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SELECTED SOCIAL INDICATORS OF RELEVANCE TO AFRICA

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INTRODUCTION

1. Within the past two decades, social scientists, statisticians and policy makers have shown interest in the development of a new set of statistics-social indicators. This trend is partly a response to the new thinking that argues for a more detailed description of the development process than is provided by the national account system indices such as the GDP or GNP.1/ According to this view, since development is concerned with raising the standards of living of the population, pertinent information should be furnished showing whether their salient social conditions and correlated services are improving or deteriorating over time. That the former indices do not now satisfy these requirements is noted by Drewnowski:

> As long as we express the results of development in terms of monetary values of goods and services, we take an economic viewpoint. We consider the resources provided but not how they affect people's lives. As the aim of all economic activity is to improve the condition in which people live, this means we have stopped half-way in assessing the consequences of development. To obtain a complete picture of development it is not sufficient to realise the amount of resources brought about by economic growth. It is necessary to examine the impact of these resources on the life of the people.2/

2. Social conditions and changes in them over time, it is argued, must also be considered as part, if not the central concern of development efforts. More specifically, the accent on development, it is stated, should now be put on such questions as whether the real health, the real educational levels, the real nutritional levels etc., of the population are improving or not.

3. A related viewpoint is one that sees "The process of economic development as a complex phenomenon which entails economic, institutional, social, cultural and political transformations, interacting with each other in a complicated feedback relationship".3/ These characteristics of development, it is argued, are best described by various indicators, reflecting among other components, social welfare.

4. These are some of the general considerations behind the development of social indicators. But for African countries, there are additional reasons for the construction of these indicators.

5. Firstly, there is at the moment disenchantment regarding past planning experiences, as these have failed to alleviate social and economic problems within these countries. That a different orientation to development should be experimented with, is increasingly advocated by some experts of the developing countries. For example, Robert McNamara of the World Bank has posited that:

> the entire concept of development must be broadened. It must be broadened beyond the simple goal of gross national product. Such growth is a necessary condition of development. But it is not a sufficient one. What is the essential condition of development is that it should encompass the basic needs of the two billion people of the developing world: adequate nutrition, meaningful employment, a more equitable distribution of income, decent chance to improve one's lot in life.4/

6. To monitor the levels and trends of development objectives advocated by this new approach, social indicators would play an important role.

7. Secondly, the demands made for the evolution of a new international economic order, would entail the generation of statistics on social welfare and equity among and within nations. In the evaluation of progress the uses of social indicators would enhance reporting.

A. Main features of social indicators

8. There is no universally accepted definition of social indicators, as the following three show.

9. Raymond Bauer, one of the pioneers of social indicator work, described them as:

> Statistics, statistical series, and all other forms of evidence that enable us to assess where we stand and are going with respect to our values and goals, and to evaluate programmes and their impact. 5/

10. The US Government publication, Towards a Social Report defined it as:

> A statistics of direct normative interest which facilitates concise, comprehensive and balanced judgement about the major aspects of society. 6/

11. And a United Nations report sees them as:

> Constructs based on observations and usually quantitative which tell us something about an aspect of social life in which we are interested or about changes in them. 7/

12. From the vast literature on the subject, the following are some of the major characteristics of the concept suggested, namely:

(1) Normative: Social indicators, unlike other types of statistics, are value-oriented measures i.e., movements in them in any given direction should facilitate statements to be made as to whether social conditions or their correlated services are improving or deteriorating.

(2) Outputs: Ideally, social indicators should relate to output or ends such as "improvements in health rather than to expenditure on health services, to the raising of educational levels rather than to attendance at school." 8/ A difficulty with this characteristic is that in many cases, it is difficult to acquire the pertinent output values, so input values such as numbers attending hospitals and school enrolments are sometimes used as substitutes.

(3) Unit of measurement: In addition to cardinal values, ordinal gradings are also used for the compilation of social indicators.

(4) Structure or system of series: There are some social scientists that would like social indicators to have an additional quality, namely, to fit into some social model. For example, Anderson remarked that the "mere accumulation of time series data on selected

social indicators provides little more than descriptive data concerning societal conditions, and do not permit separation of the effect of public policies from the impact of social processes .... To be meaningful, social indicators must be components of some social system model so that changes in the values of these social statistics over time tell us something about the functioning of the social system".9/

13. It is in this particular area that the development of social indicators is in need of additional work: in theory, methodology and conceptualization. This is because sociology unlike economics does not yet possess workable theories that both define and specify social systems, and at the same time postulate interactions and linkages between social variables.10/

14. The social conditions and related social services that are the subjects of social indicators have been classified by Land into three categories, namely:

"1. Output descriptive measures - these are the measures of the end products of social processes and are most directly related to the appraisal of social problems and social policy.

2. Other descriptive indicators - these are more general measures of the social conditions of human existence and the changes taking place therein.

