WHO/HTM/RBM/2003.47

Protocols and methods for malaria situation analysis

World Health Organization
HIV/AIDS, Tuberculosis and malaria
Roll Back malaria

July 2003

Trial Edition

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Units

Annexes

Unit 1

Protocols for malaria situation analysis at district level

Field sites: ----------
Duration: ---/---/--- **to** ---/---/---

Part I. Technical protocol

A. Learning objectives

1. Undertake entomological, malariometric and in-vivo drug sensitivity studies and analyse the results in relation to malaria control
2. Conduct situational analysis and suggest recommendations and corrective actions regarding control of malaria in an area.

B. Working groups

There will be two main groups (each with three working groups) assigned to the different districts

Notes on working groups

A report will be expected from each working group at the end of the trip. These reports will be submitted to the facilitators and will constitute part of the overall evaluation of performance of the course participants. Participants are advised to work carefully on their reports while at the field site, as they are expected to submit and present them approximately a day after their return to Nazareth (see time-table). Each of the groups should select a chairperson and a rapporteur. Each of the working groups are expected to design their own date compilation formats (from the data collection formats) which suit their independent ways of information analysis.

Each of the groups may collect data either independently in the framework of the suggested types of information (listed below) or in collaboration with the other working groups. Some of the information collected may be shared between the working groups. Smaller or bigger groups may be tentatively formed in the field for the collection of some pieces of information as the need arises. One facilitator will be permanently assigned to each working group to assist in the field works. However, it should be remembered that facilitators are only assigned to assist not to do (on behalf of the groups) the particular jobs, which are expected to be accomplished by the participants.

Each of the working groups should stick to the schedule given below, as time for each field activity is limited. Participants are therefore advised to complete each of the activities indicated in the schedule within the allocated time and should avoid putting things off. The facilitators may decide to re-arrange the sequence of some of the activities in the field in accordance with local needs. The group facilitators will arrange all conditions required for each activity well in advance in order to facilitate the timely completion of the work.

The provided protocols for the situational analysis include the RBM "Proposed Methods and Instruments for Situational Analysis and the Annexes." The RBM protocol is basically prepared for situational analysis at national and district level. So you are advised to only focus at the methods and instruments for district level. It would also be advisable to be selective in adopting the formats, as all annexes provided in the protocol may not be practically applicable to your situation. The required information and focus of area to be considered in the situational analysis are also summarised below. The groups may decide to use different approaches to conduct the situational analysis with out missing the most important indicators and measurements.

C. Summary of information to be collected

1. General information

- Population size of he sector and health institutions catchment area with age and sex structure
- Map of the area
- Major developmental activities and occupations
- Geographic and climatic information (eg. Topography, rainfall, temperature, etc)
- Any major population movement (nomadic movement, civil unrest, drought, etc)
- Number and distribution of health service facilities (including private sector)
- Risk/exposure factor in relation to malaria
- District Health budget & plan
- Policy & guidelines

NB. Sources of information

- Local administration
- Health administration, NGOs
- Ministry of Agriculture (Agricultural Bureau)
- Ministry of Education (Bureau of Education)
- Meteorological stations
- Estate farms

2. Morbidity and mortality data to be collected from health institutions

- Ten top diseases (list and frequency distribution)
- Total number of all diagnoses by month during the last year(2-3 yrs)
- Total number of malaria cases both clinical and microscopical diagnosis by month during the last year
- Microscopically confirmed malaria cases by parasite species, age and sex, and by month during the last year
- Review of records of 20 most recent malaria in-patient cards or register book
- Total number of patients admitted during the last year
- Total number of severe and complicated cases admitted to the health centre/hospital by month during the last year
- Treatment practice (drug regimens prescribed, appropriate diagnosis and treatment procedures, etc) through observation and exit interviews
- Diagnostic quality control system
- List of 10 leading causes of hospital/health centre deaths and frequency distribution
- Total deaths by month during last year

- Total number of malaria deaths by month during the last year
- Review of five recent hospital/health centre deaths due to malaria
- Role of the health institution in epidemic control
- Constraints

3. Information to be collected from sector office

- Objectives and strategies of malaria control.
- Monthly number of patients examined and positive, by species, age, sex, etc during the last three years
- Number of localities and unit structures sprayed population protected, insecticide (s) used dosage, etc by spray round during the last three years.
- Criteria used in selecting an area for spraying
- Other control measures employed
- Analysis of Malaria Detection and Treatment posts (MDTP's) reporting and not reporting
- Diagnostic quality control system
- Constraints

4. Data on vector distribution and habits

- Major vectors of malaria in the area (species)
- Habits of the vectors (breeding, feeding, resting etc)

NB. Sources of information

- Malaria control offices (sector or zone)
- Entomological survey results of your own group

5. Resources available and required

Resources available and additionally required at each health institution and sector office for each of the following:

- Annual budget of the health institution or sector office:
- Salary
- Drugs
- Recurrent budget
- Others
- Manpower staffing pattern (in number and qualification)
- Human resource management
- Logistics (including source and re-ordering levels)
- Anti-malarial drugs
- Vector control equipment
- Camping equipment
- Laboratory facilities
- Vector collection facilities
- Others

6. Information system

- Sources of reports
- Sources of feed back
- Frequency of reporting
- Frequency of feed back
- Analysis and use of reports for malaria control

7. Studies/surveys to be undertaken by participants

- House numbering (part of a village)
- Sampling of households in part of the selected village for entomological, malariometric and re-plastering surveys
- Entomological studies
- Indoor resting collections
- Outdoor resting collections
- Night biting collections
- Larval collections
- Laboratory studies of collected specimens
- Adult susceptibility tests
- Vector density
- Malariometric surveys
- Spleen rate
- Parasitological studies (prevalence rate, species etc)
- In vivo chloroquine sensitivity study

Note: One village (or locality) will be surveyed at each field study site. Due to time constraints, only part of the village will be used for sampling. A sufficient number of sample households will be selected. All entomological (indoor resting collection), malariometric and re-plastering surveys are to b made in the same households. For malariometric surveys, all members of a household will be examined.

D. Results

Each group has to analyse all the date collected through out the fieldwork in a systematic way. Results should be presented in a simplified and self-explanatory ways by applying all the data management tools as appropriate. Try to avoid excessive explanation of the results in a text form and summarised results in graphs and tabular forms.

E. Discussion

The analysis of the date and information obtained at the district will have to be discussed thoroughly among the group. The results and trends should then be discussed in a broader dimension and should be justified with biological realities, environmental and other factors. Existing information at National and regional level can be compared with the obtained results and clarify any similarities or discrepancies.

F. Conclusions and recommendations

Based on the results of the situational analysis at the district, the groups should be able to come up with clear conclusions that are justified with the information obtained. The groups should then forward practical recommendations and corrective measures to be adopted by the respective district authorities or professionals.

Part II. Effective field working as a small team

A great deal of the preparatory work for your situation analysis and stratification will take place in the classroom and in the field. You will be working as a member of a small team of twelve persons. Each team will have a Field Facilitators. Their task is to ensure the smooth running of the local arrangements and to assist your team to work as effectively as possible. They will also be the source of basic information and statistics that you may decide, as a team, that you need in order to complete this exercise.

Working as a team is both interesting and demanding for learner, tutor and facilitators. Small group sessions are useful and helpful in many different ways, including:

- Helping learners to become actively involved in a task (compiling data and writing a situation analysis)
- Developing skills in team work
- Applying knowledge to the solution of the problems

It will be your task to apply knowledge and skills you have acquired in the course, and in your previous work, to the solution of a real life problem. The brief sections that follows set out some guidelines which will help your team to function effectively and usefully as a problem-solving group.

Setting the team climate

It would be best if you would come to an agreement amongst yourselves on the selection of a team leader. A team leader plays a very important part in developing the "climate" of the group. Some of the important tasks of the Team Leader that are necessary for the effective functioning of the group as a team are:

- Ensure that the team members become quickly acquainted with each other
- Help develop and atmosphere of informality so that all participants can say what they really feel, ensuring a frank discussion on all issues
- Encourage the active participation of all team members, without exception
- Stimulate a critical attitude to problem solving

Encouraging team work

Active participation in the group's discussions can be promoted if:

- The task of the team is clearly understood and agreed upon by all members
- Discussions are kept to the task at hand and are not allowed to wander off track
- Individual members do not try to monopolise discussions and decision making
- All members of the team are willing, and prepared, to listen to the contributions that all other participants are making to the question that is being discussed.

Using all the team resources

In most teams it will be found that different participants have special knowledge and skills which are useful to the group as a whole and would be useful for completion of the tasks and for the teams purposes. Early on in your teamwork try to find out what are those special interests, skills and experience of the members of the team.

Arriving at a consensus

It will help your work if you were to periodically review the progress made. This will help you to keep the following kinds of questions in mind:

- What are the objectives of the exercise
- How can the remaining time be organised, managed, so that further issues can be dealt with
- How have the discussions and work to date contributed to the overall task of conducting and writing up good situational analysis and stratification and making appropriate recommendations for malaria control at the district.

Asking and answering questions

There are several ways in which questions may be asked, and these vary in terms of their purpose in asking them. Examples include:

- Factual questions, where a member is seeking to ascertain facts, information and data
- Open questions, where an opinion may be sought in broad terms and is open to a wide variety of different answers e.g. "What are the advantages and disadvantages of promoting the use of larvivorous fish as a control method?"
- A redirected question, where a member of the team might put a direct question to the team leader and rather than answering the question directly, the Team Leader redirects the question to another member of the team (or to the team as a whole), thus promoting further thought and more active participation.

If your team is careful in:

- Setting the climate for productive and critical discussions
- Encouraging all members to contribute and participate
- Using all of the group's resources and talents
- Summarising and seeking consensus in order to keep the discussions on track and relevant to the development of the situation analysis, stratification and recommendations
- Seeking to ask and answer questions in the most productive way

Then, your teamwork should be lively, informative, interesting, personally rewarding and should lead to the development of a valuable situation analysis, stratification and recommendations for comprehensive vector control in the assigned area.

Unit 2

Methods for malaria situation analysis

Introduction

One of the key components of Roll Back Malaria is intensified national action through country-level partnerships working within the context of health sector development. National partners will be encouraged to work together towards common goals and using agreed strategies and procedures. This may require first a systematic review of malaria control and related health sector development activities, as a basis for the development of national strategies for rolling back malaria which adequately address local needs and build on previous achievements and ongoing activities. In order to facilitate this process, RBM has developed a methodology and instruments for situation analysis of malaria and related health sector issues at national, district and community level. The methodology and the instruments are described in this document, and should be regarded as a menu of procedures and tools from which countries can choose those they consider useful and relevant.

The instruments for national level situation analysis include instruments to review national health policies, strategies, management and support systems, and for making an inventory of health care and other projects relating to malaria. The instruments for district- and community-level allow an assessment of treatment and prevention practices in the household and the community, availability and quality of health care in public and private sectors, and potential local partners and local opportunities for intervention.

The situation analysis uses rapid assessment methods and takes less than two weeks for a health district and its communities. It is proposed to do a situation analysis in no more than three selected districts per country and the total country process can be completed within 2 months. Roll Back Malaria has created a Technical Support Network, consisting of experienced scientists from the African region, who will be available to provide technical support to the situation analysis if so requested by a country.

Objectives

The general objective of the situation analysis exercise is to facilitate the development of national strategies and implementation plans for rolling back malaria in countries participating in RBM.

