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SOCIAL AND DEMOGRAPHIC STATISTICS

Promoting the improvement of social statistics in
developing countries

Report of the Secretary-General

SUMMARY

At its eighteenth session, the Statistical Commission agreed that the United Nations Statistical Office would prepare a strategy paper on promoting the improvement of social statistics in developing countries for consideration at its nineteenth session. The paper has been addressed both to the producers and users of social statistics in recognition of the need for a joint approach and is concerned primarily with the practical problems of organizing and implementing an integrated programme of improving social statistics in developing countries. It examines the nature and purpose of social statistics and the reasons for a programme to improve them and considers the uses to which they can be put and the value of placing them in a co-ordinated general framework for integration such as that discussed in the document "A draft framework for the integration of social and demographic statistics for developing countries" (E/CN.3/490). It suggests possible ways of developing practical and viable statistical operations to make them more relevant, sufficient, timely and co-ordinated. The purpose of the paper is not to suggest a complete statistical programme but to examine the problems that need to be overcome if suitable programmes can be realized. The Commission may wish to comment on the paper and indicate what future international work should be undertaken in this area. It may also wish to discuss the means of improving social statistics in the developing countries themselves and achieving this in a co-ordinated manner.

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INTRODUCTION

1. At its eighteenth session, the Statistical Commission, within the context of its discussion of the System of Social and Demographic Statistics (SSDS), examined the character of such a system for developing countries. The Commission's report stated:

It was evident from the discussion that there were two somewhat different approaches to the desirable direction of immediate international work in this area. On the one hand, there was the view that work should proceed on designing a simplified version of an SSDS for developing countries because the full version was too complex for the purpose. On the other hand, there was the view that the SSDS should be viewed simply as a process of systematization and that the immediate objective was to improve, restructure and harmonize social statistics, keeping the full SSDS as a long-term goal and using it as a frame of reference.

However, the Commission unanimously endorsed the value of an SSDS for developing countries and, above all, agreed on the importance of improving social statistics in developing countries in an integrated manner. It was agreed that systematic international efforts were required to improve and harmonize social statistics, while it was accepted that national efforts would necessarily reflect national priorities. 1/

It was subsequently agreed that the Statistical Office would prepare a paper on promoting the improvement of social statistics in developing countries for consideration by the Commission at its nineteenth session.

2. A draft of the present paper and a draft of a paper on the relevance and feasibility of adapting the full version of the SSDS for use in the developing countries, 2/ were considered by an Expert Group in November 1975. 3/ An outline of the present paper, together with a discussion of some key issues, was also presented to the 1975 Conference of African Statisticians 4/ and the 1975 meeting of the Committee on Improvement of National Statistics (COINS) of the Inter-American Statistical Institute. The views and recommendations of these conferences and of the Expert Group, together with those obtained by consultations with developing countries and the specialized agencies, have been taken into account in preparing the present paper.

1/ Official Records of the Economic and Social Council, Fifty-eighth Session, Supplement No. 2 (E/5603), paras. 82-83.

2/ ST/ESA/STAT.87 and ST/ESA/STAT.86.

3/ "Report of the Expert Group on Social Statistics and a System of Social and Demographic Statistics for Developing Countries" (ESA/STAT/AC.3/2).

4/ "Report of the ninth session of the Conference of African Statisticians" (E/CN.14/646), paras. 214-219.

I. ACTION BY THE COMMISSION

3. The Commission may wish to comment on the paper and, in the light of these comments and those on E/CN.3/490, also before the Commission, to indicate the future international work that should be undertaken towards the improvement of social statistics in developing countries. It may also wish to discuss the means of improving social statistics in the developing countries themselves and achieving this in a co-ordinated manner.

II. PROMOTING THE IMPROVEMENT OF SOCIAL STATISTICS IN DEVELOPING COUNTRIES

A. Coverage of subject and range of countries

4. For the purposes of this paper, social statistics are taken to include those statistics describing man's social conditions. This is a very broad coverage and will inevitably include some elements of what are commonly considered economic statistics such as income distribution and housing as well as the expenditures and costs of social programmes. The main components will be statistics of food and nutrition, housing and provision of water, health and medical care, labour, education and training, culture, communication, social welfare, time use and major elements of demographic statistics. Such diversity is a feature of most large bodies of statistics such as economic statistics and environmental statistics. Unlike economic statistics, however, social statistics lack the unifying feature of a common unit of measurement. It is, nevertheless, more unified than environmental statistics in that the various components of social statistics refer to the same set of individuals and groups. Because all countries have ongoing social programmes, a considerable body of largely disparate social statistics, developed mainly for administrative rather than policy purposes, is already in existence.

5. In the past, in developing countries, considerable attention has been paid to the concerted improvement of economic and financial statistics on the one hand and of demographic statistics on the other. The other main components of social statistics, however, have been left to make their own way under the auspices of their separate administrative agencies. In different countries, one or another sector with a well-established administrative structure, such as health or education, may have made considerable independent progress while other sectors, such as nutrition, are still at a rudimentary stage. The concern of the present paper is primarily with these unevenly developed sectors of social statistics outside the demographic area and with the need to improve them in a directed and co-ordinated programme of mutually reinforcing work.

6. There is a very wide range of statistical policies, capacities and performance among developing countries, particularly in social statistics. Indeed, in many respects there is a greater heterogeneity among developing countries than among industrialized countries. In some countries there is concerted support for an integrated programme of improving social statistics as part of the national development plan. In other countries support is provided in an ad hoc manner or along instrumental lines, for example, in the form of support for a population

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census or a household survey capability. The most common policy, however, is ad hoc support provided along subject matter lines whereby the Government seeks to improve the statistics of the individual sectors which national policy and administrative interests require to be strengthened. This activity usually takes the form of expanding the existing administrative reporting systems. It is as a result of these fragmented sectoral policies that most of the improvements in statistics of health, labour, education, etc., have taken place. There are also some local programmes for improving social statistics, often where social decisions are taken at the local level. There are, of course, countries where there is no national support for improving social statistics in any form owing to limited resources and competing priorities or as a result of general scepticism as to the benefits that might accrue from such a programme.