3. Analytic indicators - these are components of explicit conceptual models of the social processes which result in the values of the output indicators".11/

15. Viewed from the data collection perspective, social indicators could also be divided into two categories: Objective and subjective.

16. Objective (impersonal) quantitative indicators are derived from the same source as conventional statistics - e.g., data on education or health services from administrative records - and do not therefore represent a break from the past.

17. The subjective indicators, derived from perceptional and attitudinal surveys attempt to measure "the psychological correlates of social change". This is usually done by means of personal evaluation of aspiration, attitude, satisfaction, dissatisfaction etc., with living conditions. Answers provided in qualitative terms, are transformed, for the construction of indicators, into quantitative forms.

B. Uses of social indicators

18. Many uses of social indicators have been suggested in the literature. They include the following:

(1) improving descriptive social reporting, with respect to the levels and distribution of well-being;

(2) measuring the provision, distribution and effectiveness of social services;

(3) analysing social conditions and changes in them over time;

(4) providing signals about the likely outbreak of incipient social problems, in the same manner as economic indicators do for the economic system;

(5) monitoring the social effects of some identified socio-economic programmes; and

(6) providing social dimension to development planning

C. Composite indicators

19. While a few time series may be used as social indicators without any modifications or summarization done to them, this is not true of the majority. Some series are often converted into simple rates, ratios, means, percentage distributions, etc., while others undergo more sophisticated operations to transform them into composite or synthetic indices.

20. The main reason for converting social indicators into composite indexes is " to elucidate the structure of complex multidimensional phenomena by means of data reduction".12/

21. Among the statistical techniques employed for aggregation or summation are the factorial, regression and principal components analyses on the one hand, and the Wroclaw's taxonomic and I - distance methods, on the other.13/

Examples of composite indicators

22. Composite indicators are the results of the aggregation or summation of several components of development time series into "a single "proxy" measure of development welfare flow".14/ Three examples of such indicators are given below, namely:

(1) The Physical Quality of Life Index (PQLI) of ODC

(2) The general development index of UNRISD

(3) The measure of development or resemblance by E.F. Szczepanik

(1) PQLI

This index was proposed by Overseas Development Council, USA (ODC) "to make it possible to estimate the extent to which basic human needs of all people have or have not been met".15/

23. Three indicators, namely, life expectancy, infant mortality and illiteracy were transformed into the composite index, the physical quality of life index (PQLI). The three indicators were chosen on the assumption that "the needs and desires of individuals initially and at the most basic level are for longer life expectancy, reduced illness and greater opportunity. These minimum needs can be achieved by better income distribution, increased levels of education and increased employment".16/

(2) UNRISD's general development index 17/

24. UNRISD has developed a level of living index which compares levels of socio-economic development among various nations.

25. McGranahan and associates, from a data bank developed by the Institute, initially selected some 73 indicators. At a second stage, 42 out of the 73 were chosen. Finally, a high correlate core of eighteen indicators was settled on.

26. At another stage of the analysis, correspondences were established between the eighteen core indicators at various levels of development. These correspondence points were also utilized in estimating critical points for conversion to a common-scale.

(3) Composite indices developed by Szczepanik 18/

27. This study, which focussed on the relationship between agricultural improvements and policies and socio-economic development, aimed at elucidating the process of agricultural development by a comparative analysis of the agricultural policies of many countries at different levels of development. The development process was conceptualized as comprising four major elements, namely, human improvements, social progress, technological advance and economic betterment.

28. The author made use of Wroclaw's taxonomic method which ranks, classifies and compares countries relative to such phenomena as development.

29. Szczepanik standardised sixteen indicators from 49 countries. The standardised indices were later transformed into composite indicators, which facilitated the ranking of the countries.

A critique of composite index

30. Criticisms of composite indices are best made within the context of the uses of the measures. One such use is as complements to the national income indices in the explanation of development. A second and more ambitious use envisaged is as substitutes to the national account indicators. A third use is as measures employed for international comparisons of levels of living or development.

31. Proponents of the first and second uses of component indicators argue that they provide better insights into social problems compared with several indicators pertaining to the same problems : "Synthetic index numbers furnish valuable means of summarising the subsidiary elements (components) or the underlying factors into the ultimate subjects of social concern, such as the general state of health or public order and safety."19/

32. But, the summarization of complex and multi-dimensional phenomena such as poverty and development has sometimes been called into question. For example, Knox Opines that "the results (of such exercises) may be of little real value, for the generality of the indicator may mask important variations between different dimensions of the problems".20/

33. Moreover, the methodological aspect of the constructions of composite indicators has drawn some criticisms. Moser for example, remarked that it compounds all "the inadequacies of concepts, measurement (and) interpretation."21/ In particular, we can distinguish two -- (1) aggregation of indicators and (2) the choice of a weighting scheme.

