W O R L D H E A L T H ORGANIZATION

ORGANISATION MONDIALE DE LA SANTE

REGIONAL OFFICE FOR THE WESTERN PACIFIC
BUREAU REGIONAL DU PACIFIQUE OCCIDENTAL

DRAFT EXECUTIVE SUMMARY

Subject	:	Consultancy with PacELF, Mataika House, Suva
Place(s) visited	:	Suva, Fiji
Dates of mission	:	11 to 31 Oct 2004
Author(s) and designation	:	Dr Patricia M. Graves
Name of focus	:	
Participating agencies	:	Government of Fiji World Health Organsiation
Source of funds	:	Inter-country Budget

Please find attached the draft executive summary of the above report. Please note that this has not yet been edited or fully cleared by the Regional Office. The full report will be sent to you in due course.

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

MISSION REPORT EXECUTIVE SUMMARY

Dr Patricia M. Graves	Suva, Fiji	11-31 Oct 2004
Author(s)	Place(s) visited	Dates of mission
Report series number	Project identifier	Activity code

Objectives of mission:

A. In collaboration with PacCARE chairperson and PacELF team leader in Fiji:

1) to provide technical support for PacELF book and advocacy materials for the Pacific countries and partners;
2) to analyze data compiled by the PacELF office to develop scientific documents and publications;
3) to review PacELF office activities and make recommendations for future programme activities

B. To write a report at the end of the assignment.

Summary of activities, findings, conclusions and recommendations:

The assignment was carried out in the PacELF office in Mataika house, Suva Fiji. All recent PacELF documents and materials, including advocacy materials, annual meeting reports, "Our Work" books, manuals and the PacELF atlas and databook were reviewed. After extensive discussion with Dr Ichimori, a draft outline of the PacELF book was prepared and subsequently revised after further discussion to the version given as Appendix 1. This book will be prepared in time to be published before the Global Programme to Eliminate Filariasis meeting, scheduled to occur in Fiji in 2006. This means that a final draft must be ready before the next PacELF meeting so that it can be reviewed by the countries.

The introduction and background section of the PacELF book must include information on filariasis in the Pacific before the start of PacELF. Since much of this work has not been published Draft outlines of sections 1, 4, 5, and 6 were written and are attached as Appendixes .

New translations of advocacy materials (PacELF brochures about mass drug administration) written in French were checked and corrected before printing. It is important to use consistent abbreviations such as "MDA" in both languages. In the French brochures "MDA" was used, but its meaning explained in French.

Recommendations
o The draft PacELF

Key words :

CONSULTANCY REPORT, 11-30 OCT 2004, SUVA, FIJI

PATRICIA M GRAVES, PHD

1. PURPOSE OF MISSION

A. In collaboration with PacCARE chairperson and PacELF team leader in Fiji:

1) to provide technical support for PacELF book and advocacy materials for the Pacific countries and partners;

2) to analyze data compiled by the PacELF office to develop scientific documents and publications;

3) to review PacELF office activities and make recommendations for future programme activities

B. To write a report at the end of the assignment.

2. BACKGROUND

The PacELF programme is now in its sixth year of operation. Samoa was the first country to finish five rounds of MDA, and several other PacELF countries are approaching this milestone. Enormous progress has been made since I last reported on the programme in August 2003. Two excellent technical manuals have been produced and distributed (the PacELF manual and the PacMAN book). There has been great improvement in the collection and organization of data at the PacELF home office, and a comprehensive PacELF DATA BOOK has also been produced containing results of baseline surveys and mid-term evaluation surveys. Census information for all PacELF countries has also been collected and several countries are actively engaged in

planning for the Final evaluation survey ("C" survey) to be held after five years of mass drug administration.

There is now a need to synthesize information about the programme into a publication called the PacELF book for a wide audience. The aim is to prepare this book to be published before the next Global Programme to Eliminate Filariasis (GELF) meeting, scheduled to occur in Fiji in 2006. The introduction and background section of the PacELF book must include information on filariasis in the Pacific before the start of PacELF. Much of this work has not been published in the scientific literature. Therefore in addition to the PacELF book, scientific publications must also be produced. These can include details about filariasis epidemiology which are too specialized for the PacELF book, but are appropriate for articles in peer-reviewed journals. It is important to record this information for future generations in the Pacific, as well as to help filariasis control programmes working in other parts of the world, and as a contribution to the advancement of scientific knowledge.

Although PacELF has made tremendous strides, there is still a long way to go to full elimination status. Many countries are finishing nationwide MDA and are moving into a new phase of operations, while others are only just beginning the process. Therefore in addition to assistance with publications and the PacELF book, input was also requested during this consultancy about the work of the PacELF home office and how PacELF can continue to improve its excellent operations from this point onwards.

3. ACTIVITIES AND FINDINGS

The assignment was carried out in the PacELF office in Mataika house, Suva Fiji from October 11 to 30, 2004. The activities and findings will be described in the order of items in the terms of reference given above.

