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Organization  
Manual**

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The World Fertility Survey is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

The WFS is being undertaken, with the collaboration of the United Nations, by the International Statistical Institute in cooperation with the International Union for the Scientific Study of Population. Financial support is provided principally by the United Nations Fund for Population Activities and the United States Agency for International Development.

This publication is part of the WFS Publications Programme which includes the WFS Basic Documentation, Occasional Papers and auxiliary publications. For further information on the WFS, write to the Information Office, International Statistical Institute, 428 Prinses Beatrixlaan, The Hague - Voorburg, Netherlands.

# Survey Organization Manual

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# Contents

<b>INTRODUCTION</b>	5
<b>PART I: THE WORLD FERTILITY SURVEY AND ITS STANDARDS</b>	7
1 <b>Objectives, General Nature and Organization of the WFS</b>	9
1.1 Scope and purpose of the WFS	9
1.2 Organization and functioning of the WFS	10
2 <b>Organization of the WFS at the International Level</b>	13
2.1 Technical and other assistance	13
2.1.1 Developed countries	13
2.1.2 Developing countries	14
2.2 Communications with WFS central staff	16
3 <b>WFS Standards for the National Surveys</b>	17
3.1 General nature of the national survey	17
3.2 WFS Documentation	18
3.3 Sampling requirements	20
3.4 Training standards	22
3.5 Standards for quality control and evaluation	23
3.6 Standards for data processing and analysis	24
<b>PART II: PLANNING AND ORGANIZATION OF A NATIONAL SURVEY</b>	27
4 <b>Organization of the WFS at the National Level</b>	29
4.1 The national executing agency	29
4.2 The survey director	29
4.3 The survey organization	30
5 <b>Basic Survey Decisions</b>	34
5.1 Planning	34
5.2 Specifying survey objectives	35
5.3 Preparing the timetable	36
5.4 Schedule of WFS technical assistance	36
5.5 Preparing the proposal and budget	37

5.6	Recruiting and training field staff	38
5.7	Publicity	38
<b>6</b>	<b>Basic Survey Operations</b>	<b>39</b>
6.1	Preparing documents	39
6.1.1	Translation	39
6.1.2	Adaptation of supervisors' and interviewers' instructions	40
6.1.3	Tape recordings	40
6.2	Sample design and implementation	40
6.3	Listing and mapping	42
6.4	Pre-test	43
6.5	Preparing final survey documents	44
6.6	Role, recruiting and training of field staff	44
6.6.1	Field supervisors	44
6.6.2	Interviewers	45
6.7	Field work	46
6.7.1	Organizational aspects	46
6.7.2	Role of supervisors during field work	47
6.7.3	Tape recorders	48
6.7.4	Administrative aspects of field work	49
6.7.5	Field work control sheets	49
6.8	Editing and coding	50
6.9	Tabulation, analysis and reporting of results	52
<b>7</b>	<b>Evaluation and Quality Control</b>	<b>54</b>
7.1	Evaluation	54
7.2	Quality control	55
<b>Appendix I:</b>	<b>Individual representatives to WFS Permanent Advisory Committees as of 1 January 1975</b>	<b>57</b>
<b>Appendix II:</b>	<b>Guidelines for applications for funding and for budgeting: General Form of Survey Proposal</b>	<b>59</b>

# Introduction

Recognizing the important role which population growth may play in economic and social development, the United Nations declared 1974 as World Population Year and issued a call to Member States and non-governmental organizations to focus international attention on various aspects of the population question.

The International Statistical Institute responded by proposing to carry out an international programme of fertility research to be known as the WORLD FERTILITY SURVEY, designed to assist countries to collect and analyse the scientific information which they need for an adequate understanding of the complex bio-social system determining the level of human fertility. It was decided that the survey should be undertaken by the International Statistical Institute, with the collaboration of the United Nations and in cooperation with the International Union for the Scientific Study of Population.

The aims of the World Fertility Survey (WFS), described more fully in this manual, are to assist a large number of countries, particularly the developing nations, to conduct scientific studies of their populations' fertility beginning in 1974. The need for a WFS Programme arises from the same sort of concerns which led the United Nations to declare a World Population Year: a need for improved knowledge of, and information about, the facts concerning population trends and associated factors; a need for sharpened awareness of population problems and their implications by governments, non-governmental organizations and scientific institutions; a need for promoting demographic considerations in development planning, and the development of policies and programmes in population fields; a need to expand international cooperation in the population field and increase the supply of technical assistance to countries desiring it in accordance with their requirements.

The *Survey Organization Manual* is intended to provide a national survey director first with a brief comprehensive overview of the WFS Programme. Secondly, the manual explains the principal standards towards which WFS surveys strive. Finally, there is a more detailed discussion of the organization and planning of national surveys which are part of the WFS Programme. At some points the manual is deliberately repetitive and this is in recognition that some readers may require only a general overview of the programme while others may need greater detail. At other points, the manual makes reference to matters which are treated in other WFS documentation and which consequently are

omitted or only briefly considered here.

By its scope and nature, the WFS holds the ambition of being the largest single social science project ever undertaken in the history of mankind. The WFS attempts to bring to bear on one of mankind's most monumental problems – the growth and distribution of the human species itself – the highest standards of man's scientific endeavours. This historic undertaking depends, in the final analysis, both for individual nations and for the world as a whole, on the scientific quality, the insistence on intelligent excellence, which each participating country brings to the conduct of its own survey.



**PART 1:**

**THE WORLD FERTILITY SURVEY  
AND ITS STANDARDS**

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# 1 Objectives, General Nature and Organization of the WFS

## 1.1 Scope and Purpose of the WFS

The first and most basic aim of the WFS Programme is to assist countries to acquire the scientific information that will permit them to describe and interpret their populations' level of fertility. Individual country surveys undertaken as part of the WFS will strive to identify meaningful differentials in patterns of fertility and fertility regulation and to clarify factors affecting fertility. Improved data on these topics will facilitate national efforts in economic, social and health planning.

A second, important purpose of the WFS is to increase national capacities for fertility and other demographic survey research, particularly in developing nations. It is hoped that by participating in the WFS a country will acquire an increased cadre of trained personnel who will be able to undertake further research programmes.

A third purpose of the WFS Programme is to collect and analyse data on fertility which are internationally standardized and therefore permit comparisons from one country to another. The interpretation of national data on fertility is greatly enhanced when put into a comparative framework. There is also considerable scientific interest in having available comparable data on fertility for populations whose socio-economic characteristics differ widely.

Countries throughout the world have been informed of the WFS Programme and their degree of interest in participating has been ascertained. For each potentially participating country, the WFS attempts to establish relations with the local agencies or organizations most appropriate for carrying out a high-quality survey. Such relations are necessarily determined on an individual basis, and the WFS is prepared to devote extensive staff work to exploring countries' interests and available capabilities.

Within limitations of funding, available scientific manpower, and institutional capabilities, the WFS seeks to have as many countries of the world participate in the programme as

desire to do so. This goal can be realized only by a carefully phased programme because of the low numbers of trained personnel in some countries, the varying levels of interest in fertility research, and the nature of technical survey problems. It is recognized that no single model for conducting the survey can be considered suitable for all countries. In every country the survey will need to be adapted to local conditions, while still preserving the ideal of international comparability.

Above all, the WFS will strive for results of high scientific quality. This can be achieved through the work of national staffs, assisted by the WFS central staff, but it requires that adequate time be devoted to planning, the testing of instrumentation and procedures, the training of survey personnel, and the careful phasing of survey activities. In any participating country, the WFS should stand as a model of excellence and as a standard against which subsequent surveys could be compared.

In general, for a particular participating country, the WFS will be a single-round survey of households so selected as to provide a probability sample capable of providing national estimates. In order to ensure high quality, it would be designed as an independent survey, or at least as the primary focus in a survey which might have other non-competing objectives. Appropriate quality control and evaluation techniques (such as cross-check questions, a re-interview programme, or other methods) are to be employed in order to provide some measure of data reliability.

From the standpoint of international comparability, each national survey should adopt a set of core questionnaire items regarding fertility behaviour. The core questionnaire has been developed by WFS central staff in worldwide consultation with demographers and statisticians. There will, of course, be sufficient flexibility in the core questionnaire to allow for adaptation of items to local conditions. In addition to the core questionnaire, there will be various possibilities for expansion of the inquiry into related areas of particular national interest.

## **1.2 Organization and Functioning of the WFS**

Overall organizational responsibility for planning and carrying out the WFS rests with the International Statistical Institute (ISI), working in collaboration with the International Union for the Scientific Study of Population (IUSSP) and the United Nations. ISI is a professional society "devoted to the development and improvement of statistical methods and their application throughout the world". An independent, non-profit scientific organization, ISI was founded in 1885 and a Permanent Office was set up in 1913 at The Hague, Netherlands. ISI members represent more than 80 countries and international

organizations. Ten international societies, including IUSSP, and 21 national statistical associations are affiliated with ISI.

ISI carries out its primary function through the biennial conferences of its members and of other prominent statisticians. The proceedings of these sessions are published in the ISI Bulletin. Throughout its history, ISI has made pioneer efforts to further statistical activities that were subsequently institutionalized and continued under governmental and intergovernmental auspices. The WFS is a major continuation of this tradition.

The WFS is supported financially through grants to ISI principally from the UN Fund for Population Activities and the U.S. Agency for International Development.

**WFS Organization:**

ISI has set up a separate project organization for the WFS. The major components of this organization are as follows:

**A. Permanent Advisory Committees<sup>1</sup>.**

1. The **Programme Steering Committee (PSC)** is entrusted with the overall substantive guidance and review of the WFS Programme. The committee consists of a chairman; four experts, serving in their individual capacities, appointed by ISI in consultation with the IUSSP and the UN; and representatives of the IUSSP, the UN Population Division, the UN Statistical Office, the UN Fund for Population Activities, and the U.S. Agency for International Development. In addition, the chairman of the Technical Advisory Committee attends the meetings of the PSC.
2. The **Technical Advisory Committee (TAC)** advises on all technical aspects of the WFS Programme. Its members are appointed by the chairman of the Programme Steering Committee, on the recommendation of the ISI and the IUSSP, from the fields of demography, statistics, survey design, data processing and other related areas. Members of the TAC serve in their individual capacities.

A list of the individual representatives to each of the permanent advisory committees, as of 1 January 1975, is found in Appendix I.

1 The WFS permanent advisory committees originally included a Regional Co-ordinating Committee whose purpose was to co-ordinate the activities of the WFS at the regional level. This committee has been disbanded because the UN has established regional liaison posts to the WFS and because the WFS has established direct communications with programmes at the regional level.