1. Aggregation of indicators

34. In the aggregation of indicators, several time series are brought to a common unit. Therefore this process assumes that component series could be added to give a meaningful index. While this may be a valid operation with respect to certain indicators, it may not be true with respect to others. For example, a meaningful composite indicator may be obtained by the summation of such characteristics as housing quality and measures of delapidation. But, the same result could not be obtained by the aggregation of estimates of health status or social mobility.

2. The choice of a weighting scale.

35. During the transformation of several time series into a composite index, each is usually assigned a weight according to its importance in the model. An important decision during the procedure relates to "whose values?" determine the value - weighing - the public's or the author's. Sometimes, it is the value of the author(s) rather than the public, whose welfare is under consideration, that enters, consciously or unconsciously in the weighting scheme. 22/

36. When no weights are explicitly selected in the calculations of the indicators - for example, when all are assigned the same or no weights - the method by which they are initially selected, in effect, becomes the method of the choice of the weights. This approach can sometimes be arbitrary.

37. Moreover, sophisticated methods "such as principal components analysis, summing rank scores or transformation to normal form, face difficulties because the weights implicit in these methods do not necessarily have any relationship to the weights which individuals would ascribe to them". 23/

38. Composite indicators can be useful aids in the comparison of the state and progress of development for either regions or social groups within individual countries. 24/ But their potential value for inter-country analyses is limited.

39. Given the unsatisfactory data situation and the many problems relating to the construction of these indexes, a low priority should initially be assigned to them in the social indicators programmes of African countries.

APPROACHES TO THE SELECTION OF SOCIAL INDICATORS

40. Broadly, two approaches have been used in the selections of social indicators - (1) the theoretical - inductive and (2) the empirical - inductive. 25/ The theoretical inductive school, in the selection of indicators would like to articulate and rationalize their selection criteria by theoretical analyses before observations. Whereas, the empirical-inductive proponents' first pre occupation is with fashioning indices from whatever statistics that are available and later standardising in the light of theory.

41. In reality, these two approaches are not entirely independent because in the classification and collection of data, some theory, however crude must be involved in the beginning; while in testing a theory, it would be naive to loose sight of the problems of data availability.

42. A popular approach to the selection of social indicators involves the establishment of a list "on which there is a consensus that they (i.e. the components) contribute directly to individual satisfaction or utility and thus to social welfare and well-being."26/ According to this view there are human needs such as shelter, food and clothing, on which there is universal agreement that they constitute basic human requirements. These are the concerns, the argument continues, that ought to feature, for example, in development plans and should be the subjects of indicators.

43. For example, for the Social Indicators 1973 published by the US Government, eight major "broad areas of social interest - or social concerns" were identified. The areas included: health, public safety, education, employment, income, housing, leisure and recreation and population. These topics were selected because (1) they are broad areas of social interest or social concern in the US and (2) the concerns embody widely held basic social objectives.

44. Smith took another perspective to the selection of indices of well-being and welfare, namely, "expert knowledge". In his study of the USA, he examined a sample of literature on contemporary American social and economic problems in his choice of seven major criteria of social well-being.27/

45. Such an approach might not be appropriate for many African countries, where textbooks and other standard reference materials used, are based on Western values and cultures. Here, Cant suggests "an analysis of policy statements by political leaders and published discussions of public policy by academics, journalists and others not directly responsible for such policy"28/ to dileneate the most important areas of social concern.

46. McGranahan and associates in their study to estimate a synthetic indicator were concerned with the international classification and ranking of various countries through component indicators of social and economic development.29/ Thus, the basis for the choice of their indicators was that "they are internationally agreed upon ... (and) are stated in international documents, and reflected in the structures and activities of international organizations established to assist countries in their developments."30/

A REVIEW OF SOME RECENT WORKS ON SOCIAL INDICATORS

47. The upsurge of interest in the development of social indicators in the 1960s and 1970s has reculted in a voluminous amount of publication on the subject, by national statistical or other government offices, international agencies and private research organizations. The outcome is that it is sometimes difficult to differentiate social indicators from general social statistics.

48. Broadly, we can classify into two main categories, the various types of publications by national statistical or government offices on social indicators that have appeared in recent years, namely:

(1) A careful, but often not rigorous selection of social statistics on a wide range of topics, without attempts to analyse interactions. Examples include, Britain's Social Trends, Kenya's Social Perspective, France's Données Sociales and Canada's Perspective Canada.

(2) Included with the various statistical series are analyses, evaluations, conclusions and policy recommendations pertaining to the social issues that they raise. Examples include the US Toward a Social Report, Sweden's Levels of living and Japan's White Paper on National Life.

49. Some of the more challenging work on composite or synthetic indicators involving the use of sophisticated techniques such as the regression, factor and principal components analyses or studies based on perceptional and attitudinal surveys have been mainly attempted by private research workers.