7. Among developing countries conditions vary greatly and call for a wide range of options within an over-all strategy; however, a number of significant differences between developed and developing countries need to be taken into account in order to avoid transplanting inappropriate models of development. Developing countries, with a lower level of economic development, have fewer financial resources and more basic economic needs to be met. This argues for the avoidance of expensive and sophisticated systems. Capital intensive proposals and other proposals involving high maintenance costs that work well in developed countries may not be suitable, and the constraints of available resources and financing need to be constantly kept in mind. This is not to say, however, that adequate funds are not essential for the purposes of improving statistics in general and social statistics in particular. It is not realistic to suggest at this stage possible costs of country programmes to improve social statistics, as they will depend on the nature of the existing statistical services and the scope of the improvement programmes.

8. There is a difference between developed and developing countries in the nature of the society itself, in the very processes being described. In developing countries, masses of people live in appalling and unquantified social conditions, and a major concern is with measuring problems relating to these people. It is not only the traditional agricultural sector that has been neglected. It is an oversimplified model of development to speak of the "modern" and the "traditional" sectors as if they were quite independent entities. In practice, there is a significant area of activity which does not fall comfortably into either category and in which a large proportion of the employed and self-employed population in the developing countries is engaged.

9. For historical and other reasons, developing countries have a different administrative capacity and a restricted supply of trained manpower. Systems that rely on the constant updating of records and on speedy transmission of information over long distances are unlikely to be successful in developing countries, even though they work well elsewhere. Because of the lack of trained statisticians in the Governments of most developing countries, particularly at the middle and senior levels, programmes need to be devised that make the greatest use of this scarce resource while also encouraging the maximum use of semi-trained and untrained personnel. This means that training programmes assisted by the dissemination of training manuals are the key to the success of social statistics programmes, and that the statistical authorities will often have to do much of their own training.

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10. The official statistical collection system and infrastructure of many developing countries is much more fragile than in developed countries, and in the area of social statistics, the collection system is particularly weak. The central statistical offices in many developing countries have not yet established a field organization with a network of regional statisticians; they still rely heavily on the use of local administrators or ad hoc staff.

11. Programmes have, therefore, to be capable of producing workable and simple frameworks that are technically sound but do not go beyond the capacity of the existing statistical system. There might be a temptation to elaborate a strategy best suited to the most advanced developing countries, inasmuch as the statistical structures of these countries offer the most manageable transitions from the developed world where considerable progress in social statistics has already been made. This would, however, leave the least advanced countries without a viable strategy. What is needed is a realistic and flexible co-ordinated programme of action with a minimum set of priorities within each component.

B. Purposes of social statistics

12. Most social statistics have traditionally served the purposes of administration. They have been developed independently by each social agency and one of their major functions has been to record the execution and performance of the separate programmes undertaken by these agencies. This has given rise to their heterogeneity, because the statistics of each social sector have been designed primarily to fit the specific administrative needs of that sector. In addition to their internal accounting function, social statistics have also been used for describing social circumstances and identifying areas of concern, e.g., a description of the state of health may have the aim of providing some indicative series for social planning and policy. This is done as part of a comprehensive national plan with its implications in terms of allocation of resources, as social planning cannot be neatly separated from economic planning.

13. However, the link between the social statistician and the social planner and policy maker has not been as close as that found in economic statistics because in social programmes less urgency to know in order to act has been felt than, for example, in the case of balance-of-payments statistics where failure to act appropriately and quickly may lead to early economic disaster. The internal social process is characteristically slow and, although serious malfunctions can and do occur and lead to disaster, this deterioration usually spans a number of years. As a result, Governments and planners have felt less obliged to make immediate decisions. Until recently in many countries low priority was given to programmes designed to remove social disparities and the policy makers were less interested in obtaining early information about conditions throughout different parts of the country. The statistical services of the social agencies have tended to concentrate on meeting administratively determined needs for detail rather than on the over-all requirements for policy planning and problem solving.

14. Social planning and policy were based as much upon political and social imperatives and cultural characteristics as on an analysis of existing achievements.

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This was particularly so in developing countries where social pressures were more likely to lead to political instability. The educational planner, for example, was dealing with social aspirations that had been closely allied in the case of most developing countries with the struggle for independence and nation building. He was, therefore, obliged to plan more out of social pressures and political considerations than out of a recognition of current achievements and realizable prospects. Similarly, a target for the complete eradication of a major disease in a developing country was in itself a political instrument.

15. Under these conditions, the data the statistician produces will often be of poor quality because they are never closely scrutinized, although in some instances even incomplete data can serve a useful purpose as an early warning system, e.g., notified cases of cholera. In general, however, they will be lacking in key series and in general usefulness to the planner because they are not designed to assist him, while, in turn, the planner never comes to grips with the problem of identifying the most reasonable approximations to the characteristics he really wishes to measure. At the same time, the lack of internal comparability due to the multiplicity of agencies and differing definitions deprives both the statisticians and the planners in the social sectors of the opportunity of supporting their colleagues in other sectors; thus, each programme is left to continue in a self-perpetuating and piece-meal manner, without the fundamental improvements that have been made in other bodies of statistics.