## **B. WFS Central Staff**

The WFS central staff consists of internationally recruited experts who oversee the general design of the WFS, ensure uniformity and comparability among individual surveys, and make expert technical consultation continuously available for individual participating countries. The components of the WFS central staff are:

1. **WFS Professional Centre** is in London and, from October 1972, is under the direction of Sir Maurice Kendall, WFS Project Director. The professional staff consists of approximately twenty full-time experts, chosen on an international basis, from the fields of fertility research, sampling, survey research techniques and electronic data processing. In addition to the staff, a number of internationally recruited consultants is available for individual assignments on short- and long-term basis.
2. **WFS Administrative Centre** is located in The Hague, Netherlands, and is under the direction of E. Lunenberg, Director of the Permanent Office of the ISI. The administrative staff recruits personnel for the WFS, arranges conferences and seminars, has charge of the WFS Publications Programme, makes basic arrangements with participating countries, and administers grants for subsidizing country surveys. The publications programme issues, among other publications, a series of Occasional Papers on scientific topics of relevance to the WFS.

## 2 Organization of the WFS at the International Level

The WFS central staff has adopted a flexible approach in dealing with participating countries, taking into account the resources and capabilities of each. For each participating country, appropriate local agencies or organizations are approached as early as possible in order that planning for individual surveys may commence expeditiously. An appropriate local organization is designated as executing agency for the country and asked to appoint a national director who will have overall responsibility for the country's survey. It has also proved useful for some countries to set up a national co-ordinating committee to advise on and participate in decisions regarding the planning and execution of the national survey. Such a committee has seemed particularly appropriate where several organizations or agencies within the country are collaborating in the survey.

Country cooperation and acceptance of responsibility for carrying out a high quality survey are essential for the success of the WFS Programme. When a country agrees to participate in the WFS, the WFS central staff requests that it concur in a basic agreement, to be negotiated with the central staff, regarding the design of its study. Developing countries are asked to submit a schedule detailing technical and financial assistance required for carrying out the survey. Through arrangements with the funding agencies, the WFS Programme anticipates being able to offer technical and financial assistance for any phase of the survey, from beginning to end, negotiated on the basis of need with each developing country. Short-term consultants in various fields such as sampling or data processing, and in some circumstances, long-term consultants who could reside in the participating country for the duration of the surveys, are made available.

### 2.1 Technical and Other Assistance

#### 2.1.1 *Developed Countries*

The WFS has established contacts with developed countries through many channels including a conference convened under the auspices of the Conference of European Statisticians in January 1974. In the matter of providing financial assistance for surveys, the WFS is generally governed by the policies of its funding agencies, the UN Fund for Population Activities and the U.S. Agency for International Development. These agencies do not as a rule make financial assistance available for conducting surveys in developed

nations. Consequently, developed countries which wish to participate in the WFS are expected to provide financial and technical assistance to their own surveys from their own national resources. However, the WFS central staff, working especially with the ECE Working Group on Social Demography and members of the IUSSP, have produced a questionnaire particularly suited to countries with low fertility and high contraceptive usage such as most developed countries. This questionnaire is made available by the WFS to developed countries on request. In addition, WFS central staff are prepared to enter into consultation with developed countries in order to ensure, as far as possible, that their surveys will be standardized and internationally comparable to other WFS studies.

#### *2.1.2 Developing Countries*

The bulk of the WFS effort in technical and other assistance is devoted to developing nations of the world. The principal areas for technical and other assistance to developing countries are:

##### **1. Preliminary Communications**

Through a series of regional conferences held in late 1973 and early 1974, the WFS attempted to acquaint officials and scientists of various nations with the scope and nature of the WFS Programme and to invite their participation. Through these conferences, visits to individual countries, attendance at scientific meetings, extensive correspondence and the WFS Publications Programme, the WFS has ascertained the interest of countries in participation and the likely scheduling of surveys during the period after 1974.

##### **2. Survey Design**

Once a country's definite interest in participating in the WFS has been established, a WFS team is sent to the country for a week or more to work with the country's designated national director and his staff in the design and planning of the country's survey. The survey design visit covers all aspects of the survey including a survey timetable, provision for various kinds of technical assistance from the WFS, and detailed explanation of standards to be sought in a WFS study.

##### **3. Financing**

WFS administrative staff visit the country either during or shortly after the survey design visit in order to provide assistance in drawing up a proposal for financing the survey. The national director and other appropriate officials are consulted as to the preferred source of funding. In some cases, the WFS is able to subgrant funds made



available to ISI/WFS by foreign assistance funding agencies. In other cases, the WFS assists the country in preparing a proposal for presentation directly to a funding agency. Throughout the life of a country's survey, WFS provides administrative liaison between the country and the funding agencies.

4. **Sampling**  
WFS central staff are prepared to assist developing nations in establishing a sampling frame and drawing a sample which is in accordance with WFS standards.
5. **Training**  
WFS central staff will aid countries both to plan and organize their survey training programmes and to carry them out, as required.
6. **Preparation and Adaptation of Documentation.**  
The WFS will provide participating countries with a number of prototype documents, ranging from a core questionnaire and optional questionnaire materials to a set of manuals covering basic survey functions. WFS central staff will work with the national director and his staff to adapt these documents to the needs and interests of the participating country.
7. **Field Supervision, Coding and Editing**  
Technical assistance can be provided to countries for supervising field work and for ensuring that coding and editing of data are carried out according to agreed standards of high quality.
8. **Computer Programming**  
The WFS will assist in the developing of computer programs for tabulation of data. In some cases the WFS may be able to supply an existing package of programs.
9. **Tabulation and Analysis**  
Specifications for tabulations and guidelines for data analysis can be provided to participating countries, together with whatever technical expertise is needed.
10. **Report Writing**  
Participating countries take responsibility for the writing of the report on their surveys. However, WFS central staff can give assistance in an outline of the country survey report and in its preparation.

## 11. Resident Advisers

If a participating country feels it necessary and desirable, the WFS will make an effort to attach a full-time resident adviser to the survey.

The above enumeration is only an outline of technical and other assistance functions which the WFS stands ready to provide to developing countries. Further sections of this manual give fuller details. It is recognized that some countries will not require a full schedule of assistance, while others may require more input from the WFS.

### 2.2 Communications with WFS Central Staff

For the duration of a country's survey, the WFS will ensure that effective communication lines exist between the national director and the WFS central staff. On signing the basic agreement, the WFS will appoint a staff member as the responsible communications-link with the country. It will be the duty of this WFS staff member to maintain close communications with the national director and his staff. Similarly, the national director is expected to communicate regularly with the WFS central staff. This is particularly important during the early planning stages of the survey so that the WFS may offer assistance in basic survey decisions.

Much of this communication will be accomplished through personal contact between the country and the WFS staff in London and The Hague. In addition, the basic agreement will specify a schedule of reports from the national director and his staff to the WFS central staff. The reports will generally deal with progress made in accordance with the schedule set forth in the agreement. The reports are important, since they will be a principal means of keeping WFS central staff aware of technical and administrative progress and enabling them to plan any additional assistance which the country may require.

#### *ALL COMMUNICATIONS OF A TECHNICAL NATURE SHOULD BE ADDRESSED TO:*

<i>World Fertility Survey</i>	<i>Telex:</i>	<i>91 92 29</i>
<i>International Statistical Institute</i>	<i>Telephone:</i>	<i>01-828-4242</i>
<i>35-37 Grosvenor Gardens</i>	<i>Cable:</i>	<i>Fertilis London SWI</i>

*London SW1W OBS, U.K.*

#### *ALL COMMUNICATIONS OF AN ADMINISTRATIVE OR FINANCIAL NATURE, OR COMMUNICATIONS REGARDING THE WFS PUBLICATIONS PROGRAMME, SHOULD BE ADDRESSED TO:*

<i>World Fertility Survey</i>	<i>Telex:</i>	<i>32 69 92</i>
<i>International Statistical Institute</i>	<i>Telephone:</i>	<i>070-694341</i>
<i>428 Prinses Beatrixlaan</i>	<i>Cable:</i>	<i>Statist The Hague</i>

*The Hague-Voorburg, Netherlands*

## 3 WFS Standards for the National Surveys

### 3.1 General Nature of the National Survey<sup>2</sup>.

In general, for a particular participating country, the WFS will be a single-round survey of households so selected as to provide a probability sample capable of yielding national estimates. In order to ensure high quality, it would be designed as an independent survey, or at least as the primary focus in a survey which might have other non-competing objectives. Appropriate quality control and evaluation techniques (such as cross-check questions, a re-interview programme, or other methods) are to be employed in order to provide some measure of data reliability.

The survey sample used in each country should provide data on households, with designated women as the primary survey respondents as well as the primary units of analysis. In general, the women should be interviewed by female interviewers. In countries where data on fertility rates are available from other sources, data on the composition of households will serve primarily as a means of locating the respondent. In other situations, the household survey can also be used to provide fertility information on a large sample, together with basic age, sex, and marital status distribution. From these rough estimates, crude birth rates, general and marital age-specific birth rates and nuptiality measures can be made.

The primary analytic purpose of a WFS survey is to identify the factors affecting fertility, to analyse fertility differences and to elucidate fertility patterns. This would include study of what women and men do to affect their own fertility. With adequate sample size and well controlled field operations, the WFS can also be the basis for providing estimates of national fertility rates of various kinds. Such estimates would not have the range of checks on error which are possible in multi-round surveys, dual-collection Population Growth Estimation studies, or other methods specifically designed to measure the components of population growth. Furthermore, it is recognized that a single-round survey is particularly limited in its ability to provide accurate estimates of adult mortality levels; nor, because of sample size, will the WFS individual interview be able to provide a very precise estimate of fertility levels. For these reasons, wherever possible, the WFS will strive to "co-ordinate" its work among the various kinds of studies. For example, the WFS is prepared to design a survey as part of a multi-round programme in countries where such

2 The manual is occasionally repetitive, as at this point, in recognition that some readers will wish only an overview of the survey, others a more in-depth treatment.

a programme is under way.

In any case, the WFS will take care not to interfere directly with other studies.

From the standpoint of comparability, each national survey is expected to adopt a set of core questionnaire items regarding fertility behaviour. The core questionnaire has been devised by WFS central staff according to international standards and in extensive consultation with the widest possible spectrum of international demographic and statistical expertise. The WFS recognises that there must be sufficient flexibility to allow for adaptation of items to local conditions and will assist in such adaptation.

In addition to the core questions there are various possibilities for expansion of the enquiry into related areas of particular national interest. The WFS has devised a set of modules, groups of questions on a particular topic, constructed so as to be integrated into the core questionnaire if desired. Modules are made available to countries as optional supplements to the core individual questionnaire. However, the WFS Technical Advisory Committee has recommended that priority emphasis be placed on modules concerning family planning, abortion, fertility regulation, and the influence of child mortality on fertility. Beyond the modules, the WFS central staff are prepared to assist countries with the construction of additional items – either for expanding the household or the individual schedule – which are of purely national interest, provided such items are consistent with the overall aims of the WFS.

### **3.2 WFS Documentation**

For all participating countries, the WFS will make the following documents available:

1. Household schedule and individual core questionnaire
2. Questionnaire modules concerning optional topics
3. Survey Organization Manual – the present document
4. Manual on Sample Design
5. Training Manual
6. Supervisors' Instructions
7. Interviewers' Instructions
8. Coding Guidelines
9. Guidelines for Country Report No. 1.