Activities of International Organizations 31/

50. Several UN agencies, especially the specialized ones, such as the Food and Agricultural Organization (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) the International Labour Organization (ILO) and the United Nations Research Institute for Social Development (UNRISD) have had projects on the development of indicators.

51. The combined effort of these agencies in the fifties and early sixties, with work pertaining to the level of living, had similar rational and approach to those of the social indicator movement, a decade later. The project on the level of living aimed at measuring the actual living conditions of people through various components of living for which indicators were to be constructed.32/ Among the nine components selected were - health; food consumption and nutrition; education; employment and conditions of work; housing; social security; clothing; recreation; and human freedoms.

52. The development of statistical series such as social indicators within a coherent framework forms the principal feature of a system of social and demographic statistics (SSDS) mooted by the United Nations Statistical Office (UNSO).33/ Explicitly, the SSDS most important hallmarks include-emphasis on comprehensiveness; concern with people; description of the social circumstances of people in terms of gross and flow measures; linkages between and within parts of the system; and the series held together by common classifications, definitions and concepts.

53. At the moment the SSDS includes ten areas of social concern: population; learning and educational services; earning activities and employment services; distribution of income; consumption and wealth; social security and welfare; health and health services; housing; public order and safety; the allocation of time and leisure; and social stratification and mobility. Indicators have been suggested for each of these areas.

54. The UNESCO attempts at the development of human indicators to measure e.g., literacy and educational wastage dating just over a decade ago, was initially centered on the elaboration of a system of human resources indicators. Various studies proposed some indicators e.g., on education, health and employment, mainly to assess gaps and to explore more thoroughly (1) the identification of key indicators of social and economic change and (2) the uses of social and economic indicators in development planning.34/

55. The United Nations Research Institute of Social Development's (UNRISD) major work programme within the last few years consisted of -

(1) the selection of the best available indicators of social and economic development;

(2) The establishment of the relationship among these indicators at different levels of development; and

(3) the combination of them into synthetic indicators for development.

A study on the result of this assignment has now been published.35/

56. UNRISD's other studies are trying to crystallise the concept of welfare measurements and aspects of development at the local level by the construction of relevant indicators.36/

57. The ILO had programmes in the past concerned with designing indicators to measure such concepts as employment, unemployment and underemployment. Recently, work has started on the quantification of aspects of the Basic Needs Approach.37/

58. The Basic Needs Approach, first mooted by the ILO some four years ago, has as its principal objective, the satisfaction of the basic needs (meaning, essential goods and services - material as well as non-material) of the poor within the shortest possible time period.

59. Indicators have been proposed to measure :

(1) the core bundle of basic goods and services at any point in time; and

(2) shortfalls from achieving target levels in the satisfaction of these goods and services and access to essential services.

60. Among the primary objectives of the OECD's programme for the development of indicators was the delineation of "goal areas" and "social concern" relevant to the construction of indicators. The following common social concern areas were selected for the construction of social indicators, namely-health; leisure; purchasing power; physical environment; personal safety; and social participation.38/

USES OF SOCIAL INDICATORS IN AFRICAN COUNTRIES

61. In the selection of uses of social indicators in African countries, the following considerations should be taken into account, namely:

(1) the nature of "the socio-political context for development planning as well as the level of conceptual, theoretical and technical sophistication in both planning strategy and indicator development";39/and

(2) the fact that the statistical infrastructures of many countries are still at a low level of development.

62. Given these conditions, African countries should initially select more modest uses for social indicators, such as the following:

(1) improving descriptive social reporting with respect to the levels and distribution of well-being;

(2) measuring the provision, distribution and effectiveness of social services; and

(3) providing social dimension to development planning.

(1) Descriptive reporting of the levels and distribution of well-being

63. To streghten the bases for social policy and to make possible the drawing up, the implementation and evaluation of development planning, there is a need for the improved periodic monitoring of social conditions. The quantification of social welfare equity and the quality of life by means of social indicators would not only "give social problems more visibility"40/ but would make possible judgement to be made on whether social conditions are improving, stagnant or deteriorating over time.

(2) Measuring the provision, distribution and effectiveness of social services

64. Social indicators expressed as summary measures are required to estimate aspects of social services such as their availability, uses, inputs and outputs. Such indicators employed together with those on the levels and distribution of well-being would show whether social services are being used effectively.

65. While it is sometimes fairly easy to compile indicators relating to the input and/or output of social services, those pertaining to their impact and influence are hard to estimate.

(3) Give social dimension to development planning

66. Social indicators development partly had its origins in the dissatisfaction with the national accounts system indices as the predominant development objectives. It is now argued that more attention should be paid to the quality of life and the equitable distribution of the results of economic growth. Thus social welfare and equity according to this view, must also be made development planning objectives and should feature too in the evaluation of the results of development efforts. Social indicators, expressed as goal indicators and output measures, serving as estimates of plan targets, would help to give social dimension to development planning.

