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REACH

RESOURCES
FOR CHILD
HEALTH

HEALTH MANPOWER NEEDS ASSESSMENT FOR GOVERNMENT HEALTH FACILITIES IN YEMEN

Sanaa, Yemen

17 August - 1 September, 1991



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INTERIM REPORT

ON

HEALTH MANPOWER NEEDS ASSESSMENT FOR
GOVERNMENT HEALTH FACILITIES IN YEMEN

by

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CONTENTS

I. EXECUTIVE SUMMARY	1
II. BACKGROUND AND SCOPE OF WORK	3
III. PREPARATIONS FOR THE NATIONAL HEALTH MANPOWER PROJECTIONS	4
IV. DATA COLLECTION FOR THE HEALTH MANPOWER SURVEY	6
V. ACTIVITIES BEFORE AND DURING THE SECOND CONSULTANCY	8
ANNEX 1: Scope of Work	11
ANNEX 2: Health Manpower Situation Report: Actual Staffing Compared with Standard Staffing	14
ANNEX 3: Health Manpower Situation Report: Staff Characteristics	16
ANNEX 4: Health Manpower Situation Report: Training Institutions	20
ANNEX 5: Health Manpower Situation Report: Approximate Coverage or Equity in the Availability of Health Services.	25

ACRONYMS

ACCS	Accelerated Cooperation for Child Survival
COP	Chief of Party
LCCD	Local Council for Cooperative Development
MOPH	Ministry of Public Health
PHC	Primary Health Care
REACH	Resources for Child Health Project
TCHMP	Technical Committee for Health Manpower Projections
USAID	United States Agency for International Development
WHO	World Health Organization

I. EXECUTIVE SUMMARY

REACH commissioned an eight-week assignment for a health manpower needs assessment in the four ACCS governorates (Hajjah, Hodeidah, Mareb, and Saadah) to coincide with a national health planning exercise. The assignment will be carried out in two visits, with the following scopes of work:

1. Assisting in the design and planning of a health manpower survey which will cover the four ACCS governorates as part of the national exercise;
2. Assisting in the analysis of the current health manpower situation based on the survey data and in the production of health manpower projections of requirements and supply. This will lead to a health manpower plan for the four governorates.

This document summarizes the main results and outputs of the first of these two consultancies. Because the survey of the four ACCS governorates will be part of the national exercise, the work during this first consultancy has in effect been concerned with assisting in the design of a national health manpower survey.

The plan for the national data collection is to:

1. Correlate the data collection forms and their accompanying instructions;
2. Print forms and instructions for pilot data collection;
3. Begin data collection in two governorates;
4. Review the experience of pilot data collection;
5. Adjust the forms and instructions as necessary;
6. Print the forms and instructions for main data collection; and
7. Collect the main data.

Subsequently, the data will be entered into computers by the Central Statistical Office, analyses will be generated from it. During the consultancy, assistance was given in producing and finalizing this plan and in completing Item 1.

The Health Manpower Survey will produce four basic types of analysis:

1. Actual Staffing compared with Standard Staffing;
2. Staff characteristics (age, length of service, sex, nationality, etc.);

3. Training institutions -- their capacity and outputs;
4. Approximate coverage or equity in the availability of health services.

Annexes 2-5 contain: The purpose of each analysis; the data required for it; the forms to be used in the data collection; the instructions for completing the forms; the statistical tables to be produced; the analyses to be undertaken; and the type of conclusions which can be drawn from the analyses.

Before the second consultancy can start, a number of tasks must be completed:

1. All the data (Health Manpower Survey, Basic Health Units Survey and Hospitals/Health Centres Survey) in the four ACCS governorates has been collected;
2. The data from all the training institutes (Health Training Institutions (1) and (2) forms in Annex 3) must be collected;
3. All the data in (1) and (2) must be entered into the computer database
4. The future use of health facilities (mainly which sub-centres are to be designated as health centres) in the four ACCS governorates must be decided; and
5. The standard staffing patterns for all types of current and proposed health facilities in the four ACCS governorates must be specified.

The start date for the second consultancy will be set when these tasks are near to completion.

The scope of work for the assignment specifies analyses and health manpower projections for the four ACCS governorates alone. However, the results of these analyses will be much more useful to the respective Directors General in the governorates and to the MOPH if they are put into the context of national totals and averages, and also if they can be compared with similar results for other governorates. In addition, the training and staffing policies (length of courses, priority services) to be tested in the subsequent health manpower projections are not governorate policies but national policies. Therefore, the policies will require inputs from the Center which may not be forthcoming until all the governorate analyses are finished and a complete picture of the current national situation is available. Thus, the timing of the second consultancy should take account the progress on the whole survey, not just in the four ACCS governorates as indicated above. Alternatively, and preferably (from the viewpoint of MOPH), the scope of work could be extended to cover the health manpower aspects of the national exercise, and not the four ACCS governorates alone. This would increase the time required for the remainder of the assignment from six weeks to eight weeks.