The household schedule, individual core questionnaire and modules, and Supervisors' and Interviewers' Instructions are prototype documents which must be adapted to the situat-

ion of each country and hence are not directly utilisable in the form in which they are received from the WFS. The remaining documents give guidelines, set forth detailed standards, suggest ways and means of handling problems, and give practical aid. WFS central staff and consultants will work with national directors and their staffs to adapt the prototype documentation, as well as to create new country-specific manuals where necessary.

**The Individual Core Questionnaire.** The very concept of a "world" fertility survey implies that measures will be devised which can be applied from one nation to the next. This means that countries participating in the WFS will aspire to the ideal of international comparability and will, insofar as feasible, utilize the core questionnaire developed by the WFS.

The WFS has developed two core questionnaires. One of these is aimed at countries of high fertility and low contraceptive usage (this questionnaire is referred to internally as Mark I). The other (Mark II) was devised to be applied to countries of low fertility and high contraceptive usage, such as many developed countries in Europe and elsewhere. In the remarks below, where no specification is made it may be assumed that the text is referring to the former questionnaire, this being the schedule most likely to be used in countries to which the WFS will render most technical assistance.

Any attempt to employ standardized survey instruments in many countries is subject to difficulties. What one attempts to standardize, first of all, is the information obtained rather than the exact wording of a questionnaire item. It may happen that some questions in the core individual questionnaire are not adequate to obtain the required information in a certain country. For example, the individual questionnaire, in the form received from the WFS, considers only marriages and perhaps deals inadequately with consensual unions. In countries where consensual unions are frequent, provision has to be made in the individual questionnaire for including such unions in the marriage history so as to get an accurate picture of the respondents' "married" life. In other cases, literal translation of a questionnaire item from one language to another might result in altering the meaning of the item; changes would have to be introduced so that the meaning remains the same. Sometimes physical restructuring of the questionnaire may be necessary. Thus some parts of the questionnaires provided by WFS will be marked as "Subject to local adaptation".

The individual questionnaire has been drafted so as to acquire the minimum essential information necessary for describing a country's fertility. Everyone recognizes that a precise "minimum essential" is only a theoretical ideal, but the point is that the WFS has

attempted to keep the questionnaire as short as possible in interviewing time and number of variables covered. Obviously, many countries will wish to add variables which they consider important to the study of their own populations' fertility. With this in mind, the WFS developed modules on topics which go beyond the core individual questionnaire and which several countries might adopt. The WFS modules, rated as recommended by the WFS Technical Advisory Committee, are:

**A. Modules for Priority Emphasis**

1. Family Planning
2. Abortion
3. Fertility Regulation
4. Influence of Mortality on Fertility

**B. Other Modules**

5. Factors other than Contraception affecting Fertility
6. Economic Variables
7. Community-Level Variables
8. General Mortality

**Agreement of contents.** When the particular form of household schedule and individual questionnaire have been set and determined by a country in consultation with WFS central staff, it is expected that the contents will not thereafter be modified without again consulting WFS. The reason for this understanding concerning non-modification is that the WFS has as one of its secondary objectives the achievement of international comparability among survey results and would wish, wherever possible, to see to it that changes which are introduced do not needlessly destroy comparability.

**3.3 Sampling Requirements**

The exact procedures for drawing the sample will vary from country to country depending on local circumstances. Basically the sample is to consist of a representative number of households in which women in the fertile age-groups will be interviewed. The criteria for determining a woman's eligibility for inclusion in the household schedule fertility questions are that she be fifteen years of age or over (although a lower age boundary is acceptable), and have *de facto* or *de jure* residential status, i.e., eligible persons must be household members present or absent, or non-members who slept there the night before the interviewer calls. For the individual questionnaire, the woman should be 49 years of

age or younger, "ever-married"<sup>3</sup> and have *de facto* residential status, i.e., slept there last night.

The WFS can provide a sampling expert if needed. In any event, the national director or his senior staff should participate in the sampling procedure and exercise control of the sample during field work. In the ordinary case the interviewers will be provided with a list of households with their addresses or location descriptions. Only if these households are visited and information obtained from them can the sample be considered unbiased. Consequently, survey staff must be certain that the interviewers obtain information from these households and these households only.

Sample size is to be determined on a country-by-country basis. In general, the WFS advises smaller samples for smaller countries than for larger countries. But also important are such considerations as the detail and complexity of planned data analysis and the cultural heterogeneity of the country, in addition to the resources of trained personnel available. Recommended sample sizes range from a lower limit of about 2,000 individual women for the smaller countries to an upper limit of about 10,000 women. Less than 2,000 interferes with detailed analysis; more than 10,000 increases costs and strains on resources without commensurate returns.

Typically, the sample will be selected in two steps: first the selection of sample areas and second a list of the dwellings or households in the selected areas. The list will serve as a basic for the ultimate selection of households in which interviews will take place. The household schedule may be filled in either at the listing stage (in countries which choose to have a large household sample) or at the main survey stage and only in those households selected for the individual interview (where a small household sample is utilized). The precise definition of household or dwelling is left to the individual country with the admonition that there should be a *precise* definition.

The national director and his staff should see to it that a detailed report is prepared on how the sample was drawn and any special difficulties that were encountered. The objective is to ensure that it is known exactly how the sample was selected. This report should be prepared immediately after the sampling process lest detail about sampling be mislaid or lost. Information both on the sample design and the actual selection of the sample is valuable both for the country carrying out the survey and for those countries which will participate later on in the WFS and can benefit from experience gained in other nations. A summary of the report on sample selection should also be included in the country survey report.

3 "Ever-married": In some cultures this term would be confusing or subject to varied meaning. In such cases, the important point is that some uniform marital definition be used.

### 3.4 Training Standards

The training of survey personnel is of paramount importance in obtaining national data of a high quality. This is particularly true in those developing nations where there is a scarcity of trained personnel. Fulfilling the goals which the WFS has set itself requires careful training, both in-country and, where appropriate, out-of-country. This will be "co-ordinated" at the international level through close and continuing consultation utilizing, among other means, standardized training documentation. The WFS central staff will advise at all levels of training as required.

The provision of adequate training for the WFS will take place at three levels:

1. National directors and senior professional staff
2. Intermediate staff
3. Field staff (including editors and coders).

**Level 1.** Training at the first level is not really training as the term is ordinarily understood; it is in-depth briefing of the country's professional personnel and will operate in two ways.

1. The national director (who in some countries will not necessarily be the *de facto* director) the actual survey director<sup>4</sup> and an assistant or deputy will receive extensive briefings and consultations on all aspects of the programme, including levels 2 and 3 of the training. These briefings may take place in the country or at some other international or regional location.
2. The remaining senior staff will be briefed in the country itself under the survey director, and the briefings will consist of group discussions on regional and national problems and experiences, and local adaptation of WFS instrumentation (questionnaires, modules, sampling frame, training programme, tabulation, analysis and report-writing, etc.).

**Level 2.** In any survey there is always need for a group of support staff and/or assistants who, while not being senior professionals, are concerned with the actual implementation of the programme of work; for example, to select the sample, prepare the field work, exercise a higher level supervisory role in the field, or in data processing. Such a group would need to be involved throughout the lifetime of the survey and would be used during the pre-test period, and subsequently, in a variety of roles. The training of this intermediate level of staff will be undertaken by the survey director, his assistant and the

<sup>4</sup> The national director may be, for example, a senior government official with many duties such as a chief statistician. The survey director is used to designate the person actually in charge full time for the survey. Cf. below, section 4.2.



senior professionals, with inputs from the WFS central staff and/or consultants. This training programme should be as structured as possible and combined with the organization, implementation and evaluation of the pre-test.

**Level 3.** For the final and in some respects most important level of training, the field supervisors and the interviewers, together with the listers and mappers (if applicable), must undergo a rigorous training programme in their local settings under realistic field conditions and under the supervision of the senior staff. Editors and coders must also receive appropriate training. At this level, a continuing input may be required from the WFS central staff, but in most cases this will be a technical assistance, advisory role; the actual training will be undertaken by the country staff.

From country to country, there are substantial differences in the skills, qualifications and experience of available or recruitable personnel. For this reason, a rigid approach to the application of training standards is not feasible. Standards must be applied flexibly, with due regard to the constraints and needs of the given country situation, and implemented in such a way as to ensure that each member of the country survey staff will be able to perform his duties according to principles agreed with the WFS. The need for flexibility, however, should never be allowed to justify neglect of training at any level.

**Timing.** The briefing of the national director, survey director and senior staff will be agreed on, as to time and place, as circumstances best dictate, at the time of the WFS survey design visit. The level 2 stage of the training programme should begin after the basic agreement with the WFS has been reached. This training will be continued through participation in the pre-test. The training of the field supervisors, level 3, should take place before the training of the interviewers. In fact, the supervisors should usually be the interviewers for the pre-test. The interviewers themselves should be trained shortly prior to the start of the field work. The training of coders and editors can take place immediately before the field work commences or, if interviewers are retained for this purpose, immediately after finishing their field assignments.

### **3.5 Standards for Quality Control and Evaluation**

Experience from both the developed and developing world indicates the importance of quality control and evaluation for the interpretation of survey results. A programme of quality control procedures and evaluation should be planned and budgeted as an integral part of surveys conducted within the WFS framework.

Quality control begins at the sampling stage where senior staff in each participating country must work out procedures for ensuring that the sampling frame does not inadvertently omit or duplicate part of the population, that adequate records are kept of all steps and that both systematic and spot checks are utilized. As regards interviewers, quality control means that care must first be taken in selection and training of interviewers and that those who are unsatisfactory are dismissed. Supervisors must be sure to check interviews regularly and records should be kept of checking activities. Interviewers should know that they will be checked, and similarly, so should supervisors. Quality control in the office must be pursued as carefully as in the field. Adequate filing and storage systems are important. A document control system should be devised and implemented. Coding and editing should be controlled through selecting of samples of records to be re-verified, it being assumed that all records are verified once they are processed. Early and continuing feedback from the quality control system to operations must be insisted upon. Special arrangements should be made for data corrections and the treatment of non-response.

Evaluation of the survey involves first the provision for estimation of sampling errors. The sampling error of a sufficient variety of tabulation cells should be estimated so as to permit the development of generalized statements relating the size of sampling errors to a number of observations. External consistency checks should also be employed, and a search should be made for sources of independent estimates related to the topics of the survey. Re-interview or record matching programmes should be used where feasible as part of the overall evaluation programme. Methodological and substantive sub-studies, such as post-enumeration surveys or interviews with a subsample of husbands, are encouraged. Tape recording of some field work, particularly during training, can improve the overall quality of survey results. Translations should be controlled through back-translations. The country survey report should contain a full exposition of quality control and evaluation procedures and their results.

### **3.6 Standards for Data Processing and Analysis**

It is generally considered desirable that each country participating in the WFS should process its own survey data for the production of its country report. For those countries which lack the facilities, special provision can be made, but for the majority of countries it is thought that the WFS will better serve the present and future interests of the participating nations if the countries themselves carry out data processing and analysis.

Since each country's questionnaire is an individualized adaptation of WFS documentation, it is impossible to prepare generalized instructions for coding and editing of data.

The WFS will provide general guidelines governing coding and editing, will urge the utilization of internationally standardized systems and develop some common classifications and codes.