16. A more recent use of social statistics has been to describe social circumstances and identify areas of concern relative to these. Because social statistics were born out of administrative processes, social statisticians traditionally tended to identify mainly with administrative concerns and to concentrate on describing the conditions closest to the administrator. In developing countries, where there is an enormous divergence in social conditions, the concerns and descriptions and the accessibility of data outside the censuses tended to be concentrated on that small segment of the urban population with the greatest access to well-established social services. The recording process for this group of individuals is also administratively the most manageable and the net result is a serious distortion effect in measurement. Social statistics have been concentrated in the "modern" sector and are thus not equipped as they stand to measure the total social concerns of developing countries.

17. A distinction needs to be made between policies for improving social statistics which are idealistic expressions of long-term aspirations in response to social and political imperatives, and practical guides for early action. Making social statistics more relevant, sufficient, timely and co-ordinated will take considerable time and resources. Responsible authorities should not only be convinced of the usefulness of the undertaking but also be aware of its likely results and the probable time scale. One cannot alight upon a social problem like some deus ex machina and carry out a quick survey with a team of specialists. One can do very little in statistics without historical and continuous data. This means an efficient, planned programme of action. One cannot conjure up new social statistics only because the present social crisis requires answers. Statistics take time - time to design, to collect and to analyse. To begin a new statistical series takes

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at least a year or two and this is a serious disadvantage because, in the midst of a crisis, a country is tempted to plan without time-consuming statistical series.

18. Unfortunately, there are few authentic short cuts. There is practically no alternative to establishing a durable capability to carry out an efficient and regular collection and analysis programme, and it is here that the greatest problems arise in implementing improvement policies. A social planning unit is capable of making a great effort to obtain estimates for a specific subject on a one-time basis for the purposes of an international loan, a policy statement, etc. The cost is, however, exorbitant and the results may be highly inaccurate and are unlikely to be used to establish time series. It is cheaper and more useful in the long run to develop a practical programme of establishing a permanent reporting structure, to create a mechanism for co-ordination, to develop a means for ongoing evaluation and to provide a capability to carry out household surveys on a planned sample basis. The creation of these structures distinguishes aspiration from action programmes.

C. Establishment of national priorities

19. It is not the function of the present paper to indicate what should be the national priorities for social statistics. Each country has its own social priorities within its national plan and the priorities for social statistics will naturally be in accordance with them to the extent that they are quantifiable. It is important that some priorities in statistics be established if an improvement programme is to be given a tangible shape. The following paragraphs discuss briefly some of the general social considerations which might be expected to be significant for developing countries in the selection of their priorities for social statistics.

20. At the present time, there is a growing concern with the problem of internal disparities in developing countries and the realization that the equitable distribution of wealth is as important as the growth of total resources. This growing consciousness is leading to programmes of national integration, the lessening of regional inequalities, the creation of social funds, the redistribution of national income etc. in order to correct the distortions which current models of economic development promote. An improved social statistics service would be able to play an important role in measuring and evaluating the changes brought about by these new policies and in helping to solve the problems encountered in their implementation. In some countries, priorities will be established on the basis of some unitary concept or theory of social change or development; other countries may establish priorities on the basis of the importance of the gaps identified or on the basis of those sectors or regions which seem to provide the best opportunity for improvement in the short run.

21. If a programme is to be of immediate value, the statistical priorities should represent the areas of direct intervention in social development and welfare in which the country is currently engaged, complementing the projects in which special actions are being implemented. It is likely that there will be a common core of priority areas, owing to the similar social problems in most developing countries.

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These priority subject areas will often include: providing an adequate supply of drinking water; improved nutrition for vulnerable groups; development of basic primary health services; improving maternal and young child health; provision of basic education, particularly pre-occupational and other technical training; family planning and, more generally, strengthening the family and the community and enlarging opportunities for girls and women. These are operationally oriented priority areas pertaining to the larger areas of concern indicated in E/CN.3/490. In the context of these priority areas of concern, a balanced statistical approach should include reliable series on institutional activities and performance and a sound procedure for estimating access to and use of local services.

22. There is a need to develop a capability for providing statistics at the local level to serve the data requirements of local programmes. To this end, field organizations of the central statistical offices need to be strengthened and local authorities have to receive some minimal training in the collection and handling of statistical data. One useful device for accelerating this process is the exchange of statistical personnel between the field office and the central office so that improved techniques can be widely disseminated and so that the central staff can learn at first hand the nature of the local needs and the available resources for local statistics. Local and regional data have a key measuring function, and the statisticians, planners and administrators in the regional and local agencies will be required to strengthen their role in monitoring the impact of social programmes within the country, using the resulting data to improve the programmes themselves. Local statistics are not a substitute for national statistics, but they provide a basis for the support of local programmes and should be made comparable with national statistics.

23. The need for local statistics is closely bound up with the problem of internal disparities referred to earlier. Because more attention needs to be given to the people outside the modern sector in accordance with national plans for social improvement, programmes should seek particularly to improve the data concerning disadvantaged areas and groups, which are likely to include rural areas, urban slums and shanty towns, isolated regions, the lowest income groups, young children and cultural and ethnic minorities. Regional development will also probably be a priority and it is important to agree on the selection of special regions and to have all agencies working in them in a co-ordinated manner. The special regions would probably be the most backward agricultural districts in the country and the regions with which transport communications are the weakest. Some of these regions may already have been designated as "development areas", and statistical programmes should be linked to the ongoing activity in these regions. On the other hand, care must be exercised not to include every social or regional problem as a priority or the success of the programme may be jeopardized. It is evident that in the developing countries the greatest division is between the well-housed urban family and families in the shanty towns and rural areas, and it is these divisions within the country that should be of primary concern.

