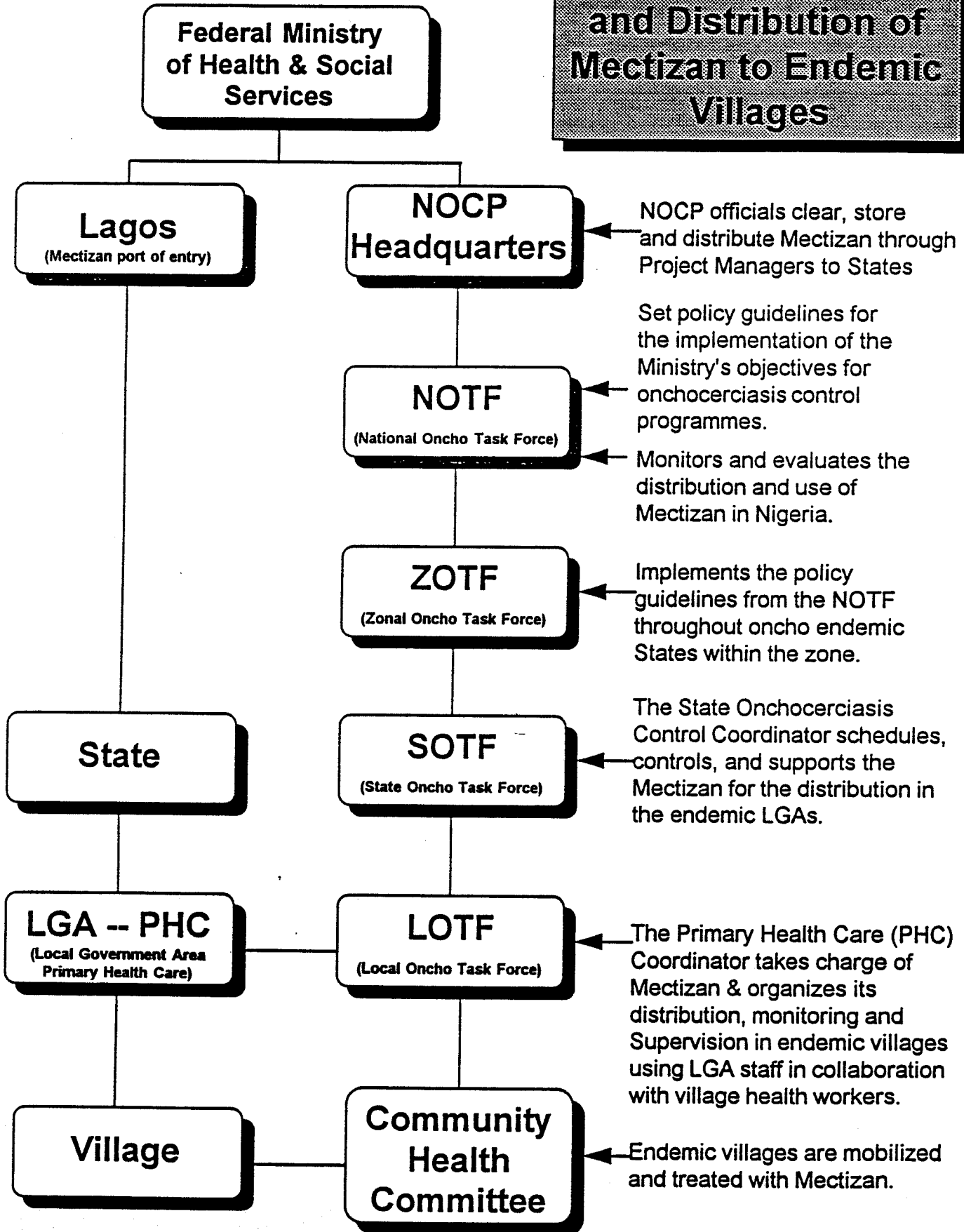
Ecuador:

