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AN INTERIM EVALUATION OF THE
WORLD FERTILITY SURVEY (WFS):
FINAL REPORT

Prepared by the WFS Evaluation Task Force

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Appendix I: Footnotes

 II: Calendar of Events

Table I: Estimated Total Cost of the World Fertility Survey,
 1972-1982 23a

Abbreviations

AHTAM	Ad Hoc Technical Advisory Meeting of the WFS
BKKBN	National Family Planning Coordinating Board (Jakarta, Indonesia)
CELADE	Centro Latino-Americano de Demografia (Santiago, Chile)
CICRED	Committee for International Coordination of National Research in Demography (Paris, France)
ISI	International Statistical Institute (The Hague, Netherlands)
IUSSP	International Union for the Scientific Study of Population (Liege, Belgium)
LDC	Less Developed Country
PSC	Programme Steering Committee of the WFS
RC	Regional Conference of the WFS
RCC	Regional Coordinating Committee of the WFS
TAC	Technical Advisory Committee of the WFS
UNFPA	United Nations Fund for Population Activities (New York, USA)
U.S.AID	U.S. Agency for International Development (Washington D.C., USA)
WFS	World Fertility Survey (London, U.K.)

Note: References to proceedings of the WFS steering and advisory committees are generally shown as, for example, TAC-1, p.6 (proceedings of the First TAC Meeting, page 6).

All financial data are given in United States dollars.

Summary of Major Recommendations by the WFS Evaluation Task Force

The major recommendations made by the Task Force are as follows:

1. It is recommended that an extension of the WFS from mid-1977 until mid-1982 be granted in order to achieve the planned objectives. (p.36)
2. It is recommended that priorities be reviewed and clarified, especially among the three major objectives: a) provision of data for national needs, b) international research, and c) development of survey capacity in countries. This is necessary so that work plans may reflect the ranking of priority. (p.12)
3. If objective c) above is considered of high priority, and especially in the event of an extension beyond 1977, serious consideration should be given to further building up country capacity to undertake surveys. For example, special attention should be given to assisting countries to analyze their own data, and renewed consideration should be given to whether research organizations in developing countries would have resources for undertaking more than the very basic analyses done by each country ("Country Report 1"). (p.37) In any event, a study should be done in each participating country, to bring together previous experience in the country, prior to initiating a new survey. (p.33)
4. Certain methodological studies might be undertaken with little redesign of surveys, in order to improve future survey efficiency and effectiveness. This should, however, be weighed against other priorities. (p.37)
5. Serious consideration should be given to the possibility of undertaking a second round of surveys, whatever form these might take in terms of the WFS headquarters participation and donor support (if any). The WFS should prepare a series of research studies on new problems that will arise in any such second round. (p.37)

Introduction

The World Fertility Survey (WFS), initiated in 1972 as a five-year research project, has developed into a major international survey programme. During the two-year Project Development Phase, nearly all preparatory work was completed: the headquarters organization in London was formed and staffed, the questionnaires, modules, and other documentation were drafted and tested, and a large number of countries were enlisted into the WFS programme.

In 1974 and 1975 field work in a number of countries was started. As the project advanced into its Implementation Phase, the primary funding agencies for the WFS (UNFPA and U.S.AID) felt that it was advisable to review what had been accomplished and the prospects for the future. They consequently cooperated in organizing an Evaluation Task Force composed of three "outside" members, not previously directly connected with the WFS. This Task Force, assisted by one rapporteur from each of the two funding agencies, was asked to review the work which had already been done and plans for the future, and to report its findings back to the two donors.

The terms of reference for the evaluation were drafted by Messrs. H.Gille and R. Ravenholt (Deputy Executive Director of UNFPA and Director, U.S. AID Office of Population, respectively), to provide the Task Force with a broad framework within which to focus. In essence, the Task Force was "...to review the WFS goals, structure, instrumentalities, priorities, accomplishments and assess its effectiveness and efficiency in meeting objectives, taking into account the needs of countries."^{1/} This was a rather broad and ambitious assignment. Although the Task Force attempted to adhere quite closely to these instructions, it was necessary to place special emphasis on particular parts of the terms of reference, given the time constraints of the site visit. In addition to some preliminary discussions and an examination of available material, the Task Force spent ten days in a site visit at the WFS headquarters in London.

Throughout the period of October 20-29, the Task Force conducted a series of interviews with key WFS personnel. Questions generally followed a general evaluation plan (conforming to the above-mentioned terms of reference), with special emphasis placed on the field of responsibility of the particular staff member. In addition to these interviews, relevant documents were reviewed and analyzed.

The WFS staff was cooperative and helpful in supplying all of the material the Task Force requested. The Task Force members wish to express their thanks to the Project Director, M. Kendall and his staff, as well as to the Director of the ISI, E. Lunenberg and to C. Hendriks, the ISI Financial Officer, for their assistance, as well as for making the work so pleasant. As far as the Task Force could determine, the staff was frank in replying to all questions and commenting on points raised.

The report which follows contains a description of the major issues involved in the WFS and the conclusions and recommendations generally agreed to by the Task Force. It should be noted that the Task Force assumed that it had, in effect, two functions. One was to articulate and describe the major issues facing the WFS so that the donors were aware of them. The second was to indicate how well the WFS was meeting its objectives in regard to these issues. It was not always possible to reach a conclusion on the latter. In such cases, the Task Force has tried to indicate the issues involved so that the donors may make their own decisions.

1. Objectives

The terms of reference for the Task Force requested a review of the objectives of the WFS. However, the Task Force, before departure, made it clear that it found itself unable to test the validity of the goals, since this would require a needs assessment (including discussions with country representatives and others). Therefore, the questions which the Task Force attempted to answer were:

- a) What are the objectives of the WFS, specified at different times by different sources? What are the priorities established amongst objectives?
- b) Is there clarity, consistency and logic in these objectives? Do procedures adopted by the WFS conform with objectives?

The question whether objectives can be achieved or have already been achieved is discussed later (Chapter 5: Accomplishments).

1.1. Origin of the Objectives

The WFS arose from suggestions made by U.S. AID to the International Statistical Institute (ISI) at the latter's biennial conference in August 1971.^{2/} During further discussions between U.S. AID, the ISI, and UNFPA, it developed that the ISI was interested in conducting the WFS in observance of the World Population Year, in collaboration with the International Union for the Scientific Study of Population (IUSSP).^{3/} A needs assessment was conducted by the U.S. Bureau of the Census in the form of an inventory of fertility and related surveys throughout the world.^{4/} This was presented to two Ad Hoc Technical Advisory Meetings (AHTAM-1 and -2) in July 1972 (convened by the ISI and funded by UNFPA) which discussed the need, objectives and mode of implementation of the WFS. Attendants at these meetings included representatives of the donors and sponsoring agencies, as well as technicians from various disciplines and countries, participating in their individual capacity, not as country representatives. On the basis of these discussions as well as other consultations during the so-called Pre-Project Phase (January-June, 1972) the project design was elaborated and "project requests" presented by the ISI to donors. U.S. AID had already approved funds for support of the Project Development Phase in June 1972 (prior to the AHTAMs), and UNFPA did so in February, 1973.^{5/} After the project had been developed and funds approved, representatives of possible interested Governments were contacted, and the WFS

programme publicized to possible interested countries through the WFS Regional Conferences (RC), between December 1973 and July 1974.^{6/}

The process described here is different from that normally followed. Programmes or projects funded by UNFPA are usually based on requests from countries or (United Nations) agencies (and this, to a large extent is also the practice of U.S. AID), and in the case where a donor agency initiates a programme, its development takes place in close cooperation with representatives of agencies concerned who are to be its beneficiaries. In the given case, as was explained to the Task Force, the donors proceeded differently, since they felt that without a detailed proposal countries would not be able to determine whether they were interested in participation, and also, that consultation with all or with the majority of possibly interested countries would have led to considerable delays.

1.2 Source Materials Examined and Their Relative Importance

The Task Force had available to it a great number of documents referring to objectives. No official documents were available referring to the initial informal discussions (August 1971-June 1972), but the minutes of the AHTAMs contain extensive discussions on the need, feasibility, and objectives of the WFS as well as technical matters, such as how the survey should be designed to meet objectives. These deliberations were later adopted by the ISI as a basis for its own conceptualization of the WFS.^{7/} The most definitive statement of objectives from the point of view of the donors (to whom this report is addressed) is in the "project requests". These are the formal basis for funding decisions. There are both overall project requests, as well as individual agreements with countries.

In addition, after project requests had been approved, two committees, appointed by the ISI began to meet: The Program Steering Committee (PSC; first meeting in January, 1973) and the Technical Advisory Committee (TAC; first meeting in May, 1973).^{8/} Both committees have considered and made recommendations of a nature important enough to possibly have an impact on the objectives as stated in project documents, although it is unclear whether advice given by the PSC should be taken as advice to or by the donors, since donor representatives are active members. Generally, it seems in the past the Project Director has been left with some flexibility in interpreting advice given, since it has rarely been given in the form of a unanimous decision - the committees generally have not voted on issues in order to reach a common position.