II. BACKGROUND AND SCOPE OF WORK

Following the unification of the Republic of Yemen on May 22, 1990, the Ministry of Public Health (MOPH) has undertaken a major exercise to produce a detailed national health plan for the next five years, and a more indicative health plan covering a further fifteen years. The work is being supervised by a Five Year Health Plan Committee, chaired by the Permanent Under Secretary for Health Development in the MOPH, Dr. Abdulla S. Assaedi. Executive responsibility and the detailed work for formulating the plan will lie with a Technical Committee for Health Manpower Projections (TCHMP) and seven other committees covering policy and resources, basic health services, hospitals and medical care, health manpower development, medical logistics and maintenance, administration and health information, and education and research.

An Information Committee has also been appointed, chaired by the Permanent Under Secretary, whose task is to collect and make available all the information which will be required by the other committees for the formulation of their different aspects of the health plan. Some of this information is already available in Sana'a, e.g. current and projected population figures based on national surveys by the Central Statistical Office. Other information (such as the definition of different types of health facilities and the standard staffing pattern of each) will be the result of decisions in the MOPH, but by far the largest proportion of this information must be collected in the field. The first task of the Information Committee is to design a comprehensive national survey of all Government health facilities in the country, including the manpower employed there. The survey is to be conducted by teams in each Governorate, using the survey forms designed by the Information Committee. Donors are supporting the health planning exercise to the extent of \$135,000, of which USAID is contributing a grant of \$60,000 towards the cost of the national survey.

The Accelerated Co-operation for Child Survival (ACCS) Project in Yemen, funded by USAID, is currently being assisted and supported by the Resources for Child Health (REACH) Project of John Snow Inc. REACH has provided a one-person, eight-week assignment on health manpower needs assessment which is divided into two consultancies. The aim of these visits was to:

1. Assist in the design and planning of a health manpower survey which will cover the four ACCS project governorates -- Hajjah, Hodeidah, Mareb and Saadah -- as part of the national exercise (two weeks);
2. Produce a report on the current health manpower situation based on the survey data, and assist in producing health manpower projections of requirements and supply for the four governorates (six weeks).

The scope of work of the whole assignment can be found in Annex 1. This report sets out the results of the first of these two consultancies.

III. PREPARATIONS FOR THE NATIONAL HEALTH MANPOWER PROJECTIONS

The Directorate General of Planning, Statistics and Evaluation in the MOPH has received approval for three papers, setting out the national policies and plans for a Health Information System, for the development and strengthening of health management, and for undertaking health manpower projections for the period 1991-2010 as part of the Five Year Health Plan exercise. The last of these papers sets out the components and steps of producing health manpower projections and includes:

1. Setting up the Technical Committee for Health Manpower Projections, whose MOPH members are members of the Information Committee as well;
2. Establishing a 10-step methodology which follows the WHO Guidelines for Health Manpower Planning;
 - a) Data Collection
 - b) Current Health Manpower Situation Analysis
 - c) Projections of Health Manpower Requirements
 - d) Projections of Health Manpower Supply
 - e) Identifying Mismatches Between Supply and Requirements
 - f) Solving Mismatches

This first consultancy has been concerned with Item 1 as preparation for Items a-f.

3. Asserting that health manpower requirements will be determined by the standard staffing pattern method i.e. by setting a staffing pattern for each type of health facility in the country; and
4. Proposing a number of tables to be produced -- some recording MOPH decisions (standard staffing patterns for different types of health facilities), some presenting the current situation (populations and staffing levels), and some setting out the results of health manpower projections.

The plan for the data collection (covering all relevant aspects of the health service, not health manpower alone) drafted by the Information Committee is as follows:

1. Correlate the data collection forms and their accompanying instructions. Add coding boxes so that they can be used as computer input forms;
2. Print forms and instructions for pilot data collection, to be carried out in 2 governorates - one urban/one rural, one in the North/one in the South;

3. Pilot data collection:
 - a) train governorate supervisors of the exercise;
 - b) governorate supervisors train their interviewers;
 - c) interviewers collect data on forms provided;
 - d) data collated and returned to MOPH.
4. Review experience of pilot data collection;
 - a) training of supervisors and interviewers;
 - b) content of the forms and instructions;
 - c) availability of data;
 - d) collation and return of forms.
5. Adjust forms and instructions as necessary;
6. Print forms and instructions for main data collection;
7. Main data collection;
 - a) train governorate supervisors of the exercise;
 - b) governorate supervisors train their interviewers;
 - c) interviewers collect data on forms provided;
 - d) data collated and returned to MOPH.

