

REPORT ON

INTERNATIONAL DEFINITION AND MEASUREMENT OF STANDARDS AND LEVELS OF LIVING

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REPORT ON

INTERNATIONAL DEFINITION AND MEASUREMENT OF STANDARDS AND LEVELS OF LIVING

Report of a Committee of Experts
convened by the Secretary-General of the United Nations
jointly with the International Labour Office and
the United Nations Educational, Scientific and Cultural Organization

UNITED NATIONS New York, 1954

PREFACE BY THE SECRETARY-GENERAL OF THE UNITED NATIONS

I.

The promotion of "higher standards of living" is set forth in the Charter of the United Nations as a general goal of international economic and social activity. It is also the stated goal of numerous operational programmes of the United Nations and specialized agencies, such as the expanded programme of technical assistance for economic development and the concerted programme of practical action in the social field.

The international organizations have for some time recognized the desirability of obtaining a clearer understanding of the concept of "standards of living" from an international point of view, and of the methods by which progress in raising standards of living is to be measured. In 1949, for example, recommendations concerned with improved measurement of standards of living were independently adopted by the Social Commission of the Economic and Social Council, the Seventh International Conference of Labour Statisticians (of the International Labour Organisation), and the rural welfare panel of the General Conference of the Food and Agriculture Organization.

Particular interest has centered upon the measurement of standards of living within the economically less-developed countries, where it is important, for national and international relief and development programmes, to assess need as well as to record progress in meeting need. Most of the work in the field of standards of living up to now has been carried out in economically and industrially developed areas, and the extent to which the concepts and methods of measurement used in such areas

apply to under-developed rural areas has been a question of interest. It must be recognized that, from an international point of view, the problem of measurement is a problem not only of how to measure but also of what to measure.

The General Assembly, by Resolution 527 (VI) in 1952, requested the Economic and Social Council "to continue to pay special attention to changes occurring in the standards of living of the working populations, and to provide for the working out of adequate statistical methods and techniques so as best to facilitate the gathering and use of pertinent data in order to enable the Secretary-General to publish regular annual reports showing changes in absolute levels of living conditions in all countries and which would permit the study of this problem in the light of changing general economic conditions; and invites all Member States to furnish to the Secretary-General all the data required for this purpose."

On 25 July 1952, the Economic and Social Council, noting this request by the General Assembly, adopted Resolution 434 B (XIV), which requested "the Secretary-General, in co-operation with the International Labour Organisation and other appropriate specialized agencies, to convene a small group of experts to prepare a report on the most satisfactory methods of defining and measuring standards of living and changes therein in the various countries, having regard to the possibility of international comparisons, to obtain the comments and recommendations of the Statistical Commission and the Social Commission thereon, and to report to the Economic and Social Council at an early date."

The report that follows is in accordance with this resolution of the Economic and Social Council.

The Committee of Experts was convened 8-26 June 1953 under the joint sponsorship of the United Nations, the International Labour Organisation, and the United Nations Educational, Scientific and Cultural Organization, and in co-operation with the Food and Agriculture Organization and the World Health Organization. The Committee was composed of Mr. Raymond Firth, Professor of

Anthropology at the London School of Economics and Political Science, University of London, England; Mr. Philip M. Hauser, Professor of Sociology at the University of Chicago, U.S.A.; Mr. Erland v. Hofsten, Chief of the Statistical Section, Social Welfare Board of Sweden; Father Louis Joseph Lebret, Editor of Economic at Humanisme, France; Mr. O. Alexander Moraes, Acting Secretary-General of the Inter-American Statistical Institute of the Organization of American States; and Mr. V.K.R.V. Rao, Director of the Delhi School of Economics, University of Delhi, India. Appropriate members of the secretariats of the United Nations, ILO, UNESCO, FAO and WHO also participated in the meeting. Mr. Rao was elected to serve as Chairman and Mr. Hauser as Rapporteur.

Among the background documents distributed at the meeting was a series of comments on the subject of international definition and measurement of standards of living received from experts of different countries. Another document consisted of the report of a prior conference convened by the Public Administration Clearing House (a private organization) with a view to helping in this project. The assistance received from these private scholars and from the Public Administration Clearing House is gratefully acknowledged.

II.

The Committee did not consider that its Report would represent a final and definitive answer to the many complex problems with which it dealt, but was in agreement on the ways in which these problems should be approached. It sought to clarify the terms "standard of living," "level of living" and related concepts, and recommended that in future discussions the expression "level of living" be employed when reference is made to actual conditions of life, as contrasted with aspirations or ideas of what ought to be. The Committee did not feel that it was its function to specify standards understood in this latter sense and therefore restricted its analysis to the problem of definition and measurement of actual levels of living.

In the opinion of the Committee, there is no single index of the level of living as a whole that can be applied internationally. In this connexion, the Committee advised against the use of per capita national income as an international index of the level of living. It concluded, in fact, that, for several reasons, including difficulties of determining purchasing power parities and of converting currencies, no type of monetary index as a general international measure of levels of living could be recommended.

It was agreed that the problem of levels of living must be approached in a pluralistic marmer by analysis of various "components" representing internationally accepted values (health, mutrition, education, etc.) and by the use of various statistical "indicators" for these components (e.g., life expectancy rates, infant mortality rates, etc., as indicators of health).

It was also agreed that, conceptually, "non-material" as well as "material" factors should be included in the definition of levels of living; but that, in practice, comparative measurement of levels of living with regard to many "non-material" aspects, as in the case of those associated with differing cultural values, could not be meaningfully carried out. The Committee's approach to the question of levels of living implied that the items used in international analyses could be considerably extended and refined in national analyses.

The Committee recognized that an international analysis of levels of living, in terms of the components and indicators it preposed, would fall short of giving a complete and balanced picture of the total situation. In this connexion, the Committee stressed the importance of the use of descriptive materials and background information, particularly in the form of social and cultural analyses.

The Committee's Report contains a number of recommendations for improvement of data on existing indicators, and also for the addition of desirable new indicators. Special tabulations of recent census data and the more extensive use of sample surveys were particularly recommended as means of improvement.

Even with such improvements and additions, however, the Committee was of the opinion that an adequate over-all picture of levels of living would not be attainable except through a very considerable expansion of studies at the level of family living — that is, studies (on a sampling basis) of actual conditions of life as directly observed and recorded in surveys. The Committee felt that there existed in the family living approach the possibility not only for more direct assessment — many of the available indicators are indirect and inferential — but also for more comprehensive analyses, and one of its major recommendations was that the international organizations, as a next step, should undertake an examination of the possibility of developing relatively uniform techniques and schedules of family living studies for use by governments, institutions and other interested bodies in different parts of the world.

The Committee made various other specific recommendations for international action which will be found summarized in the concluding part of the Report, especially paragraph 229. It should be particularly noted that the Committee reached the conclusion that an annual report on levels of living, as requested by General Assembly Resolution 527 (VI), would not be feasible at present. The Committee felt that the most satisfactory procedure would be to follow the pattern of publishing the Report on the World Social Situation, as a general vehicle for reporting levels of living, at intervals of every four years.