Other statements of objectives with what seems to be unimportant differences in wording, occur in, for example, the Manual of Organization, Progress Reports, etc.

1.3 The Different Objectives Stated

1.3.1 Justification for the WFS - After a review, the AHTAMs in 1972 concluded that although a large number of fertility surveys had been undertaken to date, and were of high quality, they frequently have been characterized by late and insufficient analysis and publication of results, by vague objectives, by insufficiently trained staff, etc. The meeting saw a "definite need for a concerted international effort within the framework of a WFS in order to achieve high quality internationally comparable surveys in as many countries as possible."^{9/}

1.3.2 Objectives - To meet this need, the following aims were proposed (which include both long-range and immediate objectives):

- a) "The basic aim of the WFS (is) to provide information which would permit each participating country to describe and interpret its fertility. Within the broad area of fertility research the survey (will) strive to identify meaningful differentials or patterns of fertility as well as clarification of factors affecting fertility. Improved data on these topics (will) clearly facilitate national efforts in economic, social and health planning for development. Employing analytical techniques now available, the survey (will) also provide useful indications of fertility levels for countries where such information is now lacking."^{10/}
- b) "A further value of the WFS programme" . . . identified at the same Ad Hoc meeting, is "to provide internationally comparable data, which will allow countries better to interpret their national data, and which will provide the scientific community with comparative data." (emphasis added for both a) and b))
- c) Another important purpose stated is to increase (national) capacities for fertility research and analysis by means of survey methods.

These statements of aims recur almost verbatim in the project request approved by donors. In the requests to UNFFPA, a very clear ranking of priority occurs between a) "the basic aim" (to allow a country to understand its population's fertility), b) "in addition...a further desirable feature...is its international nature," and c) "another objective..." building up national capacity.^{11/} The general working is similar to that of project requests to U.S. AID although the ranking seems less clear in the latter. Some later documents, notably the UNFFPA submission to the Governing Council (April, 1974), formulate a fourth objective (actually a part of the other three): to provide a body of substantive literature on fertility studies.

Project agreements for surveys in different countries^{12/} vary somewhat in their wording, their ranking of priorities, as well as whether they include certain specific goals, such as evaluation of family planning programmes.

1.4 Discussion of Differences in Objectives

As pointed out at the first TAC^{13/} meeting, there is some ambiguity in the proceedings of the AHTAM, especially on such matters as the amount of analysis to be done, and the degree of uniformity desirable in different national surveys. This ambiguity recurs in project documents, where, depending on the procedures and modalities chosen, different emphasis can be given to the goals. Such differences of interpretation subsequently were frequently apparent in PSC and TAC meetings as indicated below. The following discussion highlights some of these differences of interpretation and emphasis. It also points out that some decisions on policies and procedures may have an effect on overall attainment of goals.

1.4.1 Overall Project Dimensions - On several occasions, the ISI has compiled and distributed "programme projections", which have served as forward planning documents. However, it has frequently been pointed out by the ISI that, in the absence of knowledge about decisions yet to be taken by donors and countries, no definite work plan could be established. Therefore, until recently definite plans were only made for those parts of the project referring to the near future. Within the last few months, some more detailed plans have been prepared, at least for certain aspects of the work.

In early meetings, there was high emphasis on quality of surveys: thus in the AHTAM-1: "Although it is hoped that within a five-year period surveys might be undertaken in a majority of the countries of the world, the number of countries should not exceed that consistent with the quality of data collection..."^{14/} There was even considerable discussion on refusing admission to countries in which it was thought high quality surveys could not be undertaken.^{15/} After hearing about funding prospects, the AHTAM assumed that financing "would not be a limiting factor"^{16/} and foresaw that the programme might well go beyond the five-year period envisaged,^{17/} although it was not discussed by how much.

There were early suggestions that funding would have to continue beyond 1977,^{18/} and no cut-off date was set for countries in the belief that funding would probably be available.^{19/} No distinction seems to have been made between extending the programme beyond 1977^{20/}, and increasing total funds; presumably they are synonymous. A less sanguine tone was struck in later meetings, thus: "owing to funding restrictions, there was urgent need to set priorities for deciding which countries should be included in the WFS."^{21/}

At present, the ISI hopes to have surveys done by the WFS in around 40 developing countries and 20 developed countries before mid-1982. However, the exact amount of analysis to be done is not stated. It is realized that this is extremely difficult to pinpoint. However, it is also realized that a firm work plan must be established to insure that all necessary work will be concluded by 1982.

1.4.2 The Selection of Countries - In addition to the total number of countries to be included, there was some discussion of which countries. The AHTAM-1 merely advocated that "as many countries as possible" participate^{22/}, and did not agree to support any formal criteria for the selection of countries.^{23/}

However, project requests show little disagreement that the emphasis should be on 30-40 "key" developing countries, and a smaller number, generally 15-20 developed countries. The PSC and the TAC have pressed for and proposed criteria for selection of these countries, as well as proposing individual countries.^{24/} They have even intimated that prospects for future funding would depend on the inclusion of certain countries.^{25/}

However, although there were no major disagreements on the criteria to be used, a specific listing of countries has not been agreed upon. There was general agreement that a strong effort should be made to secure the cooperation of the very large countries. However, it is appreciated that the cost has been lower by the recruitment of a greater number of small countries with relatively inexpensive survey operations, as compared to that of a few "key" countries with relatively large survey operations.

1.4.3 The Design of the Surveys and Implications for Resultant Data - It was suggested by the AHTAMs that the survey should be single-round (retrospective), single-purpose, of moderate sample size and that it should utilize a core questionnaire used in all participating countries, supplemented by optional, more specialized "modules".

The decision in the beginning to make the WFS a single round survey programme imposes certain limitations on the kinds of data that will be available because it will not be possible to make direct time-series comparisons. In addition, the relative importance given in the WFS to sampling versus non-sampling error in the design of surveys also serves to shape the objectives. Non-sampling error can be a major source of inaccuracy, particularly in developing country surveys. For this reason, the WFS has always placed very strong emphasis on strict quality control. (In addition to establishing these controls for purposes of the ongoing survey, the goal is to make each WFS survey a model after which subsequent surveys can be patterned.) Given the constraints faced in designing each survey, funding and available manpower, it was felt that strict quality control and sample size must be traded off against each other. The WFS has normally opted for moderate sample sizes (5,000 - 8,000 women)^{26/} and very strict quality control measures (these will be discussed detail later).

However, the decision to use a moderate sample size has an important effect on the kinds of analyses that will be possible. While international comparison of broad results would be permitted, only limited detail will be available for separate geographic regions or other subgroups of the population.

Although there seems in later years to have been some expectation that the WFS would give quite accurate results on fertility levels, perhaps even by region within a country, this was quite apparently not the intent from the

beginning. Thus, "it was tentatively recommended that the sample should be designed so as to be able to detect differentials of the order of 0.5 of a child in the national estimate for countries of high fertility..."^{27/} The AHTAMs and other meetings repeatedly stress that data on fertility levels will be very approximate, which this would seem to indicate. However, a sample size of 5,000 to 8,000 would generally seem to be able to yield data of greater accuracy than this on a national level (not necessarily for detailed geographic regions).

A lack of accuracy of fertility levels means that it will be difficult to detect very small reductions in the birth rate, and the short-run demographic effects of family planning programmes.

This raises another issue relating to the goals of national priorities. For many purposes it is highly desirable to analyze data by regions which may reflect different socio-cultural-economic conditions or different degrees of implementation of family planning programmes. For most countries (though probably not all) the Task Force does not think there is any real conflict. With a sample of 5,000 to 8,000 women, important regional differences in family planning practices or fertility rates should be discernible for half-a-dozen or so regions. A similar analysis will be possible for different socio-economic or ethnic groups. It will probably not be possible to detect small subtle differences. However, considering the probable level of non-sampling error, it is unlikely that estimates of small differences would be trusted even with larger sample sizes.

The limitation imposed by the small sample size essentially concerns the ability to do separate analyses of women, cross-classified by region, by socio-economic status, by ethnic group, etc. At such levels of detail differences among groups would have to be fairly large to be statistically significant. To permit more detailed analyses of this type, the sample size would have to be increased substantially, with major changes in budget, organization of the survey, etc.

Questions on the availability of contraceptives are now being asked, although there is still controversy over to what extent they should be part of the core. There originally seemed to be consensus that questions on induced abortion should not be included^{28/} (partly as it was thought that many

countries would not participate if such questions were included).^{29/} Final decision was delegated to the TAC and the Project Director, who decided against inclusion in the core. At subsequent FSC meetings, however, the importance of including the Abortion Module in future surveys was stressed.