1) to provide technical support for PacELF book and advocacy materials for the Pacific countries and partners

PACELF BOOK

All recent PacELF documents and materials, including advocacy materials, annual meeting reports, "Our Work" books, manuals and the PacELF atlas and databook were reviewed. After extensive discussion with Dr Ichimori, a draft outline of the PacELF book was prepared and subsequently revised after further discussion. The current outline (Jan 2005) is attached as Appendix 1.

In order for the book to be printed by the GELF meeting in 2006, a final draft must be ready in mid-2005 before the next PacELF meeting, so that it can be reviewed by the countries before final publication. PacELF home office staff will be able to prepare the images and technical information mainly for Chapters 2 and 3, while I will work mainly on Chapters 1, 4 and 5 as well as the papers to be submitted to scientific journals (see next section below). Rough drafts of the chapters are attached as Appendices 2.1 to 2.5.

The PacELF book is aimed at several distinct audiences:

1) People of PacELF countries, to document the filariasis problem in each country and the work they did towards eliminating it.
2) The world scientific community working on filariasis, to describe features of the epidemiology of filariasis in the Pacific and how it was affected by PacELF.
3) Other filariasis control workers, to give a review of PacELF's work as a guideline for elimination programmes which are just beginning, to help develop policy and so they can learn from PacELF's experience.
4) Public health people working on elimination or control of other diseases, to show how a filariasis elimination programme works.
5) The PacELF donors, to show how their money was spent and to publicise the achievements.

ADVOCACY MATERIALS

There seems to have been a significant improvement in the sharing of advocacy materials between the Anglophone and Francophone countries. This may be due to the increased involvement of Dr Lam especially in the preparation of the PacELF manual and the PacMAN book during 2004. Dr Lam also translated two PacELF brochures about mass drug administration into French, which I was able to proof-read before printing

When translating materials it is important to be very consistent in the use of abbreviations such as "MDA". In the French brochures "MDA" was used in some cases, with its meaning explained in French, but abbreviations of the French equivalent words were also used in the brochure. We corrected this to ensure that only "MDA" was used, followed in the title by "Mass Drug Administration" and then a French translation of this phrase. I believe that using "MDA" is very satisfactory as long as the same abbreviation is always used and the brochure does not switch

between initials. Translation of more materials into French (e.g. the manuals) should be done if possible.

It was also noted that the Solomon Islands programme had shared with PacELF some of its health promotion materials, written in both English and Solomon's Pidgin, containing simple messages about the use of long-lasting impregnated mosquito nets for protection from malaria. These materials may be helpful to both Vanuatu and PNG, after adaptation to include filariasis control messages and for the appropriate type of net (Permanet in Vanuatu/PNG but Olyset in Solomons). The materials and messages may also be helpful in other PacELF countries e.g. Fiji if the planned impregnated trial in Fiji shows them to be a useful strategy.

2) to analyze data compiled by the PacELF office to develop scientific documents and publications

The publications being prepared will cover the following areas:

a) Description of filariasis epidemiology in Samoa, and effect of the MDA campaigns, during the 1990s just before PacELF. This includes follow-up of individual patients who were treated numerous times.

b) Description of filariasis epidemiology in Samoa and Vanuatu in 1998-1999 from the PacELF baseline surveys, with particular attention to the spatial heterogeneity in transmission and its implications for sampling design.

c) Comparison between diagnostic methods for blood surveys of filarisis prevalence.

A list of the five potential journal articles is given as Appendix 3. During this consultancy much of the old data was collated and cleaned, and put into a consistent format for each year. Preliminary graphs and tables were produced. Copies of the cleaned Samoa and Vanuatu

datasets were left with PacELF on CD. The graphs and tables will form part of the proposed publications and some may be included in the PacELF book.

3) to review PacELF office activities and make recommendations for future programme activities

MONITORING AND EVALUATION – FINAL EVALUATION SURVEYS

The topic of the design for C surveys (final evaluation blood surveys) which are described in the PacMAN book, were the topic of a lot of discussion during the consultancy. One of the difficulties is the decision about what constitutes a sub-implementation unit (sub-IU). It has been suggested that about 30 sites need to be sampled in each sub-IU to give a good estimate of prevalence. Therefore if there are too many sub-IUs, the sample size will be too large to be feasible. The definition of sub-IUs is thus a critical feature of C-survey design.

Some small PacELF countries will sample all individuals in the C survey, but most will be surveying samples. Some countries may wish to vary the design of the C survey slightly from what is described in the PacMAN book, since they may have available more information on household listings or census enumeration areas which can provide a sophisticated sampling frame. This is perfectly acceptable, although approval from PacELF home office is advised to ensure the survey is comprehensive and representative enough with respect to all ages and all areas of the country. It is very desirable to design a "probability" survey in which the chance of selection for the survey is known (although is not necessarily equal) for each person tested. Because of the spatial heterogeneity in filariasis prevalence, it may be a good idea to stratify the country first into "levels" of prevalence before sampling within each stratum. Each country's situation will be different, but all are encouraged to investigate census maps and other sampling frames such as the UNICEF-Multiple Indicator Cluster Surveys (MICS) surveys or Demographic and Health Surveys (DHS) which may have been done or may be in process in their countries.