PROBLEMS OF DEVELOPING SOCIAL INDICATORS IN AFRICAN COUNTRIES

67. The major problem areas relating to the development of social indicators in African countries could be classified into two categories, namely:

(1) Availability of the data base; and

(2) The lack of a co-ordinated social statistics system with such features as common concepts, classifications and methodologies.

(1) Availability of the data base

68. The non-availability of most of the social statistics series is one of the basic problems facing many African countries that intend to develop social indicators. As the secretary of Planning and Regional Development of Morocco observed:

Few developing countries have sufficiently elaborate statistics for meeting the requirements of a system of social indicators. While recourse to economic data by planners has become common practice, the use of social data is still little widespread. Even assuming that agreement is reached regarding the definition of a number of social indicators, there remains the difficulty of obtaining statistical series which are long enough and cover many social areas, as well as an integrated system of social statistics.41/

69. Within the past two decades, the position with respect to population and some macro-economic statistics has remarkably improved. But other types of data, on the social and economic well-being of the population such as on housing conditions, income, nutrition and employment are still inadequate.

Data collection systems and the development of social indicators

70. The review of the status of the data collection systems in Africa that follows would provide a better understanding of the broad data problems involved in the development of social indicators.

(1) The population census

71. The population census is among the major data collection mechanisms in many African countries. Its major advantage as a vehicle for the gathering of data for use in the development of social indicators is that its coverage of events is national and thus affords a unique opportunity for the collection of indicators on such subjects as housing and community level variables on a country-wide basis.

72. Accordingly for many African countries "the census provides the ideal starting point for meeting national social data requirements, experimentation in the construction of indicators, and development of basic benchmark and reference data against which other social data can be compared".42/

73. On the other hand, because of the limit on the number of topics that could be included on the questionnaire and the infrequency of the operation, the population census has to be supplemented by other data collection systems.

(2) Household surveys

74. The household sample survey method holds immense promise for the collection of data for the development of social indicators in many African countries. It can be looked upon as a complement to the population census, which has become a standard data collection method in most African countries.

75. This approach has special interest as a source of social statistics for two main reasons, especially when the unit of enumeration is the household. Firstly, households are the foci for information pertaining to societal welfare and equity. Secondly, they are determinants as well as dependent variables of social policies and programmes.

76. Two types of household sample surveys could be distinguished; namely (1) ad hoc surveys and (2) permanent. The permanent survey operations, particularly when they satisfy such conditions as having common definitions, classifications and methodologies, are capable of generating data that are comparable over time and space, and thus ideal for social indicator development.

77. But sample surveys in many African countries, to date, have been conducted mainly on an ad hoc basis. This practice falls short of providing an integrated social statistics series for the development of social indicators.

78. However, recently, there has been taking place, administrative and promotional activity for the setting up of an African Household Survey Capability Programme (AHSCP).43/ Among the objectives of this programme are the establishment of permanent field survey capabilities and statistical cartographic units and the collections of data on such topics as employment, other productive activity, income, consumption and expenditure, together with related social and demographic statistics, in various African countries.

79. When the programme becomes fully operational, many African countries would have a convenient data collection mechanism for some of the statistical series on social indicators.

80. Already, in one African country, Kenya, the Central Bureau of Statistics' National Integrated Sample Survey Programme (NISSP) is being used as one of the principal sources for data for the development of social indicators.44/

81. Explicitly, the objectives of the NISSP include the creation of a comprehensive statistical infrastructure for the collection and processing of data on socio-economic trends. Among the various data it collects are social statistics, which provide the much needed additional information required to assess the quality of the life of the population and to measure the impact government inputs are having in enhancing the same.45/

(3) Administrative records

82. These include records on for example births and deaths from civil registration systems, education data from school records and morbidity information from hospital administration, etc. Some of the data collected from this source, e.g., on education and health, are useful for the development of social indicators relating to the use and output of facilities and activities bearing on living conditions and the related institutional arrangements.

83. With the exception of a few series, notably those on education statistics, the data from administrative records in many African countries suffer from one major shortcoming, namely, lack of comprehensiveness in coverage.

84. A classic example is birth and death data from civil registration systems. Although isolated areas of many African countries - mainly urban - are well served by registration centres, where the coverages of registrations, especially of births, are fairly complete, in the much larger rural areas, there are either insufficient numbers of registration centres or none at all. Accordingly, the data derived from such systems are not useful for the estimation of national vital rates.

(2) The lack of a co-ordinated social statistics system

85. To facilitate the development of social indicators, the different methods for the generation of social statistics - the population (and sometimes combined housing) census, household sample survey and administrative records - ought to be integrated within a coherent framework that makes provision for common definitions, classifications and methodologies. The need for integration is a prime priority, especially with regard to administrative data with the two other types of statistics, given the many government agencies involved in their production. For this type of statistics, special efforts should be mounted to tackle both the problems of incomplete coverage and integration with other social statistics.