1.4.4 International Comparability - The objectives state that data gathered and analyzed should primarily be of use to national planners, and only secondarily for international research. This is particularly important with regard to the uniformity of the instrumentalities used.

As discussed at the second AHTAM, "...one of the main objectives of the WFS (is) to obtain comparable data from different countries. It (is) therefore necessary to develop definitions, questionnaires, instructions, coding, and tabulation with that purpose in mind."^{30/} However, the majority of discussions strongly stress that the instrumentalities, even the core questionnaire, must still be flexible to fit local conditions,^{31/} that only the core questionnaire should be obligatory whereas adoption of modules should be optional,^{32/} and that unless this policy be adopted, many countries would refuse to participate.^{33/}

With the combination of a consistent core and optional modules, it would seem possible that both goals could be met satisfactorily, and the conflict resolved. In practice, there has not been as much use of certain modules as might be expected. It is not clear to the Task Force whether this is due to a preference by the WFS staff for a simpler survey procedure and the influence of the staff on the country representatives, whether it is caused by the participant countries' reaction that the modules are more detailed than is necessary for their analysis, or whether the staff has failed to contact all the interested parties in the countries involved.

In survey practice, compromises are frequently necessary between the desire to collect all of the information that might be desirable from an analytic point of view and the need to keep the size and complexity of the questionnaire at a level consistent with the ability to train interviewers and retain respondents' interest. It is difficult to know where to draw the line between these goals. In the limited time available, and with little possibility to discuss with country representatives, the Task Force could not determine how much these considerations affected the final decisions,

and how much was due to agreements between the WFS staff and country representatives that the amount of detail in the modules was mostly unnecessary.

Obviously, it is too late to affect surveys that are already under way or in relatively advanced stages of planning. However, the Task Force suggests that the WFS staff be particularly sensitive to the issue. They should make certain the country representatives are aware of all the options provided by the modules. The staff should, of course, also point out the implications of having a more extended questionnaire so that both the advantages and disadvantages are made clear.

One question which has not yet been resolved is whether countries which will not allow their data tapes to be sent out of the country will be allowed to participate. The present procedure is not to accept them as full participants under these conditions, but to give them associate status.^{34/} Tape availability is essential for international comparability.

1.4.5 Research - There is repeated emphasis on the high quality expected from the WFS, and the quality controls which should be built in to ensure this high quality, as well as on research to provide improved methodology. The AHTAMs and subsequent PSCs and TACs have repeatedly brought long lists of high priority research areas, both general and methodological research.^{35/} No overall research plan was built up, although the TAC was repeatedly asked for help on this.^{36/} One PSC stated that ten percent of resources should be devoted to research^{37/} (although both "resources" and "research" remained unspecified). However, this strong pressure for methodological studies did not receive much emphasis in the objectives of the project. Thus, no clear guidance was provided to the WFS on relative emphasis to be placed on these activities as contrasted with the collection and analysis of survey data. At the TAC-6, in September, 1975, the WFS was requested to prepare a five-year research plan.

1.4.6 Development of National Capacities - Training, and other development of national capacity, is ranked as a tertiary objective in all project documents, after provision and analysis of data. The WFS staff see it as a by-product of other activities. On the other hand, the PSC and TAC have

at various times stressed the importance of institution-building and training, although the importance of this relative to other objectives has not been clearly stated in these instances.

To further this objective the WFS has given preference to national statistical offices as executing agencies and attempted to assume only an advisory and monitoring role in the conduct of surveys, for example by not having permanent resident advisors, but rather short-term visits.

Fixed rules have not yet been developed on such matters as where data will be analyzed. Although attempts are being made to have at least the national data analyzed in-country ("Country Report 1"), it now seems likely that much of the more advanced analyses ("Country Report 2"), and international comparisons, will have to be done partially at the WFS headquarters, and partially at various research institutions.

It would seem there is some uncertainty concerning what the role of the WFS should be in increasing national survey capabilities. The Project Director has requested guidance on, for example, a training plan and has been referred to the TAC.^{38/} The TAC-6 recommended that the five-year research plan mentioned under 1.4.5 should use national expertise to the greatest extent possible, with international staff acting as catalysts only.^{39/}

1.5 Concluding Remarks

This rather extensive discussion is intended to point out the diversity of the WFS objectives, and the need to strike a balance between these objectives. As the WFS project continues to grow in complexity, it is increasingly important that the various objectives be ranked according to priority, and that the future work plans reflect this ranking. The PSC and the donors should obviously take leading roles in this process of clarification.

2. Organizational Structure

In this chapter the organizational structure of the WFS will be discussed with regard to the following aspects:

- (a) the organization and operations of the headquarters staff,
- (b) relations with participating countries, and
- (c) advisory groups.

2.1 Headquarters Organization

The Professional Centre for the WFS, located in London, is responsible for developing the basic prototype documentation which sets forth the detailed standards of the WFS and is disseminated to the participating countries. It recruits countries into the programme, engages in a certain amount of data processing and will be involved in some degree in analysis. The participating countries and the WFS Professional Centre are thus jointly responsible for the adaptation of the WFS procedures to the countries and for the success of the country surveys. The ISI headquarters in The Hague is responsible for the various administrative functions of the project, such as conferences and meetings, contract management, financial accounting, publications, and personnel.

2.1.1 Staff Organization - In London, the staff is headed by the Project Director and by four assistant directors, each responsible for certain functional work areas (i.e., administration and planning, data collection, data processing, and data analysis). Professionals concerned with data processing and administration remain fairly fixed in the scope of their duties. However, "survey professionals" are normally assigned to one or more particular surveys from beginning to end, and shift from data collection to data processing to data analysis as their surveys move into these stages. As a result, the lines of supervision are frequently quite fluid, and the number of personnel under any one assistant director may vary from time to time.

The effect of this shifting of staff on efficiency and sound supervision was put to several of the senior staff for their comment. There was a general appreciation of the advantages of continuity of the different aspects of a survey supervision by the same person: however, some of the staff observed that this resulted in some disorganization and confusion as to who has supervisory responsibility for what activities.

There are advantages and disadvantages to both systems. The Task Force was not able to draw any firm conclusions regarding the question during its stay in London. However, the Task Force noted that it had not always been possible to maintain staff continuity in a country. Furthermore, the inherent limitations of shifting of staff were also noted, including the fact that very few of the WFS staff could legitimately be considered expert in all aspects of survey operations (including data processing).

2.1.2 Staff Experience and Recruiting Practices

Below the level of assistant director, staff members in London are typically quite young (early or middle 30's), have Masters' or Ph.D. degrees in demography, sociology, mathematics, or a related field, and had, at the time of recruitment to the WFS, one to ten years of relevant experience in one or more aspects of survey research.

Throughout the life of the WFS, the ISI has been faced with some rather difficult guidelines with regard to hiring procedures and salary structure. For instance, when recruiting staff, the ISI has had to bear in mind three guidelines: staff should possess internationally recognized competence, should be broadly representative of all regions of the world, and should not be crucial to the execution of demographic programmes in their home countries.

The Task Force reviewed the curriculum vitae of the professional staff and agreed that the ISI has in general recruited staff members who meet the criteria mentioned above, although naturally there was some variation between junior and senior professionals in this respect.

The guidelines and practices governing the salary structure are more complex. The Task Force examined the salary levels both in terms of net salaries (salaries received by staff members) and gross salaries (salaries paid by donor organizations). There are two approaches in establishing a salary structure, which largely exclude each other:

- a) Establishment of a pay scale for each individual on the basis of the salary earned prior to recruitment by the ISI.
- b) Establishment of a pay scale in which persons doing comparable work receive comparable salaries.

The ISI has generally adopted the second approach.

Whichever of those guidelines was chosen, there are some practical issues that had to be faced in recruiting and retaining staff, because of specific WFS features. The major considerations were:

- a) the staff does not receive fringe benefits such as pension, educational allowances, life insurance, etc.; housing is the only area in which such benefits are made;
- b) the staff can only be promised one or two year appointments, with no guarantee of renewal;
- c) the staff is required to travel extensively (more than 50 per cent of the time in many cases);
- d) England is a country with a very high tax rate and high rate of inflation. (However, the non-British staff is taxed only on the portion of their income brought into the United Kingdom).

These factors severely affect recruitment and create additional requirements on the salary levels. In effect, what the ISI has had to do was determine the kind of salaries that were necessary to recruit and retain competent personnel.

The Task Force compared the salaries for a group of professional ISI employees with those of the United Nations for staff with comparable qualifications. Only rough approximations could be made since not all the factors that go into the determination of fringe benefits were known for many of the employees, and in many cases even the salary level could only be roughly approximated. However, it appears that average salary levels for ISI staff members are more or less comparable to those of the United Nations. However, due to the tax standards in England, British nationals are at a disadvantage, and some other nationals are at a comparative advantage.