This first consultancy has been assisting in producing the plan for data collection and in completing Item 1 in preparation for Items 2-7.

This national survey of all government health establishments will produce a large volume of data which will be impracticable to analyze manually. For example, it is believed that there are about 8,000 staff members working in these establishments (including governorate health offices and MOPH). Data on each will need to be collected. It has been agreed by the Information Committee that the data which is collected must be entered into a computer using a database programme before it can be collated, consolidated and analyzed. The Central Statistical Office has agreed to:

1. Add coding boxes to all the survey forms so that they may be used as computer input forms;
2. Undertake the data entry using a database programme;
3. Produce analyses of the data.

Similar exercises have been previously undertaken in Yemen. In 1981 a health manpower planning exercise was carried out for South Yemen by the World Bank Team in Sana'a based on targets set in the 1981-85 Five Year Health Plan. Standard patterns for health facilities were used to calculate health manpower requirements. The source(s) of the data used as the basis of the health manpower supply projections (staff numbers, leaving rates, etc.) is not stated in the report, nor is it clear the extent to which the government followed the health manpower plan it produced. In the mid-1980s, a health manpower projections exercise was carried out in South Yemen as part of a WHO programme of research and development into health manpower management. It is not clear

whether the results obtained in the exercise were ever used by the government of the time as a basis for decision-making. In both cases the correct projection techniques were used, but the initiative for the exercises seems to have come from the donor organizations concerned, rather than from the government itself, as is the case in the present exercise.

The current donor support of health manpower in Yemen is mainly focussed on training, both in-country and outside. The in-country support covers various aspects of improving the teacher training, updating curricula, improving the supply of materials, etc. -- all aimed at improving the quality of existing training (which the Information Committee has decided not to address directly in the proposed health manpower projections) rather than the volume of training (capacity). No donors are currently supporting the construction of new schools or extensions to existing schools. The government plans to have a health manpower institute in each governorate, and this will doubtless be one of the main factors in the health manpower supply projections.

IV. DATA COLLECTION FOR THE HEALTH MANPOWER SURVEY

On arrival in the country, the consultant attended daily meetings of the Information Committee. The purpose of the meetings was to discuss all data collection forms, including the health manpower survey forms, which were to be used. As events turned out, the prime task of the first consultancy was to assist the Information Committee in designing a national health manpower survey. This survey was part of a larger health services data collection exercise in the country, in preparation for producing a Five Year Health Plan.

Because of the recent unification of Yemen, the government's emphasis is naturally on the country-wide application of national methods and standards, and it seemed inappropriate during this consultancy for the consultant to focus on data collection in the four ACCS governorates alone. All the work done with the Information Committee in designing the national data collection forms for use at governorate level and in specifying the analyses to be produced from them, applies to the four ACCS governorates. The time for a focus on the four ACCS governorates will be during the second consultancy when health manpower analyses based on the survey data, a Health Manpower Situation Report, and manpower projections of requirements and supply will all be produced for individual governorates. However, even here the techniques to be used in the second consultancy for the analyses and projections for the four ACCS governorates will be applicable for the analyses and projections for the other fourteen governorates as well.

The four main types of health manpower analysis which will provide the basis of the Health Manpower Situation Report are:

1. Actual Staffing compared with Standard Staffing (details in Annex 2) where the difference between the two figures shows the mismatch between requirements (standard staffing) and supply (actual staffing) for each staff category in each type of health facility, and the ratio between the two is a measure of the level of service quality being provided;

2. Staff characteristics (details in Annex 3), covering the age and length of service patterns of different staff categories in order to determine the stability of employment and the experience of staff in the government health service and also for use in the manpower projections. This calls for obtaining a small set of data (about 10 items) from each person employed in government health facilities;
3. Training institutions (details in Annex 4), to determine the current capacity and performance (output) of the health training institutions in the country, and for use in the manpower projections;
4. Approximate coverage or equity in the availability of health services (details in Annex 5). Insufficient health services can arise because of staff shortages in existing health facilities, or because of an insufficient number of health facilities -- even in an area where the existing health facilities are fully staffed. This analysis identifies:
 - a) the relative effects of staff shortages in existing facilities as compared with the lack of new facilities; and
 - b) those situations where existing facilities and staff are under the most pressure because of the combined effect of the two types of shortage.

Overall, this is equivalent to using staff/population ratios to measure coverage and equity of distribution, except that the two components - lack of health facilities and staffing shortages - are shown separately in this analysis, which population ratios alone cannot accomplish.

The annexes detail the analyses as follows:

- purpose, as stated above;
- data items which must be collected in order to perform the analyses;
- tables which can be produced from the data collected;
- types of conclusions which can be drawn from the tables.