III.

In presenting the Committee's Report to the Statistical Commission, the Social Commission, and the Economic and Social Council, I wish to take the opportunity to thank the members of the Committee for their contributions to this most difficult and challenging problem, which is central to the evaluation of the economic and social programmes of the international organizations and of national governments. I wish also to thank the specialized agencies which by their interest and co-operation made the meeting possible.

Dan Amenday

E ADDRESS - UNATIONS NEWYORK - ADRESSE TELEGRAPHIQUE

LETTER OF TRANSMITTAL TO THE SECRETARY-GENERAL OF THE UNITED NATIONS, IN REPLY PLEASE QUOTE NO. THE DIRECTOR-GENERAL OF ILO AND THE DIRECTOR-GENERAL OF UNESCO

> We, the members of the Committee appointed by you in pursuance of General Assembly resolution No. 527 (VI) and the Economic and Social Council resolution No. 434 B (XIV), have pleasure in submitting herewith our report on "International Definition and Measurement of Standards and Levels of Living".

Our meetings were held at the Headquarters of the United Nations from 8-26 June 1953. While it was not possible, in the nature of the problem, and particularly in the time available to us for discussion, to provide completely satisfactory and definitive answers to the many complex problems in this field, we trust we have been able at least to indicate the path along which progress may be made.

We wish to take this opportunity to express our gratitude for the valuable assistance given us by the Secretariat of the United Nations, and the Specialized Agencies which have participated in the meetings. Without their comprehensive and thoughtful documentation and the special efforts in the servicing of the meetings, this report could not possibly have been prepared in the time allowed for our meetings.

Respectfully yours,

Raymond First.

Lis Lehen

Danido Het Istin

Mr. O. Jalerander de Paras.

Chairman

Hay Hauses

Rapporteur

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REPORT BY A COMMITTEE ON INTERNATIONAL DEFINITION AND MEASUREMENT OF STANDARDS AND LEVELS OF LIVING

INTRODUCTION

- Labour Organisation and the United Nations Educational, Scientific and Cultural Organization, and with the co-operation of the Food and Agriculture Organization and the World Health Organization, the Committee of Experts on International Definition and Measurement of Standards and Levels of Living met at United Nations Headquarters, 8-26 June 1953. The meeting was called in response to General Assembly resolution 527 (VI), 1952, and Economic and Social Council resolution 434 B (XIV) of 25 July 1952.
- 2. The Committee, from the outset, recognized that the problems of concept and measurement involved in comparisons of standards of living were of such a character as to defy completely satisfactory and definitive solution. It construed its assignment as consisting essentially of the following specific tasks:
 - (a) the clarification of the concept "standard of living" and related concepts; 2/
 - (b) the analysis of the problem of measuring levels of living and changes therein from an international point of view;
 - (c) the description and evaluation of the kinds of data now available on an international basis for possible use as indicators of levels of living;
 - (d) the preparation of recommendations in two parts relating to the measurement of levels of living and changes therein, namely:
 - (i) recommendations in respect to what it is possible to do now with available data;
 - (ii) recommendations relating to short-run and longer-run improvements in measurement.

¹/ Quoted in the Preface, page ii.

The discussion of this problem ended with a recommendation to use the term "level of living" for the concept with which this report is primarily concerned.

I. Definitions

- The resolutions of the General Assembly and of the Economic and Social Council mentioned above contain the expression "standards of living". The utilization of this phrase is in accord with popular usage. The phrase "standards of living", however, may embody several different concepts which must be differentiated for purposes of analysis and measurement. Previous studies and investigations have resulted in distinguishing at least three separate concepts. The first relates to the actual living conditions of a people and is increasingly designated as "level of living". The second relates to the aspirations or expectations of a people, that is, the living conditions which they seek to attain or regain or which they regard as fitting and proper for themselves to enjoy; it is increasingly known in the literature as "standard of living". The third relates to desirable conditions of living as defined for specific purposes, such as the fixing of minimum wages or working hours, and arrived at by national or international convention or agreement. This third concept is often known as "norm of living". The "standard" and the "norm", which are concerned with what ought to be, serve as means of evaluating the adequacy of what is (the 'level'). The advantages of the use of these three terms, "level of living", "standard of living" and "norm of living", in the connotations indicated have, in fact, been pointed out by the International Labour Office (The Worker's Standard of Living, Studies and Reports, Series B, No. 30). The Committee agreed with the importance of making these distinctions in considerations or investigations relating to "standards of living". In the preparation of this report these distinctions have been borne in mind and the definitions given have been employed.
- 4. The Committee stressed the advisability in all other international discussions of these matters of replacing the term "standard of living" by "level of living" when the latter concept actually applies.
- II. The Position on "Standards and Norms"
- 5. Early in its deliberations, the Committee took up the problem of "standards (and norms) of living" and considered the various approaches frequently proposed,

such as "minimum", "decency", "adequacy" and "comfort" standards (or norms). The Committee recognized that the setting of "norms" involves specific value judgments. It refrained from such determinations because of the practical difficulties involved and because there was some feeling that the task was more appropriately that of administrative or legislative bodies - local, national or international, as the case may be. The Committee decided that its role should be restricted to recommendations on content and methods of measurement of actual levels of living but should not include attempts to recommend in quantitative or qualitative terms any "standards", "norms" or "aspiration levels" which countries ought to pursue.

- 6. The Committee recognized that any decision regarding the aspects or factors to be included in the concept of the level of living in itself involves a value judgment. For example, the recommendation that expectation of life at birth or literacy rate be used to indicate certain aspects of the level of living involves the value judgment that longevity and literacy are desirable. The Committee did not hesitate to make value judgments of this type concerned with content, although it refrained from attempting to establish specific norms in the sense indicated above. (It would seem obvious that in regard to expectation of life, as in regard to some of the other components of levels of living, the goal of all peoples will in fact be that of attaining the highest levels possible).
- 7. The Committee considered that measurements of differences and changes in levels of living could be carried out satisfactorily without reference to norms, and that these measurements would provide Member Governments, the United Nations and the specialized agencies with the necessary factual information to guide their policy determinations and operating programmes in respect to raising levels of living. The position of the Committee with regard to the problem of norms, while constituting a self-imposed restriction on its activities, was, of course, not intended to reflect adversely upon the establishment of such norms by any competent local, national or international policy agencies. The Committee further recognized that in certain fields, as in nutrition, for example,

the expert can indicate approximate "requirements", such as the calorie "requirement" for the maintenance of life under varying conditions, and, in this sense, suggest a type of norm. The determination of such requirements will undoubtedly continue to be an objective of science, but it must obviously be based on continuing research rather than on the deliberations of a committee of the present type.