While recognizing the wide variety of computer machinery available in countries, the WFS has attempted to develop common sets of computer programs. Advice on the availability and applicability of program packages is given to participating countries. The WFS central staff is prepared to render assistance in the training of electronic data processing staff. The WFS has developed a generalized computer program for editing and imputation of data which can be made available together with technical assistance for installation, testing and implementation of the program. Provision of generalized training in this area, however, is not a major objective of the WFS and training will be restricted to the needs of the survey at hand.

The WFS will make available to participating countries a manual on tabulation of results and guidelines for the preparation of country reports. Each country is to publish the results of its survey. Responsibility for preparation of the country report rests with the country itself, although the WFS can render needed technical assistance in this area also. The WFS envisions more than one country report: a first account, issued as rapidly as feasible and giving the broad outlines of survey results; and at least a second, more analytical report, examining the data in greater depth.

The WFS central staff is charged with the obligation of preparing regional and international comparisons of survey results. Each country should provide the WFS central staff with a full set of the finally processed micro-records on magnetic tape, together with all relevant documentation. Identification of individuals would, of course, be removed and the WFS would enter into formal agreement with the country to safeguard the confidentiality of the data and to disseminate the data only according to agreed principles and procedures. The provision of micro-record data greatly facilitates carrying out the international comparisons which are an important objective of the entire WFS Programme.

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**PART II:**

**PLANNING AND ORGANIZATION  
OF A NATIONAL SURVEY**

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## 4 Organization of the WFS at the National Level

### 4.1 The National Executing Agency.

Inasmuch as a primary objective of the WFS is to provide participating countries with high quality data on the fertility of their populations, the WFS would wish to see chosen as the national executing agency for the survey that organization which can best fulfil this objective. In principle, the WFS is prepared to negotiate a survey with any legitimate governmental or non-governmental organization, including national statistical offices, university or other research organizations, health ministries, permanent or *ad hoc* autonomous bodies or commercial survey organizations. The actual choice of organization is determined on a case-by-case basis and the WFS, expecting that the country will share the goal of achieving high quality data, weighs heavily the recommendations of interested scholars and officials from the country, discussing the matter with all concerned.

Some countries may wish to establish a national co-ordinating committee to advise the national director and the executing agency on the survey. This committee could include professionals interested in the research aspects of the study as well as representatives of government ministries and other agencies concerned with policy regarding fertility. Such a committee could have a particularly valuable role to play in countries where more than one organization is involved in the execution, analysis and utilization of the national survey.

### 4.2 The Survey Director

The national director in most cases will be a sufficiently senior member of the organization concerned as to be able to enter into a contractual obligation with either the ISI/WFS or the funding agencies. In some cases, he may be from a non-governmental organization. In some circumstances, the national director will be the chief statistician of the country, or a person fulfilling similar responsibilities, and because of his official duties will be the director only in a nominal sense. In these circumstances, it will be important that the national director appoint an actual survey director.

For the remainder of this manual, reference is made to the survey director, the person principally responsible for the conduct of the survey, whether he be one and the same as the national director, or some other person.

Ideally, the survey director should be a person with relevant experience in the field of fertility sample surveys, with a thorough knowledge of survey techniques and operations and with a capacity for leadership and organization. Such a person, it is recognized, may not always be readily available for the survey, but the WFS urges countries to put forward the best suitable candidate because the success of the survey depends to a large extent on this person.

When there is a nominal national director and an executive survey director, it is of utmost importance that their relationship be well defined. The survey director must have a free hand in the organization of the survey, the authority necessary to carry out his responsibilities, and there should be a clear-cut division of responsibilities. This is especially important with regard to financial matters for otherwise the survey organization can break down.

The role of the survey director is not one merely of general organization and decision-making in the early stages of the survey. He must be willing to bear a fair amount of the more tedious work load and identify the problems and issues which will occur throughout the survey. He may at times be involved in activities similar to those undertaken by his assistants, but essentially his role is to ensure the efficient running of the entire survey and to monitor all lower levels of activity. This is important at all stages of the survey, but especially during the training programme where his input and continued involvement are most needed.

It may be necessary for the survey director to have a deputy or assistant who is capable of assuming his role when necessary. At all events, the survey director should be employed full time on the survey.

#### **4.3 The Survey Organization**

On the following two pages are chart I, which describes a general scheme for personnel necessary to the survey, and chart II, which presents an overview of field organization. These schematic outlines are intended only as an aid for visualizing the kind of organizational structures which will be necessary. Not all of the personnel shown will necessarily exist at the same time within the organizational framework, and, of course, the organization chart for individual countries will differ widely.



As examination of the charts will suggest, the size of the survey organization and the size of the staff will change at different stages of the survey. The initial planning stages are likely to involve only the survey director, his assistant, his permanent staff and temporary survey experts. As the time for pre-testing and field work draws closer, the permanent support staff must be in place and temporary field and office staff recruited and trained. Some temporary support units such as a computer centre or printing office may never be actually a part of the survey organization but rather already existing organizations, relations with which must be organized by the survey director. There are obvious advantages to retaining the better employees in certain functions as long as possible, if the survey schedule is not disturbed. If the WFS is seen as an institution-building exercise towards a permanent survey organization, it may be possible to offer prospect of permanent employment to some.

Chart II sketches a possible field organization. One can visualize the situation in which field work is divided by geographical regions. For the purposes of chart II, there might be three geographical regions, each of which has its own field organizer. The field organizer for each region is responsible for several field supervisors, each of whom heads a team of interviewers.

Each participating country will need to develop its own survey organization adapted to the special purposes of the WFS. For some, much of the organization will exist; for others, existing organizations can be shifted to the purposes at hand. The important point for the survey director is that he see to it the organization and personnel are in place where and when they are needed for the survey.

CHART I: AN EXAMPLE OF A SURVEY PERSONNEL SCHEME

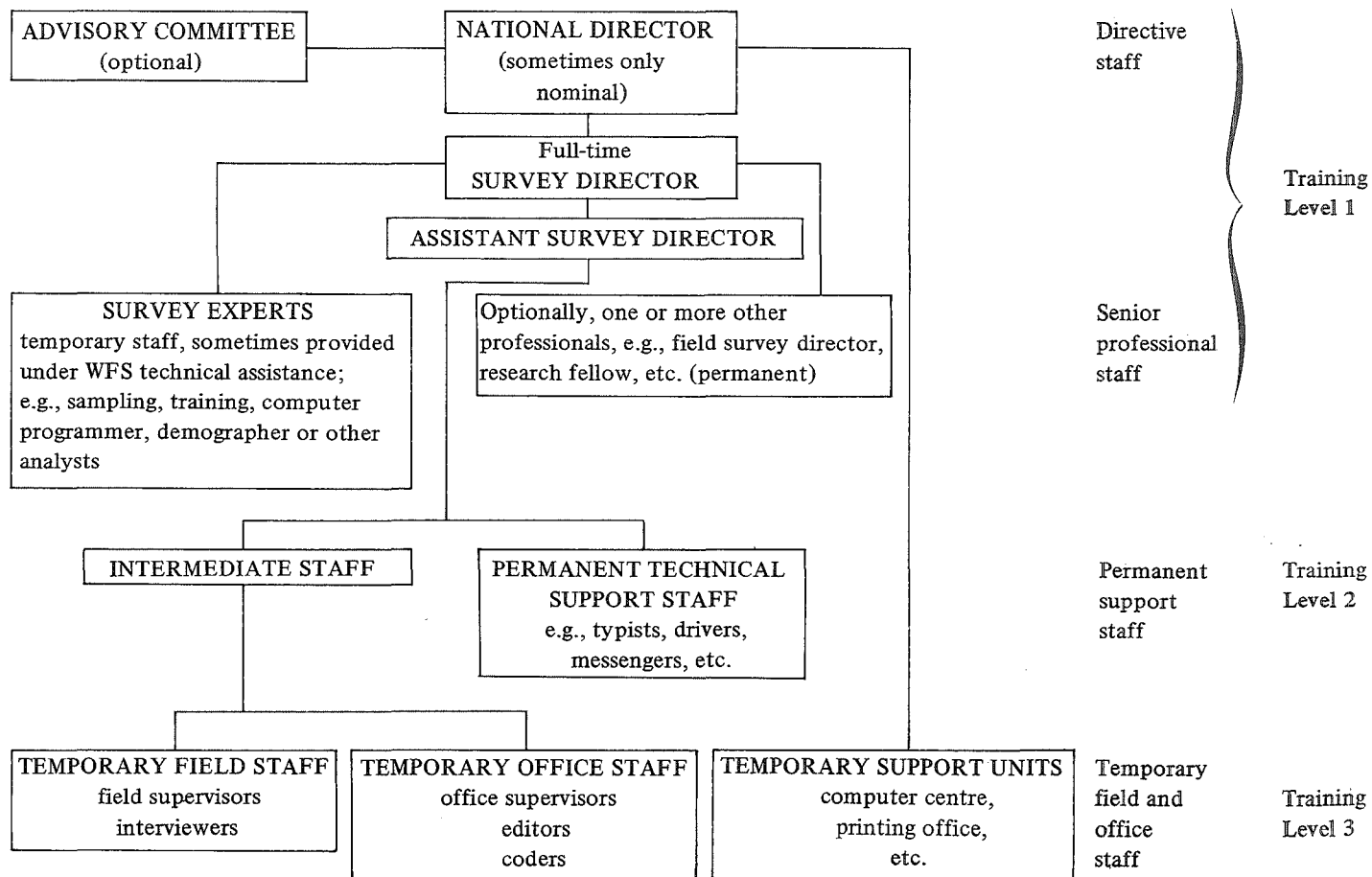


CHART II: AN EXAMPLE OF A FIELD SURVEY ORGANIZATION

PROFESSIONAL/  
DIRECTIVE

SURVEY DIRECTOR  
ASSISTANT SURVEY DIRECTOR

FIELD SURVEY DIRECTOR

Other permanent  
professional  
staff

FIELD  
ORGANIZERS

FO-1

FO-2

FO-3

FIELD SUPERVISORS

FS-1

FS-2

FS-3

FS-4

FS-5

FS-6

FS-7

FS-8

Team 1

Team 2

Team 3

Team 4

Team 5

Team 6

Team 7

Team 8

INTERVIEWERS

III

IIII

III

IIII

III

III

III

III

Comments

The field survey director is in overall charge of field work

Each field organizer is in charge of several field supervisors

Each field supervisor is in charge of a single team of interviewers. In practice there might be two supervisors for each team of interviewers, one for organization, one for field editing.

Interviewers, preferably female, carry out the actual interviewing

Cf. text for further comments; also, cf. Training Manual.