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D. Designing a realistic minimum programme

24. Since we are thinking in operational terms, special attention should be paid to the feasibility of proposed data systems and collection programmes in the context of the statistical realities of developing countries at different stages of development. It is generally agreed that statistical systems in developing countries, although varying widely, are under considerable pressure and that the demands made upon these systems have often been in excess of their capacities. It is not intended that programmes to improve social statistics should add unnecessarily to the existing burden but rather that they should seek to concentrate on a few priority items that can be viewed as a minimum statistical programme significant for the development of social policies.

25. It is important that those who plan programmes for improving social statistics should avoid sketching out their design on too large a canvas. Their aim should be to design a minimum, easily attainable programme that has the possibility of producing quick and significant results, even if the investment period is a comparatively long one. No matter how realistic and minimum a programme is, it will take time, although once the system is working, accurate and relevant social statistics can be produced quickly and cheaply. However, the authorities concerned need to be convinced at the outset that, if, at the beginning, a maximum programme is drawn up and considerable efforts are made to map out the details and produce exhaustive lists of desirable series, there is great danger that the programme will not get off the ground. If the statistician is to be convinced of the viability of an over-all strategy and, in turn, is to convince the policy maker of the importance of supporting it, there must be something to show at an early juncture for all the efforts that have been made. Programmes should therefore be carefully phased, their objectives judiciously limited and their outputs strategically timed.

26. It should be the aim of a programme to present a possible "minimum" list of statistical series that might form the heart of a multisectoral national programme of improving social statistics. Each country will have its own minimum list; it is not the intention of the present paper to provide an international minimum list. In annex I to E/CN.3/490 there are tables of illustrative series which can be used as a check list. Taking the field of health as an example, a country with a well-organized statistical system might seek to obtain series that would allow the calculation of infant mortality rates and age-specific death-rates. It might also be able to obtain reliable data on the percentages of the population having "reasonable" access to a protected water supply, being served by primary health service points and being reached by immunization and protection programmes against selected diseases. On the other hand, a country with a rudimentary statistical system might have to concentrate on the one or two series having the most immediate impact, and perhaps these should have a different formulation - e.g., the number of persons attending primary health service points in those districts where programmes are under way to extend basic health services and the number of villages or hamlets with a protected water supply.

27. According to need and availability, there will also be a minimum disaggregation within these series by sex, age, administrative units etc. The implementation of even a minimum list, however, is in itself a considerable undertaking, and countries

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should be cautious about going beyond their agreed list until the operation is successful. The aim of a minimum programme should be to establish the basic series in sufficient detail in terms of locality and types of individuals to measure inequality throughout the country rather than to expand the number of series with limited coverage, e.g., in the major urban centres only, or without a breakdown by age or sex. One of the purposes of a minimum list would be to suggest those elements that might be common to all sectoral and multisectoral activities. The series to be collected in a minimum programme should be carefully selected so as to be most indicative of the social situation and most useful from a programme management viewpoint within the limits of what is practicable to collect. Each country will design a minimum list that will reflect partly its own priority areas of concern and partly its state of statistical development. It is, however, important that the sights be set realistically.

E. Need for an integrated approach

28. When a country has established its priorities and identified its major areas of social concern, it will face the tasks of putting its policy into a co-ordinated framework. The work should not be conceived as a series of isolated activities at the various ministries involved but rather should be seen as part of an integrated programme of mutually reinforcing activities seeking to provide an added perspective and a new impetus for a concerted national effort to expand activities already under way. This may be particularly difficult in social statistics because of the multiplicity of agencies engaged in planning and formulating social programmes. An integrated social statistics programme should also be planned as part of an over-all statistical development programme, including economic statistics, and should take into account the allocation of limited resources among different statistical areas.

29. In designing an integrated programme of social statistics, the immediate aim should be to provide statistical benefits by showing up gaps, harmonizing concepts and classifications, setting up standard definitions and making social statistics more comprehensive and compatible with each other. An integrated operation, e.g., in a household survey, could produce statistical evidence on the way different aspects of social conditions - health, housing, education, income, social care - interrelate in the lives of people and on the extent to which inequalities in one are linked with inequalities in others. It could also trace changes in circumstances and conditions as people go through their life cycle, experiencing different activities and belonging to different groups; and the many statistics bearing on social conditions, social resources, and the flows of people through various activities and institutions could be brought together into a common framework of concepts and series in a coherent and meaningful way.

30. Statisticians in developing countries are in short supply, particularly in the social sectors. It is all the more important, therefore, that their efforts be made as productive as possible and that they act in concert to help each other rather than duplicate the same administrative processes necessary to carry out different surveys. Survey interviewers in one social area may be used to carry out surveys in other areas. One sectoral statistician may be well placed to assist in a related study in another sector. A strategy to make the best use of limited

resources should seek to use the statisticians working in the social sectors as a team rather than as independent individuals. The aims should be to improve and rationalize sectoral data already available while developing the compatible sectoral and cross-sectoral statistics required, for a more effective use of these scarce resources for programme development.

31. In any country, no matter how underdeveloped, extensive statistical activities are already taking place in the social areas. There are the regular statistical operations allied to the administrative process and the large-scale regular but infrequent operations such as the population and housing and agricultural censuses. More often than not, considerable survey and case-study activities are also being undertaken quite independently by one or another governmental agency. A programme for improving social statistics should have as one of its major tasks the co-ordination and rationalization of these activities, particularly the various surveys and case studies being undertaken that might be of relevance to such a programme. Surveys are expensive - too expensive for duplication, missed chances and non-utilization of results. In view of the interdependence of the data and the multiplicity of agencies concerned with social statistics, careful attention should be given to the need to devise an appropriate co-ordination mechanism for collection, analysis and the establishment of common concepts, definitions and classifications.