2.2 Selection of Participating Countries

After the decision to have a World Fertility Survey, the ISI publicized its programme and invited the participation of countries, on the basis of indication of interest, through four broad mechanisms:

- a) Wide dissemination of brochures, newsletters, press releases, etc., to mass media and national statistical offices. (during 1972 and 1973);
- b) WFS staff representation at international meetings of professional societies;
- c) A series of six regional conferences; and
- d) A programme of visits to individual countries.

As the implementation phase progressed in 1974 and an ever-growing number of countries expressed a definite interest in the programme, it became apparent that the demand for surveys may eventually exceed the resources of the WFS. With this in mind, the WFS staff has been working to develop a series of objective criteria by which interested countries could be ranked in priority. An initial attempt at a quantified priority "scale" proved unsatisfactory, although several of the criteria utilized do appear to be useful.

With a few exceptions, the ISI has not yet faced up to the problem of denying participation in the WFS to countries that express interest. However, the Task Force recognized that doing so would certainly be awkward, both from a diplomatic point of view as well as from the fact that the WFS has itself generated interest. This is further complicated by the fact that recruitment of countries in Africa has deliberately been delayed and a number of large countries still have not made a final decision. Resolution of these questions can only be done satisfactorily on a case by case basis.

Currently (as of March 1976), 22 developing countries (LDCs)^{40/} are enlisted in the programme:

<u>Asia and Oceania</u>	<u>Latin America</u>	<u>Africa</u>	<u>Middle East</u>
Bangladesh	Colombia	Kenya	Egypt ^x
Fiji	Costa Rica		Jordan
Indonesia	Dominican Republic		Kuwait
Republic of Korea	Guyana		
Malaysia	Jamaica		
Nepal	Martinique/Guadaloupe ^x		
Pakistan	Mexico		
Sri Lanka	Panama		
Thailand	Trinidad and Tobago		

^x Associate status

In addition, the following developing countries have indicated an interest in participating:

<u>Asia and Oceania</u>	<u>Latin America</u>	<u>Africa</u>	<u>Middle East</u>
Burma	Argentina	Cameroon	Iran
India	Chile	Ghana	Iraq
Philippines	Ecuador	Lesotho	Syria
	El Salvador	Mauritius	Turkey
	Guatemala	Senegal	
	Haiti	Sudan	
	Peru	Togo	
	Venezuela		

Turning to the developed countries, 16 countries are now participating or are firmly committed:

Belgium	Japan*
Bulgaria	Netherlands*
Czechoslovakia	Norway
Denmark	Poland
France	Spain
Germany,* Federal Republic of	United Kingdom
Hungary	United States
Italy	Yugoslavia

In addition, the following have expressed interest:

° Australia	Israel
Canada	New Zealand
Finland	Romania

*Countries marked with an asterisk are conducting surveys which for various reasons are somewhat different from that envisaged by the WFS.

Assuming that these projections bear some resemblance to reality and the necessary funding is available, the WFS will eventually enlist 50-60 countries

into the programme. In terms of world coverage, the WFS will have involved countries accounting for over 75 per cent of the developing world populations (excluding China) and over 67 per cent of the developed world population. Coverage of the developing world hinges somewhat on the outcome of negotiations with Brazil, India, and Nigeria. The number of countries is about in line with original projections. Many of the country decisions, however, are slower than anticipated. It is clear that an extension of time will be necessary if all of these countries are to be included.

2.3 Working Relationship with Survey Countries

Whenever possible, the WFS attempts to utilize the best survey research talent and resources in each country. Typically, the WFS will attempt to negotiate with national statistical offices, universities, or private survey research organizations and urge the host country to utilize scientists with survey experience to serve as survey director, field director, etc. However, although the WFS has considerable influence in the choice of executing agency and key personnel, the final decision ultimately rests with the host government. This limitation, according to the WFS, has not resulted in any serious problems thus far, although the Task Force was told of isolated incidences where certain key personnel who were chosen were not those the WFS would have preferred.

In all instances, WFS surveys are designed by London staff in conjunction with the key designated host country personnel. To date, the WFS has employed a more or less standard design: a sample size of 5,000 to 8,000, use of the full core questionnaire (translated and modified slightly to suit local conditions), and addition of modules of special interest to the country. The WFS also has applied standardized documentation and survey procedures. This highly standardized approach is justified by the need to (a) insure international comparability, (b) keep donor contributions for each survey within a general budget limit (\$150,000 - \$250,000), and (c) minimize the amount of "new" start-up work required to launch each survey.

There is, however, a certain amount of flexibility in WFS survey design, made possible by the series of questionnaire modules available for utilization by any participating country, subject to guidelines by the funding organizations. The WFS staff believes that these efforts have satisfied the special needs of various nations, without sacrificing international comparability of data. In the limited time available, the Task Force was not able to obtain independent confirmation of this.

Once an agreement is signed, the WFS normally assumes the role of technical monitor to insure that the survey progresses according to plan. Most of the monitoring activities are specified in the survey agreement; typically they include visits by the WFS professional staff to the country or by WFS staff and the country experts to other places in connection with a survey, (at the time of the evaluation, the actual number of person-visits ranged from 9 to 26 for completed or ongoing surveys), monthly progress and financial reports submitted to London by the local survey director, and a checklist of survey procedures to be completed by the survey director.

In a few cases, the special conditions prevailing in a particular survey required the assignment of a full-time resident advisor. The Task Force inquired as to the relative technical and financial advantages of the "short-trip" approach versus the resident advisor approach. It was noted that, even when a resident advisor is put in place, some visits by certain London staff are necessary since the resident advisor is not expert in all aspects of the survey (particularly if the advisor is a consultant, and is not totally familiar with all WFS procedures). For this reason, the Task Force concluded that the "short-trip" approach is probably less expensive overall, although it recognized the occasional need for a resident advisor in countries with specific problems requiring day-to-day monitoring.

One very crucial point that the WFS has yet to resolve is the strategy for completing Country Report 2 and cross-national comparisons for all of the surveys. A paper presented by a subcommittee of the IUSSP has been of help in shaping the substance of Country Report 2, but the logistics of its preparation and preparation of cross-national reports have yet to be worked out. How much can the host countries do? How much must be done in London? How heavily will these analyses tax the resources of the London staff? To what degree should the WFS rely on outside research organizations? These are all issues that need to be resolved very soon.

2.4 Steering and Advisory Bodies

2.4.1 Type of Steering and Advisory Bodies - A large number of such formal bodies has been utilized:

- a) Ad Hoc Technical Advisory Meetings (AHTAMs)
- b) The Programme Steering Committee (PSC)
- c) The Technical Advisory Committee (TAC)
- d) The Regional Coordinating Committee (RCC)

- e) Regional Conferences (RC)
 - f) Other resources drawn upon include ad hoc donors meetings, special task forces, and seminars, special consultants, as well as soliciting of advice by mail enquiry.
- a) Ad Hoc Technical Advisory Meetings. In July, 1972, two Ad Hoc Technical Advisory Meetings were convened by the ISI in the Hague, one of which examined the objectives, scope and general framework of the WFS and the other technical aspects pertaining to optimal strategies for conducting national surveys and survey methodology. Participants, invited by ISI; were experts from around the world, invited in their individual capacity. Following these meetings, the three permanent committees mentioned above as b) - d) were established.
- b) The Programme Steering Committee. The PSC has met six times since 1972 and is "entrusted with overall substantive guidance and review of the WFS programme." Most members attend as representatives of the donors (UNFPA and U.S. AID) and cooperating organizations (United Nations and IUSSP). In addition, individual members include the chairman of the TAC and three others.
- c) The Technical Advisory Committee. The TAC has met six times since 1972, and advises the PSC on all technical aspects of the WFS programme. Up to 1975 it has met semi-annually, but will now meet annually. Members, who serve in their individual capacities are appointed for a two-year term by the PSC, on recommendation by the ISI and IUSSP.
- d) The Regional Coordinating Committee. The RCC was originally set up to coordinate WFS activities at the regional level but was disbanded after one meeting when United Nations liaison posts were established. Members were representatives of the United Nations regional economic commissions, the Centro Latino-Americano de Demografia (CELADE), and the Population Council.
- e) Regional Conferences. Six RCs were held during December 1973-July 1974 to publicize and explain the WFS to demographers, statisticians, and government officials, to obtain technical and policy views, and seek support in eliciting country participation.

f) Use of Consultants. A great number of outside consultant studies has been solicited, on topics such as the existing fertility studies, sampling error considerations, to develop modules, etc. In addition, mail enquiries have been utilized. For example, the original core questionnaire was sent to about 200 experts around the world for their comments.

2.4.2 Membership - The Task Force examined the pattern of membership of the steering and advisory bodies, with a view to making recommendations for the future. This is only relevant for the TAC and the enlistment of consultants, since the membership of the PSC is more or less determined by the organizers of the WFS and the other groups have been disbanded.