## 5 Basic Survey Decisions

### 5.1 Planning

The first stage of a survey operation is the drawing up of a survey plan. In most cases, the survey plan will be written together with the WFS central staff team who are visiting the country for the purposes of survey design, and will follow the receipt of extensive background information on the WFS. The survey director and senior staff must participate closely in the planning as they will be principally responsible for the implementation of the plan. The planning of the survey should cover the following points:

#### A. Establishing the survey organization

1. Designating the responsible institutions and agencies
2. Setting up the survey office
  - obtaining adequate office space
  - recruiting personnel
  - securing office materials

#### B. Preparing documents

1. Adapting questionnaires and manuals
2. Translating and back-translating questionnaires; translating manuals and other documents
3. Printing of questionnaires and manuals for pre-test
4. Designing and printing control sheets
5. Deciding on coding procedures

#### C. The sample

1. Selecting the (primary) area sample
2. Mapping (where required)
3. Recruiting and training the listing enumerators and supervisors
4. Listing households or dwellings (where required)
5. Selecting the household or dwelling sample

**D. Conducting the pre-test**

1. Recruiting pre-test interviewers and supervisors
2. Training pre-test interviewers and supervisors
3. Studying pre-test results and correcting documents if necessary

**E. Printing of questionnaires and manuals for main survey**

**F. Field staff**

1. Recruiting supervisors and interviewers (possibly from pre-test staff)
2. Training supervisors
3. Training interviewers

**G. Field work**

1. Household schedule
2. Individual questionnaire

**H. Coding and editing**

1. Recruiting coders and editors (possibly from supervisors and interviewers)
2. Training of coders and editors
3. Conducting coding, editing and processing

**I. Tabulation and analysis**

**J. Report writing**

**K. Publication of report**

**5.2 Specifying Survey Objectives**

Simultaneous to the planning operations outlined immediately above, the survey director must make important practical decisions concerning his survey's objectives. For example, the prototype household schedule supplied by the WFS can be used to collect substantive data or it can serve only as a means for listing the households from which eligible respondents will be selected. If substantive data are to be collected, the survey director and his staff will have to decide which kinds of data, and work in consultation with WFS staff to re-design the household schedule, if necessary. Secondly, the survey director must decide whether the household schedule is to be administered first and then the

individual questionnaire administered at a later date. This decision has significant implications for the planning and organizing of field work. Thirdly, he must decide whether the household sample is to be larger than the sample of individual women. These decisions are not independent of one another. (See the *WFS Manual on Sample Design*, chapter 7.)

Concerning the individual questionnaire itself, the survey director and his staff must assess the data needs of their country and decide what topics, if any, will be covered in addition to the core items. This may mean selecting materials from the modules provided by the WFS. It may also mean devising and testing additional questions which are of special interest to the country but not provided within the WFS documentation. An important consideration here is a judgment as to how long an interview can become without overburdening the main enquiry, producing respondent fatigue, interviewer dissatisfaction, and the possibility of generating more data than the survey organization can ably analyse and report.

### **5.3 Preparing the Timetable**

The survey procedures established during the planning stage should be accompanied by a timetable, specifying as precisely as possible when each operation is to take place. The timetable should take into account the fact that some operations can be performed simultaneously. For example, work on the sample and on the preparation of survey documents can go forward at the same time as recruitment of interviewers and supervisors for the main survey. Interviewers for the pre-test can be trained as supervisors for the main survey. Coding may be started during the field work, or it may prove desirable to delay coding and re-train supervisors and interviewers as coders and editors.

A detailed timetable is necessary not only for planning and budgeting but most of all for guiding the survey staff in all operations. It is recommended that the survey timetable, once drawn up, be prominently displayed in the office so as to serve as a continual reminder to the survey director and his staff. If unforeseen events during the course of the survey make the original timetable obsolete, it should be re-planned.

### **5.4 Schedule of WFS Technical Assistance**

In planning survey operations and drawing up a timetable, the survey director will consult with WFS staff on the kinds and amounts of technical expertise the country will wish supplied from the WFS central staff. A typical entry might be:

May 1976. One expert for two weeks to assist with sampling and finalization of questionnaire.

This advance specification of WFS assistance is important to the survey director so that he can know when to expect visits from WFS central staff or their consultants. It is also important to the WFS in order that the allocation of technical personnel can be planned and surveys not be held up for lack of a technical expert in the right place at the right time.

#### **5.5 Preparing the Proposal and Budget**

In a typical instance, one or more members of the WFS central staff visit a country for a period of up to two weeks during which the technical design of the country's survey is developed in consultation with the survey director and his staff. Towards the end of the survey design visit, perhaps during the final week, an ISI/WFS contract officer joins the central staff members in the country. The idea is that the survey director, his staff and the WFS central staff members will have held extensive discussions concerning the technical aspects of the survey and developed a draft proposal for the survey, covering the points listed above in Sections 5.1, 5.2, 5.3, and 5.4. The ISI/WFS contract officer then arrives to discuss financial and administrative aspects of the survey.

The WFS has two principal funding sources: the United Nations Fund for Population Activities (UNFPA) and the U.S. Agency for International Development (USAID). Certain other governmental agencies have contributed smaller amounts of funds to the WFS Programme.

Inasmuch as the WFS is officially identified as a programme carried out in collaboration with the United Nations, the UNFPA is the "preferred" source of funding for WFS surveys. However, countries are of course free to seek support for their surveys from USAID or from other sources. Policies and procedures regarding the obligation, disbursement and expenditure of funds are determined by the particular funding agency.

The survey director, in consultation both with WFS and his government or other appropriate officials, will have concluded which is the appropriate funding agency to approach for support of his country's survey. Approaches to UNFPA are submitted as an official governmental request with the technical concurrence of ISI/WFS and funds granted by UNFPA are granted to the government with ISI/WFS acting in a technical liaison role. USAID funds have been granted to ISI/WFS for the purpose of supporting surveys in developing nations and ISI/WFS is empowered to subgrant such funds to governments or other national executing agencies subject to the concurrence of USAID.

The application for funding, in detail and general content, varies from country to

country, not only in accordance with the requirements of the relevant funding agency but also in relation to prevailing climatic, political, social and economic factors. A general framework indicating most of the possible ingredients of an application and some guidelines on budgeting is found in Appendix II.

#### 5.6 Recruiting and Training Field Staff

Detailed treatment of the recruitment and training of field staff is to be found in the *WFS Training Manual*. To avoid duplication, this treatment is not repeated here. However, sections of Chapter 6, below, Basic Survey Operations, bear on recruitment and training of supervisors and interviewers.

#### 5.7<sup>1</sup> Publicity

Recruiting and training of field staff may necessitate advertising for potential employees and hence publicizing the survey. In fact, the survey director should already have begun planning for publicity attendant to the survey.

Carefully considered publicity for the survey is generally an excellent method for eliciting cooperation from the members of the public in general and the respondents in particular. Later, when interviewing, field staff will find the previous publicity to be a good form of legitimation; in the face of dubious respondents, they can produce press releases or newspaper clippings or refer to radio programmes.

Suitable press releases should be prepared which describe the overall objectives of the survey, both as it relates to national goals and to international "cooperation". The press and the general public should receive prepared statements from the survey director. The WFS can assist by providing background materials on the international WFS Programme. The WFS would appreciate receiving copies of press releases, newspaper clippings and other publicity items in connection with the survey.

While making every effort to enhance the survey's likelihood of success through use of mass media, the proper steps should be taken to ensure that adverse publicity does not damage the survey. The responsibility for publicizing the survey should lie only with the survey director. It is generally inadvisable to allow blank questionnaires to be distributed to journalists and the general public. Such documents are only one piece of the entire survey and publication of one or two sensitive items, removed from their context, could be prejudicial to the whole survey. Hence interviewers, supervisors and other staff should be advised not to show survey documents, especially questionnaires, to persons other than respondents and be generally trained to avoid inquisitive members of the public without offending them.



## 6 Basic Survey Operations

### 6.1 Preparing Documents

WFS central staff will work with the survey director and his staff to adapt the household schedule, individual questionnaire and modules to the needs and conditions of each participating country. The decision to include a module within a country's questionnaire rests primarily with the country. The WFS Technical Advisory Committee has recommended that some modules be given higher priority in that they are important to the scientific understanding of fertility (cf. above, section 3.2). WFS staff will advise on overall size and complexity of the country's questionnaire; they will generally recommend against an over-lengthy and cumbersome questionnaire.

#### 6.1.1. *Translation*

Interviews must be conducted in the language of the persons being interviewed and it is therefore necessary to translate the household schedule and questionnaire into this language. Translation of technical questionnaires is itself a technical speciality. It requires a person who is both bilingual and knowledgeable about demographic expressions.

The recommended WFS translation procedure is that, first, the English, French, Arabic or Spanish version of the questionnaires be translated into the local language by one person. This translation is then translated back into its original by another person working independently. The two are then compared. This procedure reveals possible pitfalls and difficulties in the translation which should then be solved by the two persons who were involved. The WFS questionnaires, available in English, French, Arabic and Spanish, are accompanied by explanatory notes which should be useful to translators in understanding the meaning of the questions.

Any translation should also be tested in the field and this should be done prior to its usage even in the pre-test, since actual experience might reveal difficulties the translators had not anticipated. Interviews for the purpose of testing the translation need not be many in number but rather should concentrate on clarity and ease of respondent understanding. The essential purpose is to obtain responses comparable in other languages. This does not necessarily mean word-for-word translation of WFS questions. In some cases adaptation may not only be advisable but imperative.

### 6.1.2 *Adaptation of Supervisors' and Interviewers' Instructions*

Interviewers and supervisors must be able to understand clearly the documents with which they will work. Consequently, in most countries translation of interviewers' and supervisors' instructions will be needed and this should be done at the same time the questionnaires are translated.

More generally, however, perusal of the prototype *WFS Interviewers' Instructions* and *Supervisors' Instructions* will show that these two documents are written in the expectation that they must be adapted to the individual country situation. When the country's questionnaire is prepared, these instructions must also be prepared. Great care must be exercised to ensure that the supervisors' and interviewers' instructions are consistent with the questionnaires as finalized, lest inconsistencies be transmitted to the field and result in a great deal of error.

### 6.1.3 *Tape recordings*

Tape recordings can be particularly useful when documents are being prepared, especially translations. Staff should take particular account of the fact that there is often considerable difference between the official and the popular language. When the official language is not well understood by respondents, a major effort should be directed at translation into the popular language.

Under no circumstances should survey staff leave translations to the interviewers. Such a practice inevitably leads to inaccurate or faulty transmission of the meaning of the questions. By the same token, when different language groups exist in a country, translations should be made for each group whenever possible. In these instances tape recorders can be used to standardize question wordings.

## 6.2 **Sample Design and Implementation**

WFS sampling will normally begin with the search for a list (sampling frame) of area units whose boundaries are reasonably well defined and whose population size is as small as possible. A sample of such units is selected (with stratification and possibly in more than one sampling stage) with probability proportional to population or estimated population.

If the area units are small enough — perhaps less than about 200 households in each — they can be accepted as the ultimate area sample units. If they are larger, a further stage of area sampling must be introduced, each selected first-stage unit being subdivided into second-stage area units of some 50 to 100 households by means of a field operation. A sample of such second-stage area units would then be selected, using the same class of sampling method as that used in selecting the first-stage units.

When this process has been completed, the survey director has arrived at a sample of small area units. The number of such units selected in the sample will typically range from 100 upwards.