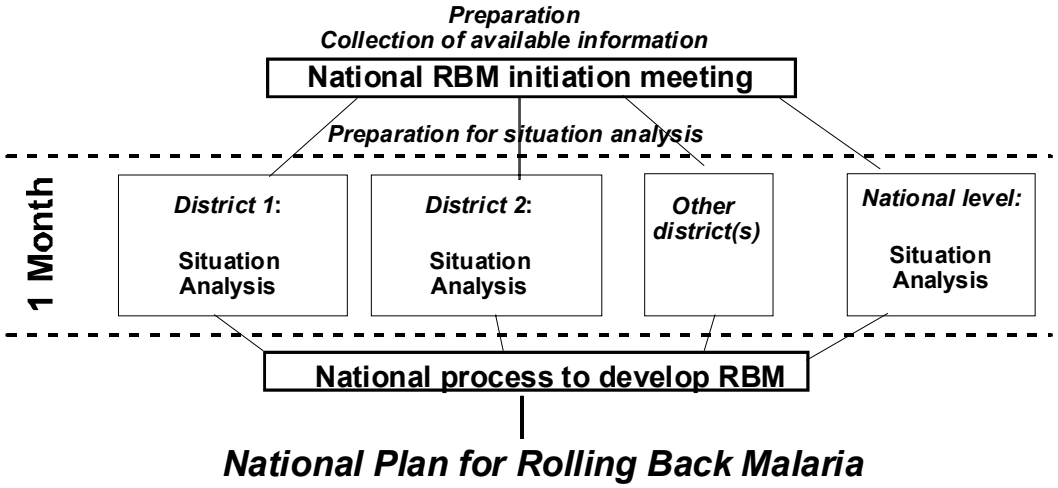
Specific objectives include;

1. To identify the strengths and weaknesses of national health policy and strategy for disease control with particular emphasis on malaria.
2. To assess the strengths and weaknesses of the institutional and structural framework for supporting disease control activities with particular emphasis on malaria.
3. To assess treatment and prevention practices at household and community level, with particular emphasis on malaria, and to identify community priority needs for health care delivery.
4. To assess the strengths and weaknesses of the formal, informal, private and public health care delivery systems for disease control with particular emphasis on malaria.
5. To identify ways by which to strengthen the health sectors to deliver disease control interventions more effectively.
6. To identify potential partners and opportunities for more effective intervention, especially at the community level.

The proposed process

The proposed process is as follows (see also diagram)

1. A country team initiates the RBM preparatory process by identifying relevant existing information on malaria control, health sector development and results from previous situation analyses if such exist. The team will identify information gaps, as well as ongoing or already planned country activities of relevance to RBM. The country team prepares documentation of previous assessments and undertakes structured desk analyses as it deems necessary. A few weeks may be needed for this process.
2. The country team presents the results of its review to a national forum. This might be a national RBM initiation meeting or another forum which brings the major national stakeholders together. Based on the review and other information presented by the participants, the meeting would decide whether the available information is sufficient or whether there is a need for further situation analysis. In case of the latter, the meeting would recommend on the extent of situation analysis to be undertaken.
3. If so recommended, the country would carry out a structured situation analysis exercise involving about three districts. In a period of about one month, each of the participating districts would perform a review, prepare a report and suggest priority points of action. During the same period, the country team would undertake the national level situation analysis.
4. The results of the situation analysis at district and national level would be fed back into the national process to develop Roll Back Malaria. This could be during a second national RBM meeting or in any other format the country deems appropriate. Such a meeting would review the results of the national level situation analysis, presented by the team of reviewers, and the results of the situation analysis in the selected districts, and their proposed priority points for action, preferably presented by the directors of the districts. This would then provide an evidence-base for the national movement for rolling back malaria.



The proposed methodology and instruments

The remaining sections of this document describe the proposed methodology for the situation analysis. The methodology and the corresponding instruments were developed by the RBM Technical Resource Network on Situation Analysis during a workshop which was held from 5-8 October 1998 in Geneva. The methodology was subsequently pre-tested in four countries (first in Nigeria and Ghana; a revised version was subsequently tested in Mali and Zambia). The pre-testing showed that the methodology and instruments were effective in describing critical areas for malaria control, including prevention and treatment practices, functioning of the private and public health sector, and adequacy of health policies.

The methodology covers the following:

1. Situation analysis at national level

    - Review of national health policies and strategies.
    - Review of institutional support systems
    - Review of national malaria policies, plans, strategies and interventions.

2. Situation analysis at district-level

    - District self-assessment of planning and management
    - Community level assessments
    - Assessment of Health Care Providers

The methodology and instruments are described in the remainder of this document.

Situation analysis at national level

Rationale

The fundamental aim of RBM is to strengthen health services to better take care of malaria. Strengthening of health services is an agenda of on-going health reforms and health systems development in most countries.

Historically, different aspects of health reforms like, policy reforms, health management systems reforms and health services reforms have tended to be undertaken without much co-ordination. This has limited the total benefit of the reforms. RBM intends to assist countries to assess the results as well as the processes for on-going reform so as to maximize the impact on implementation of priority interventions.

The following are some of the reasons for targeting malaria in this exercise:

- Participating countries have identified malaria as a priority problem,
- Efficacious interventions exist which can bring down the burden of disease significantly.
- The systems requirements for effective implementation of malaria interventions will have direct positive impact on interventions for other major contributors to disease burden like acute respiratory infections, and dehydration due to acute diarrhoea diseases. Innovative social marketing arrangements for promoting the use of insecticide treated materials could integrate with initiatives for promotion of materials for reproductive health and HIV prevention.

National level assessment will explore the contribution of the national health policy, the relevant health management systems, and the health services to creating an enabling environment for operational levels to effectively implement disease control interventions.

Objectives

- To review the national health goals, policies and strategies.
- To assess the strengths and weaknesses of the institutional support systems.
- To assess the health service design and implementation strategies.

The process

It is proposed that the core to national level review will comprise of an exercise conducted by a team of reviewers. The country concerned will appoint the team of reviewers. WHO/RBM will provide support by making available to the country the necessary funds, networks of experts and assistance with communication.

The team could comprise of a mix of national, and where required, external experts. As a minimum the team would comprise of 1 health systems expert, 1 malaria control expert, 1 public policy analyst and 1 financial management specialist. It is recommended that the team works together as a team through out the exercise.

The **terms of reference** are divided into 2 parts as follows,

A: First terms of reference of the team would include,
(a) Review of national malaria programme for the past 5 to 10 years.
(b) Performing desk analysis of all previous relevant studies or evaluation exercises, and identifying information gaps prior to the first national RBM meeting.

(c) Finalising instruments for national level assessments based on the identified gaps in agreement with the recommendations of the first national RBM meeting.

The reviewers should submit a synthesised report on items (a) to (c) showing clearly recommendations for the next steps given the present status of developed plans and strategies. The synthesised report should be submitted one week in advance to the participants of the first national RBM meeting.

B: Second terms of reference of the team would include,

(a) Perform a desk analysis of relevant policy documents, strategic plans, national guidelines, and review a sample of district and health facility plans, progress reports, and financial reports or returns.
(b) Update the instruments for national level review, and conduct interviews with selected national level officers, representatives of key stakeholders, intermediate level officers,
(c) Confirm the findings by conducting interviews and panel discussion with selected national and district level officers (in districts other than the ones undertaking detailed situation analysis, selected health facilities, and selected community level health providers (including traditional healers where applicable).

Review of National Health Policies and Strategies

This aims to assess intent by ascertaining the presence or absence, adequacy, and perceived degree of success of implementation of various policies and strategies.

The respective instrument will explore particularly the following,

(a) National health policies.
(b) Health management systems related policies.
(c) Health services structure related policies.
(d) Strategic health plan.

The proposed instrument is described in Annex 1.

Review of institutional support systems

This aims to assess the actual functioning of the systems by reviewing the functioning of a few critical and representative management support systems. The systems listed below are not exclusive. The team of reviewers or the country concerned should add or vary as required.

(a) Management of personnel,
(b) Research, monitoring and evaluation,
(c) Management of drugs and supplies,
(d) Management of finances

Detailed questions to assist with the exploration are as set in the instrument in Annex 2.

Inventory of malaria interventions

An inventory will be made of ongoing or planned malaria interventions and community-based health care activities in order to detail the framework within which malaria control activities could be expanded and to identify potential new partners.

Objective:

- To identify and describe the activities of community-based health care projects by the MOH, NGOs and other agencies within the country, particularly those relevant to malaria

Methodology

Questionnaires administered to or interviews undertaken with MOH, NGOs and other agencies on their community-based health interventions, specifically those directed against malaria (e.g. bed-nets).

Output:

- Map of community-based health interventions and bed-nets programmes by district
- Details of activity (e.g. population targeted, bed-nets provided etc.,) for each programme identified
- Details of sources of funding for these activities

The proposed questionnaire on malaria interventions and community-based health care activities is described in Annex 3.

Situation analysis at district level

Definition of district

A District is regarded as the smallest administrative sub-division in the country. However, this would vary from country to country depending on the size and population. In this circumstances country specific sub-divisions should be adhered to.

Selection of districts

Countries should select districts to demonstrate the situation of malaria and malaria control based on epidemiological and ecological variations, socio-economic status of the population and the involvement of partners.

Rationale

The main elements of the malaria control strategy for areas with stable, high transmission malaria are (i) early diagnosis and appropriate treatment of malaria-related fevers in children, (ii) intermittent treatment in pregnant women and (iii) protection by the use of insecticide impregnated bednets of high-risk groups.

The effective delivery of these interventions requires implementation strategies which are adapted to local needs and opportunities. It is proposed that the major stakeholders at the district level jointly develop appropriate implementation strategies on the basis of a situation analysis of malaria and the health sector. The situation analysis would be undertaken by the DHMT, supported by experts as required. It would include an assessment of:

- treatment and prevention practices at household and community level,
- availability and quality of health care in public and private sectors,
- potential local partners and local opportunities for intervention

Objectives

- To conduct a situation analysis of malaria and the health sector at all levels of the District, especially the community level
- To identify priority needs for malaria and the health sector
- To develop a implementation strategy for the district which addresses the priority needs
- To prepare a Plan of Action & Budget for approval and feedback through the National Strategy Development Process for RBM
- To inform the national strategy development process for Roll Back Malaria

Process at the district level

The situation analysis would be carried out by an ad-hoc team composed of members of the DHMT and commissioned consultants. It is suggested that the situation analysis would involve the following components:

1. Self-assessment of the district planning and management process as relating to malaria.
2. Assessment of perceptions, care-seeking and preventive behaviour with respect to malaria in the community
3. Identification of potential partners for malaria control at the community and district level
4. Assessment of accessibility and quality of care by health care providers at all levels

Plan for data collection

It is important to plan properly for the data collection. Things to consider properly are

- **Types of interviewers**

It is important to use interviewers from the DHMT so they can have a sense of ownership of the whole process. Have a mix of males and females so that whilst the males handle instruments for bed-nets, shopkeepers, village health workers, male group discussions and community based organisations, the females can do the illness histories for the pregnant women and children and female group discussions. It will be useful to have experienced interviewers but if they are not available, a fair amount of time needs to be put in training them.

- **Training of interviewers**

This needs to be intense and some of the things that need to be done include

- Translation of questionnaires
- Going over how to ask the questions properly
- Coming up with a practical timetable for data collection

- **Briefing of DHMT**

It is important that the DHMT is properly briefed on the data collection procedures and the type of data to be collected. They should be briefed on the whole RBM process and given the opportunity to ask as many questions, as they want.

Self-assessment and data collection

The methodology for the district self-assessment and the data collection in the community and at the facility level are described in sections 3.2 to 3.4 below.

The integrated analysis of the results of the assessments

Following the district self-assessment and the data collection in the community and at the health facility level, an integrated analysis of the results must be done with the active participation of the DHMT members. This will enable them have a sense of ownership of the program. They could fill in dummy tables, and also try to put together sections of the report for presentation at a stakeholders meeting. Analysing the results using the SWOT approach at this stage will be very useful. The finding would be presented by the DHMT.

District self-assessment of management

Objective

- To conduct a rapid self-assessment of the resources, policy, management and practice of the District Health System as a basis for District planning and support to appropriate interventions for malaria.

Methodology

It is proposed that the District creates an ad-hoc RBM Situation Analysis Team to oversee the planning and execution of the situation analysis, and to undertake the self-assessment of the district planning and management process as relating to malaria. The team may be composed of 3-4 DHMT

members (eg. DMO, DMCH, plus 1 to 2 members), 3-4 representatives of other stake-holders in the district (including community representatives) and an RBM Facilitator (external to the District).
The self-assessment of planning and management as relating to malaria would involve two one-day sessions of the Situation Analysis Team. The first session would take place at the beginning of the situation analysis. Using the checklist given in Annex 4, the Team would review the relevant information and documents for each of the listed issues, discuss experiences and problems and suggest possible solutions. To facilitate this process, some members of the Situation Analysis Team will be asked to prepare copies of the relevant documents and information, including (if available): District health plan and budget; District health situation analysis; District health facility and human resource inventory; District maps; policies and guidelines; and any local malaria research data. These documents are reviewed with the assistance of the RBM District Level Situation Analysis questionnaire, a budget mapping matrix, and district health resource map.