32. The approach to social welfare and development has to be necessarily multisectoral and has to take into account the implications of a wide range of policies. Information on a variety of social and economic aspects may be required for the formulation of plans and programmes for any single sector. The environment in which people live, food intake, health, physical and mental development, education and employment all affect each other. For example, the food intake and its composition have a fundamental bearing on health and physical growth, education and productivity. One of the valuable features of a co-ordinated social statistics programme should be the interlinking of data from the different sectors. Surveys in one sector should ask questions about the inputs and outputs from other sectors and ask them in such a way that they can be related to macrodata normally collected for the whole sector. It has become increasingly clear that sectoral approaches are not sufficient in themselves and, beyond a point, fruitful outcomes depend on the different sectoral approaches supplementing and interacting with one another.

33. The programme should also be seen as part of the work of developing an integrated framework for social statistics, such as the one described in E/CN.3/490. The work should bring additional support to that part of an integrated framework of social statistics and those parts of the programmes of the concerned ministries that impinge upon the priority areas of social welfare and seek to strengthen the relevant sectoral statistics. The continuing work will make use of both international and country experience in using the framework to service the needs and capabilities of the developing countries. In the course of this work, the present programme will be instrumental in focusing on aspects of practical concern for the improvement of social statistics.

34. A programme should be designed jointly by the producers of statistics and the users and policy makers so that the necessary links are established at the outset.

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It is important that all viewpoints be represented, above all those of the policy makers, so that a programme can be geared to the needs of problem solving and receive the necessary political backing. The policy makers can be attracted to a programme if stress is laid on its contribution to improving management by monitoring and evaluation, on its ability to provide information justifying a ministry budget by relating inputs to expected outputs, or on its value in providing a basis for policy decisions by indicating the likely outcome of past and current trends or by providing an assessment as to whether pilot projects will be replicable in the rest of the country at a justifiable cost and in preference to other programmes. The policy maker has to be convinced that a statistical programme will make some early contribution to the solution of his problems. Research and academic institutions engaged in social studies are also very much concerned with the development of social statistics both as users and producers of data. The contributions of such institutions could be substantial and they should be encouraged to participate and lend their expertise and prestige to a co-ordinated programme.

35. Each country will make its own arrangements to create mechanisms for co-ordination and linkages in the light of its own administrative structures, but this is best done under the guidance or with the strong support of a central statistical authority. Social statistics in most developing countries are at present decentralized, each major sectoral ministry being responsible for the statistics of its own sector. The national statistical office may have an advisory role through legislation or even national statistical councils but only in a minority of cases is the single national statistical agency directly responsible for sectoral social statistics. On the other hand, most large-scale statistical operations, such as the agricultural, population and housing censuses and national household sample surveys are organized by bodies which are part of or directly associated with the national statistical office. The major exception is the operation of the civil registration system for vital events, which is often the responsibility of another agency.

36. A central statistical office, or a statistical co-ordinating council, where it exists, has a fundamental role to play in ensuring that the statistical work of the various substantive ministries is not lost but contributes to the development of a systematic approach to the improvement of social statistics. Working closely with the statistical services of the various ministries, the national statistical office can assist, for example, in the development of common classifications that can benefit the users of data in all fields of social statistics. It has a key role in improving statistical standards, establishing concepts and definitions, and initiating work programmes concerning all common services and functions, e.g., training programmes, electronic data processing and statistical administration.

37. The national statistical office together with the statistical departments of the sectoral ministries may have regional and local offices responsible for data collection. However, in the case of the ministries, their regional and local offices are often staffed by untrained officials. Usually, communication is maintained between the national statistical office and the sectoral ministries, if sometimes only formally. Communication between the local units of the national

statistical office and the ministries, however, is usually weaker. The national planning agency usually has an over-riding authority and works in close collaboration with the national statistical office and the statistical units of the ministries. Most national planning agencies carry out the bulk of the analytical work they need but, in the main, rely on the existing statistical system to obtain the data required. Often the planning authority and the statistical office belong to the same central ministry, but even when they are in separate ministries the links are close.

F. Inventory of activities, requirements and capabilities

38. The actual requirements of a national programme will vary widely depending on the statistical and social situation. It is, therefore, important for each country to undertake, to the extent possible, a preliminary inquiry into the current statistical activities, the major requirements of the potential users and the range of possible statistical improvements. The statistical offices should carry out a survey of the major concerns and the types of data that might be useful in the process of responding to them. In arriving at some consolidated list of over-all requirements, it may be necessary to reconcile conflicting demands from different agencies, and it is at this early stage that the views of the users are most important.

39. Where feasible, the inventory of data being currently collected should include an evaluation of the quality of the data and the degree to which they are currently used. The fact that some data are collected, compiled and published is of little value if the data are unreliable, out-of-date or cannot be used for some other reason. Both producers and users should indicate which of the series they consider least useful. In both cases, it is important to distinguish between series that are not useful because the information is not required and those that are not exploited because the data, although on important topics, cannot be interpreted effectively. It would also be useful to list the inevitable cases of duplication and of incompatibility in definition and, in this way, it should be possible to identify the major gaps and deficiencies in the statistical system.

40. Identifying gaps is a particularly laborious exercise and it might be useful for each agency to make a prior identification of the major gaps in its own area of concern as well as to provide information on needs and availability. These individual lists of major gaps would not be intended to pre-empt the final decisions but would be a preliminary covering of the ground to enable the co-ordinating group to recognize the areas of mutual concern and concentrate on the major disagreements or contradictions. Once the gaps have been identified, they must be put into some order of priority.