A frequently mentioned problem for sampling in the Pacific is that village populations are reluctant to accept that only a part of a village be tested. However the demands of good sampling design and logistical limitations often mean that only a sample of some villages can be included. This problem can be solved by testing all inhabitants and giving them the results, but only including the previously determined sample of individuals in the survey analysis.

A related problem is how to choose a subsample of a large village in an unbiased way. In addition to the methods described in the PacMAN book, two other possible ways to do this are suggested:

1) Unicef "Modified Cluster Sample" method: Randomly choose a 'segment' of the village (group of households, e.g. 10 or 20) and sample everyone in that segment as described in the UNICEF-MICS manual[1], Chapter 6. The method proposed is known as the "Modified Cluster Sample"method. However this requires that: (a) the number of 'segments' in each village in the country be estimated in advance and taken into account in the sampling plan; (b) a rough map of a village be available (or created); and (c) the surveyors are able to identify distinct segments and randomly choose one of them.

2) Use Portable Digital Assistants (PDAs) equipped with GPS/ EpiInfo software designed both to map households within a village and then automatically select a sample. These have been used by CDC for surveys of bednet use and MDA compliance in Africa and Haiti. They can be recharged with solar power and backup copies of the data can be downloaded to prevent data loss.

[1] UNICEF MICS End-decade assessment manual, available at www.childinfo.org/MICS2/finman/M2finM.htm

I suggest that each country carefully consider the definition of sub-IU as well as the options for the C-survey which are described in the PacMAN book, and request assistance from PacELF in the design at an early stage.

FOLLOW-UP OF POSITIVE CASES

During the C-surveys or even during the B (mid-term) surveys, individuals testing positive in the ICT test are encountered and treated. Some of these positive cases are false positives, but others are true positives. Some of these individuals remain positive year after year, despite treatment. The ICT tests for an antigen on the adult worm which is circulating in the blood. Since we do not know how long the ICT antigen persists after the adult worms are dead, we don't know what this persistence of positivity means. Such individuals should also be checked by 3-line blood slide for microfilariae, but with or without microfilariae, the persistence of adult worms remains unknown.

It is suggested that all ICT positive individuals have blood spots on filter paper taken, which can be tested at a later date for antibody or by Og4C3 test. It would be ideal if these tests could be done at Mataika house. At least PacELF should be able to provide the filter paper and instructions for taking and storing the samples.

CLOSER COLLABORATION WITH THE FIJI PROGRAMME

The experience of collecting the Samoa data from the early 1990s showed how important it is to keep full and accurate records of annual blood surveys. PacELF is in an excellent position to be able to assist the Fiji programme in keeping track of it's large amount of data and collecting it into an annual data-book for future use.

Since Fiji has a night-biting as well as a day-biting vector, impregnated nets may be a useful method of filariasis control. PacELF is assisting Fiji with design of a trial of long-lasting nets and curtains in Rewa subdivision. Similar opportunities for collaboration are encouraged.

4. RECOMMENDATIONS

1) PacELF book:

a) Drafts of Chapters 1, 4 and 5 to be produced by P Graves by February 2005.

b) Drafts for Chapters 2 and 3 to be produced by PacELF by Feb 2005.

c) Images for all chapters to be collected by Furuya-san.

d) PG to visit Fiji in April or May 2005 to finalize the draft in collaboration with PacELF staff.

2) Advocacy materials

a) Be consistent with acronyms when translating into French, and have native speaker check the proofs

b) Translate more materials into French.

b) Encourage sharing of bednet-oriented health promotion materials between Melanesian countries.

3) Publications

a) PG to continue working on the five paper drafts with a goal of final drafts for at least three of them by the visit in April/May.

4) PacELF future work

a) Encourage countries to consult at an early stage with PacELF home office when deciding on sub-IUs and designing C surveys.

b) Consider using PDAs in one or more countries to carry out sampling/surveys. Outside technical assistance will be required to plan, train and carry out this process, but it has significant advantages for both sampling and ease of data analysis.

c) Develop strategy to follow when consistently ICT positive persons (or children) are identified in blood surveys. Make filter papers available from PacELF for taking/storing samples for future testing by Og4C3 or antibody assay.

d) Assist the Fiji programme to produce a data book of survey results each year.

5. ACKNOWLEDGEMENTS

I am very grateful to the Government of Fiji, the WHO South Pacific Regional Office and the PacELF team at Mataika House for their assistance in this work and for all the time, information and documents they cheerfully provided. Thanks also to the Fiji Filariasis team for sharing their expertise.

LIST OF APPENDICES