CHAPTER I - SOME METHODOLOGICAL CONSIDERATIONS

Section I - Nature of the Problem

- I. Needs, Wants and Values
- 8. In practically all countries, sections of the population live under conditions which are generally considered unsatisfactory and which consequently ought to be improved. The assumption of this statement is that there are certain human needs and wants which are not properly satisfied.
- 9. Human needs and wants, however, range from common biological needs as for food, water and protection against cold to culturally-defined motivations and wants which may differ from society to society or from individual to individual. Into the picture enters the whole field of desires and values for which man may be striving: desires for particular types of food, drink, housing and clothing appealing to the taste; for access to educational, cultural and recreational facilities; for opportunity to do the kind of work that is satisfying to the individual; for satisfactory working conditions; for security safeguards covering the risks of illness, unemployment and old age; etc.
- 10. Not all needs are recognized by individuals. For example, the diet that represents good nutrition is but poorly perceived. Furthermore, fulfilment of some needs or wants may mean less satisfaction of others.
- ll. The Committee took the position that the concept of levels of living should have reference to the satisfaction of all types of needs and wants. Obviously, it should include assessment of physical well-being, which is a widely-accepted human goal. It should further include related material elements as in consumption. The Committee emphasized the view, however, that "non-material" factors should also be included, and that, for example, the satisfaction of cultural or educational wants, the enjoyment of art and music and political rights, may be deeply significant for the interpretation of comparative levels of living.
- 12. At the same time, the Committee acknowledged the practical difficulties in finding suitable international statistical indications of most non-material factors. In so far as non-material needs are satisfied through, and closely

identified with, material means and facilities, measurement of the latter may be possible. But in many cases where indices of the use of facilities may appear available - for example, the number of people who visit museums and galleries, the percentage of the electorate who vote - the information is actually not of much value without full indication of content or attitudes involved. Do people vote, for example, because of their interest in the candidates and in the exercise of political rights or because they are fined if they do not appear at the polls? The Committee was obliged to conclude that non-material elements are very often not manageable from the point of view of measurement, although highly important from a conceptual point of view. 13. The problem of diverse needs and wants in their relation to the level of living is associated with the problem of "values". The Committee strongly affirmed its belief in the importance of recognizing characteristic national or local cultural values in any studies of levels of living. $\frac{1}{2}$ An understanding of such values is especially important in assessing changes taking place within an area. But in the field of international comparisons of absolute levels of living, the Committee held that, as far as measurement is concerned, it would not be meaningful to adopt a diverse set of evaluations which would include the specific value systems of each different community. 2/ 14. Even the simplest comparison of levels of living - that between two individuals - can be carried out only under the assumption of common values and requirements. With regard to certain physiological needs, it may be possible to assume that these needs are more or less identical for all human beings for example, that all individuals have roughly the same need for the maintaining of body temperature. With regard to nutrition, the picture is somewhat more complicated and comparisons of the extent to which requirements are fulfilled become more difficult: the need for calories is universal but the exact amounts needed are known to depend upon a number of factors like age, sex, body structure,

type of work, outer temperature, etc.; while other dietary requirements are

^{1/} See paragraph 61.

^{2/} This is not meant to preclude the use of such indices as extent of "freedom of choice" which in a sense make allowance for the exercise of local values or preferences.

incompletely known. When, however, it is purely a question of personal tastes and preferences, comparative measurement is not possible. It can be stated, for example, that one individual prefers to drink coffee and another prefers to drink tea; but it is not possible to state, in terms of the satisfactions derived from these preferences, that the level of living of the one individual is higher than, or lower than - or the same as - that of the other individual. It should be further noted that personal wants and tastes, which are to a high degree influenced by society, may be subject to rapid changes.

- 15. International comparisons of levels of living can therefore only be made if certain values are adopted which must be assumed either to be essentially the same for all individuals or to differ in a known way. It was not considered the task of the Committee to establish these sets of values. But the Committee could study the generally-accepted aims for social and economic policy as determined by national or international agencies, and note the common values endorsed in these aims. This approach taken by the Committee implied that only certain fundamental, generally-accepted needs and wants would be treated and that they would be treated in a way not necessarily in conformity with the personal wants of the individual.
- 16. The Committee realized the possibility of some conflict between the internationally approved set of values and the local system. For example, in many areas of Asia there is a preference for white, polished rice rather than brown, undermilled rice, although the latter is nutritionally preferable; and in many areas of Europe, there is a corresponding preference for white bread rather than the more nutritious kinds of dark, whole-grain bread. In popular opinion, the level of living is often regarded as higher when white rice or white bread is consumed. Yet from the point of view of international goals and values, the nutritional and health aspects must be considered. (The conflict may, of course, be resolved by such procedures as adding vitamins or mineral substances to the nutritionally inferior product).
- 17. The Committee realized also the possibility of bias in the use of a consistent and universal value scheme. Thus, while physical well-being

represents a value which can be understood to have universal validity and currency, the specific indicators employed to measure health levels are in practice primarily based upon and reinforced by the findings of scientific work in limited areas of the world. This problem is even more evident in the case of the interpretation of levels of living by reference to the spread of communications media, such as newspapers and the radio, which serves to give an international value stamp to technological developments from the West. The Committee considered, however, that the dangers of ethnocentric bias should not be too sensitively regarded, provided that a good measure of international agreement is accorded to the criteria used in measurement and provided that the statistical indicators chosen are treated frankly and empirically for what they are and not made to bear too much of an ideological load. (For example, figures on newspapers and radios should not be regarded as indicators of "cultural" level but as indicators of communications facilities).

- II. The Component Approach and the Use of Indicators
- 18. As a result of the considerations outlined to this point, the Committee was led to the conclusion that the most satisfactory approach to international measurement of levels of living would be through the measurement of clearly delimited aspects or parts of the total life situation that are amenable to quantification and reflect international aims. The generally-accepted aims for social and economic policy at the international level are stated with reference to particular fields such as health, nutrition, housing, employment conditions and education which may be regarded as "components" of the level of living. Quite apart from this fact and arising from the nature of the problem itself, the Committee regarded it as desirable to approach the question of the level of living from the point of view of its components and to treat these components separately from each other. Hereafter, this will be called "the component approach".
- 19. For the specific factors used in statistical measurement, the Committee adopted the term "indicators". An indicator was thought of as measuring some aspect of a component in the sense in which, for example, calorie consumption measures an aspect of nutrition and literacy rate measures an aspect of education.