41. The priorities will be viewed in the light of a number of criteria, such as need or accessibility. Obviously, it is important to keep in mind the use to be made of the statistics. Priorities, however, cannot be assigned exclusively on the basis of the importance of a topic, and considerable attention should be given to those areas where the missing information, once supplied, would be used immediately and frequently. The criterion of need will thus be a mixture of departmental commitments and requirements for national and local planning and support in the implementation of the established policies. The criterion of accessibility will be a mixture of the ease with which the new data can be collected, the existence and suitable conditions for the processing of data and the rapidity with which they can be disseminated, much of which will depend on the co-operation of the administrative agency concerned and the enthusiasm of the prospective user.

42. The identification of gaps does not by itself lead to an explanation for the gaps and deficiencies, especially with regard to the quality and utility of data. Therefore, in addition to the review of data and needs, there could also be a review and evaluation of the social statistics system, i.e., organization, capacity, personnel, equipment, working procedures, production and use of the statistics and the existing links with the users. It is here that the central statistical office can play a very useful role. It is the body with the greatest supply of statisticians in the country and it should be able to assist the sectoral ministries in the review of social statistics in the country. Many sectoral ministries would find it difficult to carry out such a review without assistance and this is best provided by the officials of the central statistical office who are at one and the same time working statisticians, nationals, and familiar with national and local statistical problems. An additional advantage would be that the sectoral reviews would be carried out in a comparable manner and thus be a valuable tool for the operational programme of the co-ordinating group. It is understood that, in practice, the consultation process outlined will not be a series of distinct steps but that steps will overlap, be repeated and get out of the described sequence, following instead other pragmatic paths according to the local conditions. The process has been described as a series of steps in order to clarify the content and purpose of each step.

G. Staffing and training

43. A successful programme for improving statistics requires the assistance of able and enthusiastic staff. Such a programme requires the authority and support of the national statistical office; one way of formalizing this authority and support would be to set up within the national statistical office a social statistics division, if one does not already exist, headed by a senior official. One of its main responsibilities would be to co-ordinate the programme for improving social statistics. As this programme, by its very nature will, be intersectoral, the head of the division should have a multisectoral outlook and he should maintain close contact with the statisticians and planners of the major sectors, with the central planners and with the co-ordinating group.

44. In some countries, the social statistics division taking on this primary responsibility will be able to staff the operation without any help, other than technical, from outside sources. In others, there may be a need for financial aid to tide the unit over a sufficient period to cover the procedures involved in getting approval for additional staff. Other countries may feel that the appointed official will need for a limited period of time, the advice of a national or foreign statistician with experience in this area.

45. Staffing requirements are not limited only to the co-ordinator of the programme and his immediate associates. A basic deficiency in one or more of the key sectors or regions could well threaten the success of the programme as a whole. Here, it would be the responsibility of the co-ordinating group to assess staffing needs and recommend appropriate measures for establishing the necessary staffing arrangements or securing the additional resources needed. The important sectoral and local issues involved should be faced by the co-ordinating group at an early

stage, as it would be desirable to co-ordinate the programme of external assistance in the same way as the improvement programme itself. The timing and sequence of assistance programmes are crucial, particularly if they involve the use of advisers, the holding of workshops and the departure of some officials for training programmes abroad.

46. The international assistance programme should be used as a controlled input into the statistics improvement programme, whereas, in current practice, assistance tends to be provided in a piece-meal manner according to the decisions of the individual national and international agencies, with little over-all assessment of statistical needs and capabilities. The various national authorities responsible for promoting a programme to improve social statistics should be able to rely upon a consistent policy on the part of the international organizations. Many of these issues are discussed in detail in the documents on technical assistance entitled "Basic problems and issues", also before the Commission (E/CN.3/472).

47. The role of the statistician in the social sectors has tended to be less valued than that of other national statisticians (themselves not one of the most prestigious groups of government officials). Perhaps one of the causes is that he usually works alone or almost alone among colleagues who are specialists in the subject area in which he is working. He is, in a sense, considered to be outside his subject area while, at the same time, he is not in frequent contact with his fellow statisticians. Where the statistician working in the social sectors belongs administratively to the national statistical office, as is the case in most developed countries, the problem is less likely to arise, even if he is outposted to a ministry. In most developing countries, however, this is not the case and consideration needs to be given to dealing with the twin problems of low status and isolation. Where this is practicable, the establishment of a national cadre of statisticians could help to alleviate the problem.

48. Another very important part of a programme is training. If the work of senior officials and advisers is to be of long-term benefit, the training of personnel and the transfer of skills at different levels and within all the national agencies concerned will have to be undertaken. This involves, training statisticians and statistical assistants at the local and provincial levels as well as at the national level, holding national and provincial workshops, as well as arranging for attendance at appropriate regional training courses and the exchange of experience between countries. The training efforts of the various ministries and local authorities will have to be co-ordinated with a view to implementing a comprehensive training programme for social statistics. The programme will press upon existing statistical resources and it will be necessary, therefore, to carry out in-service training at an unsophisticated level and for professionally untrained officials in order to increase the availability of statistical help.

49. The training programme for social statisticians will cover many specialities of concern to statisticians in other areas - statistical organization, sampling, design of questionnaires and forms, non-sampling errors, estimation, cartography, analysis and presentation of results - all problems of particular importance to developing countries. The manuals used in such training programmes will have to

be based on sound statistical principles, but the solutions offered must also be feasible in terms of the practical problems facing statisticians in developing countries. The focus on the work in this area should go beyond the scope of the highly trained statistician and should include advice on recording social activities by non-statisticians and step-by-step suggestions for carrying out techniques appropriate to the material available. The interested international statistical agencies might be asked to co-operate in a joint programme for the preparation of suitable manuals.