In each selected small area unit a listing operation is conducted. Either households or dwellings are listed, according to the basic survey decisions made previously. Again depending on basic survey decisions, the listing may or may not collect substantive demographic information; if it does, the household schedule provided by the WFS can be used for this purpose. The listing may be carried out some weeks in advance of the individual interviews, perhaps by different field workers, or it may be done only just before, using the same interviewers as those who will do the individual interviews.

Finally, from the list of households, between 20 and 50 households are selected for each small area for the main survey. The probability of selection at this stage will be inversely proportional to that used at the earlier stages, yielding a self-weighting sample. In the main survey, that is, for the individual questionnaire, every eligible female in each selected household is interviewed.

Further advice and information on sample design can be found in the *WFS Manual on Sample Design* and, in many cases, the WFS is prepared to provide sampling expertise on request for the purpose of drawing the sample. Sampling expertise is essential to the survey. In the event a WFS sampling expert does not visit the country, the WFS will at least insist on reviewing the sample design and plans for its implementation.

The survey director and his staff should see to it that the basic data required for drawing the sample are obtained. Maps must be obtained for the areas selected. Sampling calculations must be checked at each stage. During field operations, senior survey staff must check to ensure that the procedures for identifying households or dwellings work adequately and that these procedures, e.g., placing stickers on exterior wall of house, are fully described in the report on sampling. Senior staff must see to it that supervisors re-visit a random sample of selected households to check that interviewers have visited the correct ones; supervisors should check on the eligibility of women interviewed in each selected household and make an effort to convert non-contacts or refusals into completed interviews. These are not easy tasks to which supervisors can simply be assigned. Senior staff must work in the field with the supervisors and interviewers to show them how to carry out these functions.

It is important that the survey director, together with his sampling expert, make a detailed report on how the sample was drawn and any special difficulties encountered.

The objective is to know at any moment during the entire process exactly which steps and procedures were followed as regards the sample. Difficulties encountered and the way in which they were solved constitute valuable information for the country itself for future survey work; accounts of problems and their solutions are also useful to other countries which will participate in the WFS later and can benefit from others' experience. The descriptive report on sampling should be written immediately, while experience is fresh in mind, rather than later.

It is further essential to provide a detailed report of the sample design, showing the number of units selected, and their selection probabilities, at each sampling stage and in each stratum.

### **6.3 Listing and Mapping**

The survey sample is based on households or dwellings. A list must be made of the households or dwellings in each sampling area. Each household or dwelling must have its exact location known and clearly specified. This means that, as a prior operation, the household or dwelling locations may have to be recorded or listed. The survey director and his staff will have decided whether it is households or dwellings which are to be listed. Where a single dwelling normally corresponds to a single household, listing can conveniently be done on the basis of dwellings. Whatever the basis, care must be taken that suitable and uniform definitions are used by all listers.

The listing operation should be accurate, should be carried out rapidly, and should take place shortly before the actual field work begins. It will be a relatively large operation and a sizeable number of listers will be needed in order to accomplish the task in an acceptably short period. In some cases, listers may have to be recruited especially for the task as the future interviewers and supervisors may be attending their training courses at this time. Listing may appear to be a fairly mechanical job, but it should be carefully planned and supervised. One of the main difficulties during listing will be the exact determination of the boundaries of the sampling area. Identification in the field is often quite difficult; maps may be inadequate; changes may have taken place in the composition or location of villages.

Difficulties in locating the exact boundaries of the sampling areas to be listed may lead to an over- or under-coverage of the number of households or dwelling. Any sizeable discrepancies between the expected number and the number found suggests a possible mapping error and requires on-the-spot verification of the listing procedure. To avoid erroneous procedures during the listing stage, the listing supervisors should themselves be

closely involved with the field work. Especially close supervision during mapping and listing is extremely important.

#### 6.4 Pre-test

Every participating country should organize a pre-test, conducted in areas of the country that will provide a realistic test of the questionnaires, other documents and survey procedures as well as the ability of the staff to undertake the project. The scope of the pre-test will vary according to the extent of previous experience in surveys and fertility research in each participating country.

The pre-test should ordinarily utilize survey documents agreed with the WFS central staff. It should not be a major operation. With perhaps 100 interviews adequate information can be obtained on any necessary modification of the survey documents or procedures. The pre-test should not be conducted in an area that falls in the sample for the main survey.

In some cases a larger pre-test may be used in order to create a stock of well-trained supervisory staff who may then be of assistance during the main interviewer training. In this situation, the pre-test may serve as a replacement for supervisory training.

The pre-test is aimed at improving the survey documents and organization. Care should be taken that all difficulties encountered by the interviewers are recorded and studied and that suitable improvements are made. Use of tape recorders is one good way to learn from a pre-test. The survey director and his staff must analyse the completed household schedules, individual questionnaires, interviewer reports and interviewer de-briefing sessions for information as to how the survey worked and specific changes which should be made in documents or procedures. Special forms to obtain structured information on each pre-test interviewer should be used so as to ensure adequate feedback from the interviewers.

During the planning stage of the survey, it is important to allow a sufficiently long period of time between the end of the pre-test and the beginning of training for the main survey. Otherwise, it may be difficult to introduce all necessary changes into the documents in time; either the benefits of the pre-test will be lost or the whole organization of the survey may have to be altered in midcourse.

## 6.5 Preparing Final Survey Documents

When the results of the pre-test have been analysed and their implications fully studied both for the content of documents and the organization of the survey and its field work, final survey documents should be prepared. At this point, each questionnaire instrument – household schedule, individual questionnaire together with any modular and special-purpose items – should be re-scrutinized from beginning to end. Manuals should be redrafted where pre-test experience dictates necessary changes in field procedures or in the organization of work.

Finalization of documents is a critical point. Extreme care should be given, for example, to the pre-coding of the individual questionnaire, ensuring that code numbers appear in the interviewers coding boxes; mistakes here can cost much, later, in time and money. Printing should be checked and re-checked for accuracy. Skip instructions should be exhaustively proof-read. Preparation of final survey documents may be an appropriate point at which to schedule a visit from a member of the WFS central staff in order that the survey director may avail himself of outside assistance at this time.

## 6.6 Role, Recruiting and Training of Field Staff

### 6.6.1 *Field supervisors*

The role of field supervisors is to ensure that the correct and relevant information is collected and that the interviewers follow standardized procedures. Field supervisors should preferably have had some higher education beyond secondary school, have had some survey experience, be of an age and maturity which can command respect, be of demonstrated organizational capability and be able to stay away from home for fairly long periods of time. They should be committed to work full time for the whole of the survey period.

There are some advantages to recruiting field supervisors from within the national executing agency itself: such a practice aids the institutionalization of survey capability in the country and ensures greater staff motivation. Often there will not be enough people in the national executing agency to fill the number of supervisory positions, so that the survey director may have to look elsewhere, recruiting, for example, graduate students in the social sciences from universities, teachers, social workers, midwives or nurses. Sometimes, survey scheduling may have to depend on the availability of such personnel, as when surveys are scheduled so that field work occurs during school holidays in order to utilize teachers and students.

Initial training of supervisors should take place before the training of interviewers and last about two weeks. Where candidate supervisors have sufficient previous survey experience this training period may be cut down to one week. After their own initial training, candidates selected to be supervisors should then participate in the training course of interviewers. Supervisors can be either male or female. One relative advantage of female supervisors is that they can be utilized to carry out quality checks on the work of the female interviewers by the method of re-interviewing.

Greater detail on the role, recruiting and training of field supervisors is to be found in the *WFS Training Manual*.

#### 6.6.2 Interviewers

The interviewer is, in a sense, the most fundamental cog in the survey machine, the point at which information originates which is later to be tabulated and analysed. Careful attention to the role, recruitment and training of interviewers is the keystone of a high quality survey.

In WFS surveys, the interviewers should be female, have at least a secondary education, possess a high level of motivation and interest in the survey, be able to spend time away from home and demonstrate ability to work in an organized and methodological way. Additional characteristics which are desirable but much less easy to define objectively are: the ability to establish rapport with respondents and to put people at their ease, and facility in adjusting to group living (since interviewing groups may have to spend considerable time together away from home).

Recruitment of interviewers follows similar lines to recruitment of supervisors. The issue of the suitability of certain groups such as students or nurses for interviewing is one that must be settled on a country-by-country basis. More candidates should be recruited than would be needed, in order to allow for drop-outs and dismissal of unsuitable candidates.

The content and organization of the training programme for each country survey can be determined in consultation with the WFS staff. The WFS is prepared to assist both in organizing the training effort and in playing an advisory role during the actual conduct of training. Greater detail concerning these matters is to be found in the *WFS Training Manual*.

## 6.7 Field Work

### 6.7.1 *Organizational aspects*

From the viewpoint of optimal data quality, the fewer the field workers, the better the survey. In practice, given the geographical and cultural heterogeneity within countries, it is usually necessary to have a minimum of three or four teams of interviewers, together with their supervisors, in order to smooth out seasonal and regional effects, and this minimum may be possible for smaller countries participating in the WFS.

The more common situation will be one in which the physical size of the country, the cultural heterogeneity, transportation logistics or the number of interviews to be completed is of such a magnitude that several teams of interviewers must be used. Otherwise, the time consumed in travel and field work, together with the language and other cultural problems, would be so great as to extend the survey over an excessive period of time.

When several teams of interviewers and supervisors are utilized, each should work according to the same standards and instructions. This entails intensive supervision and means, in turn, that critical emphasis must be placed on supervision of the supervisors and truly effective communication links throughout the survey organization. The survey director and his senior staff must especially ensure the uniformity of standards and procedures among the supervisors. He and his assistants must maintain a continuous and active contact and communication flow with the various teams of supervisors and interviewers. Each team should be visited regularly while in the field, at least on a weekly basis, if possible. Completed questionnaires, already scrutinized by the field supervisors, should be re-checked in order to evaluate the performance not only of the interviewers but also of the supervisors. Some tape recorded interviews could be used as an important additional means of evaluating performance during the visits of the survey director and his staff. Particularly in the very early stages of field work these visits are absolutely essential in order that erroneous procedures can be corrected from the outset and a pattern of good communications solidly established.

The number of field teams to be used will depend on the time allocated for field work, taking into account geographic, ethnic and linguistic differences. When two or more supervisors are in the same team, it is important that one be placed in charge of the whole team.

Given that country characteristics and sample sizes will vary widely, it is impossible to draw up standardized guidelines in a manual of this kind for the organization of field work. Basically it must be assumed that several teams of interviewers, together with their



supervisors, will conduct the field work. Detailed organization must be considered on a country-by-country basis and will depend to some extent on the experience of the country with previous surveys. Details of survey organization will be a major topic of discussion during the WFS survey design visit to the country.

Good organization of field work requires that the survey director and his staff work out a scheme for the deployment of each group of interviewers, including estimated dates in various field locations and anticipated logistic support needs. The scheme should attempt to minimize travel costs and time delays as well as ethnic or linguistic problems. When teams are divided by regions, regional headquarters should be established, especially where communications by telephone or radio are difficult.

#### *6.7.2 Role of supervisors during field work.*

The work which the survey director expects of the field supervisors should be explained to them in considerable detail. Many of the factors to be considered are dealt with in the *WFS Supervisors' Instructions*, but several points may be made here.