The annexes also describe the forms on which the health manpower data items are to be collected and the instructions to be followed by the interviewers. Some of the data items used in the health manpower analyses specified in Annexes 2-5 do not appear in the Health Manpower Survey, e.g. numbers of health facilities of different types operating in each Nahia (to determine how many staff should be employed now according to the staffing standards set for each type of facility). This data will be collected in the two health facilities surveys.

The Health Facilities Surveys will also collect statistical or aggregated data on the numbers of staff employed in each facility (in contrast to the individual data to be collected, as described in Annex 2). This part of the Facilities Surveys could be counted as part of the Health Manpower Survey. The manpower statistics from the Facilities Surveys will turn out to be different from the figures obtained from the Staff in Post Survey (Annex 2) because employment figures are usually comprehensive, whereas surveys of individual staff never achieve 100% coverage owing to staff absences during the survey. The intention is for staff to complete the Staff in Post Form when they collect their salaries (before they are given their salaries) during the data collection exercise, in order to maximize the coverage of the survey. Even so the coverage will not be complete. Special arrangements will have to be made for those situations where salaries are collected from the Governorate Office on behalf of staff e.g. where a Health Center Director collects salaries on behalf of his staff and disburses them locally. This less-than-ideal coverage of the Staff in Post Survey results will not affect the analyses and the conclusions to be drawn from them in the Health Manpower Situation Report, provided that the coverage is reasonably good (80% or more) in each of the staff categories of interest. This can be verified by comparing the results of the Staff in Post Survey with the employment figures obtained in the Health Facilities Survey.

The health manpower supply projections require some estimate of leaving rates (resignations, retirements, etc.) by staff category, sex, etc. for inclusion in the projections calculations. Usually, these leaving rates are obtained from information on those leaving over the last few years. This information is not available in Yemen and so another (less direct) method must be used. The most likely option is to compare the number of staff in post of Yemeni nationality with the total number of the category which have been trained in the health institutions in the country. This will produce a leaving rate averaged over a number of years but without distinguishing between the different types of leaving (resignation/ retirement). It would be most desirable to be able to estimate resignation rates from the data, since retirement by reason of age (which already operates) and length of service (which is to be introduced very soon) will each be built into the supply projections as separate components of the calculations, and resignation rates should be another. The choice of which method to use to estimate leaving rates will be made during the second consultancy.

V. ACTIVITIES BEFORE AND DURING THE SECOND CONSULTANCY

The tasks to be undertaken in the second consultancy are to perform the manpower data analyses for the four ACCS governorates, produce a Health Manpower Situation Report for each governorate, and carry out the manpower projections for each. Before these analyses and projections can be undertaken, the data collection and a number of other tasks must be completed by the Ministry of Health:

1. All the data (Health Manpower Survey, Basic Health Units Survey and Hospitals/Health Centres Survey) in the four ACCS governorates must be collected;

2. The data from the training institutes (Health Training Institutions (1) and (2) forms, Annex 3) must be collected;
3. All the data in (1) and (2) must be input into a computer database;
4. The future use of health facilities (mainly which sub-centres are to be designated as health centres) in the four ACCS governorates has been decided; and
5. The standard staffing patterns for all types of current and proposed health facilities in the four ACCS governorates has been specified.

A schedule will need to be arranged for the various stages of the data collection and the subsequent data entry into the computer, but such a massive survey is bound to create uncertainties in the timing and duration of many of the activities, whatever plans are made. Rather than attempt to set a date for the anticipated completion of items (1-5) above, it seems more prudent to postpone the start date of the second consultancy until there has been substantial progress on the survey and the subsequent computerization of the data.

The Health Manpower Situation Report for each of the four governorates will be discussed not only in MOPH but also with the Director General of Health and his staff in the respective governorates in order to check on the adequacy of the data collected, the realism of the conclusions drawn, and to identify what further more detailed analyses would be useful to the governorate. There would, of course, be a major advantage in having available some results from the other governorates as well. This would allow putting these four sets of results into the context of national totals and averages i.e. national problems and issues, and also to compare these results with those from other governorates with others on an individual basis. Treating the four ACCS governorates as part of the country in this way, instead of as separate locations unconnected with Yemen, could only be done if a few gross national totals and averages (at least) were available when the four sets of governorate results are discussed in MOPH and the governorates. These national figures should include:

1. Total number of health staff currently employed in each governorate by:
 - staff category
 - sex
 - nationality
 from the Basic Health Units Survey and the Hospital/Health Center Survey;
2. Standard staffing patterns for each type of health establishment;
3. Number of health facilities of each type operating in each governorate (from the Basic Health Units Survey and the Hospital/Health Center Survey); and
4. The total population in each governorate, from the Central Statistical Office.