H. Practical methods

50. There is a pressing need for practical methods that are as easy as possible to apply, taking into account the limited resources available to social statistics in developing countries. To argue for simple methodologies is not to make a case for crude thinking. On the contrary, only the most careful thinking and open-minded approach will suffice to produce efficient, reliable and trustworthy techniques that are at the same time simple and inexpensive. It is not sufficient, in the area of nutrition, for example, to propose to developing countries that they limit themselves to carefully monitored surveys of family food consumption. They are very expensive and time-consuming for countries facing serious nutritional problems. It might even be argued that the use of an anthropometric measurement such as weight is limited, since it depends on the distribution and maintenance of machinery. The nutrition problem applies to children above all and thus the accuracy of the weighing is paramount. The statistician is obliged constantly to look for approximate but simple indicators of malnutrition such as arm circumference and skin-fold thickness, using untrained assistants to record these data with simple tools in ongoing surveys.

51. Such solutions do not arise solely out of statistical ingenuity but also out of an understanding of the nature of the concerns. To take the nutritional problem as an example, the measurement of the circumference of the upper arm does not depend on exact age reporting for its validity. Between the age of 1 and 5, the normal young child shows little change in the circumference of the upper arm, thus allowing the measure to be applied within a considerable age range. It also has an advantage over weight in that it more adequately measures the effect of recent malnutrition, and requires no more measuring equipment than a suitable coloured strip of X-ray film. Measurement of skin-fold thickness although relying more on judgement, can also be carried out within village conditions.

52. Other methodological solutions for statistical problems specifically pertaining to developing countries are needed, particularly for problems involving management and policy, e.g., defining employment and underemployment, calculating the time spent in obtaining drinking water and fuel, evaluating the relevance of formal academic education when it often leads to early drop-out, producing an operational and reliable definition of literacy, estimating the access to and impact of basic health services etc.

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53. Effective use of sampling and estimation is another means by which statistical practice can be improved. Statisticians working in the social sectors of developing countries have not made sufficient use of sampling techniques, as have their counterparts in other fields of statistics. Present administrative reporting although deficient, is, in a sense, too complete. In many instances, timeliness is more important than comprehensiveness and the advantage of early dissemination sometimes outweighs the possible biases introduced by the use of partial returns. In long-established statistical operations, particularly in recurrent administrative statistics where it is possible to make reliable estimates, the local and central social statisticians should be encouraged to make estimates in order to speed up the dissemination process. In new activities or recently established operations, it is not always possible to give reasonable estimates and alternative time-saving mechanisms need to be sought.

54. Sampling provides one such mechanism and offers other advantages as well. Sampling experiences in developed countries and in the production activities of developing countries have shown that quite small samples can provide data sufficiently reliable to guide policy. The services dealing with social statistics in developing countries have for too long considered their primary objective to be to enumerate all elements of the universe to obtain "accurate" data for accounting purposes, rather than to produce some idea as to the magnitude trend and distribution of the series as quickly as possible for social policy and programme management purposes. One of the aims of a statistics improvement programme should be to help to change these objectives.

55. Sampling does not necessarily involve the application of cumbersome techniques or the creation of complicated universes. The use of easily applied sampling measures such as systematic sampling should be encouraged even if small biases may be introduced with smaller units. Precision is not an absolute good and the returns from added precision must be set off against the increased costs and time involved. Moreover, in many instances, reductions in sampling errors achieved through enlarged samples are more than offset by increases in non-sampling errors, because the fixed resources available for supervision and control are spread more thinly over the larger sample. Thus the statistician should make his decisions in terms of rates of return with respect to the major anticipated uses of a series and not in terms of abstract principles or absolute standards. There are technical problems to be mastered in the matter of sampling, however, particularly the problem of using sampling to measure trends, and the international and national statistical agencies should be encouraged to promote expertise in sampling and survey design and to advise in the use of effective sampling techniques and estimation procedures.

I. National household survey capability

56. A key element of any programme for promoting the improvement of social statistics is the establishment of a continuing national household survey capability. Surveys are an important complement to the relatively infrequent population and housing census for, in addition to their timeliness, they permit both a wider range of topics to be covered than is possible in the census and more

extensive questioning on each topic. Indeed, in most developing countries, household sample surveys are the only practicable way of obtaining up-to-date national data on social conditions and trends, access to needed services, and the impact of programmes designed to remove the conditions of poverty in which the vast majority of the population lives. Moreover, such a household survey activity, if suitably designed and implemented, can be an important instrument for the integration of social statistics.

57. The main features of the desired national capability for survey taking are described in the document "African household survey capability programme" (E/CN.3/473), also before the Commission, and in particular paragraphs 26-45 of that document dealing with national survey activities. In the context of the concerns of the present paper, it is important to note that the emphasis in such survey activities would be, first, on a continuing programme of integrated surveys as opposed to a series of unrelated ad hoc surveys and, secondly, on a multisubject capacity for survey taking but not necessarily on a single, general multisubject survey. Such a strategy places emphasis on the development by the national statistical office of the infrastructure elements needed for a continuing and responsive programme of survey taking: a permanent field organization and sampling, cartographic, administrative, data processing, analytical, and publication services at headquarters.

J. Dissemination vehicles

58. Another element of a concerted national effort to improve social statistics is the development of a publication that presents the social statistics produced by the individual ministries, along with the relevant census and survey data obtained by the general statistical services, in an orderly and attractive format geared to the interests of the user. Such publications will help the producers of statistics by giving greater visibility to the outputs of their efforts, by emphasizing the interrelatedness of social statistics rather than its fragmented sectoral aspects and by organizing selected indicative statistics into time series. More important, the users of statistics, particularly those with multisectoral and policy concerns, will find themselves with an important new tool for policy planning and monitoring. Publications of this type, which are being issued by a growing number of countries, should be multisectoral in content, oriented towards policy and prepared by the national statistical office or statistical co-ordinating agency with the support and co-operation of the sectoral services.