- 20. The use of such indicators, however, presented certain problems to which the Committee devoted considerable attention. It seemed obvious that there is no unitary indicator available which by itself conveys the totality of the level of living concept and which, alone, can serve the purposes of international comparison. $\frac{1}{2}$ Each indicator refers to only part of the total level of living. In fact, even the indicators that are available for a given component like health, nutrition or education, do not yield a complete measurement of the component but relate to particular aspects of it and are not additive. 21. Several questions arise from this situation. One concerns the feasibility of seeking an aggregate or synthetic index as an end process, by combining the several specific indicators; this matter is discussed later (see paragraphs 130-138). Another question concerns the degree to which the indicators selected are independent variables capable of giving one another unbiased support, or are interdependent and to some extent versions of one another. Some degree of interdependence, for example, may well exist in a given case between the indicators for nutrition and those for general health. Even those for health and those for educational level - as in school attendance may not be entirely separate. In general, there seems to be a tendency for the indicators ordinarily chosen to be highly correlated. On the other hand, there may be important exceptions to this, and certain indicators may tend to move in opposite directions. A country may thus have a comparatively high level of living according to some indicators, and a comparatively low level according to others (for example, a country may, as in a depression, continue to have a high literacy rate and low mortality, but suffer a low level of employment and consumption).
- 22. A further problem lies in the degree to which the chosen indicators may refer to means or facilities rather than to actual levels of living. Thus, the numbers of schools and of school teachers in a country show only what is available. To serve more closely as indicators of levels of living these figures must be supplemented by information about utilization. Even figures

^{1/} The validity and use of national income figures from this point of view are discussed later in paragraphs 130-133.

of school enrolment are an imperfect guide, since they often express no more than a pious intention or a show of conformity to authority, and may not be indicative of real educational effects. Similarly, in the medical field, resistance to novel medicines and treatment may inhibit sections of the population, especially more secluded groups, from resorting to the available facilities. Yet information about effective utilization is hard to collect systematically and regularly.

- 23. Figures on amounts of material facilities available do not, moreover, reveal quality of performance. Thus, in order for figures of school attendance to be significant indicators of level of living on the educational side, there must also be some confidence regarding the content of what is taught in the schools, and the learning capacity and interests of the children. And in order for an increase in the number of school teachers or physicians in a country to represent a substantial rise in the level of living, the expansion of these services must not have been accompanied by a falling-off in their quality as through inadequate training. \(\frac{1}{2} \)
- 24. The Committee recognized that the question of facilities is but one phase of the problem of means and ends a problem that lies behind much of the discussion of the validity of indicators chosen to measure levels of living. Such a factor as literacy, for example, may be regarded as an end, in terms of the satisfactions it directly provides, or as an indication primarily of means available, since it leaves unanswered the question of the uses to which the literacy will be put. So also national income figures and related totals give evidence of the means available to a community, but only fragmentary indication of the ends which they serve.

It was not considered a function of the Committee to judge on the policy question of whether an underdeveloped country with limited budget should seek to maintain high standards with limited personnel and reach relatively few of the population, or should concentrate upon mass facilities with possibly (in some cases, inevitably) some lowering of standards; but the Committee emphasized that in so far as justification for either policy is sought by reference to changes in levels of living, these should be looked for in the closest empirical indices of nutrition, health, literacy, etc., and not simply in terms of available facilities or services.

25. The Committee noted that, in general, the need for measurement appears inevitably to lead to stress on indicators most easily capable of quantitative expression. Hence the indicators tend to assume an indirect character and to reflect primarily the quantity of facilities. This may lead to the danger, mentioned above, of using figures on the number of newspapers purchased in a country, for example, or of the quantity of newsprint consumed in a year, as indicators of level of cultural development.

III. Types of Indicators

- 26.• It will be apparent that the Committee regarded the series of indicators put forward at various times for measurement of levels of living as being of diverse orders of reference. There are macro-indicators, such as national income, and there are micro-indicators, such as family budget data. There are the more direct indicators of actual conditions (of health, nutrition, education, etc.) and the less direct indicators of services or facilities. Again, indicators may be divided according as they are of personal reference, or of collective reference. This diversity does not invalidate the indicators, but it does mean that in any comparisons, especially on an international scale, care should be taken to see that the indicators concerned are of the same general type.
- 27. There is one other distinction of importance. Most indicators <u>measure</u> what exists. This is true, for example, of figures of infant mortality; consumption in calories, proteins, vitamins; the number of kilometres of roads per square kilometre; the national income per capita of population, etc. But there are also indicators that <u>express tendency</u>, and are valuable because they allow us to say something of the direction in which the levels are changing; for example, such ratios as:
 - (1) Index of growth of agriculture production
 Index of growth of population
 - (2) Index of growth of industrial production
 Index of growth of population

(3) Investment and index of changes therein

and

Investment Total population and index of changes therein

In a similar way, trends in other components of levels of living may be analysed by introducing appropriate indexes. These reveal a dynamic aspect of development and measure to some extent the possibilities of evolution. (In so far as assurance regarding the future and the perception of progress play a role in the present state of the individual, however, measures of changes might be also regarded as measures of an aspect of the present level of living).

IV. The Monetary Approach

- 28. Thus far, the use of money for comparative measurement of levels of living has not been discussed. In the industrially developed countries, money is no doubt the most important means by which an individual can raise his level of living. The amount of money spent on consumption is often regarded as the measure of the level of living. The Committee did not agree with this view. 29. Monetary expenditure to a large extent indicates personal wants and preferences. If an individual receives an increased income, and if prices, etc., remain the same, it must be assumed, according to the monetary approach, that his level of living has risen. But if he spends the additional money on certain types of products or activities injurious to his health, one may, from the component approach, come to the conclusion that his level of living has not gone up or is even lower than before. Similarly, two persons expending the same amount of money on themselves may, according to the component approach, have quite different levels of living. Monetary comparisons consequently fall into a quite different category from that of comparisons undertaken according to the component approach.
- 30. Only a comparatively small part of the money expended by individuals in the industrially developed countries is actually used for the fulfilment of basic needs. Food that is satisfactory from the point of view of nutrition can usually be obtained at a much lower cost than the actual expenditure; clothing can by very cheap, if fashion is entirely neglected; many expenditures have practically nothing to do with basic needs.

- 31. In the case of macro-economic comparisons, one may similarly find that the per capita consumption expenditure entering into the national income calculations of two countries is the same in terms of money, but, in the one country, the resources may be used in such a way that, from the point of view of the component approach, the population of this country must be assumed to have a much lower level of living.
- 32. These considerations, however, do not imply that monetary comparisons are without interest. Such comparisons are a necessary tool for interpreting economic development within countries and economic differences between groups of individuals and countries. Calculations of this kind may also throw light on the relative level of living, provided they are properly undertaken and interpreted.
- 33. It is preferable that monetary comparisons be undertaken from more than one base. If two individuals in different circumstances different climate, prices, etc. are to be compared, we may base the comparison on the pattern of expenditure of the one individual and ask what sum of money would be required in order to purchase the same or equivalent goods and services in the situation of the second individual. This sum may then be compared with the actual amount of expenditure of the second individual. It should be realized, however, that this is a one-way comparison, which is based on a certain set of values; viz., those of the first individual. An alternative calculation based on the consumption of the second individual may give a different result. Since there is no a priori reason to accept one result rather than the other, both should be considered.
- 34. International monetary comparisons involve the very difficult problem of the rate of exchange to be used in converting expenditures from one currency to another for the purposes of comparison. (For a more detailed discussion, see paragraph 131). This is even more difficult than the problem of "deflating" money expenditure in terms of its purchasing power i.e., expressing the expenditures in terms of constant prices in the case of time-to-time comparisons within countries.