The subsequent stage of the exercise, of producing projections of health manpower requirements and supply in each of the four ACCS governorates, will call for a more specific input from the national level. Both types of projection, and particularly manpower supply, depend heavily on the policies which will be followed on training (e.g. priority staff categories, length of courses), staffing levels coverage targets, etc., which are mainly MOPH not governorate level decisions. It is of course considerably better for senior managers in MOPH to consider practicable national policy options (as the basis of a range of scenarios for the projections) after they have reviewed the situation analysis for the whole country. They may well be reluctant to provide the necessary policy guidance for individual governorate projections until they have seen the results of the analyses (Health Manpower Situation Reports) for most governorates. Thus, although a Health Manpower Situation Report can be written for each of the four ACCS governorates, and some health manpower projections can be calculated for each of them, the value or utility of these outputs would be greatly increased if the national Health Manpower Situation Report and projections were also available. Here again, the results for the four ACCS governorates will be less useful if produced separately rather than as part of a national picture.

The scope of work may need to be changed as follows:

1. A second consultancy of four weeks to perform the health manpower analyses and write the Health Manpower Situation Reports for the four ACCS governorates to be funded from the USAID/Sanaa buy-in to REACH. The consultant will work closely with staff who can then use the same methodology and techniques to perform the health manpower analyses and write the Health Manpower Situation Reports for the remaining fourteen governorates and for the country as a whole;

MOPH staff will then review the national and governorate Health Manpower Situation Reports, identify the priority problems and issues, and determine the policy options which should be considered in order to deal with these problems and issues in the Five Year Health Plan.

2. A third consultancy of four weeks to perform the health manpower projections at the national level in order to evaluate the national policy options, and then to perform the health manpower projections for the four ACCS governorates in order to calculate the effects of applying the national policies at local level. These governorate projections should be done working closely with staff who can then use the same methodology and techniques to perform the health manpower projections for the remaining fourteen governorates.

The aim is to provide the MOPH not only with the national and governorate health manpower analyses, situation reports and projections it requires for its immediate planning task, but also with a staff with some knowledge and experience of how to produce these essential aids to continuing health manpower management.

ANNEX 1: SCOPE OF WORK

Manpower Development Consultant ACCS/REACH/Yemen

I.

Name: Peter J. Shipp

Consultancy: Manpower Needs Assessment

Period: 17 August through 1 September, 1991

Purpose: the initial two-week consultancy will be for the purpose of reviewing the progress of the TCHMP; determining the direction of the future committee activities; and proposing a detailed workplan covering the activities and budget for the manpower needs assessment. This workplan shall include a second consultancy of approximately six weeks to Bcomplete a technical document for the four REACH/ACCS project target governorates.

The purpose of this consultancy is to prepare a manpower needs assessment that will identify the minimum staff requirements needed to deliver a standard package of basic health services as defined by the MOPH at the governorate level. The assessment will be carried out in four ACCS governorates that are actively in the process of developing a PHC system for the delivery of basic health services including PHCW training, health education and community service activities. These governorates are Hajjah, Hodeidah, Mareb and Saadah.

Since it is unlikely that the MOPH will be able to find/afford/ and/or train in the short term the personnel to fill all the desired positions necessary to manage and supervise all the approved interventions, it will also be necessary to consider what other manpower alternatives can be utilised on a part-time and voluntary basis from local communities.

At the end of this consultancy, the MOPH will have the information it needs to identify both short-term and long-term personnel requirements needed to manage an agreed upon and sustainable level of basic health services that can be tailored to fit within the expected resources in each governorate. It will also provide the data necessary for the MOPH to develop a plan and implementation schedule to recruit, train at appropriate institutions, and post the required personnel at a competitive salary.

The methodology used to prepare and conduct this assessment will be designed in a manner that can be used to carry out similar manpower needs assessments in other governorates in order to assist the MOPH meet national objectives. In the development of the methodology and survey instruments, special consideration will be given to harmonise the imbalances that exist between health resources and demand that resulted after reunification in the northern and southern sectors of the country. The assessment will be undertaken in such a way as to assure that health manpower development and utilisation for the provision of basic health services in communities throughout the country will be done on a basis of equity.

manpower development and utilisation for the provision of basic health services in communities throughout the country will be done on a basis of equity.

The Yemeni counterpart appointed by the MOPH for this consultancy will be a member of the Technical Committee for Health Manpower Projection (TCHMP). The consultant will conduct this consultancy within the framework of the plan and procedures developed by the TCHMP.