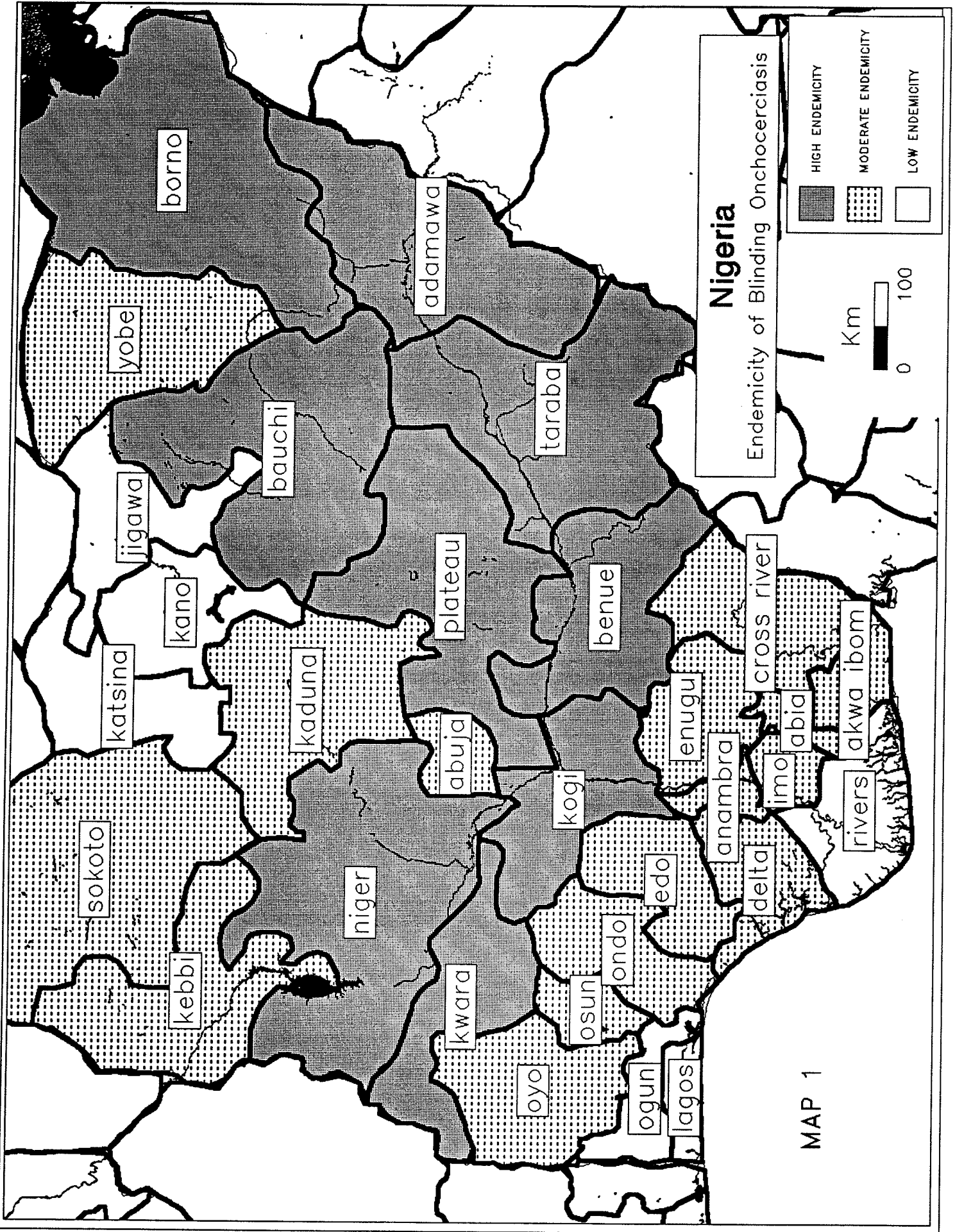
Dr. Mauricio Espinel

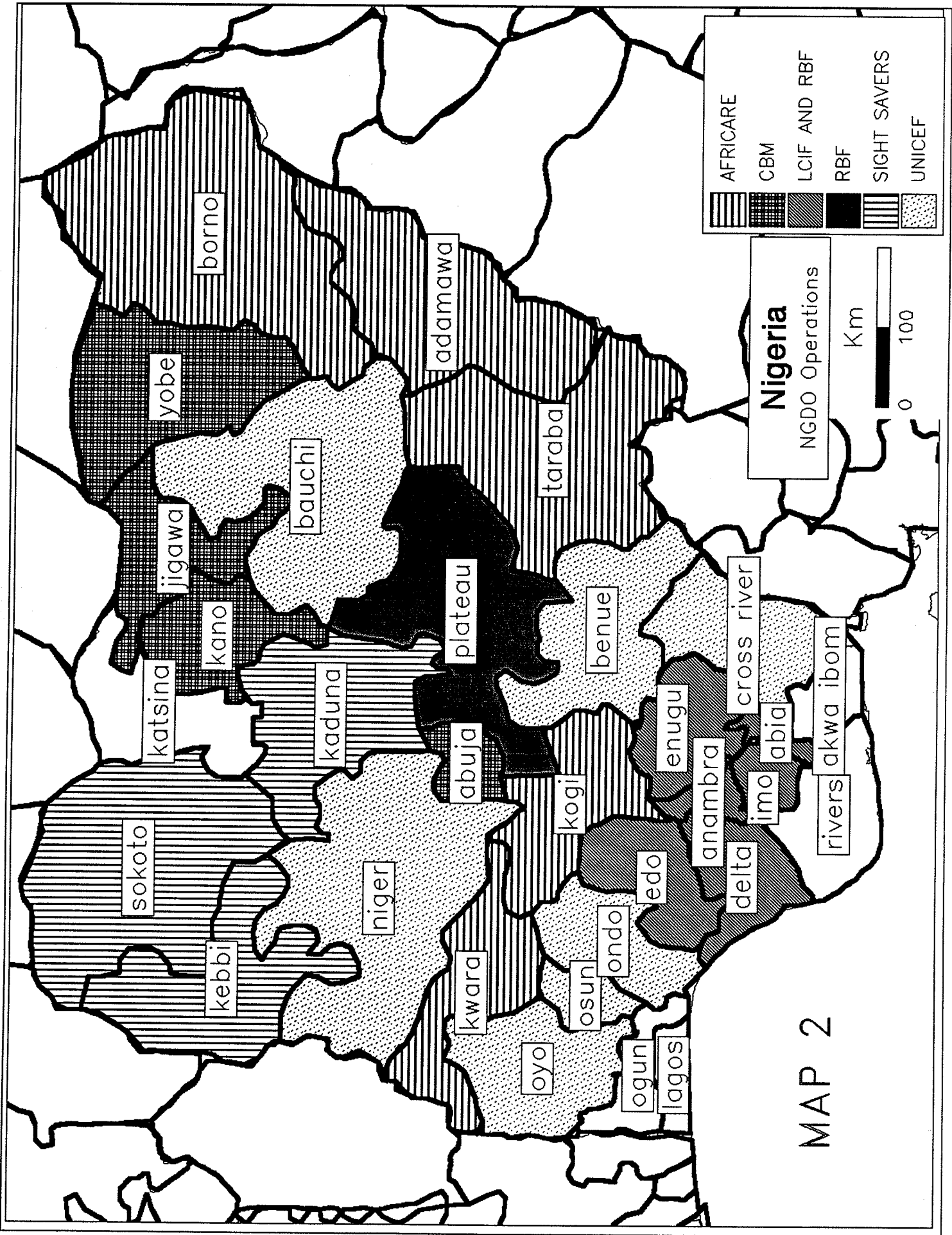
Organogram Showing the Channel of Communication and Organizational Structure



**Summary of
Workplan, Movement
and Distribution of
Mectizan to Endemic
Villages**







**COMMUNIQUE OF THE 7TH
NATIONAL ONCHOCERCIASIS TASK FORCE (NOTF)
Held at the University of Ibadan Conference Centre, Ibadan
31st October, 1995**

The Seventh National Onchocerciasis Task Force (NOTF) meeting was held at the University of Ibadan Conference Centre, 31st October, 1995. The meeting was chaired by the Director of Primary Health Care and Disease Control, Federal Ministry of Health, Dr. O.F.A. Ashley-Dejo.

The following resolutions and recommendations were made:

- 1) The National Onchocerciasis Task Force (NOTF) acknowledges the continued interest of the Federal Ministry of Health and Social Services in collaboration with the Nongovernmental Development Organisation (NGDO) Coalition group to control Onchocerciasis in Nigeria.
- 2) NOCP and NGDOs should endeavour to ensure a successful Onchocerciasis Day for 12th February, 1996; especially as regards the fund-raising programme.
- 3) There is the need for uniformity of reporting Oncho activities by the Zonal Programme Managers (ZPMs), highlighting the trends of Mectizan distribution activities.