Annex 4 will be used for the self-assessment which will be done in three stages. The first stage will be to give the instrument out to the DHMT members who will be involved in the process ahead of time. This will enable them seek the necessary sources of information (files, memos, reports etc). Secondly, the team will fill in the matrix provided for the policy issues in the first part of the self assessment. After the matrix has been filled in, a group discussion will be held with the core DHMT staff to probe on issues raised in the checklist which could not get incorporated into the matrix and to discuss the other sections of the self assessment. The following categories of people (if they are not part of the DHMT) need to be involved in the whole self assessment. Pharmacist, Monitoring & Evaluation officer if he exists, Finance officer.

Assessments in the community

Objectives

- To determine community perceptions of common illnesses, including malaria-related conditions, with particular reference to recognition, cause, prevention and treatment.

- To identify care seeking behaviour patterns in response to common illnesses, including malaria-related conditions, and to pregnancy and the factors that influence these behaviours including attitudes, information sources and costs.

- To describe preventive behaviours relevant to malaria, especially the use of ITNs, and the factors that influence these, including attitudes, information sources and costs.

- To document the type and role of community based organizations and other potential partners in health development and discuss the implications for malaria control.

Methodology

Using the district map of communities and health care facilities, communities will be stratified as “having” a health facility or as being “far” from a health care facility. This reflects “easier” and “more difficult” access to services. A random sample of four communities will then be taken, two from the communities “having” and two from those classified as “far” from health care facilities. In each of the selected communities, data will be collected by members of the Situation Analysis Team or consultants with the required expertise. Members of the DHMT should accompany the teams to help make introductions and arrangements. The following instruments have been designed for gathering data from the community.

1) Focus Group Discussions with female and male community members (Annex 6)

The purpose of FGDs is to gather information on community perceptions about malaria, learn about local ideas concerning prevention, ascertain illness treatment pattens and preferences, and find out the degree of interaction between the health service and the community.

Number = 2 per community or a total of 8
In each community recruit groups of 6-8 males and 6-8 females from different sections of the village so that participants are less well known to one another.

2) Case studies - in-depth interviews on recent care seeking/illness experiences (Annex 7)

Case studies of child illness are crucial for documenting what actually happens when small children (<5 years of age) become sick.

Number = at least 10 children who had been sick in the past 2 weeks per community or a total of 40
Procedures: Procedures: Randomly choose a direction in the community by spinning a bottle at a central point in the settlement and moving along the direction that the bottle points.. Proceed to observe/interview in 10 families along that line. If houses are not in a line, make an approximation. If the end of the village is reached before ten sick children are found, go back to the starting point and chose a new direction. If ten children can not be found in a selected village, move to the next adjacent village and continue.

3) Case studies - in-depth interviews on recent pregnancies (Annex 8)

As with child illness case studies, those for recently pregnant women are aimed at determining both health promotion and illness treatment actions taken by women.

Number = at least 5 women who had been pregnant and delivered within the past 6 months (if village is small, may need to increase inclusion time to 12 months)
Procedures: Same as for child case studied.

4) Bed Net use observation checklist and brief structured interview (Annex 9)

This household survey in intended to document the availability of nets, experiences with using and reimpregnating them and reasons why people do or do own nets.

Number = 7 per community
Procedures: Randomly choose a direction in the community by spinning a bottle at a central point in the settlement and moving along the direction that the bottle points.. Proceed to observe/interview in 7 houses along that line. If houses are not in a line, make an approximation. If the end of the village is reached before seven houses are found, go back to the starting point and chose a new direction. Ensure at least 2 of the chosen families are without a net. If more than one family lives in the house, ballot for one only.

5) Key informant interviews with CBO leaders[1] (Annex 10)

CBOs are potential community partners in malaria control. This instrument is designed to document the types of groups available in the community as well as their actual experiences and contributions to health and development.

[1]CBOs are local voluntary associations such as women's associations, trade groups, religious societies, youth clubs, parents-teachers associations, age grades, neighbourhood councils, social groups, etc.

Number = minimum of 2 per community, or mimimum of 8 total
Procedures: Develop list of CBOs from FGD responses as well as consultation with community leaders. Stratify by gender where possible. Ballot for one male and one female CBO and interview an available leader. If there are different types of groups - e.g. social, trade, religious, development, try to interview some of each.

Assessment of health care providers

Objectives

- To describe the type of health care services being provided, including their utilization, accessibility, quality and costs.
- To explore the practices of non-formal health care providers, indigenous healers, spiritualists, volunteer village health workers and drug sellers.
- To identify and characterize linkages that exist between health care providers /services with communities and other agencies
- To assess management support systems

Methodology

Health care providers are defined as those in formal (public and private) as well as informal (volunteers, indigenous healers, spiritualists) sectors. The assessment of the health care providers will be carried out in the community and at their respective health facilities.

Formal sector providers

It will be necessary to identify the various types/categories of services provided in the district. In the public/government sector, these may include district hospitals, health centres and health posts or clinics. Private for-profit sector clinics form another category as well as NGO/Mission hospitals and clinics. These should be mapped and a sample of at least two facilities per category should be chosen for visits. If for example, the district has private for-profit clinics, government health posts and government health centres, a minimum of six facilities would be visited.

The following instruments are designed for the situation analysis in formal health care facilities.

1. Health Care Facility Check List
2. Health Provider In-depth Interview
3. Health Care Provider Assessment Form
4. Facility Based Client Exit Interview

1. The Health Care Facility Check List may require observing several sections of the facility and talking to several different staff. One should start with the staff member in-charge, but may also need to consult the person responsible for essential drugs, record keeping and child health, for example, although in some facilities one person may perform some or all of these functions.

2. The Provider In-depth Interview is designed for persons who actually attend to sick children.

3. The Provider Assessment form should be used by team members who have been trained in IMCI methodology. No more than three health workers treating sick children in selected facilities will be observed.

4. The Exit Interview will be linked to the clients observed using the Provider (IMCI) Assessment Instrument.

Informal sector providers

The FGD responses should be a source to identify other, non-formal providers such as VHWs, medicine sellers and indigenous healers. They may also be identified from attenders at the first district level stakeholders meeting. At least **two of each** of these different types of non-formal providers should be sampled per community selected for study. This means at least six non-formal healer will be interviewed per community selected. Since not all villages have non-formal healers, it may be necessary to visit villages neighbouring the selected villages to find enough of these providers. The following instruments will be used.

1. Medicine Sellers/Shop Owners
2. Volunteer (non-paid) Community Based/Village Health Workers
3. Indigenous and Spiritual Healers

1. Basically there are two types of shops of interest - those that sell preventive products such as mosquito coils, insecticide sprays and bed nets, and those that sell medicines. It may be possible to find shops that sell both as well as shops that sell either medicines or preventive products. If possible, be sure to find at least two of each category. For example finding one shop that sold coils and sprays, one shop that sold medicines and one shop that sold both would satisfy the data collection needs for this section. It may be that nets are sold in or near the same shops that sell cloth.

2. VHW interviews should be conducted with at least eight persons in the district. If it turns out that a village/community has only one VHW, it will be necessary to visit an additional village to meet the desired number of interviews.

3. Indigenous and spiritual healers come in various types. Some simply sell herbs; other say prayers, make incantations, and sell amulets; while another group may diagnose and make medicinal preparations. A variety is desirable, yielding a minimum of at least 8 per district, but if possible, one should aim at covering the different types of healer.

Annex 1

Instrument for policy review

Introduction

The instrument is focused on interviews and discussions with national level policy makers. Some of the questions however should also be used to direct discussion at the first national RBM meeting with donor representatives, representatives of important NGOs, representatives from other sectors of government and providers like the representatives of private and traditional practitioners. It is expected that countries will adjust the questions to suit their situation.

The questions are meant for direct discussions with interviewees. They are not intended to be sent out as questionnaires to be filled in. It is expected that interviewers will improvise additional questions during the flow of the interview. The use of recording equipment is highly recommended.

Process of assessment

The process of assessment at this level is as follows - deskwork analysis (review of existing documents including interviews), and panel discussion using SWOT analysis.

Guidelines for assessment

Deskwork analysis
This exercise should be undertaken by a team of consultant(s). All documents reviewed should be made available for further discussion.

Panel discussion

Preferably the facilitator should be a senior official of MOH or someone from a Management Institute with immense experience in moderating meetings. Panel discussions would be useful for dealing with large groups of officials/interviewees e.g. heads/senior official of the various departments/units of MOH, other relevant sector representative from ministries of Finance, Planning, Local Government, Education, Environment, Agriculture, Population. Etc. SWOT analysis is one of recommended methods for addressing issues and arriving at consensus.

A. Deskwork

1. National health policies

Are all national health policies in one national health policy document? (If not available, search for all policy documents i.e. memos, letters, meetings, circulars, draft proposals, papers etc. on policy)
What are the priority health problems outlined in the policy document(s)? (Please note the achievements and constraints stated in these documents and show the trends over the years).
Compilation of other related policies and guidelines in the form of letters, circulars, papers, directives, draft proposals, documents etc. from central government and other government regulatory bodies.
Review other relevant policies such as population, environment, decentralization, education, agriculture etc.

2. Health service structure

Policy documents on health service structure and reforms (the analysis should show the process, the content and the actors). Indicate the stages of implementation, achievements, constraints and solutions.
National Health strategic plan
Analyses of national health strategic plans and other related documents
Health systems management policies and guidelines:
Analysis of policies related to health system management and other related policy documents

B. Panel discussion issues

1. National health policies

General questions on health policy formulation and review
What are the processes for development of a national policy? Do you have a national framework for policy development? Do you have a National Policy Co-ordinating Board/Council? Membership? Are they functional? How was consensus obtained from stakeholders? Do the priority health problems remain the main priorities at the moment? What are the bases for priority rankings? What rank is malaria? What is the policy on involvement of the private sector? What is the policy on involvement of other sectors? What is the policy on empowerment of communities to influence the direction of their health services?

Specific questions on political commitment
What is the proportion of the national budget allocated to the health sector? What are the trends over the past four years? How does this compare with other social sectors like education? What proportion of the health sector budget is allocated to first contact level service? What proportion of the budget is allocated directly to support for community based health care activity? What are the trends in these allocations over the past three years? What are the trends in economic indicators for the country over the past three years?

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

2. Health service structure related policies

General questions on organization of health services
What influence does the nature of priority health problems have on the design of the health system? What is the policy on referrals? Does this include what and how much money patients have to pay when referred from a lower level to a higher one? How are the referral needs of malaria and other acute illnesses taken care of by the current design? Is equity of access a major consideration in the design of the health system? How is this demonstrated in the current design? Is cost-effectiveness a major concern in the design of the health system? How is this demonstrated in the current design? What are the national health service's coverage goals and targets? In the light of what is known about malaria today, how does the malaria specific mortality impact on national health service coverage and goals?

Malaria specific questions
Is there a policy for malaria control? Is there a mechanism for co-ordinating malaria control activities?

Household case management
What are the household and health seeking practices of mothers/caretakers for fever/malaria? Is treatment at home a recognised component of the case management strategy for malaria? If so what drugs are officially authorised for self-prescription? What information package has been made available to the households? How is the quality of drugs for use at home guaranteed? How satisfactory is home treatment? What is the policy on laboratory support at various levels? How in your opinion has this been successfully achieved? What are the implications for malaria control?

Household disease prevention
What preventive methods are designed for active promotion? What promotion strategies have been adopted? How successful is their promotion? What quantitative evidence or methods are used to determine the success rate?