II. Specific Tasks

1. Meet with Yemeni counterpart and members of the TCHMP to determine the current situation of committee activities and determine the future course of action to be taken during the consultancy in relationship to TCHMP and the four ACCS governorates. This will include the role of the ACCS target governorate in conducting the assessment and techniques that can be used to address the issue of equity.
2. Meet with the MOPH and Civil Service leadership as well as other ministries and individuals identified by the TCHMP to discuss how the assessment is to be conducted, the role of each of the principal players, and the schedule for the organisation of activities.
3. Meet with MOPH officials at the governorate level from the four REACH/ACCS target governorates at a meeting in Sana'a called by the TCHMP to discuss and determine their roles, schedules and timetables.
4. Meet with USAID and REACH staff to discuss consultancy, determine role, needed resources, schedules and timetable. Determine documents to be translated into Arabic/English.
5. Meet with WHO and other donor agencies as needed to discuss the consultancy and mutual assessment interests.
6. Discuss and agree with TCHMP appropriate activities and assignments to be completed after the conclusion of the initial two-week consultancy and before the return of the consultant.
7. Draft the workplan for producing the manpower needs assessment nationally as well as in the four ACCS/REACH target governorates. This will include the activities to be completed before the consultant returns.

III. End of Consultancy Products

1. Strategy document and timetable for the implementation of the manpower needs assessment that identifies the roles and contribution of the principal parties to this activity.

IV. Relationships

The consultant will work under the general direction of the ACCS/ REACH/Yemen Chief of Party and in collaboration with the designated Yemen counterparts officially appointed before arrival by the MOPH and the Civil Service for the duration of the consultancy. Prior to the consultant's arrival an entry briefing and an exit debriefing will be arranged with Viviann Gary, USAID/GDO/HPN/Yemen.

V. Contract Period

The initial consultant visit will be for two weeks in Yemen that will begin on or about 17 August, 1991, and will end on or about 1 September, 1991. The dates for the second phase of the consultancy will be determined during the consultant's presence in Yemen for the first phase.

ANNEX 2: HEALTH MANPOWER SITUATION REPORT

OUTLINE OF TABLES AND ANALYSES

Actual staffing compared with standard staffing

PURPOSE

This analysis shows the current mismatch between requirements (standard staffing) and supply (staff in post) for each staff category in each type of health facility throughout the country.

DATA

For each Nahia:

Number of each type of health facility in operation (from the Health Facilities survey).

For each health staff employed in a Nahia:

Type of health facility

Staff category

Nationality (Yemeni/Expatriate/Total)

Sex

For each staff employed in a Governorate hospital and health office:

Type of health facility

Staff category

Nationality (Yemeni/Expatriate/Total)

Sex

For each staff employed in a national or specialist hospital and in the Ministry:

Type of health facility

Staff category

Nationality (Yemeni/Expatriate/Total)

Sex

All these items of data for individual staff are included in the Staff in Post Form, see Annex 3.

TABLES

For each Nahia, for each type of health facility (health units, health centres, district hospital):

standard staffing: number x staff category x sex (if specified)

together with

actual staffing: number x staff category x sex x nationality

Total the Nahia figures to give a governorate total. Add in governorate hospital(s) and governorate health offices.

Total the governorates figures for the national totals. Add in specialist hospitals and MOPH.

ANNEX 3: HEALTH MANPOWER SITUATION REPORT

OUTLINE OF TABLES AND ANALYSES

Staff characteristics

PURPOSE

This analysis covers the age and length of service patterns of staff to determine the stability of employment of the health staff and for use in the manpower supply projections.

DATA

For each health staff employed:

Staff category

Sex

Age

Nationality

Type of health facility

First Qualification

Year of First Qualification

Year of First Recruitment

Further Qualifications

Year of each Further Qualification

Years of service (allowing for any breaks in service)

Employer (Government/LCCD)

Type of service (terms of employment)

TABLES

1. Age distribution x staff category x sex x type of health facility: for each governorate (with national totals) for the large staff categories; national figures only for the smaller staff categories.
2. Length of service distribution x staff category x sex x type of health facility: for each governorate (with national totals) for the large staff categories; national figures only for the smaller staff categories.
3. Numbers employed x employer x type of health facility x staff category.
4. Type of service (terms of employment) x employer x nationality.
5. Interval between first qualification and first recruitment x staff category.

ANALYSES

% staff in 5-year or 10-year age bands x staff category x type of health facility

% staff in 5-year or 10-year length of service bands x staff category x type of health facility

% staff x employer x type of health facility x staff category

%type of service x employer x type of health facility x staff category

CONCLUSIONS

Where are the younger staff who are more mobile? Where will age retirement fall heavily?

Where are the less experienced staff who need more supervision? Where will length of service retirement fall heavily?

HEALTH MANPOWER SURVEY 1991

STAFF IN POST

Governorate.....
District.....
Health Establishment: Type..... Name.....

PERSONAL DETAILS

Name..... Nationality: Yemen
Sex M F Age years Other
specify:.....

PROFESSIONAL QUALIFICATIONS

Qualification	Year	Training Institute attended
1.		
2.		
3.		
4.		