Field supervisors must have their work areas and time schedules clearly described. They must be issued with sufficient numbers of questionnaires, household schedules and control sheets, plus briefcases and writing materials for the interviewers. Supplies must be sufficient to enable the supervisors to ensure that all necessary work can be completed while they are out of reach of their headquarters. If field headquarters have not been established in advance, the supervisors will need enough money to pay for adequate accommodation for the team as well as any other reasonable expenses. Once again, good communications with the survey director are important, lest field work be delayed or halted for lack of funds on the part of a supervisor in the field.

Field supervisors should examine each day the questionnaires completed by the interviewers. This procedure is important especially in the initial weeks of interviewing. Only by going through each day's questionnaires can the supervisor point out errors to interviewers and avoid their repetition. If it is absolutely impossible to examine the questionnaires on the day of interview, the supervisor should certainly do so the next day. If this kind of scrutiny is not carried out, systematic errors will begin to occur, necessitating re-visits, prolonging the field work and jeopardizing the overall quality of the survey.

Supervisors should make a regular practice of spot-checking various matters such as those mentioned above in section 6.2 regarding implementation of the sample design. These are important quality control procedures and can also have a strong motivating influence on

the interviewers. It is recommended that the amount of spot-checking be fixed and not left to the supervisor's discretion.

It is more difficult to establish quantitative criteria for re-interviewing. In the present context, re-interviewing is considered as a means for assessing interviewers' performance, not as a procedure for evaluating the quality of the data as such. Supervisors' re-interviewing is not a major enterprise requiring a great deal of time, but it is a necessary one and the frequency should depend on interviewer performance as deduced from scrutiny of the questionnaires and listening to tape recordings. Re-interviewing should be done more often in the first weeks of the survey. At the beginning, the supervisors should do at least two re-interviews for every interviewer. Re-interviews need not cover all items in the questionnaire but only those parts where critical factual data are obtained, such as maternity history, marriage history and questions on contraceptive use. Discrepancies with the original interview should be discussed with the interviewer and misunderstandings about the questionnaires or procedures cleared up.

#### 6.7.3 *Tape recorders.*

The answers recorded on a completed questionnaire may indicate a successful interview even when, in reality the interview was quite the opposite. The interviewer may have asked leading questions, may have done insufficient probing, may not have asked certain questions, may have incorrectly assumed certain answers, and so forth. Interviewer training can help minimize these problems but experience shows that, especially in the initial stages of survey field work, errors are committed. These errors should be eliminated as soon as possible in order to safeguard the quality of the survey. In this sense, training must go on throughout the field work and interviewers' mistakes must be pointed out to them.

In addition to visual examination of questionnaires, there are two ways in which errors committed during the interview can be corrected. One way is for the supervisor, especially if female, to sit in on a number of interviews. A second way is for interviewers themselves to tape record a number of interviews. This procedure, when adopted, works best if at least two interviews are tape recorded per interviewer in the early stages of the survey. The tape-recorded interview gives a complete record of the way in which the interview was conducted. It also gives the survey director, his staff and the field supervisors an excellent opportunity to "attend" an interview without intruding and thus enables them to single out errors and correct them. The *WFS Supervisors' Instructions* contains a list of the more practical points to be taken into account when using tape recorders.

#### 6.7.4 *Administrative aspects of field work.*

An important determinant of the smooth flow of events in any sample survey is the care taken with regard to the administrative aspects. Matters such as not having enough pencils, or returning with an armload of dirty questionnaires because there were no briefcases in which to carry them, may seem like minor irritants. When they become multiplied many times over they can become major irritants, seriously affect morale, undermine the junior staff's confidence in their seniors, indeed in the whole survey, and, ultimately, prejudice the scientific quality of the results.

A succession of small administrative errors can prove difficult, but some administrative matters are clearly of major importance. One of these is salary or wage payment and the method of its administration. The field supervisor will be spared unnecessary conflicts with the interviewers if the method of payment in the field is clearly established in advance and payments are made on time. It should be determined whether interviewers will be paid per time period, e.g., once a week, or by piecework, e.g., per completed interview. The most advisable procedure appears to be to pay by time period. Payment by completed interview tempts interviewers to complete as many interviews as possible while perhaps scanting considerations of interview quality. On the other hand, when interviewers are paid by the time period, they should be required to do at least a minimum number of interviews per day unless there is a very good reason for completing fewer. It is recognized that laws and rules prevailing in the country may influence the decision concerning the method of payment. In any event, allowance should be made for refusals, partial refusals, visits without contact, and whether the interview takes place in a difficult area where more time is spent in travelling from one household to another.

The administration of pay is often a complicated matter, but the method of payment should be described in detail, in advance; interviewers should be fully informed and promises strictly followed. The survey director must bear in mind that administrative matters such as method of payment can jeopardize the entire survey and certainly affect the quality of data obtained.

#### 6.7.5 *Field work control sheets.*

A number of control sheets should be devised for adequate control of flow of work, location and disposition of documents, interviewers' assignments, supervisors' assignments, the number of interviews completed, and so forth. These control sheets are described in greater detail in other WFS manuals and notably in the *Supervisors' Instructions* and *Interviewers' Instructions*.

One control sheet which deserves mention here is a survey director's master control sheet. Although the survey director or his staff will receive all the field work control sheets and thus have all the information necessary for assessing progress and problems, it is recommended that the information be summarized onto a master control sheet which will give an overview of the survey operations at any one time. This sheet can be organized in such a way that both current and accumulated information can be readily discerned. For example, the survey director's master control sheet might display for each supervisor the total number of interviews completed by that supervisor's team to date and the total number of eligible respondents this represents. The sheet should be updated regularly and serve as a checklist of materials received from the field. The sheet will show how much work has been completed and whether the survey director's office has received all necessary materials and the date on which materials were received. This is important as a way of spotting communication lags with the field work.

Similarly, the survey director's master control sheet could display the progress for other aspects of the survey besides the field work: coding and editing, the training programmes, printing, computer aspects of the project, deployment of various important materials such as vehicles, copying machines and so forth.

#### 6.8 Editing and Coding

The editing operations in the survey begin in the field when the supervisor scrutinizes the completed questionnaires received from the interviewers. Detailed consideration of these operations is presented in the *WFS Supervisors' Instructions*. The advantage of paying careful attention to editing in the field is that an immediate and continuous feedback can be maintained to the interviewers and serious errors can be corrected by a re-visit to the proper household.

Office editing is a complementary operation to editing in the field. It entails verification of the answers to all questions and to certain combinations of questions, coding of "open-ended" questions, and checking of all skips in the questionnaire. Central office editing can usually be more systematic than field editing and is a valuable procedure for facilitating the task of coders.

All parts of the household schedule and individual questionnaire will require re-editing in the office. Special attention must be paid to thorough re-editing of the pregnancy history, the marriage history and all other age and date information. A team of editors should be assigned to the central office to carry out this type of editing before questionnaires are coded; perhaps employees whose earlier jobs have been completed, such as pre-test inter-

viewers, might be trained for editing. Special procedures and criteria should be established for returning reproductions of questionnaires to the field when field correction is required.

Editing is an extremely important, if unexciting, aspect of a survey, one which must be carried out conscientiously and accurately if the total value of the survey is not to be jeopardized. All editing work must be verified on a 100 per cent basis if at all possible. Detailed suggestions on the editing process may be found in Chapter 7 of the *WFS Training Manual* and in the *WFS Coding Guidelines*.

As an aid in the editing process, the WFS has prepared and will make available a computer program for consistency checking, range checking and limited imputations for selected variables such as age, and duration dates for certain events. The system is designed for use on small computers such as would be available in developing nations.

The operation of coding involves principally the mechanical transferral of numbers from the questionnaire to coding boxes. Coding also entails development and application of coding categories for open-ended or semi-open-ended questions such as occupation and certain questions in the WFS modules.

Instruction in coding should be a part of the training of every candidate for field supervisor. Supervisors who have coded a number of questionnaires themselves will have a better understanding of coding difficulties derived from inadequate recording of answers during the interviews. This should make them better supervisors. Coding supervisors should be trained through participation in the detailed preparations of editing and coding rules, instructions, examples of problems and organizational arrangements under the guidance of the survey director. All editors and coders should be given specific job training for at least a week. Constant, on-the-job training and evaluation should continue after the job has actually begun. Coders require detailed, practical training in coding until they develop an exhaustive knowledge of the questionnaire, particularly the skip instructions.

Coding and punching operations should be 100 per cent verified; that is, each record rechecked independently. Coding supervisors should themselves spend time in actual coding so as to reinforce in the minds of the coders the importance of care and accuracy.

Rather than a coding manual, the WFS has produced a set of coding guidelines since each country's questionnaire, and hence each country's own coding manual, will be individualized from various WFS materials. The document *Coding Guidelines* gives principles of

coding and editing, and WFS staff can assist in producing the country's coding manual. Reference should also be made to the *WFS Training Manual*.

#### 6.9 Tabulation, Analysis and Reporting of Results

The tangible scientific product of each country's survey is the report of results. The WFS, after considering the matter at some length, recommends that country reports be issued in two stages:

1. A first report describing the field work and presenting basic results for major demographic and social strata, with a minimum of complex analysis or evaluation. This report should be produced as quickly as possible.
2. A second report, or series of reports, in which the basic measures will be evaluated in more detail and multivariate analysis used for appropriate problems.

The rationale behind this recommendation is that thorough analysis is likely to be a lengthy process which may hold up release of the basic data for too long. It is preferable to release tabulations in a first report after preliminary assessment with a frank statement that their quality will be assessed in further detail and adjustments suggested, where necessary, in later reports.

The first country report should begin with a statement of the main objectives of the survey, as well as a re-statement of general WFS objectives, and indicate which organizations are responsible for conducting, sponsoring and financing the study. After presenting an overview of the social and demographic background of the country's population, the report can present methodological aspects of the study such as the questionnaires and the sample. The organization and execution of the study should be described and the steps taken towards quality control and evaluation of the data. The report will then turn to substantive findings. For the core questionnaire, this would include:

1. Nuptiality and exposure to child-bearing
2. Fertility
3. Preferences for number and sex of children
4. Knowledge and use of contraception
5. Use of contraception as related to fertility preferences.

The WFS document *Guidelines for Country Report No. 1* can deal only with the core questionnaires. Most countries will wish to include in Report No.1 materials from the

modules or other questions they have added to the core.

At the time of planning the survey and making basic survey decisions, the survey director should look ahead to the stage of final reporting and decide which additional reports, beyond Report No 1, will be necessary to meet his country's needs and interests. The WFS is prepared to render assistance in designing and planning Report No. 2 and subsequent reports. No matter how high the quality of survey data, they are useless in a very basic sense unless they are analysed and reported. Provision must be made from the outset for as full and exhaustive an analysis of the data as the country has the capability for. This includes specification of which reports will be issued, outlining the contents of the reports, setting deadlines for their publication, and planning and budgeting for their production.

## 7 Evaluation and Quality Control

### 7.1 Evaluation.

Evaluation should be built into the very design of the survey. It should not be undertaken as an afterthought when the survey is completed, but should be planned and budgeted at the outset.