First health professional contact level (i.e. licence practitioners):
What is the officially designated level of first contact with professional service for the households? What is the population size allocated to such a facility? What is the relationship between the number of clinically competent personnel for the facility and the population size allocated to the facility? What is the officially desired maximum travelling time for the furthest household from each facility set out in the policy guidelines? What is the desired maximum waiting time at such a facility laid out in the policy guidelines? How do these fit in with the requirements for emergency malaria treatment? Is this level expected to provide clinical differential diagnoses? Is this level expected to handle acutely ill patients? If not what is the next immediate level for referral? What communication arrangements are provided to facilitate patient evacuation? Which document outlines all these guidelines and targets? What proportion of existing facilities have functional emergency evacuation facilities? What
is the coverage at present of the population at the targeted travelling time stated above? What is the policy on integration of services at facility level? During outreach visits to communities? What are your experiences with integration of services?

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

3. National health strategic plan

General questions on health strategic plans
Is there a documented national health strategic plan? Have all stakeholders agreed upon the plan? What is the implementation period for the plan? What will the main achievements be each year? If there is no single document, what is the guiding principle for health development activity? If not available, what do you use?

Specific probe questions
What is the national target for population coverage at the standard of access officially set? What is the level of coverage at the moment? When is this target set to be achieved?
What is the total number of units to be established to achieve the target? What are the strategies for establishing the units? All public? Private investment promotion? Community owned and managed facilities? What are the year by year milestones? What is the estimated growth in the recurrent expenditure? How does this compare with the projected growth of the national economy? What is the evidence from economic trends?
What is the estimated trend in the expenses attributed to specific inputs for malaria over the same period? How does this relate to the projected disease burden?

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

4. Health systems management related policies

General questions on health system management

What are the budgetary policies for ensuring that health priority ranking influences resource allocation? What are the resource management policies to promote innovation at all levels? What are the resource management policies to ensure that equity of resource allocation is achieved particularly for the remote areas of the country? Do these function well for financial resources? Do these function well for human resources? What are the financial management policies to minimise time wastage and administrative overheads in financial transactions at all levels? How smooth are finance-related transactions at the facility level? What is the evidence for this?

Specific probe questions

Specific questions for management of the first contact facility:

What are the arrangements for the first contact facility to maintain identity with individuals or households in the catchment area? Is there a Family health register? Family health card? Or are there only patient registers?

Is this facility expected to perform periodic community diagnosis? If so, what are the guidelines on community diagnosis? How are the findings recorded? Used? What is the recommended frequency for updating the community diagnosis? If periodic community diagnosis is not mandatory for the facility to perform, which facility in the system has the responsibility?

Is the facility required to maintain a record of vital statistics? If not, where is such information kept? How does the facility access the information for planning?

What is the estimated annual cost of running such a facility? How much of this cost is budgeted for through central sources? Is it possible at the end of the year to track actual expenditures to this facility? Is it possible to break the expenditure to specific outputs? What are the outputs for expenditure control?

Can a private individual put up such a facility? Would the same personnel profile be acceptable as for a publicly run facility? Would the facility be supervised by the district health service in the same way? How are the mechanisms to facilitate access of the poor if such a facility is the nearest to the household?

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

Annex 2

Instrument for review of management and support systems

Individual interviews

It is proposed that this instrument is administered to the heads of these departments/units. It is expected that countries will adjust the questions to suit their situation.

1. Management of personnel

Respondent: Head/Senior Officer-In-Charge

General on human resource management

What are the mechanisms to ensure that first contact level facilities have properly qualified personnel, and in correct strengths? What are the mechanisms to ensure equitable distribution even to the remote communities? Has this equity been achieved? If not, what are the main constraints? What are the mechanisms to ensure that reward matches with work load and excellence? How effective are the mechanisms? How is performance monitored? How is human resource needs assessed for the various facilities? Which categories of staff are in short supply? What plans are in place to address this shortage?

Specific probe questions

- What is the minimum number of personnel with competence to manage a case of malaria without supervision officially allocated per 1st contact facility? What proportion of the existing facilities at this level have a full complement of such personnel? What is the source of the information? What are the difficulties if any in trying to achieve a fair distribution of personnel to such facilities?
- What are the arrangements for in-service updating of skills for personnel at this level? How do personnel in remote locations benefit from these arrangements? How do these in-service training arrangements relate to skill building for priority problems? Specifically for malaria?
- What are the arrangements for ensuring continuity of service? Is there a maximum number of days that an officer can be out of the station for workshops per year? Is this done by attempting to integrate and co ordinate workshops? If so how successful are the integration attempts? What if any are the major constraints? How is the service covered when an officer has to go away for any reason?
- How is performance of an officer assessed? Does the reward match with workload? Does the reward match with excellence? Is there compensation for hardship? If so, how is this calculated? Does it match with the degree of hardship?
- What mechanisms are in place for the population of the catchment area to influence quality of performance of personnel? Do the mechanisms actually work? What is the evidence?
- What in the design of the basic training ensures that personnel acquire the correct competence for service at this level? What is the annual output of the training schools? How does this output fit in with national requirements? Are there defined problems in the performance of the schools? Are there already defined solutions to the problems? What influence does professional politicking play in personnel management and development?

CHECK: Request for a human resource inventory of a health facility around and go and verify from that facility

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

2. Research, monitoring and evaluation

Respondent: Head/Senior Officer-In-Charge

General questions on research, monitoring and evaluation issues

What are the mechanism or systems to ensure that first contact facilities have adequate technical support in planning and managing disease control strategies particularly for malaria? Are there activities centred on operations research? What are the mechanisms to ensure that policies on drugs and insecticide are based on sound scientific advice? Any example to demonstrate this? How is drug and insecticide sensitivity monitored? What is management information system are you using at administrative and health facility levels? Describe them? What are the problems (if any) associated with your MIS? What are some of the solutions?

Specific probe questions

Are there centrally based disease control centres? Are they backed by defined laboratory and field research centres? Do local universities play any formal role? Are there centres routinely monitoring quality of drugs and other supplies? Are there separate centres for each priority disease? Would it be possible to develop capacity in one centre to service several drugs? Would this be more efficient or not? Are there activities centred on ethnographic studies? Are such researches an integral part of control activities or ran independently on adhoc basis? Which studies have been used to arrive at some of the policies currently being implemented?

CHECK: Request for an institution with the discussed facilities and go and verify from this facility.

3. Management of drugs and supplies

Respondent: Head/Senior Officer-In-Charge

General questions on drugs and supplies management

What are the mechanisms to ensure that first contact level facilities have an adequate supply of drugs? How well are the mechanisms functioning? How is monitoring of performance done? How is quality monitored?

Specific probe questions

- What are the main sources of drugs for this level of care? What anti-malaria drugs are supposed to be stocked at this level?
- Would these quantities agree with estimates made at the facility on average? Are the facilities involved in budgeting? What methods do these facilities use to estimate annual requirements?
- Are the facilities allowed to procure additional drugs for themselves? How would such drugs be accounted for? How would the quality of such drugs be monitored?

Specific questions for management of national drug store or warehouse

Were there any problems encountered in relation to inventory in the past financial year? If any, what were they? What were the underlying causes? What measures have been put in place to address the problems? Is performance better now? What additional changes are needed?

Were there any problems with drug distribution in the past year? What were they? Have these problems been solved? How efficient would you rate the national drugs and supply distribution system? What adjustments would you like to make? What are the constraints?

Do you have any problems with quality control? Importation procedures? Procurement procedures? Financing arrangements? Please comment on how you are handling the problems.

CHECK: Request for the breakdown of drugs supplies and costs in one complete year.

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

4. Management of finances

Respondent: Head/Senior Officer-In-Charge

General questions on financial management

Are there mechanisms do to ensure that budgets and expenditure favour service production? How is financial accountability ensured at all levels? How is actual allocation and expenditure tracked down to all levels? Is it possible to track expenditure towards out puts? Is the system able to absorb additional resource? What proportion of the total budget is from internally generated funds? How are these funds managed?

Specific probe questions

- What is the total budget available from external and government sources for the health sector this year?
- What proportion of this money has been allocated to community level activity? How will it be accounted for?
- What proportion has been allocated to health centre activity? How will this be accounted for?
- For the resources allocated to community level and health centre levels, what proportion will be spent on administrative overheads? What proportion has been allocated for direct health inputs?
- If it is not possible to analyse the allocation as proposed above, what are the mechanisms for ensuring that a critical amount of the resources will be used to purchase service as close to the family as possible?
- Given the existing systems for resource allocation, if the available budget from donors pushed the resources up by 5%, how much of the additional resource would be used to finance directly the health centre and community based services? Would this happen automatically with available calculating systems? Would it require fresh negotiations? Is there a mechanism where all contributors to the funds and providers would jointly influence the decision on the additional expenditure?
- Considering expenditure patterns of the previous years, does actual expenditure tally with the resource allocation aspirations?
- Would the resource allocation systems so far described favour effective implementation of malaria interventions without making special protection of 'malaria money'
- How will you ensure that outputs for malaria control are achieved at the lower levels when funds are not earmarked specifically for malaria?

CHECK: Request for budget and expenditure in one complete year.

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

5. Public Sector Financial Policy

Respondent: Budget Division/Department, Ministry of Finance

General questions on public sector financial regulation and monitoring
What are the policies and guidelines for formulation of public sector budget? How are these policies and guidelines made? What are the processes? Who are the actors? How often are the policies and guidelines reviewed? How are financial ceilings and spendings of sectors set? How are resource released to sectors? What are the processes? Are exemption rules? If yes, and how and who is it applied to? How are donor funds (i.e. loans, grants and aids) agreed upon and channeled to the sectors? What are the processes? Who are the actors? What are the financial reporting procedures for both government and donor funds? Can sectors apply for additional funds? If Yes, what is the procedure? If No, why not?

CHECK: Request for copies of the policy and guidelines.

SWOT analysis and action tables should be completed before closing the interviewed (Please bear in mind the following questions: why have things happened this way? Why have thing gone this way? Why have we not done something before? What can we do now?)

Annex 3

Inventory on health care and other projects relating to malaria

Respondents: Programme Officers of MOH, NGOs and other agencies

If you have any programmes that are providing community-based healthcare interventions within this country, particularly those focused on malaria.

1) What is this programme called?
2) What are its main objectives and strategies?
3) What are its main activities?
4) Which districts are covered by the programme?
5) Who are involved in its design?
6) Who are implementing it?
7) What population size is covered by the programme (specify by district)?
8) How many communities are covered by the programme (specify by district)?
9) When did this programme start?
10) When is this programme expected to finish?
11) How is this programme financed?
12) Is there a tax exemption system in place? (name items)
13) Does this programme provide training?
14) If yes... who, how many and in what?
15) Does this programme provide impregnated bed-nets?
16) If yes...
    - Who is targeted?
    - Which insecticide is used?
    - What is the source of insecticide/bed-nets?
    - How much were paid for insecticide/bed-nets?
    - Are bed-nets and re-impregnation provided free or are there charges? (How much)

17) Does this programme provide curative care? If yes....antimalarials?
18) Does this programme provide health education?
19) If yes...what? (e.g. posters, media)
20) What are the main problems encountered in the implementation of the control programme? How are they being addressed?

Annex 4

Checklist for district self-assessment

For each of the following issues, discuss whether there is a policy or guidelines dealing with it, whether a copy of the policy document or guidelines is available at the district level (review documents if available) and whether it is actually applied. Discuss the experiences and problems associated with it and try to identify reasons and possible solutions.

Policy and implementation

- essential drug list by levels of care? (Specifically for anti-malarials)
- drug revolving fund? (Specifically for anti-malarials)
- most recent national guidelines for case management (IMCI)?
- most recent national anti-malarial drug policy? Does the drug policy specify the range of drugs at different levels of care and which ones should be prescribed or acquired without prescription?
- policy or practice for non-government health providers in the prescribing of anti-malarial drugs?
- policy on inter-sectoral collaboration, and what mechanisms are there for the collaboration of other sectors? (Particularly for malaria control activities)
- District plan/policy/guideline for ITN promotion?
- District policy on user fees and exemptions/subsidises? (Specifically anti-malarials and bed-nets)
- District plan/policy/guideline for malaria prophylaxis during pregnancy?
- District policy on formulation and implementation of the district health plan
- What health care activities are the community involved with?
- What malaria activities are the communities involved with
- Social mobilization?
- Drug supply in private and public sectors?