The TAC has been composed of around half statisticians and half demographers, mostly with data-gathering expertise. About half are from LDC's and half from developed countries and most, although not all, have had a good deal of field experience. However, there has been little representation of persons responsible for setting policies on fertility regulation, executing programmes arising from the policies, or both. Between the fifth and sixth meetings, membership was rotated in accordance with earlier plans, with a changeover of about 50 per cent. New members are still largely oriented towards university or other research activities, but do include a higher proportion of analysts (but not of persons responsible for the development and conduct of national policies and programmes) as compared to those with expertise in data collection.

Mail enquiries concerning the core questionnaire were sent to over 200 experts for comments. Almost half of these were nationals of developing countries, and included staff members of United Nations and national demographic institutions. The others were located in universities in developed countries, IUSSP, Committee for International Coordination of National Research in Demography (CICRED), and similar organizations.

Consultants, on the other hand, have been drawn heavily from developed countries, 21 out of a total of 25 by the end of 1975, although it should be recognized that they had the required expertise in different aspects of survey design and analysis relating to one or more developing countries.

Regional Conferences were also fairly well attended, generally comprising participants from a majority of the countries in the regions concerned.

Generally, the operating procedures of the WFS have adhered to the suggestions and recommendations of the advisory groups, whenever there was a reasonably clear-cut consensus among the advisors.

On several issues, there were disagreements within the advisory body and therefore no clear guidelines for the WFS to follow. Of course, the Project Director had to make its own decisions in such cases (as well as making the ultimate decisions in the others).

Some of these disagreements involved major decisions. One was on the inclusion of family planning information. Another was on the issue of sample size, where originally many of the TAC members seemed to favor smaller samples than have subsequently been used (the latter generally because countries have requested larger samples.)

As part of the development of the core questionnaire, comments on a proposed draft were solicited from a very large number of authorities in demography and survey design all over the world. A serious effort was made to analyze the over 300 pages of answers and take them into account in modifications of the questionnaire. As a result of efforts such as these and the use of advisory groups, the WFS has been able to utilize input from a great many distinguished demographers and statisticians.

3. Cost and Budget

3.1 Description of Inputs to Date

The WFS is funded primarily through grants from UNFPA and U.S.AID. These grants were meant to cover the costs of the WFS headquarters operations in London and The Hague (so-called "core" costs), and of the surveys in developing countries. The cost of surveys in the developed countries is borne by these countries themselves, although they benefit from some of the work done by WFS headquarters staff under "core" costs. Also, cost of surveys with "associate" status in LDCs has not been included in cost estimates for the WFS. Table I summarizes the cost of the WFS (excluding developed countries and countries with associate status).

The mid 1972 - March 1976, expenditure of UNFPA contributions was around \$4.080 million, including \$3.053 million for core cost at headquarters and \$1.027 million for country surveys. For the same period, expenditure of U.S. AID contributions has been around \$3.843 million to WFS, of which \$2.442 million has been for core cost and \$1.401 million has been subcontracted by the ISI for country surveys. Other donors (Japan) have contributed \$15 thousand for surveys, and approximately \$908 thousand has been put forward by host countries for support of their own surveys. Allocation of funds for analysis of data beyond Country Report 1 have been nil, apart from one case, where excess survey funds were recently transferred for use in further analysis of that survey.

For the 15-month period April 1976 - June 1977, the ISI projects a total expenditure of approximately \$7.186 million. Of this amount, \$3.213 million is designated for UNFPA support, \$2.884 million for U.S. AID, \$409 thousand for other donors, and \$680 thousand for host countries. As of this writing, almost all of the amounts budgeted for UNFPA or U.S.AID support had already been granted or seemed likely to be so in the near future. Funding from other sources was less certain.

In attempting to estimate the cost of a five-year extension of the WFS, the ISI has projected a total expenditure of approximately \$23.054 million for this period. Of this total, \$10.886 million is designated for UNFPA support, compared to \$9.663 million for U.S. AID, \$1.140 million for other donors, and \$1.365 million for host countries.

Table I

ESTIMATED TOTAL COST OF THE WORLD FERTILITY SURVEY, 1972-1982
(EXCLUDING DIRECT COSTS IN DEVELOPED COUNTRIES AND COST OF SURVEYS WITH ASSOCIATE STATUS)
(US \$000)

	UNFPA	U.S.AID	Other Donors	Host Country ^{a)}	Total
<u>mid 1972 - March 1976</u>					
Headquarters (core) ^{b)}	3,053 ^{c)}	2,442	15	-	5,510
Surveys	1,027	1,401	-	908	3,336
Analysis	-	-	-	-	-
Total	<u>4,080</u>	<u>3,843</u>	<u>15</u>	<u>908</u>	<u>8,846</u>
<u>April 1976 - June 1977</u>					
Headquarters (core)	1,546	2,094	-	-	3,640
Surveys	1,427	550	409	680	3,066
Analysis	240	240	-	-	480
Total	<u>3,213</u>	<u>2,884</u>	<u>409</u>	<u>680</u>	<u>7,186</u>
<u>July 1977 - June 1982^{d)}</u>					
Headquarters (core)	7,506	7,506	-	-	15,012
Surveys	2,000	1,257	840	1,365	5,462
Analysis	1,380	900	300	-	2,580
Total	<u>10,886</u>	<u>9,663</u>	<u>1,140</u>	<u>1,365</u>	<u>23,054</u>
<u>Grand Total (mid 1972-mid 1982)</u>	<u>18,179</u>	<u>16,390</u>	<u>1,564</u>	<u>2,953</u>	<u>39,086^{e)}</u>

- a) At the time of the evaluation, data were not readily available to calculate host country contributions precisely. Figures change too frequently to allow calculating a hard figure, and phasing between periods changes. Therefore, these have been estimated roughly as one-third of all survey costs for each time period (not including analysis).
- b) The breakdown core/survey/analysis is somewhat arbitrary. Many of the costs for headquarters or core costs can also be attributed directly to surveys.
- c) This figure includes \$54,225 donated in the Pre-Project Phase.
- d) Figures for 1977-1982 assume a 50/50 split of headquarters costs between UNFPA and U.S.AID. Some other costs (surveys, analysis, etc.) have also been assigned to UNFPA and U.S.AID and other donors. Those costs not yet assigned were divided evenly among UNFPA and U.S.AID.
- e) Cost for United Nations liaison posts, at \$1-2 million for the whole period, have not been included.

Source: Project Requests to UNFPA and U.S.AID, February 1976

To summarize, the ISI expects that the total cost (excluding developed countries) of the ten-year project will be approximately \$39.086 million, of which some \$34.569 million is designated for the two major project donors, UNFPA and U.S. AID.

The ISI has actively sought to broaden its base of support through appeals to UNFPA donor nations. Japan donated \$15,000 to the WFS in 1974 and the Overseas Development Ministry of the United Kingdom has made a firm commitment to support the upcoming survey in Kenya. In addition, Canada, Japan, Norway, and the Federal Republic of Germany have expressed an interest in reviewing specific survey agreements for possible funding, and Sweden has indicated a willingness to provide limited general support to WFS for headquarters core costs.

The headquarters costs account for a high proportion of the total programme costs. However, it should be recognized that headquarters costs are not mainly for administration. A substantial part is directly attributable to country survey operations. Another major part is for development of the necessary questionnaires, manuals, and related materials.

At the Task Force's request, the WFS prepared estimated of the "projectized" headquarters costs. This was defined as staff time spent in the field or at headquarters relating to specific surveys, plus travel and per diem costs for technical assistance visits by WFS staff and consultants.

The ISI estimates that approximately 20 per cent of all headquarters costs prior to March 1976 can be attributed directly to surveys. Moreover, during the period 1977-1979, the ISI projects that this percentage will increase to around 30 per cent and then decline gradually as the number of ongoing surveys decreases.

Costs of preparing basic documentation such as questionnaires, manuals and technical bulletins, are more difficult to measure, but certainly a significant proportion of headquarters expenditures were directed toward development activities in the early years of the project. Now, as emphasis in the WFS shifts to analysis of data, one would expect that a certain amount of staff time will be engaged in analytic work.

The Task Force concurs in the need for the WFS to be a relatively "lean" organization, with the ratio of costs for core/surveys being kept low. The concept

of "projectizing costs" does shed some light on the extent to which this is the case.

The ISI is, of course, accountable financially to the donor agencies. Annual progress reports and audits are required of the ISI (or at least provided for in the grant documents); and the ISI requires each of its sub-contractors to be subject to audit if necessary.

3.2 Special Budgetary Concerns

The Task Force inquired into the impact on efficiency of having two headquarters sites, with technical offices in London and administrative offices in The Hague. The issue is somewhat complex. Space is currently free in The Hague, through the cooperation of the Netherlands government. Whether the additional space that would be required if all activities were located in The Hague would also be provided free of charge is not known. However, rent and utilities in The Hague are lower than in London, and even if it were necessary to rent space commercially in The Hague, cost of space would still be lower.