The survey design should make provision for the estimation of sampling errors. As part of the overall evaluation of the survey data, the sampling error of a large variety of tabulation cells should be estimated so as to permit the development of generalized statements (in the form of curves or tables) relating the size of sampling errors to the number of observations. Such generalized tables or curves should be developed for several types of disaggregation such as national, regional, rural-urban, and so forth. The WFS has developed materials for assisting countries to estimate sampling errors.

As part of the overall evaluation programme, the survey staff should make a search for sources of independent estimates related to the topics of the survey. Such independent estimates should preferably be objective, but even subjective estimates can be useful under certain conditions. These independent estimates should be compared with the estimates derived from the survey and the reasonableness, or otherwise, of the comparisons established. Neither agreements nor disagreements between survey estimates and external evidence need be considered as conclusive indicators of the quality of the survey. Rather, they should be utilized as conclusive indicators to the direction of further investigation and research. In general, the approach recommended consists of considering *all* the available evidence concerning the reliability of survey estimates.

Since the questions included in the WFS core individual questionnaire cover a wide variety of subject-matter fields, several of the estimates derived should show generally predictable interrelations within some broad tolerances. These relationships should provide opportunities for internal consistency checks. Just as in the case of external checks, however, the internal consistency checks should not be considered as definitively establishing the existence of major biases or the lack of them; rather, they should be used in conjunction with other evidence to assess the overall quality of the survey.

As regards both external and internal consistency checks, the scope of survey evaluation should not be restricted to direct comparisons between two specific estimates. It is



possible to use, in addition, derived estimates obtained through analytical techniques. Derived estimates might under certain conditions provide indirect measures of certain characteristics which can be compared with some direct or other indirect measures taken from the survey.

A re-interview programme and/or record matching is an option in the evaluation of the survey which the WFS encourages. Record matching can be carried out utilizing existing administrative records, previous survey or census records, or other relevant files – for example, civil registration system records or family planning programme records – containing information related to the subject of the survey and covering the whole or even just a part of the universe of the survey. If a re-interview programme is carried out, it should be done shortly after the end of the survey and conducted as independently as possible. If either re-interviews or record matching are to be done, they should be planned for and budgeted for as an integral part of the survey programme.

Re-interview programmes, when opted for, should be restricted in subject matter to a few critical content items rather than spread out to the full range of subject matter of the original survey. Re-interview and/or matching programmes should provide gross and net estimates of coverage errors. They may also provide estimates of content errors, particularly measures of the so-called “simple response variance,” indicating the inherent instability of measurement of some of the characteristics.

In a major undertaking such as the WFS, the methods used, as well as the estimates obtained, should be evaluated. This means that methodological research should be properly considered as a necessary counterpart of evaluation. The WFS central staff will be glad to assist countries in carrying out methodological research as a part of their survey effort.

## 7.2 Quality Control

To a large extent, major steps towards quality control have already been covered in previous sections of this manual, and are examined in more minute detail in the WFS *Manual on Sample Design, Training Manual* and *Guidelines for Country Report No. 1*. There remain several points to be made on this topic.

First, it is important that the survey director actually establish a programme of quality control procedures and that he examine and re-examine both basic survey decisions and survey operations from the viewpoint of quality control. Second, one weak link in several quality control programmes in surveys has been inadequate control of the field supervisors. Thus it is worth repeating that supervisors should be aware they are being checked,

just as their own checking activities help to improve the work of interviewers. Senior survey staff or regional directors should check, for example, the records which supervisors are instructed to keep on quality control; they should talk to some of the interviewers to see that the supervisors have visited a sample of households; they should check over the rules according to which supervisors consider interviewers' assignments to have been completed successfully.

On the other hand, the number of interviewers assigned to a supervisor should be consistent with the tasks of the supervisor. An ambitious quality control programme can be defeated if the supervisor is overloaded with work by being required to carry out too many checks on too many interviewers. Thus the survey director and his staff must see to it both that the supervisor does the work assigned to him, or her, and that the work assignment is not excessive.

Thirdly, quality control in the survey office is important. Survey documents must be maintained in satisfactory physical condition and they must be accessible. A document control system should be devised and implemented. Document control procedures should make provisions for keeping track of work not yet received, whether they be household listings, questionnaires or whatever; and for recording the arrival of questionnaires, the time of their arrival, and the names or codes of the interviewers and supervisors responsible for them. These records will facilitate the monitoring of the current progress of the survey, area by area as well as interviewer by interviewer. The major steps in document flow should be traced out, i.e., "questionnaire in editing," "in coding," "punching," "filed as completed," "returned to field for corrections," etc. These steps should be taken account of in the document control system so that it is, in principle, possible to find any single document somewhere in the process on any given day.

## APPENDIX I

### Individual Representatives to WFS Permanent Advisory Committees as of 1 January 1975.

#### PROGRAMME STEERING COMMITTEE

The Programme Steering Committee provides overall substantive guidance and reviews the WFS Programme and its implementation.

<b>Chairman</b>	P.J. Bjerve (Norway)
<b>Representatives</b>	
UN Population Division	L. Tabah M.A. El-Badry (alternate) R. Carleton (alternate)
UN Statistical Office	S.A. Goldberg W. Seltzer (alternate)
UN Fund for Population Activities	H. Gille N. Sadik (alternate)
International Union for the Scientific Study of Population	C. Miró M. Livi-Bacci (alternate) B. Remiche (alternate)
U.S. Agency for International Development	R.T. Ravenholt J. Brackett (alternate)
<b>Individual members</b>	C. Chandrasekaran (India) K.T. de Graft-Johnson (Ghana) F.E. Linder (U.S.A.) M. Macura (Yugoslavia)

## TECHNICAL ADVISORY COMMITTEE

The Technical Advisory Committee (TAC) members are nominated by the ISI and IUSSP in consultation with each other. The TAC advises the Programme Steering Committee, through the Project Director, on all technical aspects of the WFS.

### Chairman

M. Concepción (Philippines)

### Members

S. Al-Shaikhly (Iraq)

B. Benjamin (U.K.)

E. Berquo (Brazil)

J.C. Caldwell (Australia)

P. Cantrelle (France)

L.J. Cho (Korea)

A. Coale (U.S.A.)

W.J. Dixon (U.S.A.)

R. Freedman (U.S.A.)

R.J. Harewood (Trinidad and Tobago)

G. Johnson-Acsádi (U.S.A.)

L.J. Kish (U.S.A.)

G.M.K. Kpedekpo (Ghana)

W.P. Mauldin (U.S.A.)

C.A. Miró (Panama)

## APPENDIX II

### General Form of Survey Proposal

#### A. BACKGROUND AND SUPPORTING INFORMATION

This includes justification of the application; composition and functions of any coordinating or steering committee; institutional framework of the executing organization; named key personnel (national director and essential supporting technical staff) and other supporting staff; facilities, accommodation and data resources provided by the country; indications of other relevant activities within the country and follow-up proposals, if any.

#### B. STATEMENT OF OBJECTIVES (long-term and immediate)

#### C. THE WORK PLAN

1. Relevant preparatory and supporting activities and resources preliminary to the survey.
2. Preparatory activities and arrangements required for the survey. This includes accommodation; office and equipment facilities to be provided; organization, adaptation, translation and printing of the questionnaires, relevant modules, training and other manuals, coding sheets and procedures, etc.; the household listing and sampling frame.
3. Recruiting and training of field staff: for pre-test and/or the survey.
4. Recruiting and training of field staff: for coders, editors, etc.
5. Organization for mapping and establishing a sample frame.
6. Organization of field work.
7. Organization for coding, editing and analysis.
8. A chronological schedule of all operations of the work plan with supporting bar chart.

9. Description of ISI/WFS input. This includes staff assignment (technical assistance for sampling, training, field work, coding, editing, tabulation, analysis, reporting, etc.) with chronological detail; funding agreement; sub-contracting, if any; training, equipment and supplies, etc., in summary form.

10. Description of country input.

**NOTE:** Not all the ingredients listed above are required in every case and they are stated here in essential detail only. Professional discourse, explanation or enlargement of details follow, where required in explanatory Notes (11) below.

11. Explanatory notes on work plan.

#### **D. THE BUDGET**

1. ISI/WFS (funding agency) budget.

2. Country contributory budget.

3. Funding, staging and conditional organization of the project.

The general principles of the budget will have been clarified during the preliminary discussions and the actual details are discussed and agreed during the formulation of the work plan, when costs allowable against the funding agency and those to be carried under the country contribution are agreed. A listing of personnel salaries, subsistence and travel costs; equipment and miscellaneous items, with breakdown details and explanations, is drawn up and a detailed breakdown of monthly costs under each head of the estimates is prepared. (This latter item is not part of the application but copies are kept by the accountant of the executing organization and the finance officer of ISI/WFS for detailed study of progress during the implementation of the project.)

4. For the sake of uniformity, budgets are usually prepared under the heads and sub-heads found on the budget form below.

**BUDGET FORM**

Code	COMPONENT	1974		1975		1976		TOTAL		US \$
		MM*	Local Currency	MM	Local Currency	MM	Local Currency	MM	Local Currency	
10	PROJECT PERSONNEL									
11	Experts									
	- 01									
	- 02									
	etc.									
13	Administrative support staff									
16	Incentive payments									
	- 90 Project director									
	- 91 Asst. director									
	etc.									
16	- 96 Field staff training									
16	- 97 Field work									

Line per expert. Includes salary, subsistence and travel

Single line entry which is to include secretary, translator, clerk etc. all cost related.

Line per job. Includes salary subsistence and travel

Single line entry which is to include salaries, subsistence and travel of field staff (listers, mappers, interviewers etc.) during training.

Single line entry which is to include items as under 16-96 but during the actual field work.



16	- 98 Technical Advisory Committee	Details of meetings, cost etc.
19	COMPONENT TOTAL	
30	TRAINING COMPONENT	
32	Group training	Details of members, periods etc. should be provided.
	- 01 Seminars	
	- 02 Meetings	
	- 03 Workshop	
	- 05 Courses	
	- 98 Other	
99	COMPONENT TOTAL	
40	EQUIPMENT COMPONENT	
41	Expendable equipment	
	- 98 Expendable equip. -other	
	- 99 Sub-Total	
42	Non-expendable equipment	Itemize with detailed costs, source etc.
	- 01 Data processing equip.	
	- 03 Audio visual equip.	
	- 04 Vehicles	
	- 05 Office equipment	

Code	Component	1974	1975	1976	TOTAL	US \$
		Local Currency	Local Currency	Local Currency	Local Currency	
	<ul style="list-style-type: none"> <li>- 51 Data processing rental</li> <li>- 97 Other rental</li> <li>- 98 Non-expendable equip. other</li> <li>- 99 Sub-Total</li> </ul>					
43	<ul style="list-style-type: none"> <li>Premises</li> <li>- 51 Rental</li> <li>- 98 Premises - other</li> <li>- 99 Sub-Total</li> </ul>	Itemize with detailed costs, source etc.				
49	COMPONENT TOTAL					
50	MISCELLANEOUS					
51	Operation & maintenance of plant					
52	Reporting costs					
53	Sundry (to be itemized)					