- 4) The need for adequate funding and equipping of zonal offices for effective implementation of NOCP objectives was re-emphasized.
- 5) NOTF notes with satisfaction the completion of REMO/RAM and the completion of the approved cross-validation in 25 states of the federation, including the FCT. These results are now ready for entry into the Geographic Information System (GIS).
- 6) NGDOs should evolve uniformly acceptable Onchocerciasis Control Programmes in such a framework that the devolution process will lead to sustainability of such programmes.
- 7) In view of the leading role of NOCP in the APOC programme and the volume of data to be handled, NOTF recommends the establishment and equipping of an office to accommodate all MIS materials for Oncho control in the Federal Ministry of Health.

8) NOTF notes with satisfaction that the AZPMs are in place in Zones A, C and D and recommends that appropriate administrative processes be put in place to facilitate the deployment of AZPM to B-Zone.

9) The NOTF recognizes the need for Oncho operational research to ensure programme compliance and sustainability.

10) The next NOTF meeting is scheduled for 23 January, 1996 in Jos.

11) Finally, the NOTF appreciates the assistance of the Oyo State Government, NOCP B Zone and UNICEF in supporting this NOTF meeting.

Communique drafting Committee:

Dr. Henry Edeghere (Chair)
Prof. B. E. B. Nwoke
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