V. Types of Comparison

- 35. The types of indicators available will obviously affect the types of comparison that can be carried out. In some cases (e.g., calories consumed, years of schooling), direct comparison of individuals is possible; in other cases (e.g., mortality rates, literacy rates), there are no numerical gradations applying to the single individual, and quantitative comparisons are necessarily between groups.
- 36. In the case of indicators that yield individual figures, groups can be compared by the computing of averages. The Committee pointed to the risks involved, however, in drawing conclusions from averages, which may conceal serious discrepancies. It consequently stressed the great importance of knowing the distribution of the group over a given quantitative measure; that is, the percentage of the population reaching (or falling below) various levels of calorie consumption, income, etc. It was noted that important differences may be discovered even between different members of one and the same family. It was also noted that for certain kinds of comparison, e.g., those founded on "national income" calculations, it may not be possible to obtain distributional figures, a difficulty which clearly limits the use of such comparisons. In certain cases where distributional figures on an individual basis are not possible (e.g., mortality rates, literacy rates), it may be possible and desirable to refine rates for the total population by indicating rates for various groups of the population.
- 37. Comparisons of the same group at different periods of time are, on the whole, the easiest to undertake. Climatic conditions can be assumed to be identical, and also, in many other respects, identity may be assumed, provided that the time interval is not too long. Through such time-to-time comparisons, it is possible to ascertain the trend of development in different fields for different groups within a country or for different countries.
- 38. With regard to comparisons between groups in different areas, the Committee noted that such comparisons are always difficult, and to a certain extent arbitrary, because of climatic differences and differences in values. Specific

comparisons of whole populations, particularly comparisons between the whole populations of large countries that contain highly varying conditions, are usually less desirable than more limited comparisons between corresponding parts of the populations; or than comparisons between different parts of the population within one and the same country.

Section II - Some Technical Problems of Measurement

39. The measurement of the components of levels of living is admittedly difficult even for a relatively homogeneous population; it is confronted with extremely complex technical problems when attempted for purposes of international comparisons. The technical problems involved may be summarized under the following headings: (I) Timing; (II) Accuracy; (III) Representativeness and (IV) Comparability.

I. Timing

- 40. The General Assembly in resolution 527 (VI) requested "regular annual reports showing changes in absolute levels of living conditions in all countries ..." In the opinion of the Committee, the measurement of annual changes is in many cases not feasible, either because the expense involved would make it impractical, or because available methodology and techniques are not precise enough to measure annual changes. Moreover, annual measurements even if feasible, may be misleading if the causes of the changes are not carefully analysed.
- 41. Annual data simply do not exist in most countries for most of the components of levels of living. This fact alone makes annual reports impossible at the present time, or in the foreseeable future, unless a great expansion occurs in the statistical activities of most of the countries of the world, including the more developed nations. The Committee, in fact, recommended such expansion especially in respect to the utilization of sample surveys. (See paragraphs 147-151). It must be recognized, however, that the development of adequate statistical facilities necessarily takes a number of years and is in some measure dependent upon general economic and social development.

- 42. Even if important statistical developments occur, however, it is doubtful whether significant measurement of changes in most of the components of levels of living would be possible on an annual basis for some time to come. Change in most demographic and social phenomena, even under induced development programmes, proceeds relatively slowly and the precision of available measurement techniques is in many cases inadequate to the task of measuring the small changes which may be expected to occur within a single year.
- 43. Finally, the interpretation of annual change, even when it can be measured with reasonable accuracy, may be quite misleading unless made in the context of seasonal, cyclical and secular (long-term) changes. The effects of seasonal change may be readily controlled for a given local population by taking the measurement in the same month each year, or by obtaining aggregate data for an entire year. In the case of international comparisons, when it is not feasible to obtain aggregate data covering an entire year's activity and this is often the case serious problems of comparability arise in regard to measurements that may refer to different seasons of the year for the various countries.
- 44. Furthermore, business cycle changes do not have the same significance and effect for all countries of the world. Cyclical economic changes may obscure the meaning of annual changes in many components of living; other cyclical phenomena such as those of epidemics, insect plagues, drought, etc., may also affect the meaning of annual changes.
- 45. Consequently, it is scarcely possible, on a year to year basis, to separate changes that are of a long-run character from more temporary or incidental changes. The utilization of statistical, analytical methods which allow full understanding of the types of changes which are taking place must await the development of relatively long time-series on the various indicators on levels of living.

II. Accuracy

46. The Committee recommended that all measurements in respect to levels of living be carefully evaluated from the standpoint of their <u>reliability</u>, that is, the consistency with which they measure whatever they do measure. Without

some indication of the reliability of the existing and proposed measurements, comparisons of indicators of levels of living are subject to grave misinterpretations.

- 47. It is also highly important to know how valid the indicators of levels of living may be, that is to know to what extent they actually do measure what they purport to measure, or do indicate those aspects of levels of living under exploration. Such knowledge can be gained only through intensive research and investigation. It was, therefore, recommended by the Committee that the Secretariat of the United Nations and the specialized agencies and the personnel of Member countries co-operate in endeavours to obtain uniform means of assuring and measuring the validity of the indicators which are employed, for either national or international comparisons.
- 48. With regard to the question of <u>precision</u> of measurement, the Committee recognized that rough measurements may frequently have current practical value for purposes of policy and administration among Member Governments or in the United Nations and the specialized agencies. What is desired is an accuracy of measurement consonant with the required uses of the data. For example, it may not be necessary to know with great precision whether the infant mortality rate of a nation is 225 or 250. In either case, the same policy and administrative action would undoubtedly be indicated. It is important, however, to know, at least approximately, how precise the available measurements may be, that is, to know their relative margins of error.
- 49. Some of the many other technical problems relating to the accuracy of the measurements of the various components of the levels of living are dealt with more specifically in connexion with the indicators discussed below (Chapter II). In general, the basic importance of the considerations noted above in respect to reliability, validity and precision justifies special attention if measurements are to be obtained which in fact do portray differences in absolute levels of living or in changes therein. It was therefore recommended by the Committee that the United Nations and the specialized agencies, in co-operation with Member countries, devote special attention to ascertaining and improving the reliability, validity and precision of level of living indicators.

III. Representativeness

- 50. Another important aspect of the problem of measurement is the extent to which the measurements obtained apply to the total population of a nation or to a well-defined portion thereof. Many kinds of data available are based on relatively intensive ad hoc investigations of a part rather than the whole of a population. Data so obtained are usually interpreted to apply to the whole population. Yet it is known that only under special circumstances and through the employment of specific techniques is it possible to generalize to a whole population from the study of only a part. In the present state of knowledge, assurance exists that a part of a population represents the whole only if probability theory and practice are used in the design and selection of a sample of the population.
- 51. The Committee urged, therefore, that, as far as possible, probability theory and practice be employed in the selection of all population samples used for purposes of obtaining measurements of the levels of living, whether samples of the population of a nation as a whole or, especially for large countries, of any well-defined segments. Towards this end, the Committee recommended that the United Nations and the specialized agencies give priority to meeting requests from countries for information and technical assistance on the use of modern sampling methods; and that Member countries so far as possible employ such methods in the conduct of their regular statistical activities or ad hoc investigations.
- 52. The Committee realized that the use of probability sampling methods is not always possible, and it may sometimes be desirable to make investigations using other methods. Reports based on studies of a part of the population, however, should always bear explicit statements on the nature of the methods used and indicate to what extent the sample may be regarded as representative. 1/

^{1/} It is particularly important to know, in this connexion, whether a sample is representative of the whole population, or of a selected group. In the latter case, this group should be clearly defined, and its numerical importance in relation to the total population should be indicated.