86. The problem of the comparability of census and survey data relative to classifications, definitions and methodologies is easily solved if the two types of data collection methods are handled by one agency, say the Central Bureau of Statistics. But a more difficult situation is created when many bodies, say private research organizations, and other government departments are also engaged in the collection of statistics, as is the position now in many African countries. In these cases, there is a need for directives on methodologies, definitions and classifications from say the Central Bureau of Statistics.

CONSIDERATIONS INVOLVED IN THE SELECTION OF SOCIAL INDICATORS IN AFRICAN COUNTRIES

87. In the selection of social indicators in African countries, the following are some of the factors that should be taken into account, namely: 46/

1. Appropriateness i.e., the relevance and indicativeness of the social indicators;
2. Summarization i.e., their degree and power of summarising the social concern or state;
3. Co-ordination and structuring; and
4. Feasibility

1. Appropriateness.

88. Social indicators should attempt to measure the absolute levels or trends of social concerns or their correlated social services. Two types of measures are utilised, namely - direct and indirect (proxy). Direct measures should "coincide with the totality or the parts of the topic of the social concern in question; they should be ultimate indicators of that state of affairs." 47/

89. However, sometimes direct measures (such as output) are not available and resort is made to indirect (or proxy) estimates such as input values. The nearer the correlation of such measures to the social concern or service that they attempt to measure, the better they are as indicators.

2. Summarization

90. Social indicators should furnish as much information as possible on social concerns and social services. There is however a problem: fuller information is often provided by disaggregated series, relating e.g., to specific age or social groups or geographical classifications. Thus some compromise has to be struck between the two objectives, summarization and disaggregation.

3. Co-ordination and structuring

91. To facilitate their combined uses social indicators should fit into a system of co-ordinated, coherent and linked body of statistics. Strategies to achieve this objective include - standardizations of concepts, definitions and methodologies, such as are canvassed by the SSDS scheme.

4. Feasibility

92. When developing social indicators, it is necessary to examine the possibility of collecting, processing and tabulating the data that are required. As part of such exercise, it has to be ascertained, once a list of potential indicators has been established, whether the statistics are currently available and whether it will be possible, given the cost (i.e., of collection, processing, tabulation etc.,) to gather those not available in the future.

SOCIAL INDICATORS OF RELEVANCE TO AFRICA

93. Below are presented topics that should be included in the social indicators programmes of African countries. These have been divided into two categories, namely (a) basic topics and (b) other useful topics. The basic topics are the subject matter fields which should be included in the social indicators programmes of every African country to provide a comprehensive and holistic coverage of social welfare, equity and well-being. Their selection was based on the above mentioned criteria - appropriateness; summarization; coordination and structuring; and feasibility.

94. The choice of the other topics is optional, depending on such considerations as the state of development of the statistical infrastructure and their relevance in individual countries.

95. Although no detailed suggestions have been made about classifications, countries that have any of the data series specific to geographical sub-divisions and/or socio-economic groups are advised to publish them showing these fine details.

96. Six subject area fields - population; learning and educational services; health, health services and nutrition; housing; employment; and the distribution of income, expenditure and level of living - closely approximating the SSDS series (See Annex 1) especially the grouping suggested for developing countries, have been proposed for the initial development of social indicators in African countries. Individual countries can extend this list to include the other SSDS topics - family formation, families and households; allocation of time and leisure; social security and welfare services; social stratification and mobility; and public order and safety - depending on their relevance and priority.

Population

97. The basic topics focus on information relating to the size, the rate of growth of the population and components accounting for changes in the latter (i.e., the birth and the death rates). Another topic featured, because of its importance to African countries, is the rate of internal migration.

98. The main source of population data in many African countries is the population census. Sometimes, household surveys have included questions relating to population variables. But at the moment, vital registration systems are incomplete in the majority of countries in the region. So no reliance could be placed on them to provide vital rates until sometime in the future.

Health, health services and Nutrition

99. The basic topics include subjects on the assessment of the health status of the population and the correlated institutional arrangements. The subject fields for nutrition are the measurements of the adequacy of food. The data source for both subjects are usually household surveys and administrative records.

Housing

100. The basic topics on housing provide insights into the living arrangements of the population, a subject of importance in all Africa countries, given that shelter is a basic necessity. Some countries have included this topic in either their population census or household survey.

Employment

101. Information relating to the distribution of the employed population into various categories of industries and occupations and the unemployed are the subject of the basic topics. A major source of data for this topic is usually the population census supplemented sometimes by household survey statistics.

Distribution of income, expenditure and level of living

102. The basic topics attempt to measure the distribution of income among various groups. The principal source of data on this subject is the household budget survey.