EMPLOYMENT DETAILS

Year of first recruitment to Yemen Government health service

Total years of employment in the Yemen Government health service (do not include breaks in service)

Current staff category

Employer: Government LCCD Other
specify

Type of service: Permanent employee Contract
Volunteer Other
specify

I DECLARE THAT THE INFORMATION GIVEN IN THIS DOCUMENT IS CORRECT

Signature of staff member ID Number

NOTES/INSTRUCTIONS FOR:

STAFF IN POST FORM

PERSONAL DETAILS

Age

Enter the exact age (years) if it is known. Otherwise enter the best estimate.

PROFESSIONAL QUALIFICATIONS

Qualification

Give the full name of the qualification.

Date

Give the year in which the qualification was obtained.

Training Institute attended

If the training institute where the qualification was awarded was in Yemen, write its name. If the training institute where the qualification was awarded was not in Yemen, write only the country where the qualification was awarded.

EMPLOYMENT DETAILS

Year of first recruitment to Yemen Government health service

Write the year of first working in the official (Government or LCCD) Yemen health services.

Total years of employment in the Yemen Government health service

Count only the number of years of paid employment in the official (Government or LCCD) Yemen health services.

ANNEX 4: HEALTH MANPOWER SITUATION REPORT

OUTLINE OF TABLES AND ANALYSES

Training Institutions

PURPOSE

This analysis shows the current capacity and performance (output) of the health training institutions in the country.

DATA

For each training institution:

Types of training courses given

For each training course given:

Entry qualification

Qualification given on the course

Length of course

Frequency (number of intakes per year)

Maximum intake per course

Reason for average intake less than the maximum

Number entered and number graduated in each of the last five years, (by sex)

Number of places reserved for entrants from particular governorates in the last five years

Number of these places taken up in the last five years

Number of students from these governorates who graduated in the last five years

ANALYSES

% of places filled on intake (capacity used) in last 5 years

% places filled by females

% success rate (capacity used effectively)

% places reserved for particular governorates (capacity reserved)

% reserved places taken (efficiency of use of reserved)

% reserved places producing graduates (effectiveness of reserved places)

Total for all Governorates to produce national totals and averages for each staff category.

CONCLUSIONS

Comparisons of capacity used and possible reasons for differences.

Comparisons of success rates and possible reasons for differences.

Comparison of % places filled, success, etc. by females

Estimates of maximum output for each staff category for current institutions and operations.

Comparison of efficiency and effectiveness of the use of reserved places with open places.

HEALTH TRAINING INSTITUTIONS (1)

GOVERNORATE

HEALTH TRAINING INSTITUTION

<u>COURSES GIVEN</u>	
1	
2	
3	
4	
5	
6	

		COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5	COURSE 6
ENTRY QUALIFICATION							
QUALIFICATION FROM THE COURSE							
LENGTH OF COURSE							
FREQUENCY (INTAKES/YEAR)							
MAXIMUM INTAKE TO THE COURSE							
IF AVERAGE INTAKE IS LESS THAN MAXIMUM, WHAT BRIEFLY IS THE REASON FOR THIS?							
1986	INTAKES	M					
		F					
	GRADUATES	M					
		F					
1987	INTAKES	M					
		F					
	GRADUATES	M					
		F					
1988	INTAKES	M					
		F					
	GRADUATES	M					
		F					
1989	INTAKES	M					
		F					
	GRADUATES	M					
		F					
1990	INTAKES	M					
		F					
	GRADUATES	M					
		F					

ARE PLACES ON SOME COURSES RESERVED FOR ENTRANTS FROM PARTICULAR GOVERNORATES?

YES NO

IF 'YES', PLEASE COMPLETE HEALTH TRAINING INSTITUTIONS (2) FORM.

NOTES/INSTRUCTIONS FOR:
HEALTH TRAINING INSTITUTIONS (1) FORM

This form is to be completed for all health training institutions

Courses given

List all the courses regularly undertaken in the training institution for which a qualification is given to graduates and which is recognised by the MOPH. Courses which offer only a certificate of attendance should not be listed. If there are more than six courses given in this health training institution, continue the list on to another sheet of Health Training Institutions (1) Form.

Entry qualification

The minimum level of schooling which the training institution requires for a student to be accepted on the course.

Qualification from the course

The qualification awarded by the school to students successfully completing the course.

Length of course

The scheduled length of the course in years/months.

Frequency (intakes per year)

The actual frequency of intakes to the course (1 per year, 2 per year, etc.) i.e. the number of times the course is started every year. If the course is not given every year, then write the frequency as 1 per two years, 1 per three years, etc.

Maximum intake to the course

The maximum number of students which could be enrolled on the course in one intake.

If the average intake is less than the maximum intake, what briefly is the reason for this?