IV. Comparability

- 53. Experience has demonstrated that even in the census undertakings of countries that are most advanced in their statistical procedures, serious problems of comparability arise from census to census, or from place to place within a nation in the same census. Even when the concepts and definitions employed are the same, problems of measurements for example, differences in the interpretation of field instructions may affect the comparability of statistics.
- 54. As indicated in other sections of this report, exact international comparability in indicators of levels of living is not possible in the first instance because of the differences in the value systems of the various nations and cultures, as they apply to specific components in the levels of living. Any comparison involving use of a particular indicator in different countries necessarily wrenches a specific component of the level of living out of its context. Despite this basic fact, the Committee concluded that it is nevertheless possible, within reasonable limits, to make comparisons by use of certain indicators.
- 55. Among the prerequisites for reasonable international comparability may be listed the following: (1) the development of common conceptual frameworks, (2) uniform coverage of subjects, (3) standard definitions, (4) the development of uniform schedules and questionnaires, (5) uniform classifications, editing and coding procedures, (6) uniform tabulation procedures, (7) standard analytical and reporting practices, and (8) detailed descriptions of all methods and procedures used. While much progress has already been made towards the goal of achieving international comparability in statistics, much still remains to be done, particularly in respect to a number of the specific indicators important to the measurement of differences and changes in the levels of living. 56. In view of these considerations, the Committee recommended that the United Nations and the specialized agencies expand their efforts, as far as possible, towards improving the international comparability of data, especially in respect to the indicators of levels of living that are treated below (Chapter II). The Committee considered it most desirable that Member countries

undertake to adopt uniform standards and procedures as rapidly as possible. In the interim, the Committee strongly recommended that publications of the United Nations and the specialized agencies contain, where appropriate, explicit descriptions of the methods and procedures used in the compilation of data and indicate the extent to which changes in such methods and procedures may affect the comparability of the indicators of levels of living.

Section III - The Role of Social and Cultural Analyses

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- 57. The formulation of enquiries and the interpretation of data on levels of living require knowledge of local values and the structures of the societies concerned. For the economically more developed countries, such analyses usually exist in enough detail or outline to provide adequate categories for framing and interpreting levels of living studies, although much research still remains to be done. The Committee noted that grave deficiencies in this respect occur in many of the underdeveloped countries. These deficiencies are often due to the cost of having such social analyses made. But to some extent they are due to lack of appreciation of their importance; and to lack of the experience and of the professional personnel necessary for such analytical work, which essentially involves research by sociologists, anthropologists, economists and other social scientists.
- 58. In the first place, as a prerequisite for framing schedules of census or other broad statistical enquiries, it is necessary to have some knowledge of the main structural features of the society under consideration. Thus, if information is required by questionnaire about certain details of housing, it may be necessary to know in advance, for purposes of planning the enquiry, whether patterns of residence involve the division of the house into rooms, or depend on sharing a large single floor space among all the members of the household. Or again, if it is desired to include in a census schedule a question about relation of household members to head of the household, it may be of prime importance to know that the conventions of authority and ownership in the society allow of several interpretations of the term "head", and of

several persons being so designated. Moreover, in many societies, terms for "mother", "brother", "sister" can apply to a wide range of persons far outside the elementary family, and unless the broad structure of the kinship system is known in advance, much confusion may result. For framing enquiries (as well as for other purposes), the structural data at command should include, for instance, material on: the geographical definition of social groups; the distribution of the population in terms of ages, origins, occupations, social strata; the degree of social mobility.

59. For an adequate interpretation of level of living data, a more detailed and intensive analysis may be required, including analysis of the various types of social units and their interrelationships; the patterns of behaviour and values attaching to membership of a social unit; the precise local arrangement of age and sex categories and their social implications; the structure and values of the kinship system, the status system, the occupational system, and the system of cwnership of rescurces, including the tenure of land. Material from any of these fields of enquiry is likely to have bearing on the understanding of levels of living and on attempts to raise such levels. For example, when nutritional indicators are used to study variations in level of living between different categories of a population, and to seek out the most vulnerable groups, it is essential to know to what extent there are special local patterns which might lead to uneven allocations of food in a family, or between families. Again, the interpretation of data on occupations depends on a knowledge of the structure of the economy and the society. For instance, in studies of "real wages" a question may arise about the position and number of "unpaid family workers", who affect the real income level by their labour without easily calculable return. But such a conception of a person as "unpaid" is a function of an economic structure which treats payment as primarily a regular material transfer of money or goods in very specific conditions, and in which such transfers are basic to the whole functioning of the economy. There are many societies in economically underdeveloped areas in which "payment" is often of a diffuse kind, irregular, not closely proportioned to the value of the service at any given time, and frequently consisting in delayed counter-service or general social support rather than in

money or goods. In such a society the proportion of "unpaid family workers" is often very high, yet to ignore their services would distort the significance of the level of living in so far as it may be interpreted by reference to the "real wages".

- of the important points to be considered in all analyses of a social and cultural type is the transformation of social structures and values of the traditional society by the progressive and rapid introduction of social and economic systems resembling those of the economically more-developed countries. This transformation implies such characteristics as: change to a monetary economy; the institution of a salaried class; the growth of urbanism; the rise of specific institutions for social security. It is necessary, for a proper analysis of levels of living, that the stage or degree of transformation be known.
- 61. The Committee urged that whenever levels of living studies are planned or data from them are being interpreted, all available information on the local social structures and values should be thoroughly reviewed in order that its significance for levels of living may be seen. For longer-range programmes, the Committee recommended that a more sustained and more systematic effort be made to obtain enough social and cultural analyses to give reasonable coverage for those countries where levels of living studies are, or are about to be, undertaken.
- 62. As indicated elsewhere in this report, the Committee emphasized the importance of developing the methods of family living studies, and related studies, to obtain more complete and direct information on the actual levels of living. Such studies depend largely for their adequacy in the planning stage on the definition of the social universe given by the treader social and cultural analyses here discussed.