District health management

- Composition of the DHMT
- Functions of DHMT
- How does the DMHT function as a team (e.g. frequency of meetings?)
- Role of the local authority and other stakeholders in district health planning, management and implementation

Resources

- map of health care facilities by ownership, location and level of care. Does this map include location of communities? Catchment populations?
- inventory of health and human resources by categories and facilities?
- (If not available then aide in developing this because it will be required for the sampling of health care facilities and communities)
- transportation is available to the DHMT for supervision and drug delivery?
- functional means of communications between the various functional levels of the health care system (telephone, radio-call, e-mail) available to the DHMT
- Are new infrastructure developments through the district? What are they planned for?
- Staffing norms at the district. Who sets them, what numbers are enough to manage the different types of facilities in the district.
- Mechanisms for monitoring and evaluation of resource use

District health plan and budget

- year and time period covered by the most recent District Health Plan
- information sources used in planning
- Does the plan include a District Health Situation Analysis?
- If yes, does the situation analysis:
- include a map of the demographic pattern of the district?
- have a map or inventory of all health care providers, facilities, resources and ownership in relation to the demographic pattern? (If not, assist)
- include information on malaria endemicity, incidence and risk? (If not, assist)
- What is the content of the current District Health Plan? (Assist team to conduct budget mapping of interventions supported and source of funds for:

    1) actual expenditures last fiscal year; and
    2) the planned expenditures for the current fiscal year using the RBM Situation analysis

District Health Budget Mapping Matrix

Use this to determine:

1) What share of resources is allocated to malaria case management (or IMCI)?
2) What share of resources is allocated to ITN promotion?
3) What share of resources is allocated to prevention of malaria in pregnancy?
4) What is the overall priority given to malaria in the plan?

- What is the budget for inter-sectoral activities?
- Does the DHMT raise its own financial resources? What is the experience and sources?
- Can the DHMT allocate (re-allocate) its own financial resources?
- District health plan and budget for supervision
- Does the plan allow for supervision of only government health facilities or all facilities?
- What is the content of the supervision plan (resource needs, quality, compliance, training needs, outreach, etc)
- Actual District health partners to the DHMT.
- The type of relationship that exists between the identified partners and the DHMT
- Non-mobilized potential partners to the DHMT
- What share of the resources is allocated to public health
- What share of resources is allocated to disease control
- What is the future health plan with regards to malaria control.

Malaria case management and prevention

- District estimate of the annual malaria incidence rate for children and adults
- Does the District have adequate supply of anti-malarials in relation to the expected incidence?
- Problems, if any, with the supply of anti-malarials?
- District health providers been trained (upgraded) in the application of malaria case management (IMCI) guidelines within the last 3 years?
- Does the district have/support any ITN programmes?
- What is the source of supply of the nets and treatment kits. What are the problems associated with it.
- ITN promotion plan: If it exists, how does it engage the community in planning ITN implementation?
- If no ITN program in place, are there any future plans? What when will it be what will be the source of net and insecticide supply.
- Does the DHP include assessment of inter-sectoral impacts on malaria risk (e.g. Irrigation schemes, micro-dams, etc)

- What is the nature of the assessment? Who are the partners and proposed financiers, when do you propose to start.
- Actual and potential partners for malaria case management and prevention? Is there a plan to support and involve them in malaria control programmes?
- Referral mechanisms (esp. for malaria)
- Monitoring and evaluation mechanisms
- Mechanisms for integration and co-ordination

POLICY AND IMPLEMENTATION

ISSUE	Is there a policy		
	Existing	Available	Applied/Used
1. Essential drug list by level of care (especially for antimalarials)			
2. Drug revolving fund (specifically for antimalarials)			
3. Most recent national guidelines for case management (IMCI)			
4. Most recent national antimalarial drug policy. Does the drug policy specify the range of drugs at different levels of care and which ones should be prescribed or acquired without prescription?			
5. Policy or practice for non-governmental health providers in the prescribing of antimalarial drugs			
6. Policy on inter-sectoral collaboration and what mechanisms are there for the collaboration of other sectors (particularly for malaria control activities)			
7. District Plan/Policy/Guideline for ITN promotion			
8. District Policy on user fees and exemptions or subsidies (specifically for anti-malarials			
9. District Plan/Policy/Guideline for malaria prophylaxis during pregnancy			
10. What health care activities are the community involved with (specifically related to malaria)?			
11. Social Mobilisation			

Annex 5

Guidelines for the use of community and provider instruments

This guide gives some directives for using the research tools from the point of view of facilitating their implementation. It is not exhaustive.

Drug and remedy vendors

It is important to build trust with the resource people who will help identify the sellers as well as with the sellers themselves. It is not however necessary to put this in writing. This confidence building can be done by introducing oneself, speaking briefly about the objectives of the task and emphasising that this study is not only being carried out in their particular community. If necessary, list the other communities involved in the study that would be known to the audience.

Identification of sellers by category

Sellers can be broken down into two categories: those who sell in pharmacies and pharmaceutical depots (private or otherwise) and those who own general stores selling various articles and goods including drugs. This study does not include insecticides as these are very diverse and an evaluation of their quality can be excessively time consuming. Those insecticides that are found abundantly in all shops should not get any particular attention in this study.

With the help of the resource people (health workers, community health workers), the next step is to identify those vendors eligible to take part in the study.

The study should be carried out in communities or villages. In communities where there are less than five vendors, the study will be exhaustive. When there are more than five vendors, a list should be drawn up and five vendors drawn at random.

Attitudes to avoid: Do not make judgement on the answers of the interviewee even if you feel that he should have some answers that he is not providing, as by doing so would be anticipating his replies. Do not make comments such as “how is it that you do not know the name of this drug or how is it that you do not know the number of drugs sold last week?”

Do not show surprise as this may influence the mood of the interview.

Herbalists and drug peddlers

Building trust with these vendors is very important, but also very difficult. The herbal healers may think that you are only interested in causing problems for them. This situation is even more delicate with drug peddlars and travelling vendors. It is important to give them even more information on the work being done and insist that the study does not just concern their community. The resource people identifying them should also feel assured

Identification of these vendors

They can be identified using the resource people (village chiefs, village leaders), and after a brief meeting at the end of the focus group discussions or they can also be identified while selling in the markets.

Five people from each category should be chosen. When all three vendors are present in the community, two herbal vendors (if possible one male and one female), two travelling vendors (one male and one female) and one drug peddlar, (if possible alternate between male and female between communities) should be chosen.

Traditional healers

These are identified at the end of the male and female focus group discussions. The team who has collected the data will choose one male and one female among the chosen healers. Those who have the largest clientele according to the data collected should be chosen. Building trust is again very important.

Key informers of community organizations and associations

These are identified in the same manner as the traditional healers. The two most dynamic and active organizations should be identified. One male and one female organization should be chosen but they can also be mixed. In all cases, if there are many associations and they are not mixed, the most **dynamic** female and male associations should be chosen.

The interview should be held with the head of the association, if possible the top person - head, president or other title.

Community health workers

Identification of these vendors is carried out in the same manner as the traditional healers. Two should be identified per community, if possible one male and one female.

Case study on childhood illness experiences, recent pregnancies, use of mosquito nets and curtains

Please refer to the methodology outlined in section three "Assessments in the Community" in the RBM methodology document dated 17 December 1998. Remove the number to be interviewed as this will depend on the number of districts and consequently the number of villages. (This, of course, no longer involves pre-testing the instruments of the methodology).

Again building trust is paramount. The same steps should be followed as for drug vendors as well as drawing on the details given in the 17 December version of the methodology.

Care providers

There are three types of surveys to be carried out among the health care providers. Their trust can be earned easier by explaining the objectives of the study and also if the district health team are involved in the activity when not all the team is from outside the district health services. The involvement of district health personnel can also create trust, however, this is not enough due to the certain supervisory and control functions held by district health and welfare officials. It is therefore necessary to give ample information on the activity to all the health care providers being surveyed and to avoid expressing an attitude which could give negative impressions.

It is important that the activity should not be perceived as a spot check aimed at sanctions, rewards, approval or disapproval of some fact or behaviour.

The check list survey takes place with a chosen community health service provider regardless of the nature of the health service (reference, arrondissement, revamped arrondissement, community, or private health centres, dispensaries or maternity clinics in the case of Mali for example).

There is only one survey per health facility. The survey takes places with the head of the health centre or another member of staff, as even if the head is absent, the survey must still be conducted. Similarly the interviewee may call on another member of staff for certain issues that he is not familiar with. This type of situation should be noted under "remarks".

The interview with the health care providers is, on the other-hand, focused on the individual activity of the staff member interviewed. (The questions concerning the facility e.g. questions 14 – 17 should be transferred to the facility check-list tool).

The assessment of the providers is a more delicate exercise because, as well as building confidence, it is also necessary to maintain checks which require certain precautions:

1. The form on which the data is recorded must not be seen by the person being assessed.
2. Given that the consultation is confidential, the evaluator's presence must be agreed with by the provider or justified, for example, on the grounds that he needs to listen to the patients' expressing their complaints and judge their capacity to verbalise them.
3. The evaluator's presence must be discreet. He should pretend to read and take notes on a medical journal or review, for example, or documentation on the centre in order to be able to discretely fill in the form.
4. He should not memorise facts and note them down afterwards.
5. The task should serve to encourage providers to accept such an exercise in the future by giving them feedback on the results and discussing it with them later.
6. The fact that the provider does not know the real reason for the interview will help reduce bias which could influence his behaviour.

For this assessment, one member of staff from each category of providers, who carry out consultations, should be surveyed. If there is more than one member in a particular category, the person can be chosen at random after the arrival of the team.

Exit interview with patients after consultation

The health workers should not be informed of the contents on the form in order to avoid interview bias

30 interviews at least should be carried out by centre

It is again necessary to take certain precautions

1. Interviews should be carried out in isolation as the proximity of other people could cause the interviewee not to give certain information
2. The interviewer should introduce himself and give some of the reasons for the interview, however, he should not say that it is to evaluate the work of the health worker.

Focus group discussions

The guidelines for focus group discussions as outlined in the methodology document of 17 December should be retained. However, possibly many people will turn up for the focus group discussions and in this case, it must be ensured that the number of participants outside the numbers indicated is not more than 12.

It is not necessary to give guidelines on running focus group discussions or on the conditions for forming groups. It should however be remembered that the discussions should be carried out under the normal procedures and that this necessitates that only people experienced in the subject should be identified.

It is also necessary to remember that homogeneity is required for certain parameters, in particular, for certain specific issues, a male/female group should not be used.

After the discussion, do not leave in a hurry. The team should stay until the last participants have left as often very important things are said: at this time. Participants may talk among themselves, they may speak to the moderators about issues that they did not want to bring up during the discussion, or sometimes simply joke with them. Important data can often come out during this time.

Practical hints

For all interviews, observer notes are useful, these include among others:

- observations on the facility, its equipment, its state,
- observations on community and social activities taking place during the presence of the team in the community,
- observations on health-care seeking behaviour,
- observations during family interviews about the existence of drug vendors as often information can not be obtained by simple interview only,
- observations on general attitudes of the provider being assessed
  - does he build confidence in the patient,
  - does he give particular attention to everything the patient tells him,
- how do patients wait for the consultation, what are their complaints while waiting for the consultation and afterwards,
- debates at the end of the focus group discussions,
- discussions while assigning people to carry out the surveys,
- geographic accessibility to the health centre visited and distance between communities being surveyed,
- existence of working tools in the health centres and elsewhere.

Annex 6

Focus group discussion guide

Planning: Focus groups consist of 6-8 people, ideally persons who are not well known to each other in advance to avoid one or two persons biasing the responses. There should be an experienced moderator to lead the discussion and a recorder/rapporteur to take notes. Neither of these people should be a member of the health service so as not to inhibit discussion about the health services. A tape recorder should be used, and after the discussion, the recorder and the moderator should review the hand written notes together while listening to the tape recorded version. The moderator should introduce all participants, explain the general topic of discussion and let participants know that everyone should contribute his/her ideas. After the recorders notes have been revised, the transcript should be typed, preferably on computer. Copies of the transcripts will be needed during the data analysis meeting.

Village: _____ Number of participants: _____

Type of Group: ❑ female ❑ male

1. Please tell us about the general health problems in this community and the most common diseases among:

   - Adults
   - Children
   - Pregnant women

   PROBE: What about illnesses associated with: ... hot body
   ... stomach problems
   ... convulsions
   ... measles
   ... cough

   PROBE: Ask about febrile illnesses and convulsions specifically

2. Specifically concerning illnesses with fever and convulsions, what are the causes?,

3. What are the main things people in this community do to prevent illness (that is to keep people from getting the illness at all)?