Selected Social Indicators of Relevance to Africa

1. Population

Basic topics

1. Growth rate of the population
2. Birth rate (crude birth rate, total fertility rate)
3. Death rate (crude death rate)
4. Percentage of the population under age 15
5. Rate of net migration from rural to urban areas

Other useful topics

6. Urban/rural population as percentage of total population
7. Selected socio-economic groups as percentage of total population
8. Rate of net international migration

2. Learning and Educational services

Basic topics

1. Population with secondary completed as percentage of total
2. Population with primary school completed as percentage of total population
3. Combined primary and secondary enrolments as percentage of the age group 5-19
4. Ratio of students per teacher, first level; and second level
5. Adult population literate (literacy as measured by minimal educational attainment e.g., 5 grades completed, rather by self-evaluation) as percentage of total population
6. Total current expenditure on education as a percentage of GDP

Other useful topics

7. Qualified teachers (primary or first level) as per 10,000 population
8. Third-level enrolment per 10,000 aged 20-24
9. Average distance of households from a first-level educational institution

3. Health, health services and nutrition

Basic topics

1. Life expectancy at birth, male/female
2. Infant mortality, male/female
3. Population per hospital bed
4. Population per doctor/nurse/midwife
5. Per capita calorie intake
6. Per capita protein intake

Other useful topics

7. Percentages of cases of communicable and other diseases
8. Proportion of births attended by physicians or trained auxiliary staff
9. Per capita food expenditure/consumption
10. Total current/capital expenditure on health services as percentage of gross domestic product (GDP)

4. Housing

Basic topics

1. Percentage of population occupying living quarters with electricity
2. Percentage with indoor piped water supply or with access to piped water supply within 100 meters
3. Percentage of the population occupying living quarters with toilets

Other useful topics

4. Percentage of the population living in squatters or shanty houses
5. Household consumption expenditure on housing as a percentage of total household consumption expenditure

5. Employment

Basic Topics

1. Percentage distribution of employed population by industry
2. Percentage distribution of employed population by occupation
3. Percentage of the population of working age (15-59) to the total population
4. Percentage of people employed in the agricultural sector as to the total population
5. Percentage of persons unemployed in the economically active population of the age group, 15-25 & 25-29; total

Other useful topics

6. Rates of labour force participation, males/females

6. Distribution of income, expenditure and level of living

Basic topics

1. Average income per household and distribution of the same by size classes
2. Per capita household consumption expenditure at current and constant prices and distribution of the same by size classes
3. Percentage of available household income accruing to percentile groups of households

Other useful topics

4. Consumption expenditure in the lowest total expenditure group.

CURRENT AFRICAN EXPERIENCE IN THE DEVELOPMENT OF SOCIAL INDICATORS

103. In many African countries, much work has been done to improve the collection, tabulation and analysis of some macro-economic and demographic statistics. But the position with respect to other social statistics is currently unsatisfactory.

104. The reason for the subordinate role given to social statistics in African countries is largely explained by the planning procedures adopted in the past. The procedures of planning focussed on macro-economic accounting. This approach calls for mainly economic data, since they form the principal variables in such models, with social statistics playing only a minor role:

> There is as yet ... no equivalent data source that takes into account more recent approaches to planning, directed towards an integrated social and economic process rather that a macro-economic modelling with social by-products.48/

105. The population census is now becoming established as a regular data collection mechanism in most African countries. But the two other data collection systems, the household sample surveys and administrative records are currently being used in an unsystematic fashion. This has accentuated the problem of generating social statistics series in many countries in the continent.

106. For example in Malawi, "because of long intervals between statistical surveys covering social topics, the limited availability of staff and funds to mount most large surveys and the inherent difficulties of collecting data on social subjects, social statistics has not been as intensively covered as the economic statistics by the National Statistical Office."49/

107. Thus, at the moment, the only country in Africa that has a special programme for the development of social indicators is Kenya. The major vehicle of disseminating social statistics in the country is the publication, Social Perspective, issued periodically since 1976. This publication brings together available social, demographic and related economic statistics for the purposes of assisting policymakers, planners and the public in defining, measuring and implementing policies and objectives of economic and social planning and of monitoring social conditions and changes.

108. Introducing the first issue of the publication, the Director of Statistics observed that:

> The primary objectives of developing Kenya's system of social statistics is to provide information which will enable policy-makers to undertake the necessary resource allocation to maximize the outcome of their endeavour in enhancing the "quality of life" of the peoples of Kenya. The government in the past few years has been allocating almost 40% of its annual budget towards the provision of social and community services. Given the level of commitment of resources, it is imperative that an information system be set up to monitor and evaluate the government performance in the provision of these services, on an on-going basis.50/

109. To strengthen the data base of the system, the Central Bureau of Statistics instituted the National Integrated Sample Survey Programme (NISSP) which attempts among other things to collect information on the "quality of life".