CHAPTER II - CHCICE (F COMPONENTS AND INDICATOR

Section I - Components of Levels of Living

Classification of Proposed Components

- 63. As indicated above, the Committee came to the conclusion that as a practical matter, in order to measure the level of living, it is necessary to analyse it into specific components which are amenable to quantitative treatment. The subdivision of level of living into components necessarily involves arbitrary classification. The ultimate test of any such classification of components of living must be found in its usefulness for the purpose at hand. Several such classifications of components, or elements of living, have been proposed, some by the United Nations and the specialized agencies.
- 64. In a broad sense one classification of components of living may be derived from the very structure of the United Nations and the specialized agencies. The mere existence of these organizations concerned with various facets of living points up the significance of the specific aspects of life with which they are concerned. For example, the existence of the World Health Organization indicates the importance to the peoples of the world of various aspects of health as an important element in the level of living. the mere existence of the Food and Agriculture Organization, the International Labour Organisation and the United Nations Educational, Scientific and Cultural Organization point to the world wide significance attached to the aspects of life with which these Organizations are concerned. The existence of certain specialized units within the Secretariat of the United Nations itself can also be interpreted as pointing to aspects that are important to take into consideration in any international attempt to analyse the level of living into its components. In proposing a list of components, the Committee was thus mindful of the importance of bearing in mind the structure of the United Nations and the specialized agencies.
- 65. Moreover, it was recognized by the Committee that much of the data required for measurement purposes is actually available through the United Nations and the specialized agencies and is used by these agencies for the determination of policy, the administration of specific programmes, and the measurement of progress in their respective spheres of operation.

- Mations Secretariat had indicated its conception of major sub-divisions in the field of standards or levels of living by the very structure of its Preliminary Report on the World Social Situation, which bears the sub-title "with special reference to standards of living". Specialized agencies of the United Nations have likewise indicated what they regard as important components.
- 67. The United Nations Educational, Scientific and Cultural Organization has emphasized the importance of measurements relating to educational and cultural matters. While recognizing the problems of comparability involved, UNESCO has expressed its interest in paying "full regard to differences of cultures and values as well as to material measurements", and has accordingly indicated that attempts to comprehend levels of living should take into account non-material as well as material indices.
- 68. The International Labour Office has also proposed a list of "major components in the concept of 'standards of living'". This agency arrived at its list of components through the application of the following criteria in the case of each component:
 - (1) its importance in the well-being of the individual according to generally accepted objective norms;
 - (2) how widely its deficiency in relation to "felt" wants constitutes a problem;
 - (3) the extent to which its deficiency could be remedied by human action;
 - (4) its susceptibility to statistical measurement.

^{1/} In a statement by the representative of the United Nations Educational, Scientific and Cultural Organization.

^{2/} In document 11, as listed in Annex II and in the Worker's Standard of Living (Studies and Reports, Series B, No. 30). These points were developed also in an oral statement to the Committee by the ILO representative.

- 69. In the light of these criteria, the International Labour Office has proposed the following as the major components of the level of living:
 - (1) Health
 - (2) Food and nutrition
 - (3) Education
 - (4) Housing
 - (5) Conditions of work
 - (6) Unemployment
 - (7) General levels of consumption
 - (8) Individual security and welfare
- 70. The most extensive listing of components of levels of living emanating from the United Nations or the specialized agencies is that of the Food and Agriculture Organization. While concerned primarily with "elements in rural welfare", it is also apposite to the general level of living. The F/O listing of components follows: $\frac{1}{2}$

Health

- (1) Demographic conditions
- (2) State of physical health
- (3) State of mental health

Levels of Income and Consumption

- (1) Income
- (2) Material standards of consumption
 - (a) diet
 - (b) housing
 - (c) cther
- (3) Savings

Conditions of Work

Literacy and Skills

Social Adjustment

^{1/} Cf. Food and Agriculture Organization: Essentials of Rural Welfare, 1949.

Individual Security

- (1) Security of person
- (2) Security of income
- (3) Security of property
- (4) Emotional security

Beliefs; Customs and Standards of Behaviour

71. Some of these components listed by the FAO are obviously more difficult to measure than others. In fact, no data exist on an international basis for a number of them. This is particularly true of "Social Adjustment", of aspects of "Individual Security" and of "Beliefs, Customs and Standards of Behaviour".

Proposed Components

- 72. In the view of the Committee, the following could be considered as an acceptable international catalogue of the components of the level of living, although the precise connotation of each would to some extent be determined by national attitudes and standards resulting from peculiarities of environmental conditions, cultures, values and economic, political and social organization:
 - 1. Health, including demographic conditions
 - 2. Food and nutrition
 - 3. Education, including literacy and skills
 - 4. Conditions of work
 - 5. Employment situation
 - 6. Aggregate consumption and savings
 - 7. Transportation
 - 8. Housing, including household facilities
 - 9. Clothing
 - 10. Recreation and entertainment
 - 11. Social security
 - 12. Human freedoms

73. These components, for purposes of convenience in writing this report, are arranged roughly in the order in which quantitative data are available for their measurement. The Committee was, of course, mindful that the proposed components do not include all the significant aspects of life which in their entirety properly constitute the level of living. But they do include, in the judgment of the Committee, those aspects of living which are likely to be universally acceptable as significant.

Section II - Indicators

74. In choosing indicators of the levels of living in different countries, the Committee was limited not only by the availability of data, but also by the requirements that the data be expressible in measurable form, and serve the purpose of international comparability. It is well known that there is an immense difference in range and quality of the statistical material now available in different countries in regard to the components of the levels of living. It is not feasible to recommend use of only such material as is now commonly available in the different countries, for the simple reason that, if this were done, it would be almost impossible to say anything about existing levels of living or changes therein. At the same time, it would be unrealistic to expect governments to be able to supply statistical material adequate in range and good enough in quality to give a perfect measure of the level of living. The Committee suggested therefore a compromise which makes some call, involving varying degrees of effort, on the statistical resources of Member countries. The indicators recommended immediately below are those that may be derived primarily from short-range improvements in census statistics and regular governmental administrative statistics, supplemented by sample surveys. Recommendations that concern long-range programmes involving new developments in the use of sample surveys and family living studies for the measurement of levels of living are given in Chapter III below.

- 75. The indicators suggested are listed under each of the components as presented above.
 - 1. Health, including demographic conditions
 - (1) Expectation of life at birth
 - (2) Infant mortality rate (number of deaths of infants under one year of age per 1,000 births per annum)
 - (3) Crude annual death rate (deaths per 1,000 population per annum)
 - (4) Number of hospital beds in relation to the population
 - (5) Number of physicians in relation to the population.
- 76. There is widespread agreement on the importance of health as a component in the level of living. Duration of life and good health seem to be universal values. Moreover, they tend to be highly correlated with other components of the level of living and to be sensitive to their changes. The literature (see forthcoming United Nations study of the <u>Determinants and Consequences of Population Trends</u>) documents the basic relationship between demographic trends and economic and social developments, and also calls attention to the importance of the study of these relationships in assaying economic and social advance, especially in the less-developed areas of the world.
- 77. Although the statistics on health matters and demography on a world-wide basis leave much to be desired, there are some data available for relatively large numbers of countries which can be utilized as indicators of absolute levels and changes in health and length of life.
- 78. The Committee was aware that length of life or mortality rates do not necessarily reflect living conditions as distinguished from the maintenance of life itself. In comparing figures on expectation of life and mortality rates, it must be borne in mind that they are determined not only by general levels of living but also by special medical facilities which may well be provided even in the context of comparatively low levels of living e.g., D.D.T., vaccination, anti-epidemic programmes and the like. A fall in the death rate in a less-developed country, and the reduction of the gap between the death rates of the less-developed and the more-developed countries, will not by themselves be proof of any substantial improvement in other respects in

the levels of living of the less-developed countries. They can, in fact, be harbingers of problems of unemployment and imbalance in population growth in relation to production. In general, however, the high correlation between these indicators and other conditions of living, as well as the intrinsic meaning of the indicators themselves, places them, in the judgment of the Committee, among the best now available for the measurement of differences in levels of living and changes therein.