   PROBE: Ask about: ... hot body
   ... stomach problems
   ... convulsions
   ... measles
   ... cough

4. What are the different ways that people can take care of illnesses with fever? With convulsions?

   [Use probes below to ask about care for small CHILDREN and ADULTS separately.]

   PROBE: Local forms of care at home
   Care from shops - ask for names of shop
   Local healers - indigenous and spiritualists - ask for names of prominent healers
   Private health providers - ask for names of these providers
   Government providers - ask for name of commonly used facilities

PROBE: Specifically ask about knowledge of common drugs/medicines for these illnesses: types, names, knowledge of how the drug "works," costs, preferences, reasons for choice.

5. Among those illnesses associated with hot body and with convulsions, what are the common forms of treatment?

6. What are the main problems people have in getting care/help when they have a disease with fever? With convulsions? With stomach problems? With measles?

7. Specifically, please share your experiences about the type of care received at (nearest district health facility).

8. Please tell us about the situation concerning mosquitoes in this community.

PROBE: Problems caused by mosquitoes
Efforts to get rid of mosquitoes - explore techniques, preferences, costs

9. What has been the experience in this community with bed nets?

PROBE: Type of nets, source of nets, whether impregnated, experience with the nets, preferences and problems

10. What local groups and associations in this community contribute to the health and development of the community? Give examples of specific projects or activities.

11. Please tell us about any recent meetings, visits or encounters between the community and the district health staff.

PROBES: Specify forms of contact and dates
Discuss the issues addressed and what was resolved
Give examples of how the community has been involved in health programmes

12. Finally, please give your own suggestions about how health services could be improved in this community.

Thank you for your participation.

Include name of interviews in report/transcript

Annex 7

Case studies of recent illness in children under five

[Screen for illness that occurred within the past two weeks for a child <5 years]

Background: Age of sick person: _____Sex: ❑ female ❑ male Village _____
Respondent: Name:_____❑ mother ❑ other _____
Profession of father _____ Education of father _____
Profession of mother _____ Education of mother _____

1. What type of illness did the child have? Please describe the illness.

(From narrative above, mark the following if mentioned:

❑ hot body	❑ convulsions	❑ diarrhoea
❑ weakness	❑ joint pain	❑ headache
❑ cough	❑ yellow eyes	❑ loss of appetite
❑ vomiting	❑ catarrh	❑ other

Possible diagnosis (classified by a team doctor on the basis of the above information)
❑ Malaria ❑ Malaria coupled with another disease ❑ Not malaria

2. For how long was the child unwell?

3. (**First action**) Please describe what you did when the child became ill. Describe the first step you took whether it was something you did at home or elsewhere.

PROBE for each action taken using the charts below, and using a new page for each separate action. The action taken should include self-medication or treatment from a traditional healer, as well as from a modern health centre or health worker. (If did nothing throughout illness, write *none* and close interview)

First action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one)	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Second action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one) ?	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Third action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one) ?	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Interviewer Name: _____

Annex 8

Case studies of recent pregnancy

[screen for women who have delivered a baby in the past 6 months or less depending on size of village and likelihood of finding enough women who had been pregnant recently]

Background: Age of woman: ____ Parity: □ first pregnancy □ second □ subsequent

Village _____

PART A: Antenatal care during last pregnancy

1. During your last pregnancy, did you go anywhere special to receive antenatal care? □ YES □ NO

   a) If yes, how often? _____

   b) If yes, please describe the place, type of services sought/provided and reasons for going to
   c) that place(s)

   d) How far was the clinic from your home?

   e) How old (in weeks) was the pregnancy when you first reported?

   f) Who encouraged you to go to this clinic?

   g) What kind of services did you receive there?

   h) What was the total costs incurred?

   i) If you did not attend ANC, please tell me why -

2. During your last pregnancy, did you take any specific actions to prevent illness? □ yes □ no

   If yes, please describe the illnesses and actions?

   PROBES: **Medicines taken - see table which follows**:
   Special diet
   salt-free diet ?
   other food restrictions? If yes, specify _____
   Use of Bednets □ yes □ no
   Information sources for available options

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
After how many weeks of pregnancy did you first take the medicine					
Dosage administration: (stage of pregnancy in weeks, number of tablets taken per day)					

Classification of preventive treatment
(checked by the team doctor on the basis of information given in the above table)

Preventive treatment appropriate according to national recommendations.	❑ Yes ❑ No

3. Did you have any illness during your last pregnancy? □ Yes □ No

(If yes, continue with PART B)

Interviewer Name: _____

PART B: Case study of illness in recently pregnant woman

1. What type of illness did you have? Please describe the illness.

(From narrative above, mark the following if mentioned:

□ hot body	□ convulsions	□ diarrhoea	□ catarrh
□ weakness	□ joint pain	□ headache	
□ cough	□ yellow eyes	□ loss of appetite	

Possible diagnosis (classified by a team doctor on the basis of the above information)
❑ Malaria ❑ Malaria coupled with another disease ❑ Not malaria

2. For how long were you unwell?

3. (**First action**) Please describe what you did when you became ill. Describe the first step you took whether it was something you did at home or elsewhere.

PROBE for each action taken using the charts below, and using a new page for each separate action. (If did nothing throughout illness, write *none* and close interview)

First action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one)	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Second action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one) ?	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Third action

PROBES for first action	**Action**
What was done?	
How many days after illness started?	
Where was care/treatment obtained and from whom?	
What was the diagnosis (if there was one) ?	
What was the total cost (drugs, fees, transport etc)?	

If the medicines were prescribed or purchased, describe each one in detail

	1	2	3	4	5
Name of the medicine					
Anti-malarial? (Yes/No/Don't know)					
Quantity					
Where were the medicines obtained?					
Treatment programme prescribed Dosage					
How many days after the illness began, did the first treatment start?					
Dosage administration: (indicate the number of tablets taken per day)					

Quality control of care and treatment given
(checked by the team doctor on the basis of information given in the above table)

Quality of treatment prescribed	Quality of treatment taken

Interviewer Name: _____

Annex 9

Checklist/interview on bed net use

Introduction: We are working with the district health department and interested in learning about people's experiences with bed nets. We would appreciate any information you can provide and will keep your responses confidential (secret)

1. Village: _____ Interviewer Name: _____
2. Respondent: □ Head of Household □ Other _____
3. Sex: □ Female □ Male
4. Do you have any bed nets in this house? □ Yes □ No **(if No, go to question 9)**
5. Prepare a list of children under five and ask each one if he slept under a bednet the previous night

Name of child under five	Slept under a bednet last night (Yes/No)

Summary

Number of children under five	
Number of those who slept under a bednet the previous night	

6. If you have nets, please tell us WHY? _____
7. How many nets do you have ? _____

8. Please show us the nets. □ agreed □ refused

Condition of Nets	Net Number				
	1	2	3	4	5
a. Is net actually hanging over a bed/mat? (Y/N)					
b. When was the net purchased					
c. From whom purchased					
d. Cost purchase					
e. Any credit					
f. How and where this was done					
g. Was this bed net ever impregnated with insecticide?					
h. When last re-impregnated					
i. Cost Re-impregnation/re-treatment					

9. Perceived Effectiveness: Preventing illness □ very □ somewhat □ not at all
If effective: which illnesses: _____

Preventing mosquitoes □ very □ somewhat □ not at all

Preventing other Insects □ very □ somewhat □ not at all

If no nets: a. Why? _____

b. What other ways do you use to prevent mosquitoes from biting?

c. Have you seen nets for sale? □ yes □ No

If yes, where:

□ in this community □ elsewhere (specify _____)

Annex 10

CBO leader key informant interview

LEADERS OF COMMUNITY BASED ORGANIZATIONS (CBO)

Introduction: We would like to talk with you about the genesis, purpose and activities of the organization; number of members; role of the organization in the community; successes and difficulties in carrying out organizational functions; solutions to difficulties; any history of involvement in health-related matters; collaboration with formal health sector.

1. Name of Association

2. Position of Respondent in Organization: _____

3. Gender of Respondent: □ Female □ Male

4. Location of Association/Area Covered

5. Objectives /Purpose of the Association

6. Age of the Association - when founded

7. Please describe the Membership of the association:
   a) who (type of person)
   b) how many members
   c) Is CBO open to: □ women only □ men only □ both

8. Contribution to/activities in community development generally

9. General contribution to/activities in health

10. Any history of specific projects/cooperation with District Health Service - Describe.

    PROBE: ask about malaria and bed nets specifically.

11. Source of funds for
    - organizational running
    - special projects

12. Problems encountered and solutions found

13. Possible contributions to malaria control

14. Knowledge of other associations (and contact persons)

Annex 11

Medicine sellers/shop keepers

Section A – Descriptors No:____

District: _____ Village: _____

Name: _____ Age _____ Education: _____ Years in business: ___

Type of shop: □ drug/chemist □ general store □ itinerant □ market stall

□ traditional medicine seller □ other _____

Respondent: □ owner □ clerk/apprentice

[Note whether drugs are sold or not - if not, complete Section B only]

Section B - Preventive products

Please show me the different products you have for sale to prevent malaria/fever and to prevent mosquitoes from biting.

	Type of product						
	bed nets	coils	insecticide sprays	repellents	herbs	powders	other
Brand names							
No. of products							
Cost range							
Items sold past week							
Comments							

Section C- Medicines

1. What are the common health problems that people bring to you?
2. What are the most popular drugs?
3. What are the most popular drugs for malaria/fever?

	Type of drug						
	Chloroquine	Fansidar	Others	Other	herbs		
Child<5yrs							
Adult							

1. How often do the following happen?

	Often	Sometimes	Rarely/Never
Customers ask for specific drugs			
Customers bring a prescription from health worker			
Customers ask you for your opinion about what drugs they should buy			

2. From your experience what are best the drugs to use for malaria/fever?

3. What drugs do you have available that people buy for malaria/fever?

	Type of drug					
	generic chloroquine	chloroquine injection	trade name chloroquine	Sulfa-Pyr	Anagesics/ Antipyretics	Other Antimalarials
Brand Names if approp.)						
Number of tablets						
Cost Range per tablet						
Number of tablets sold past week						
Comments						

4. Have you received any training on medicines and common illnesses?

❑ yes ❑ no

If yes, please describe,
when?_____

where?_____

what taught? *(Tick items mentioned below)*

❑ malaria/fever ❑ cough ❑ diarrhoea ❑ immunisable diseases

❑ family planning ❑ water/sanitation

By whom?_____

5. What types of training would you like to have?_____

6. Were you provided any guidelines/standing orders for treating common diseases?

❑ yes/seen ❑ yes/not seen ❑ no

If yes, are these helpful ❑Yes ❑ No

If yes, why?_____

If No, why not?_____

7. Please give 3 suggestions for improving your work_____

_____

Annex 12

Herbalists/drug peddlars

Section A – Descriptors No:____

District: _____ Village: _____

Name: _____ Age _____ Education: _____ Years in business: ___

Section B- Medicines

Name of drug	Illness treated	When to use	How to use	Amount available	Cost per treatment

a) Do you own those products ?

b) Where do you obtain them?

c) How did you get involved in this job?

d) Which of your products are in your pinion the most effective for the treatment of malaria?