59. One aspect of the generally backward and fragmented state of social statistics in developing countries is the lack of emphasis on data dissemination. This is understandable, since many kinds of social statistics are derived by one or another ministry from the administrative records of its own programmes. With the producer of statistics and its primary user in the same governmental agency, the publication of statistics is frequently conceived of as serving archival rather than operational purposes. Data may be published, if at all, as part of an annual agency or ministerial report. Such reports are often

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characterized by their focus on a single sector or even subsector, by an organization and content reflecting administrative rather than substantive considerations, an absence of analysis, a generally dull, unattractive appearance, and late publication, sometimes as much as five or six years after collection of the statistics.

60. The limited body of statistics actually used for the planning and administration of programmes are circulated somewhat more promptly by informal means within the individual programme or ministry. Unfortunately, other users must rely on ad hoc requests to specific ministries for unpublished data, on whatever social statistics the national statistical office may publish in its statistical yearbook or similar general compendium, and on the disparate publication programmes of the individual ministries. This can only hinder the evolution of integrated social statistics and work to the disadvantage of the users and the producers of statistics within each ministry, because such arrangements do little to foster needed improvements. The increased visibility of a multisectoral social statistics publication exposes the central and ministerial statistical services to the increased risk of criticism for gaps and short-comings in published data. However, it is primarily through such exposure that the statistical services receive the criticism and then the resources needed for improvement.

61. As with any multisubject statistical compendium, some balance will have to be struck between the value of using common classifications and formats in presenting the statistics of each sector and the cost of excluding some statistics that are available only with non-standard classifications. In the early years of such a publication, greater emphasis would necessarily be placed on the availability of data regardless of the classifications used. However, with time, as the value of common classifications became clearer to the users and producers of statistics alike, the compilers of a social statistics publication could help to promote these common classifications by casting the publication increasingly within their frame.

62. Needless to say, attempting to improve the "image" of social statistics through the creation of a publication without taking steps to improve the quality of social statistics would be self-defeating. Better publications will not by themselves overcome many of the obstacles to improved social statistics already discussed, but they can contribute to the process of improvement. Moreover, the failure to review the adequacy of existing dissemination vehicles, and if necessary improve them, can substantially reduce the impact of improvements in other aspects of social statistics.

K. Phasing

63. It is recommended that any concerted national programme for improving social social statistics be phased over a limited period of years and bear some relation to both the period and content of the national development plan which will reflect the basic strategy of the country. Ideally, the phasing of the

time-table should coincide with the period of the new national plan or the remaining period of the existing plan. This might allow for an easier settling of competing demands, as some priorities will already have been established. The additional resources and authority associated with a national plan operation can also be exploited by this identification. The first three-year phase of the programme is especially important, and one of the results of the phasing exercise will be to decide on the work that should be undertaken in the initial period. There will be periodic reviews as the programme evolves, but great care should be exercised in deciding what can be done in the first phase.

64. The target should be realistic, taking into account the possibilities in the country. It is neither the statistician nor the actual user who provides most of the raw data of social statistics but administrative and technical personnel responsible for the delivery of social services, and they often resent the added burden. Whatever decisions are taken by the country, the concept of agreeing on a realistic minimum set of series as a target is important for the success of a programme. If the sights are set too high, failure and disillusion will result. If the sights are realistic, not only will the aims be achieved but success will lead policy makers to agree to raise the sights for a second phase.

65. Each country will make its own assessment of the comparative importance of individual series in the light of the criteria of need and accessibility (see paras. 40-41) and the degree to which attention should be paid to improving some series and eliminating others in the first phase. It must be borne in mind that statistical expertise is in short supply and that administrative goodwill is limited. It is, therefore, suggested that less active series be collected less frequently or sometimes be eliminated altogether so as to create space for new series, and that the improvement of existing questionnaires and series also be given early priority, as it is in this way that a small effort produces a large return. Accessibility should be given due regard because a programme needs some early successes, and the aim should be to establish an operational core group of series which can later be expanded as the programme develops. In many developing countries, a great deal of work can be done to simplify records and reduce unexploited record keeping, both of which are a legacy from earlier administrative systems. Such streamlining at the beginning of a national programme will help to produce the early results that will be necessary if further support is to be obtained. Major elements of social statistics in developing countries do not at present serve to help policy, and the statistics generated or improved by these programmes should turn outwards, serving the needs of the relevant parts of the national plan.

66. The early success of a programme depends to a large extent on the degree to which it can be grafted onto the existing administrative structure. It is not, therefore, intended to generate its own collection mechanism. With respect to sectoral statistics largely derived from administrative uses or authorities, the work of preparing and issuing questionnaires, collecting the data, verifying and collating the information, and analysing and publishing the first results will remain with the agencies traditionally responsible for this work in the country. Programmes will seek to move these agencies along certain agreed and compatible

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lines and to supplement the sectoral work with appropriate centralized activities including the household survey operations; in this way, they will not take over any of the agencies' responsibilities. However, in pressing for certain priorities, the organizers of effective programmes will probably find it necessary to argue for a streamlining of cumbersome processes that have traditionally been the reflection of antiquated accounting procedures.

67. The establishment of even a minimum viable programme can never be a short-term process. Within the space of a few years, far-reaching or dramatic changes in policy are not to be expected. The statistics which must reflect the relevant changes are often difficult to obtain and become available only after a considerable time-lag. This is true, for instance, of data on changes in mortality, on the health and nutritional status of the population, on the living and working conditions of women etc. An operational programme can hope to deal extensively with only one or two of these areas of concern in the first phase, although a limited coverage of others would be required. Hence, a careful judgement of what is truly the minimum and the order of priority within that minimum is most important.