110. The six major areas on which data are collected for the development of social indicators include the following (see Annex 2)51/

1. Health and nutrition; 2. Education; 3. Housing; 4. Levels of living; 5. Public safety; 6. Community level variables.

111. While the majority of African countries do not now have programmes specifically geared to social indicators as Kenya, a number produce periodically statistical compendia on a variety of topics, including social statistics. On the whole, most of the social statistics are raw series, though they could be converted into social indicators with small manipulations done to them. The publications containing these series provide the only source for the dissemination of social statistics derived from administrative records such as on education, health and crime.

112. Examples of such publications are Tanzania's and Sierra Leone's Statistical abstract and (annual) Statistical Bulletin. These publications contain social statistics on such topics as education, housing and crime.

113. Another source of data now available in many African countries that could be used for developing social indicators are the population census statistics (and information from surveys). Recent population (and sometimes combined) housing) censuses conducted in some of these countries contain data on such subjects as educational attainment, fertility and mortality and occasionally housing and community level variables.52/

114. Data published from this source are mainly in the form of raw social series, though they could be easily converted into social indicators. The greatest value of these statistics derives from their national character. Thus, they could be disaggregated into smaller geographic areas or sub-social or age groups to furnish more illuminating indicators.

115. Some initial experimentation in social indicator development could begin in many African countries by the utilization of these available social statistics. But a necessary second phase of this development would involve the collection of data on a continuous basis by a household survey system along the pattern suggested by the African household capability programme.

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Illustrative examples of subject matter coverages of social indicators
(UN Social indicators: Preliminary guidelines, 1978)

A. Population

1. Size, structure and changes in population
2. Geographical distribution of population and changes in distribution

B. Families and households

1. Family formation and stability
2. Families and households

C. Learning and educational services

1. Educational attainments and educational achievements of the population
2. Use and distribution of educational services
3. Input, outputs and performance of educational services

D. Earning activities and the inactive

1. Labour force participation
2. Employment opportunities and mobility
3. Employment compensation
4. Working conditions
5. Availability and performance of manpower services

E. Distribution of income, consumption and accumulation

1. Level and growth of household income and accumulation
2. Level and growth of consumption
3. Inequality and redistribution of income and consumption

F. Social security and welfare services

1. Scope of protection against loss of income and other hazards
2. Use and magnitude of protection against loss of income and other hazards

G. Health, health services and nutrition

1. State of health
   (a) Mortality and length of life
   (b) Mortality and disabilities
2. Availability, use and performance of health service
3. Nutrition

H. Housing and its environment

1. Supply, characteristics and distribution of housing
2. Tenure of and outlays on housing
3. Public housing assistance
4. State of the housing environment

I. Public order and safety

1. Frequency and severity of offences and victimization
2. Characteristic and treatment of offenders
3. Institutions and personnel

J. Time use

1. Use of time (activities)

K. Leisure and culture

1. Use of leisure
2. Availability and use of leisure-time facilities

L. Social stratification and mobility

1. Social stratification
2. Intra-generational mobility
3. Inter-generational mobility

Kenya: Proposed list of social indicators

1. Health and nutrition

1. Infant mortality - urban/rural, male/female
2. Expectation of life at birth - male/female, urban/rural
3. Days of illness in previous month by work status and whether treated urban/rural
4. Intake of calories per head per day - urban/rural
5. Intake of protein per head per day - urban/rural
6. Measures on young children of under 4 years, who are underweight/undernourished, urban/rural
7. Number of medical personnel per person by type - urban/rural
8. Number of people per hospital bed - urban/rural
9. Number of visits to family planning clinics - urban/rural
10. Number of acceptors of family planning measures - urban/rural, method

2. Education

1. Combined enrolment (total) - primary/secondary, male/female
2. Enrolment primary schools as a percentage of population in age group 5-14 male/female
3. Enrolment secondary schools as a percentage of population in age group 15-19 male/female
4. Enrolment higher education as a percentage of population in age group 20-24 male/female and type of higher education
5. Adult literacy - male/female, urban/rural
6. Newspaper circulation per 1,000 population - urban/rural
7. (1) Pupil teacher ratios - secondary/primary
   (2) Number of teachers - secondary/primary, trained/untrained, male/female

3. Housing

1. Source of water supplies
2. Type of source of water supply by distance
3. Method of sewage disposal
4. Percentage of dwellings with electricity - urban/rural
5. Average number of persons per dwelling room - urban/rural
6. Percentage of households with 1.5 person or less per room - urban/rural
7. Percentage of occupied dwellings made of "strong" material

4. Levels of living

1. Percentage of families below "food poverty" level
2. Wage rates - skilled/unskilled, type of occupation
3. Unemployment rate (urban only) by education and occupation
4. Index of mobility
5. Time spent by adults on various economic activities - male/female (including water carrying)
6. Time spent by children on various economic activities - male/female
7. Distance from social amenities such as health centres, schools, bus stops

5. Public safety

1. Crime incidence by type of crime - urban/rural
2. Number of people in prison - male/female
3. Number of youths on probation - male/female
4. Accidents

6. Community

1. Index of community organization (Harambee projects)

Source:

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