On the other hand, it was further noted that communications and travel links between London and The Hague are very good and relatively inexpensive. Another important point is that having the technical headquarters in London has probably helped in recruiting staff and consultants. The Task Force saw no evidence of any important financial or administrative problem for the WFS in having "split" headquarters.

In estimating the cost of each survey or the cost of the entire project, the ISI had very little experience upon which to base its judgements. As it turns out, the ISI estimates of \$150-\$250 thousand per survey (excluding cost to countries) have proven to be quite accurate. However, these agreements only cover costs for the survey and production of Country Report 1. There will be additional costs of further processing and analysis (i.e., Country Report 2 and cross-national analyses); the exact amounts are not yet clear. The costs will depend on the technical specifications of these analyses, and decisions on how workload (and costs) are divided between the WFS, host countries, outside organizations, etc.

Cost of data processing is another area that has been hard to forecast. For each survey, an attempt is made at budgeting data processing costs at the survey

design stage. However, these budget estimates are typically difficult to make accurately. In reality, factors such as loss of programmer staff, delays in getting access to computers, and other bottlenecks in editing and tabulation have resulted in unexpected data processing costs in some instances.

The practice thus far has been simply to include in survey agreements an "estimate" of about \$30 thousand for production of Country Report 2. (During the sixth meeting of the PSC, it was the general opinion that this amount should be increased to roughly \$60,000 for most countries, and slightly more for countries with particularly complex situations.) However, only in one case have funds actually been obligated to the ISI or by the ISI for any analysis beyond Country Report 1. Clarification of the scope and nature of the ISI inputs into sophisticated analysis will have a significant bearing on staffing patterns and budget projections, especially for the period beyond 1977. The ISI should start planning this phase of the project soon.

The total number of countries eventually brought into the programme will, of course, also affect budget projections. If the ISI is to continue honoring all incoming requests for surveys, the additional financial burden must be met by the donor agencies or through additional assistance from other developed nations. Also, the cost of conducting surveys is likely to be high in a few of the remaining "key" countries. For example, the ISI has estimated that the cost of doing a survey in India might be over \$750 thousand. Guidelines for a survey of this size should be laid as soon as possible.

In order to be prepared for these and other unforeseen problems that can cause overexpenditures in certain surveys, the Project Director has suggested that a contingency fund of \$100-\$200 thousand be maintained at WFS/ISI headquarters to cover these types of "slippages". Considering the significant amount of time required to secure special supplemental funds from the funding agencies for a particular survey, the Task Force sees merit in the Project Director's proposal. Of course, the funding organizations should set forth the guidelines for operating such a contingency fund and monitor its operations.

4. Survey Methodology

As was noted in Chapter 1 of this report, one of the means for insuring high quality surveys as well as international comparability has been to develop a set of standardized procedures, and to document these procedures for both current and future LDC use. Much of the efforts of the WFS during the Project Development Phase were concerned with this effort. As a result, the following WFS documentation is now available.

Documentation

Survey Organization Manual
Supervisor's Instructions
Interviewer's Instructions
Manual on Sample Design
Training Manual
Editing and Coding Manual
Guidelines for Country Report
No. 1 (Mark I)
Guidelines for Country Report
No. 1 (Mark II; draft)
Guidelines for Country Report
No. 2 (Mark I; draft)

Survey Instruments

Core Questionnaires (Mark I and II)
Abortion Module
"Factors Other than---" Module
Family Planning Module
General Mortality Module
Community-Level Variable Module
Economic Variables Module
Fertility Regulation Module

As each of these documents is finalized, it is published in English, French, Spanish, and Arabic and made available for use in country surveys as appropriate.

A great deal of effort and care went into the production of the core questionnaire. By spring, 1973, a first draft of the core questionnaire was developed by Charles Westoff and Norman Ryder of Princeton University, and this was considered at the first meeting of the TAC, New York, May 14-15, 1973.

At the recommendation of the TAC, a second draft was mailed to over 200 experts throughout the world and their written comments solicited. More than 300 pages of written comments were received at WFS London headquarters and the comments were subsequently codified and summarized by Jack Harewood of the University of the West Indies.

Incorporating these expert comments and subsequent recommendations from the PSC, the WFS re-designed the core questionnaire, reducing it by approximately 50 per cent. This third draft was then considered by the TAC at its meeting of October 15-17, 1973, in London. After detailed discussion, the third draft was essentially approved by the TAC, although additional minor revisions emerged during the meeting.

The core questionnaire and all other WFS documentations are adapted to local conditions during the beginning phases of each survey. The importance of these documents lies not only with their usefulness during the WFS operation, but with their potential usefulness in guiding future high quality surveys. This is one of the important legacies of the WFS.

The questionnaire modules were produced by WFS staff and by outside consultants. Each module has been reviewed extensively by the TAC and, in some cases, by other outside authorities.

As can be seen, a great deal of work went into the development of the core questionnaire and modules. The Task Force did not think it was possible for it to determine whether the quality of the various questionnaires was the best that can be produced with the current state of the art. It did think it appropriate to examine the WFS efforts to create these materials, in order to judge whether the efforts were sufficient and of the right type.

There seems to be no question that the WFS went to extraordinary lengths to ensure a very high level of input into the development of the questionnaires. They are probably the most thoroughly reviewed reporting forms in the history of statistical surveys. Furthermore, the comments were seriously considered and had major effects on the final form.

This does not mean that problems will not arise in the execution of the surveys, but given the current state of the art, the WFS has obviously done all that can reasonably be expected in creating the methodology for the surveys.

Over the past two years, the WFS has also given considerable attention to the matter of data processing. Since it is normal WFS policy to have most or all of data processing for each survey done in the host country, the WFS has sought out easy-to-use, comprehensive editing and tabulation software packages that would run on the relatively small computers available in most of the developing world.

Two appointed committees of data processing and analysis experts were formed to discuss practical means for dealing with WFS data once they are collected. The first of these committees, The Working Group on Computers and Packages for Survey Data, met three times in 1974 to discuss various tabulation and edit software packages and to recommend a course of action for the WFS. Participants from several

organizations were asked to present their software packages to the Working Group; attention was focused primarily on tabulation packages. The end result of these discussions was the decision by WFS to adopt the CENTS and COCENTS packages of the U.S. Census Bureau, since these are the only packages currently available that will both produce all necessary tables and run on a small computer.

To consider the special problem of machine editing, a separate committee, the Advisory Committee on Computer Edit Programs, convened several times in 1974-75. Initially, there was some debate over the relative merits of developing customized edit programmes for each survey versus developing a generalized edit package. After some unsuccessful experimentation with the CEISHA programme from Statistics Canada, the committee recommended that customized packages be written for the first several WFS surveys, and that WFS work with CELADE to adapt their new generalized edit programme (CONCOR) to the core questionnaire. The WFS has adopted this recommendation, and CONCOR has been tested and refined in Costa Rica using data from the WFS survey in the Dominican Republic.

5. Accomplishments

Ultimately, the success of the WFS will be measured by its accomplishments, not by its organization, problems, etc. Looking at the title of the project, the World Fertility Survey, it is apparent that the title emphasizes three aspects of the study - world coverage, fertility content, and good survey methodology. It is useful to examine the accomplishments from that point of view.

5.1 Is a representative sample of the world's population in the WFS programme?

As reported in Section 2.2, the Survey will achieve quite good coverage, assuming that India and much of Africa will be included. There are significant omissions - uncertainty about Brazil and Nigeria, and the non-participation of China and the U.S.S.R. - but it appears as if the initial goals of country participation will be met.

5.2 Fertility

With necessary constraints on the size of the questionnaire, the content of the questionnaires does include the major factors affecting fertility as recommended by a large group of some of the most distinguished demographers in the world. The WFS has also been able to resist the temptation to attach other items of interest for social research but seen as having only marginal effect on fertility analysis. Here also, the WFS is obviously proceeding in the right direction.

5.3 Effectiveness of Survey Methodology

The WFS has placed considerable emphasis on the production of high-quality surveys. The ANTAM-1 noted that there were over 200 fertility studies done in the past 15 years but that many of them were of poor quality leading to a great deal of uncertainty as to the accuracy of the results. Furthermore, publication of results has frequently been very late. These two factors provided much of the impetus for the establishment of the WFS.

The TAC repeatedly and strongly has urged that effective quality control measures be used, and that this should be part of and budgeted for every survey. It has also urged that the WFS should develop new procedures for quality control.

The WFS has made strong efforts in this direction. The efforts involve such features as carefully constructed and worded questionnaires, extensive training of field interviewers with a well-planned and highly-structured training package, a high supervisor to interviewer ratio, extensive field editing and other controls on the quality of the interviewers' work, and monitoring of these local activities by the London WFS staff (a fair amount of the staff travel is for training and monitoring activities). These are the major features affecting the quality of a survey that are under the control of the central staff, and the Task Force's judgement was that the WFS had put as much emphasis on each of these factors as is reasonable, given the current level of knowledge of survey methodology.