	Type of drug						
	Chloroquine	Fansidar	Others	Other	herbs		
Child<5yrs							
Adult							

1. How often do the following happen?

	Often	Sometimes	Rarely/Never
Customers ask for specific drugs			
Customers bring a prescription from health worker			
Customers ask you for your opinion about what drugs they should buy			

2. From your experience what are best the drugs to use for malaria/fever?

3. What drugs do you have available that people buy for malaria/fever?

	Type of drug					
	generic chloroquine	chloroquine injection	trade name chloroquine	Sulfa-Pyr	Anagesics/ Antipyretics	Other Antimalarials
Brand Names if approp.)						
Number of tablets						
Cost Range per tablet						
Number of tablets sold past week						
Comments						

4. Have you received any training on medicines and common illnesses?

❑ yes ❑ no

If yes, please describe,
when?_____

where?_____

what taught? *(Tick items mentioned below)*

❑ malaria/fever ❑ cough ❑ diarrhoea ❑ immunisable diseases

❑ family planning ❑ water/sanitation

By whom?_____

5. What types of training would you like to have?_____

6. Were you provided any guidelines/standing orders for treating common diseases?

❑ yes/seen ❑ yes/not seen ❑ no

If yes, are these helpful ❑Yes ❑ No

If yes, why?_____

If no, why not?_____

7. Please give 3 suggestions for improving your work_____

_____

Annex 13

Community health workers

District: _____ Village: _____ Sex M____ F_____

Type of CHW □VHW □ TBA □CBD □Other (specific e.g. family planning)

1. Please tell me how/by whom you were selected:

   □ village meeting □ village leader □ volunteered □ health staff

2. What health work do you do?_____

3. Are you:

   □ (a) paid or □ (b) Volunteer

4. Were you trained for the work you are doing?

   □ yes □ no

   If yes, when: _____ (year)

5. What was the duration of your training?_____

6. Please tell me the main things you were taught:

   _____

   From narrative above tick items mentioned below

.

   □ malaria/fever □ cough □ diarrhoea □ immunisable diseases
   □ family planning □ water/sanitation

7. Have you attended any in-service training since then?

   □ yes □ no

8. If yes, when was the last time _____ (year),

9. What topic(s) were covered?
   From narrative above tick items mentioned below.

   □ malaria/fever □ cough □ diarrhoea □ immunisable diseases
   □ family planning □ water/sanitation

10. (a) Have you treated a child recently with malaria\fever ?
❑ yes ❑ no

(b). How did you know the child had fever/malaria?

❑ felt for temperature ❑ asked questions ❑ other _____

(c). what did do for children who had fever/malaria?

❑ gave chloroquine ❑ gave paracetamol ❑ gave antihistimine
❑ gave other anit-malarial _____
❑ gave other anti-pyretic
❑ gave vitamins
❑ others: _____

11. Overall, how many people came to you for treatment in past month: _____

[Note whether information provided - ❑ from record ❑ verbally]

a. How many were children below school age? _____

b. How many complained of fever/malaria: overall _____ Preschool _____

12. Do you keep any records (ask to see)? ❑ yes/verified❑ yes/not seen ❑ no

13. (If there are records) - do you submit your records to anyone? ❑ yes ❑ no

(If yes) please describe to whom you submit, how often, what form

14. In the past month, have you sent anyone with malaria\convulsion to a clinic/hospital/ health centre?

❑ yes ❑ no

(If yes) How many people? _____Children____ Adults___

15. Do you have any malaria treatment guidelines/standing orders

❑ yes/seen ❑ yes/not seen ❑ no

If yes, are these helpful ❑Yes ❑No

If yes, why

If no, why not?_____

16. Do you have a village drug/medicine kit/box? ❑ yes/seen ❑ yes/not seen ❑ no

17. (If there is a kit/box) Please describe how this drug kit is managed for the village?

_____

_____

PROBE: Who keeps box? _____

What is the source of drugs? _____

Through what means do you transport the drugs to the village? _____

Do you charge for the drugs? Yes No

Are the proceeds of the sale of drugs controlled by the village Committee? Yes❑ No ❑

How do you determine the quantity of drugs required?

_____

18. (If kit available - look inside and count)

DRUG NUMBER	NUMBER	HOW KEPT
Chloroquine		
Sulfadozine-Pryimethamine		
Paracetamol		
Vitamins		
Antibiotics (type)		
Antihistamine (type)		
Others		

19. How many times in the last 6 months have you had antimalarials stock out? _____

20. Do you receive supervision visits from health staff? ❑ yes ❑ no

_____

(If yes) When last? _____

What did the person do?_____ _____

_____ _____

21. Is there a village health committee? ❑ yes ❑ no

(If yes) Please describe

(a) membership: sex composition Male_____Female_____

(b) Activities _____

(c) Frequency of meetings_____

(d) Relationship of committee with VHW_____

22. What are the main problems you encounter in your work?

23. Please give suggestions on how the work of CHWs like yourself can be improved.

_____

_____

Annex 14

Indigenous healer/spiritual healer

District: _____ Village: _____

Name: _____

Type: ❑ herbalist ❑ diviner ❑ spiritual ❑ other _____

1. Please tell us how you got started working as a healer and when you started

2. What are the diseases which you treat and which treatments do you use for them?

Disease / Illness	Treatment	Comment

3. What are the common types of problems that people bring to you?

for adults
for children

from narrative, tick -
❑ malaria/fever ❑ cough ❑ diarrhoea ❑ convulsions

3. a. How many people have come to you for help in the past month? _____
b. How many were children below school age? _____
c. How many had fever/malaria? _____

4. How do you determine what kind of illness a person has?

5. Specifically, how do you determine whether a person has malaria/fever?

6. For those who come with malaria/fever, generally how were they treated?

From narrative, please tick -
❑ herb teas ❑ herb powders ❑ incantations/prayers ❑ sacrifices
❑ scarification ❑ special/holy water ❑ tablets

7. For those who come with convulsions, generally how were they treated?
   From narrative, please tick –

   ❑ herb teas ❑ herb powders ❑ incantations/prayers ❑ sacrifices
   ❑ scarification ❑ special/holy water ❑ tablets

8. Do you ever ask any of your patients/customers to go to hospital?
   ❑ yes ❑ no a. if yes, for what reasons?
   b. how many in past month? ____

9. For which diseases do you refer patients to a health centre? Why?

10. For which diseases do you never refer a patient to a health centre? Why?

11. Is there an association for healers like you in this area?
    ❑ yes ❑ no

    if yes, what do they do?

12. If there a village health committee here? ❑ yes ❑ no ❑ don't know

    if yes, are you a member? ❑ yes ❑ no

13. Have you ever attended any workshops/training programmes sponsored by the nearby hospital/clinic/DHS?

    ❑ yes ❑ no

    a. If yes, please describe what you learned?

    b. since the training, do staff from the clinic/DHS ever visit you and what did they do?

14. Do you have any suggestions on how the local health system could be improved and how indigenous/spiritual healers could make a contribution to these improvements?

_____

Annex 15

Health care provider interview

District: _____ Village: _____ Sex M____F_____

Name _____

Type of Facility: ❑ Hospital ❑Health Centre ❑ Health post/dipensary ❑ Other

Cadre of Health Provider_____

1. What type of services do you provide_____
2. Were you trained for the work you are doing?

   ❑ yes ❑ no
   If yes, when: _____ (year)
3. What was the duration of your training?_____
4. Did you receive training on:

   ❑ malaria/fever ❑ cough ❑ diarrhoea ❑ immunisable diseases

   ❑ family planning ❑ water/sanitation ❑ others
5. Have you attended any in-service training since then?

   ❑ yes ❑ no
6. If yes, when was the last time _____ (year),
7. What topic(s) were covered?

   ❑ malaria/fever ❑ cough ❑ diarrhoea ❑ immunisable diseases
   ❑ family planning ❑ water/sanitation
8. (a) Have you treated a child recently with malaria\fever ?Yes ? No

   (b). How did you know the child had fever/malaria?

   ❑ felt for temperature ❑ asked questions ❑ other _____

   (c). What should be done when a child has uncomplicated malaria?

   - List drugs, dosage and treatment schedule

   (d). What should be done when a child has complicated malaria?

   - List drugs, dosage and treatment schedule

9. Overall, how many people came to you for treatment in past month: _____

10. Overall, how many people came to you for treatment per month during the period when there were many mosquitoes (intense malaria transmission): _____

    [Note whether information provided - ❑ from record ❑ verbally]

    a. How many were children between 0 and 5 years ? _____

    b. How many complained of fever/malaria: overall _____ Preschool _____

11. Do you keep any records (ask to see)?

    ❑ yes/verified ❑ yes/not seen ❑ no

12. (If there are records) - do you submit your records to anyone?

    ❑ yes ❑ no

    (If yes) please describe to whom you submit, how often, what form

13. During the last period with intense malaria transmission, did you send any patient with malaria or convulsions to a hospital / health centre ?

    ❑ yes ❑ no

14. If yes, how many?

    Children ___ Adults _____

15. In the past month, have you sent anyone with malaria/convulsion to a hospital/health centre?

    ❑ yes ❑ no

    (If yes) How many people? _____Children____ Adults___

16. Do you have any malaria treatment guidelines/standing orders

    ❑ yes/seen ❑ yes/not seen ❑ no

    If yes, are these helpful

    ❑ Yes ❑ No

    If yes, why _____

    If No, why not?_____

17. Do you have a stock of drugs in your clinic or in the village ❑ yes/seen ❑ yes/not seen ❑ no

    - How it is managed?
    - Who is responsible?
    - What is the source of drugs_____
    - Through what means do you transport the drugs to the village____
    - Are there antimalarials in the stock?
    - If yes, which? _____

18. Do you charge for the drugs ❑ Yes ❑ No

Are the proceeds of the sale of drugs controlled at the district headquarters? Yes No
How do you determine the quantity of drugs required?

19. (If drug store/cupboard is available - look inside and count)

DRUG	Number	How Kept
Chloroquine		
Sulfadozine-Pyrimethamine		
Paracetamol		
Vitamines		
Antibiotics		
Antihistamines		
Others		

20. How many times in the last 6 months have you had antimalarials stock out?_____

21. Do you receive supervision visits from the district headquarters?

❑ yes ❑ no

(If yes) When last _____

What did the supervisor do?_____ _____

22. What types of problems do you encounter in the performance of your work? _____

23. Which of these problems have been solved ?_____
How were they solved? _____

Please give 3 important suggestions on how to improve your work at the facility.

i _____ ii _____

iii _____

Annex 16

Health care facility check list

District: _____ Village/Town: _____

Respondent's Position: _____ In-charge? □ yes □ no

Respondents Sex: Male Female

1. Type of Facility: ❑ Hospital ❑Health Centre ❑ Health post/dispensary ❑ Other _____

2. Does the facility have a defined catchment area? ❑ Mapped ❑ Not defined ❑Other _____

3. Does the facility have a register for ❑ Out-patients ❑ In-patients ❑ NA

4. Does the facility provide the following services?

❑ malaria case management ❑ IMCI ❑ Ante-natal services ❑Laboratory services

❑ Blood transfusion ❑ EPI ❑ Growth monitoring ❑ Promotion of ITNs

5. Does the facility have diagnosis and treatment guidelines

a. book ❑ Yes ❑ No
b. wall chart ❑ yes ❑ no

6. Do they have a copy of ...

a. National malaria treatment guidelines ❑ Yes ❑ No
b. IMCI guidelines ❑ Yes ❑ No

7. Does the facility have a fee schedule

❑ Yes seen ❑ Yes not seen ❑ No

8. Do they make provision for people who cannot pay for the services?

❑ Yes ❑ No

9. How many patients have been exempted in the last 6 months? _____

10. Is there a standard list of antimalarial drugs for the facility

❑ Yes ❑ No

11. What is the main source of supply?

❑ District/Regional medical stores ❑ Private Pharmacy ❑ Both

12. Has there been a stock-out for in last 3 months for antimalarials?

❑ Yes ❑ No

13. What is the average cost of antimalarials for the treatment of

a) Child <5yrs _____ b) An adult _____
Specify drug: _____ Specify drug: _____

14. Are there any stock of second line drugs for the treatment of malaria

❑ Yes ❑ No

15. Is there any functioning vehicle to refer severe cases of malaria to the next level of care?

❑ Bicycle ❑ Motorcycle ❑ Car/ truck

What is the nearest health facility to address severe Malaria_____
What is the distance(Kilometres) of referral Facility

16. Does the facility collect information on the following services:

❑ Outpatient visits ❑ Inpatient visits ❑Outreach clinics ❑ Under 5 clinics

❑ Home visits ❑ Antenatal clinics ❑ immunizations ❑ Community activities

17. Are the records complete for the following?

❑ Outpatient visits ❑ Inpatient visits ❑Outreach clinics ❑ Under 5 clinics

❑ Home visits ❑ Antenatal clinics ❑ immunizations ❑ Community acti

18. What is done with the information collected?

❑ Send information regularly to the next level of care

❑ Planning of activities of the facility (e.g. drug purchases)

19. What percentage of the staff members have not attended an in-service training in the last 2 years?

20. Has the facility received a supervisory visit in the last 3 months?

❑ Yes ❑ No

21.