Give the brief reason if this is known e.g. not enough local applicants having the entry qualification, health salaries too low, unattractive conditions in the teaching institution, reserved places not taken, etc.

Intake 1986-90

The number of students enrolled at the start of each course in each of the five years 1986-90.

Graduates 1986-90

The number of students, including retakes, who graduated from each course in each of the five years 1986-90.

HEALTH MANPOWER SURVEY 1991

HEALTH TRAINING INSTITUTIONS (2)

GOVERNORATE

HEALTH TRAINING INSTITUTION

GOVERNORATE	YEAR	COURSE 1			COURSE 2			COURSE 3			COURSE 4			COURSE 5			COURSE 6		
		Places allocated	Places taken	Graduates															
1.	1986																		
	1987																		
	1988																		
	1989																		
	1990																		
2.	1986																		
	1987																		
	1988																		
	1989																		
	1990																		
3.	1986																		
	1987																		
	1988																		
	1989																		
	1990																		
4	1986																		
	1987																		
	1988																		
	1989																		
	1990																		

62

NOTES/INSTRUCTIONS FOR:

HEALTH TRAINING INSTITUTIONS (2) FORM

This form is completed only if the health training institution reserves places on some courses for entrants from particular governorates. Its purpose is to find out which governorates have these allocated places, how many places are allocated to them, and how many of these allocated places are filled by students from the governorate.

Course 1, 2, 3, 4, 5, 6

Same as on the Health Training Institutions (1) Form.

Governorate

Write in the names of the governorates for which places are allocated on one of the courses 1-6.

Places allocated

The number of places on the course allocated to each governorate in each of the five years 1986-90.

Places taken

The number of these allocated places on each course which were filled by students from the governorate they were allocated to in each of the five years 1986-90.

Graduates

The number of students from the governorate who graduated from the course during each of the five years 1986-90.

ANNEX 5: HEALTH MANPOWER SITUATION REPORT

OUTLINE OF TABLES AND ANALYSES

Approximate coverage or equity in the availability of health services

PURPOSE

Insufficient health services can arise because of staff shortages in existing health facilities, or because of an insufficient number of health facilities -- even in an area where the existing health facilities are fully staffed. This analysis identifies:

- a) the relative effects of staff shortages in existing facilities as compared with the lack of new facilities,
- b) those situations where existing facilities and staff are under the most pressure because of the combined effect of the two types of shortage.

DATA

For each Nahia:

Current estimated population

Number of each type of health facility in operation (from Health Facilities Survey).

Number of health staff in each category employed in each type

of

health facility (from Staff in Post Form, see Annex 3)

TABLES

For each Nahia:

Current population

Population theoretically covered by existing health facilities of each type (using standard population ratios for these facilities)

For each Nahia:

Actual number in each staff category in each type of health facility (from Staff in Post Form, see Annex 3)

Standard staffing pattern in each type of existing health facility

ANALYSIS

For each Nahia:

% population covered by existing health facilities if they were fully staffed

Number of facilities of each type required to bring coverage up to 100% of national standards

For each Nahia:

number in each staff category required to staff the full number of health facilities required according to national standards.
current staff as % of required staff for full coverage

Total Nahia figures for each governorate.

Total governorate figures for national totals.

CONCLUSIONS

Identify relative coverage effects of:

current staff shortages in existing facilities
current lack of facilities according to national standards

Identify areas most underserved by current facilities i.e. areas where there is the greatest mismatch between current staff and the staff which would be required for full coverage.

[Overall this is equivalent to using staff/population ratios, except that the two components -- lack of health facilities and staffing shortages -- are shown separately which population ratios alone cannot do.]

Population Distribution and Density

NAHIA	POPULATION	AREA	POP/KM ²	% POPN. DISTRIBUTION		
				URBAN	RURAL	NOMADIC
1						
2						
3						
4						
1						
1						
1						
GOVERNORATE TOTAL						

GOVERNORATE	POPULATION	AREA	POP/KM ²	% POPN. DISTRIBUTION		
				URBAN	RURAL	NOMADIC
1						
2						
3						
1						
1						
1						
18						
NATIONAL TOTAL						

HEALTH MANPOWER SURVEY 1991

SEGMENTED POPULATIONS, CURRENT AND PROJECTED TO 2010

GOVERNORATE	YEAR	MALE					FEMALE					TOTAL M+F
		0-4	5-14	15-44	45+	TOTAL M	0-4	5-14	15-44	45+	TOTAL F	
1	1991											
	1996											
	2001											
	2006											
	2010											
2	1991											
	1996											
	2001											
	2006											
	2010											
3	1991											
	1996											
	2001											
	2006											
	2010											
NATIONAL TOTAL	1991											
	1996											
	2001											
	2006											
	2010											

28