It should be noted that although these various steps are necessary conditions for the production of data with a minimum of error, with the present state of the art it is not known whether they are sufficient conditions. There are a number of factors which are not under the direct control of the central staff and which could have significant effects on the quality of the data. These include the fact that the WFS could have only a limited effect on the choice of the executing agency in each participating country and of the director of the survey. Possibly more important is the fact that local cultural patterns could affect respondents' understanding and perception of the questions asked, and their ability or willingness to give correct answers.

There will almost certainly be some variability in the quality of results from country to country. The WFS staff is aware of these limitations of survey data, and plans are underway for an early analysis of the quality of the data. Only a limited amount of such analysis is possible without designed experiments and other fairly costly studies, which it is probably too late to implement. However, even the limited analyses are important in that the results could affect inferences that will be made from the survey data. The Task Force urges that these analyses be started as soon as data become available from a few countries.

The discussion of quality in this section has been restricted to the quality of the basic data that will be obtained in the survey. Another aspect of reliability is the quality of the demographic analysis that will be made of the results of the surveys. Much of the demographic analysis will be made in the individual countries, and is outside the scope of the WFS. In any case, plans for such analyses are at an early planning stage, and not enough has been done to permit any evaluation by the Task Force.

5.4 Building Up of Country Capacity

The three preceding sections cover accomplishments relating to the major objectives of the WFS. As mentioned in Chapter 1, there are also some secondary goals. One of these is to build up country capacity to perform similar surveys in the future.

There are two main achievements in this area. One is the production of materials which can be considered models for future surveys. Although they obviously are not the first such materials produced, they do provide a very carefully planned, complete package covering virtually all phases of a fertility survey. A country which wishes to take its own survey will find its task considerably lightened by the availability of the materials.

The second relates to building up institutional capacities within the individual countries. The WFS has consistently attempted to work with permanent institutions. The majority of the surveys are undertaken by statistical offices, either along or jointly with other institutions involved in population programmes. National committees concerned with population, including both Governmental and other institutions, have also been set up. This will automatically have a carryover effect on future surveys. The experience they gain in conducting the current survey, and the knowledge they gain of the importance of quality and the need for careful quality control, can be expected to influence the conduct of future surveys.

However, the local statistical offices or other operating agencies are largely working with a set of procedures that have been given them. Although this is very useful, it does not build up the ability in the same way as having them involved in the decision making process, or at least being in a position to observe these processes being decided (e.g., decisions on questionnaire wording or format, reasons for choosing the sample sizes, etc.). This method of operation was a deliberate decision by the WFS, stemming from the established priorities. The Task Force does not disagree with this decision, and doubts that any other approach was really possible, given the need to produce a large quantity of data in a relatively short period of time. The donors should, however, be aware of the implications of this method of proceeding. Some of the IDC's will undoubtedly be able to produce future surveys with very little help from a central staff. In fact, some of them have the trained personnel and institutional capability to do them now. In these countries, the technical input of the WFS is mainly important to insure uniformity

from country to country. However, it is likely that for many of them, future surveys would require considerable outside assistance.

The Task Force also recommends that greater emphasis be placed on pooling of knowledge of previous survey methodology and results in the countries: often these lie scattered in the official government publications and sometimes the data are not analyzed carefully. Examples are survey costs, response and refusal rates, results of pretests of various items and questionnaires, types and magnitude of errors detected by supervisors, and sampling variance (total and by stages of selection). Once a country is selected for participation in the WFS, a study should be initiated that would bring together the previous experience in the country itself. This study could be undertaken by an expert involved in a senior capacity with the major surveys in that country, WFS professional(s) assigned to the survey and/or UN liaison officers. The study could be completed relatively quickly and could provide data of great importance in adapting WFS instruments and procedures to local conditions.

5.5 Addition to Scientific Knowledge

The data that are being produced will add substantially to the body of knowledge about fertility patterns. Also, the WFS is helping coordinate and centralize additional information on fertility throughout the world. From the point of view of demography and demographic analysis, these are major achievements.

However, there is not much being done in the area of survey methodology. There does not appear to be any development of innovative survey techniques or of experimental evaluation of survey methods that are commonly used. It should be pointed out that the problem of allocating priorities between the need to produce standardized data and the research desire to develop better techniques is fairly common, and there is no obvious right decision. With such a large scale effort as the WFS however, it does appear as if some accommodation towards research in survey methods could have been made.

5.6 Effectiveness of Operating at Reasonable Cost

Only a limited amount of investigation of the general issue of efficiency of operations could be carried out by the Task Force. It did examine the output and the cost patterns, involving salaries, overhead items, and the effect of the

organizational structure used for the WFS. The Task Force was in no position to independently assess the working habits of the staff members, or their individual productivity. However, some facts regarding the effectiveness of the organization as a whole seem clear.

First, the use and encouragement of mass-production techniques, that is, the development of essentially a single set of documents such as questionnaires, computer programmes, etc. for use in 40 or 50 countries automatically creates a very efficient system.

Secondly, there is obviously a determined effort to use existing local resources and institutions in the participating countries. This also adds considerably to the WFS efficiency.

The Task Force explored the issue of whether setting up an entirely separate organization for the WFS was wasteful, as compared to making it part of the United Nations. The Task Force saw no evidence that any additional expenses were incurred due to organizational issues. As reported earlier, the salaries, are not out of line with comparable United Nations salaries. The location of two offices in London and The Hague do not appear to add importantly to the cost of operations.

Two minor points relating to the costs were also briefly examined. One was the expense of convening advisory committee meetings in such diverse places as Kuala Lumpur or Jamaica. In practice, almost all of the meetings outside of New York, The Hague, or London were convened in conjunction with other meetings, such as the ISI or regional conferences. Consequently, these meetings do not appear to have had any important effect on the cost.

The second point relates to the extensive amount of travel engaged in by the WFS staff. Two issues explored by the Task Force were - is all this travel really necessary, and was it organized in the most efficient manner? The Task Force saw no evidence of inefficiency in these operations. Given the need to come to agreement with 40 or 50 countries on the nature and size of the surveys, the desire to produce comparability by uniformity in training, supervision, quality control and data processing, and the need to assure reasonable quality by high standards of sample selection methods, recruitment, etc., a considerable amount of personal communication between the WFS staff and the participating countries is necessary. The Task Force saw no way of avoiding this. The patterns of staff travel also seemed

reasonable. In general, when long trips are made, the staff members involved visit several countries to help defray the travel costs. There are features of survey methodology that require specialized knowledge that is not easily transferable from one staff member to another, for example, sample design, interviewer training, computer processing. This requires some multiple visits that as far as the Task Force could see, are unavoidable.

5.7 Adherence to Time Schedule

There seem to have been no major delays in the planning activities. The Pre-Project and Project Development Phases were scheduled to be completed by about June, 1974, and generally this has been accomplished.

The Project Implementation Phase was initially foreseen to last three years, from mid-1974 to mid-1977. It now seems unlikely that this schedule can be adhered to, and the ISI has suggested an extension of the WFS to mid-1982. Hence, the WFS will take ten rather than five years. However, early estimates were recognized as being very tentative, depending on experience to be gained regarding time and funds needed for each survey, as well as on the availability of funding. It would seem optimistic to have expected that 40-60 country surveys could be carried out in three years, and as early as the AHTAM-1 it was recognized that an extension would probably be necessary. The WFS mode of operation has implicitly assumed a longer implementation period. For example, the WFS has agreed to postpone most of the African studies, to permit completion of the African Census programme. Similarly, discussions with other countries regarding future participation in the WFS are still proceeding, on the assumption that additional time is available. In fact, the size of the WFS staff is not large enough to provide for the required close contact and monitoring of activities in participating countries, if the Implementation Phase has to be completed by mid-1977.

The ISI now estimates that each survey takes around two years to complete, and that the WFS organization has a capacity of 16 ongoing surveys at any one time. This is only an assumption; until the end of 1975 that capacity had not been reached, and the phasing scheduled would imply operating considerably more than 16 surveys in 1977. Whereas the Task Force sees no reason to doubt that WFS will be able to undertake the scheduled number of surveys (somewhat differently phased), progress must be closely monitored so that any delays will be promptly noticed. This would imply elaboration of a detailed work plan, and a check at short intervals (for example, every PSC) to see whether the work plan is being followed.

6. Considerations for the Future

6.1 Can the objectives be met by mid-1977?

If support for the WFS were to end in 1977, this would entail shutting off all recruitment of new country surveys almost immediately since there is a long lead time between early planning for a survey in a country and the completion of field work, data processing, and the analysis of the results. This would exclude India, much of Africa, as well as other developing countries. During the year and a half remaining, the efforts of the headquarters staff would largely be concentrated on finishing the field work for the countries already committed and producing the first country reports. Probably very little additional analytic work could be performed on such items as international comparisons. The problems would be compounded by the fact that a high level of attrition of the staff can be expected once it becomes clear that operations would soon cease. The Task Force believes this is a very undesirable situation and that serious consideration should be given to the necessary extension of time.