Drug Stock Inventory	**Number**	**How Kept (e.g. bottle, poly bag)**	**Date last delivered**	**Number Delivered**
Chloroquine				
Sulfadoxine-Pyrimethamine (Fansidar)				
Other Antimalarials				
Paracetamol				

Past month - indicate exact dates_____

22.

Review of Register	< 5 years	other child	Pregnant Women		Other Adults
			New	ANC	
TOTAL					
Malaria/Fever					

23. Other Equipment/Supplies

a. Thermometer ❑ yes ❑ no
b. Weighing Scale for Children ❑ yes ❑ no
c. Cold Box ❑ yes ❑ no

24. Human resources:

a. What are the human resources available in this facility?

Doctor_____
Health educator_____
Community Health Officer_____
Pharmacist_____
Nurse _____
Midwife_____
Nurse-Midwife_____
Auxiliary Nurse_____
Health Assistant____
Laboratory technician___
Pharmacy technician_____
Others (specify)_____

b. How many of you are trained to manage severe malaria_____

Doctor_____
Health educator_____
Community Health Officer_____
Pharmacist_____
Nurse _____
Midwife_____
Nurse-Midwife_____
Auxiliary Nurse_____
Health Assistant____
Laboratory technician___
Pharmacy technician_____
Others(specify)_____

25 Is this facility equipped to handle severe malaria? Yes No

26. Give 3 main suggestions that could improve on the services you provide to your clients,

1.
2.
3.

Annex 17

Health care provider assessment form

Type of Provider:				
Did the health care provider	Yes	No	Yes	No
Check for the following signs and symptoms				
Malaria/fever				
Cough				
Diarrhoea				
Vomiting				
Convulsions				
Not able to feed or drink				
Other signs and symptoms (ear, skin infections)				
Treatment given before coming to health facility				
Assess the patient for:				
Child's age				
Weight				
Temperature				
Immunization				
Anaemia				
Pneumonia/breathing				
Request for blood smear				
Have a copy of the treatment guidelines				

Annex 18

Facility-based client exit interview

DISTRICT_____

Type of Facility: ❑ Hospital ❑Health Centre ❑ Health post/dipensary ❑ Other

Respondent: ❑ Mother ❑ Father ❑ Other caretakers

1. What type of illness does your child have_____

2.What did the provider tell you your child is suffering from_____

3.Was your child examined ❑ Yes ❑ No
Temperature taken ❑ Yes ❑ No
Blood tested ❑ Yes ❑ No

4. What type of medicines were you given to treat your child _____
_____

5. Were you told how to use these Medicines ❑ Yes-all ❑ Yes-some ❑ No

6. Were you advised to return if the child failed to return ❑ Yes ❑ No
If yes when_____

7. Are you satisfied with the way your child was treated ❑ Yes ❑ No
Give reasons_____

Annex 19

Guide for analysis of community data

The purpose of gathering data from the community is to learn how well the DHS is responding to the perceived health needs of the community as a basis for strengthening programming. Involve the DHMT and draw from all four data sources to write a report using the headings below that correspond primarily to the main intervention areas of malaria control. Two sample dummy tables are included as a guide to help the team analyse the data.

1. Illness Perceptions *[Health Education]*

   This section should provide a background perspective that helps people understand community response to local illnesses and the interventions. Mention the common local illnesses for children and adults and present how the community recognises/describes these, along with associated beliefs. Talk about actual illness episodes (case studies) and how these were names and treated by the family. Comment specifically on those local illness concepts that have similarities with clinical malaria and compare the relative seriousness with which they are viewed.
   Conclude how local disease perceptions may influence treatment and prevention and **recommend** appropriate and culturally sensitive **health education.**

2. Health Care Options and Preferences *[Case Management]*

   Describe what health care options/choices people recognise. State what they like and dislike about each, and other factors that influence their choices. From case studies, mention actual choices made and reasons why/factors influencing. Report on knowledge and use of medicines and drugs. Consider how available CBOs could play a role in ensuring better access to prompt and appropriate treatment. Describe the activities and roles of non-formal providers in the community: indigenous healers, spiritualists, drug sellers and volunteer village health workers.
   Conclude how the DHS compares to other available choices viz accessibility, perceived effectiveness, cost, etc., and **recommend** appropriate ways to strengthen available health care options, especially those closest to the people, through the people involvement, e.g. with participation of CBOs, and through cooperation with non-formal providers.

3. Insecticide Treated Nets *[Sustainable Prevention]*

   Outline the existing situation concerning availability of, distribution and re-impregnation procedures for and community opinions about ITNs. Consider other things people do to prevent mosquito bites. Discuss findings in the context of community perceptions about mosquitoes, especially any possible perceived link, or lack thereof, between mosquitoes and malaria. Talk about interaction with the health service and efforts to involve the people in preventing actions. Identify roles for potential CBO and NGO partners.
   Make **conclusions** about the strengths and weaknesses of the current ITN programme and **recommend** appropriate action.

4. Pregnant Women

Describe the health care seeking pattern of pregnant women in both preventive and curative terms with special reference to illness concepts related to malaria. Consider CBOs that may be helpful and appropriate in promoting maternal health.

Make **conclusions** about risks and opportunities, and **recommend** how the DHS can better respond to the needs of pregnant women.

Sample dummy tables

Dummy tables are blank tables where people can tally the results. Discuss with the team about the main questions that should be analysed for presentation at the second district meeting and first draw up tables for those items. Remember that it will not be possible or desirable to present everything at a meeting. Present the most important findings related to the delivery and utilisation of services. Then ask the DHMT what additional data should be analyses for the team to use in planning.

Example 1. Common complaints of sick children

Complaint	Village		TOTAL
	With Health Facility	Without Health Facility	
hot body			
Diarrhoea			
etc.			
No. of Children Surveyed			

Example 2. Antenatal care

AnteNatal Care	Villages		TOTAL
	With Facility	Without Facility	
Number of Women Interviewed			
Number Attending ANC			
Percent Attending ANC			
If attended			
Range months pregnant when first registered			
Average age of pregnancy when first attended			
Has an Illness During Pregnancy			

Annex 20

RBM indicators

Notes:

1) indicators based on/derived from available instruments;
2) need to consider what expected as a result of RBM;
3) may be different needs for analysis/report of situation analysis and later monitoring
4) will require country-specific adaptation
5) indicators represent, document, point toward "good practice"
6) some could suggest technical interventions
7) indicators marked with an asterisk are the proposed 'core' indicators

1. Health utilisation behaviour

a. Illness behaviour

1) document forms of treatment sought for sick child <5:

   a) where care is sought (count number at home, chemist, healer, etc.)

   b) *what type of care obtained - Consider possibility of developing some guidelines for indicators of quality home management, e.g. if diarrhoea, then ORT

2) document forms of treatment sought for illness during pregnancy (as above - where and *what)

b. Preventive/promotive behaviour

1) families
   - ❑ obtain - possess any net
   - ❑ impregnate (past 6 mos.) and
   - ❑ * use bed nets to protect children < 5 (% children under net)

   (observe, note child's bed/mat) - percent households doing each

2) pregnant women register for appropriate antenatal care and attend at least two times one month apart (Note - guidelines as above) - percent doing so

3) pregnant women have received two intermittent treatments of malaria with antimalarial (?SP ?CQ - national policy) (note need revision of instrument) - percent receiving

Sources of Information:
- Case Study of Recent Child Illness
- Case Study of Recent Pregnancy
- Checklist on Bed Net Use

2. Provider behaviour/quality of care

a. Medicine sellers

1) obtained training in common illnesses and medicines - percent having certificate of attendance (need questionnaire to include checking for the certificate)

2) possess treatment guidelines/standing orders (Note: verify visually; this is a potential intervention) - percent seen as having guidelines

3) *if sell drugs, stock appropriate essential anti-malarials (based on national guidelines)

4) *report of selling correct/appropriate antimalarials for sick child <5 - based on treatment guidelines - including dosage of antimalarial and duration of treatment - percent giving correct answer

b. (Volunteer) Community health workers

1) *Percentage of villages that have trained village health workers (see district self-assessment procedures).

2) report giving appropriate anti-malarial treatment for sick child (sharpen question, include age of child - e.g. for a 2-year old child, what would you do ...) - based on treatment guidelines - including dosage of antimalarial and duration of treatment - percent giving correct answer

3) possess treatment guidelines/standing orders (verify visually) - percent having

4) * have appropriate essential anti-malarials in stock (viz government guidelines) - % that have

5) report receiving supervisory visit within past 3 months

6) record are
   - ❑ accessible,
   - ❑ up-to-date (most recent clients entered), and
   - ❑ complete (information required is entered, e.g. age, sex)

c. Indigenous/spiritual healers

1) obtained training in common illnesses and medicines - percent having certificate of attendance (note: this could be an intervention)

d. Formal health provider

1) *Quality of sick child management - using health care provider assessment form - score obtained from sick child management checklist.

2) reports giving appropriate anti-malarial treatment for sick child - based on treatment guidelines - including dosage of antimalarial and duration of treatment - percent giving correct answer

3) possesses treatment guidelines/standing orders - percent having

4) In-Service-Training within past 2(?) years on sick child management issue

e. Client satisfaction

1) Score of reported provider behaviour (Questions 2,3,5 in exit interview to make a 5-point scale)

2) reports of satisfaction on exit interview - percent of respondents interviewed (Q7 exit interview)

3) presence or absence of complaints about health services in FGDs

f. Facility indicators

1) *have appropriate essential anti-malarials in stock - see essential drug list

2) report of supervisory visit in past 3 months

3) basic equipment available - ❑ thermometer,
❑ weighing scale,
❑ cold box

4) * equipped to manage severe malaria - ❑ IV, ❑ quinine,
❑ lab, ❑ blood,
(may need to modify facility checklist) ❑ trained staff, ...

5) reports of out-of-stock in past 3 months

6) record keeping: records are ❑ accessible,
❑ up-to-date (most recent clients entered), and
❑ complete (information required is entered,
e.g. age, sex, ailment)

7) transport: ❑ minimum - ability to communicate with central, carry small supplies
❑ referral - ability to carry sick persons comfortably, safely
❑ outreach - ability to visit surrounding villages under local conditions
(**Note** - "ability" means functioning vehicles)

3. District level

a. Community involvement and partnerships

1) *CBOs report being involved in recent/current health programmes

2) *FGDs report that health workers have visited community to encourage participation in health development efforts

3) *District health plan exists and is available supporting community involvement

4) Presence of functioning mechanism for inter-sectoral and community involvement in health care management (e.g. district management boards, committees) (evidence - budget line, minutes of meetings, ...)

5) specific roles spelled out for each partner in health plans

b. Planning and management

1) Presence of district health plan with set objectives, targets, strategies and evaluation mechanisms

2) Presence of annual report that contains achievement of targets and financial accounting

3) Presence of population based malaria intervention plans

4) Equitable (and functional/factual) distribution of staff (how to verify)

5) Adequate supplies of essential/appropriate supply of anti-malarials in relation to expected incidence (implies presence of an estimated incidence that considers whole district, not just based on clinic records)

6) Transportation - from checklist make an inventory - type, number and note whether transport pool meets –

- ❑ minimum - ability to communicate with central, carry small supplies
- ❑ referral - ability to carry sick persons comfortably, safely
- ❑ outreach - ability to visit surrounding villages under local conditions

(Note - "ability" means functioning vehicles)

4. National

1) *Presence of national malaria policy with strategies

2) *National health policy exists and is available supporting community involvement

3) Presence of functioning mechanism for inter-sectoral and partner involvement in health policy and planning - (evidence - budget line, minutes of meetings, ...)

4) Specific roles spelled out for each partner in health plans and policies

5) Availability of access standards such as distance, ...

- ❑ minimum - ability to communicate with central, carry small supplies
- ❑ referral - ability to carry sick persons comfortably, safely
- ❑ outreach - ability to visit surrounding villages under local conditions

(Note - "ability" means functioning vehicles)