6.2 How much time will be needed to meet objectives?

As mentioned in chapter 5.7, it is estimated that it will be possible to undertake all planned surveys by mid-1982. It is recommended that this extension be granted. There is no reason to believe that headquarters or other costs could be reduced significantly during the remaining implementation period (except possibly for consultants). A few of the countries that are likely to participate in the next few years are much larger than average and will probably require larger sample sizes. Between this factor and inflation it is unlikely that the next five years will cost less than the past, and the WFS has in fact estimated it to cost about the same.

Whatever decision is made regarding the proposed five-year extension, it is urgent that a decision on this matter be made by the donors very early, certainly within the next few months. First of all, it is essential for good planning purposes. The WFS staff may already be making commitments to countries that cannot be met if the 1977 schedule is to be met. Secondly, as a matter of fairness to the staff members, they should be informed of their prospects for future employment in the WFS. However, it is recognized that the donors may not be in a position to make a firm five-year commitment at this time.

If an extension beyond 1977 is granted, serious consideration should be given to some of the problems listed in this report. Strong efforts should continue to be made to see whether greater accommodation to the needs of countries is possible without serious effects on time schedules or on other goals. Similarly, a stronger attempt should be made to allow countries to analyze their own data, and to recruit a higher proportion of consultants from developing countries. Also, renewed consideration should be given to whether research organizations in developing countries would have the resources for undertaking analysis beyond Country Report 1.

The Task Force also recommends initiation of further methodological research that could be completed in time to have potential effect on the methodology for the surveys to be initiated in the next five years. This should include studies that can be performed through analysis of the data already collected (or in the process of being collected) with little redesign of surveys, e.g., the methods of treating non-response and inconsistent entries, as well as the reconciliation of estimates of the number of children ever born (or living) obtained from the different parts of the questionnaire.

6.3 Reconsideration of Priorities in Objectives if the WFS is Viewed as a Long Term Effort

For the present round of surveys decisions have been made on priorities, and the procedures and operating methods that have been developed are consistent with these decisions. It would be costly and wasteful to change at this time. However, the Task Force believes that serious consideration should be given to the prospect of a second round of WFS surveys, either supported by the present donors or in other ways. Should such a second round become a reality, the Task Force recommends that the WFS add to its present role responsibility for studying and reporting on alternative approaches that are possible.

More specifically, it is recommended that the WFS staff prepare within the next few years, a series of research studies on new problems that will arise in the second round, as well as the implications of changing some of the priorities accepted for the current surveys. No attempt at itemizing all the needed studies has been made, but some of the more obvious subjects are as follows:

- a) There are methodological problems in measuring change over time that are different from measuring levels at a single point in time. How should

this affect the design of the questionnaire, the sample design, or any other survey features?

- b) If a second round is to be made more responsive to the programmatic needs of national population programmes, how can this be done within the framework of the WFS? What changes in the organization of the WFS, the questionnaires, and the working relations between headquarters staff and participating countries will be necessary?
- c) A similar report should be prepared on the organizational changes necessary if a higher priority is to be given to the development of national capacity to perform future fertility studies. This may require a different type of training programme for professional personnel, including fellowships and extended visits to the London headquarters.
- d) Is the present organization and method of funding of the WFS the ideal one, and what others should be considered?
- e) What kinds of methodological research are necessary to improve the quality of future surveys?

Three levels of potential research can be identified: (1) methodological studies that can be performed through analysis of data already collected or in the process of being collected (e.g., analysis of sample designs, nonreporting problems or inconsistencies, etc.); (2) studies that require experimental designs and that need to be completed prior to the second round; (3) research that requires large scale samples and that could probably only be done by making it part of the second round.

A useful by-product of the WFS will be development of improved survey methodology. In this area, the Task Force recommends that the WFS should attempt to go ahead with at least some research studies, even in the absence of planning for a second round. This is no complete catalog of needed research, but is rather a listing of some examples of the kind of information that is needed:

- the effect of different standards for the recruitment of interviewers
- the effect on response of very long questionnaires
- the optimum length of a training programme

- can randomized response techniques be used to improve the reliability of response?
- what kind of probing techniques can be used to reconcile inconsistencies?
- what is the effect of different ways of asking about the number of children ever born?
- what can be learned about efficient sample design from the information on hand?

The WFS staff, with the help perhaps of consultants, should develop a research plan, with an estimate of the effort needed. This would permit decisions on the resources to be invested in the research, as well as priorities for individual projects.

Footnotes

- ¹ Cable to WFS/London from Gille/Ravenholt (September 18, 1975)
- ² See Appendix II for Calendar of Events
- ³ "The World Fertility Survey: The First Three Years," ISI, January 1975, p. 16
- ⁴ Ibid, p. 7
- ⁵ Ibid, p. 11 and UNFPA financial records
- ⁶ Ibid, pp. 13, 25-28
- ⁷ Ibid, p. 12
- ⁸ See Chapter 2.4 for details
- ⁹ "Report of the First Ad Hoc Technical Advisory Meeting on the World Fertility Survey" (ISI, The Hague, July 1972)
- ¹⁰ Ibid, p. 3
- ¹¹ "Project Request for UNFPA," October 1973, pp. 14-15
- ¹² Only those for Panama, Malaysia, and Thailand were analyzed from this aspect
- ¹³ TAC-1, p. 2
- ¹⁴ First Ad Hoc Technical Advisory Meeting, July 1972, p. 4
- ¹⁵ TAC-3, p. 3
- ¹⁶ TAC-1, p. 13
- ¹⁷ Ibid, p. 13
- ¹⁸ PSC-3, p. 5
- ¹⁹ e.g., PSC-2, pp. 2,4
- ²⁰ PSC-5, p. 6
- ²¹ PSC-4, p. 6
- ²² AHTAM-1, pp. 4, 16
- ²³ AHTAM-2, p. 3
- ²⁴ PSC-2, p. 6; PSC-3, p. 9; PSC-4, pp. 5-7; PSC-5, p. 6
- ²⁵ PSC-5, p. 7
- ²⁶ AHTAM-2, p. 11
- ²⁷ AHTAM-1, p. 6

²⁸TAC-1, p. 9; TAC-4, p. 1

²⁹PSC-3, p. 5

³⁰AHTAM-2, p. 6

³¹Ibid, p. 6

³²TAC-6, pp. 2,5

³³PSC-3, p. 5

³⁴TAC-3, p. 2

³⁵AHTAM-1 and AHTAM-2; PSC-4, p. 8; TAC-5, p. 10; TAC-2, p. 8; TAC-2, p. 9

³⁶TAC-3, p. 4

³⁷PSC-2, p. 6

³⁸PSC-3, pp. 8,11

³⁹TAC-6, p. 9

⁴⁰The dichotomy between "developed" and "developing" countries has been based on WFS listings, which generally attempt to divide countries according to demographic characteristics and need for WFS technical and financial assistance. This terminology is not necessarily the same as that employed by the United Nations.

APPENDIX II

Calendar of Events

ISI Biennial Conference, Washington D.C.	August 1971	Pre-project Phase
Beginning of informal consultations, U.S.AID/UNFPA	January 1972	
Approval by UNFPA of \$54,225 for Pre-Project Phase	April 1972	
Approval by USAID of \$1,043,000 as part of costs for Project Development Phase	June 1972	
Ad Hoc Technical Advisory Meetings	11-21 July 1972	Project Development Phase
PSC-1 (The Hague)	22-23 January 1973	
Approval by UNFPA of \$520,000 as part of costs for Project Development Phase	February 1973	
TAC-1 (New York)	14-15 May 1973	
PSC-2 (Vienna)	17-18 August 1973	
TAC-2 (London)	15-17 October 1973	Project Development Phase
RC for Africa (Addis Ababa)	3-4 December 1973	
RC for the Middle East (Beirut)	14-15 December 1973	
RC for the Caribbean (Port-of-Spain)	14-15 January 1974	
TAC-3 (Port-of-Spain)	16-18 January 1974	
RC for Europe (Geneva)	28 Jan. - 1 Feb. 1974	
RC for Asia (Bangkok)	14-16 February 1974	
PSC-3 (Princeton)	21-22 February 1974	
TAC-4 (Kuala Lumpur/Penang)	21-24 May 1974	
RC for Latin America (Mexico City)	15-17 July 1974	
TAC-5 (London)	29-31 October 1974	Project Implementation Phase
PSC-4 (The Hague)	11-13 December 1974	
PSC-5 (London)	21-23 May 1975	
TAC-6 (London)	15-17 September 1975	
PSC-6 (Kingston)	24-26 November 1975	
PSC-7 (London)	5-7 April 1976	
TAC-7 (London)	Planned 16-18 August 1976	