- 79. With reference to the use of the <u>crude annual death rate</u> as an indicator the Committee was aware of the approximations involved in this index and particularly its dependence on the age distribution of the population. It was, nevertheless, included, because of its rough correlation with general health conditions and its availability for a large number of countries. While specific comparisons should be restricted to countries having roughly similar age structures and accurate statistics, the large gap existing between developed and less-developed countries in this index reflects over-all contrasts in their living conditions.
- 80. The Committee was also aware that, logically, the five indicators given above do not all belong to the same class, the last two being in some sense determinants of the first two. The Committee recognized the limitations of such indicators as hospital beds and medical personnel in that they concern facilities rather than actual utilization. Yet these data are the only kind at present available for any large number of countries and they can be used for indicating, at least in a gross way, the magnitude of medical and hospital resources available to a population.
- 81. The Committee recognized that none of the indicators proposed under this heading represents a direct measure of health. No such direct national or international measures, in fact, exist. At best, what can be anticipated in the present state of knowledge will not be measurements of health but rather of deviations from that state that is, measurements of illnesses or cause-specific mortality. Even these data, however, do not now exist in adequate form in most of the more-developed countries. Such data are sorely needed on a world-wide and regional basis to provide better indications of differences

in levels of living. The Committee endorses the activities of the World Health Organization in its efforts to develop health statistical systems and improve the collection and analysis of more adequate statistical and other evaluation data. Further comments on this subject are given in Chapter III.

- 2. Food and Nutrition
 - (1) National average food supplies in terms of calories \(\frac{1}{2}\) at the "retail level" \(\frac{2}{2}\) compared with estimated calorie requirements.
 - (2) National average food supplies in terms of total proteins at the "retail level". 2/
 - (3) National average food supplies in terms of animal protein at the "retail level".2/

^{1/} It should be pointed out that simple statistics of food availability in terms of calories conceal the essential difference that exists between the quality content represented by the calories in different countries. It is well known that to produce one calorie of a food such as meat, eggs or milk, more than one calorie of food in the form of cereals or vegetable crops is required. The Food and Agriculture Organization in its first World Food Survey gave certain ratios of equivalence between what it termed "original" calories and "derived" calories, the latter referring to the calories represented by the final (non-cooked) form of the food for human consumption such as cereals, milk, meats, eggs etc., the former to the calories represented by the crops whether directly available for human consumption or indirectly through animal feed. As "original" calories indicate gross availability and give a rough measure of differences in quality not revealed by national statistics of derived calories, it may be useful to compute statistics of food availability per consumption unit in terms of "original" calories. It must be added that statistics of "original" calories are also subject to limitations as an indication of potential quality differences, partly because they do not include fish and partly because it is not possible to produce cereals for human consumption in all land under fodder.

Z/ The food balance sheet prepared by the Food and Agriculture Organization starts from data of total food production, trade and movement in stocks; makes deductions for the amounts used for animal feed, seed and non-food purposes; and arrives at the estimated quantity of food and nutrient sugglies available at the "retail level" for human consumption. For further discussion see paragraph 83.

- (4) Description of facilities for education and propaganda in regard to national and economic utilization of food, including nutrition and home economics, also of legislation regarding food and the enforcement machinery thereof.
- 82. A method of assessing energy requirements in calories is now available (see Report of the Committee on Calorie Requirements, Food and Agriculture Organization, June 1950). This method takes into account body weights, the distribution of the population by age and sex and the environmental temperature, and can be considered a rough guide in assessing the adequacy of average calorie consumption levels.
- 83. The average <u>availability</u> of food is, of course, not a direct measure of nutritional <u>intake</u>; neither does it give an indication of the <u>distribution</u> of food within the population. However, it represents a useful indicator considering the presently available data; the possibilities of more direct measurement of food consumption are considered below in Chapter III.

 84. Items 2 and 3 relate to the protein factor in the food component of the levels of living. While it is true that nutrition experts have not yet arrived at standard figures for the requirement of protein of both animal or vegetable origin, it has been demonstrated that protein is essential for growth and life,

and that animal protein is of greater nutritional value than vegetable protein.

Under the circumstances, it is considered useful to include items 2 and 3 in

the list of indicators.

- 85. We have not included any indicators of the elements of vitamins and minerals in the food component, partly because of gaps in nutritional theories of the subject and partly because it is almost impossible under present circumstances to obtain with sufficient accuracy the original data from which such indicators could be derived.
- 86. Information on national food supplies classified by different categories, e.g., cereals, roots, pulses, etc. (cf. Appendix 3 of the second World Food Survey) is published by the Food and Agriculture Organization. Figures are also given on calorie availability and the availability of animal proteins per capita and per adult equivalent. These figures are admittedly subject to great

deficiencies. The Committee was of the opinion that the food balance sheet technique as used by the Food and Agriculture Organization does not, in its present state, provide a completely satisfactory basis for measuring differences in quantity and quality of food consumption.

- 87. Elements of inadequacy in coverage and unreliability in estimates are found in larger or smaller measure in the food statistics of most countries. This is a field where continuing work is necessary on the part of the governments concerned. These indicators are nevertheless proposed partly because the inaccuracy resulting from inadequate coverage and unreliability in estimation is greater for the individual items in the food balance sheet than for the aggregate figures of calories and proteins, and partly because they would give fairly reliable measures of trends, if not of actual levels in the food component. All the same, the Committee warned that, quite apart from environmental and traditional influences which play so great a part in food, the nature of the statistical material that would be used for the indicators is such that they do not present a complete or accurate picture of the international differences in the food component of the level of living. They indicate only broad differences; the larger the difference revealed, the more likely it is that there are real differences in the levels of living. 88. The age composition of populations is an important element in arriving at any valid judgment on the adequacy of food consumption. The Committee undertook to make allowance for this in item 1 by relating food supplies in terms of calories to estimated requirements. As requirements for proteins have not been established, a similar procedure is not possible for items 2 and 3. Nevertheless the Committee suggested that the proportion of children below twelve, and of the age group between twelve and eighteen, be included somewhere in the tables that will contain these indicators.
- 89. The Committee endorsed the activities of the international organizations in their efforts to obtain measurements of available and consumed food and nutrients. There is admittedly much work to be done before these data are completely satisfactory for purposes of international comparison. The Committee therefore recommended that concerted efforts be continued by these organizations to improve and enlarge the scope of data available on food and nutrient consumption. Further consideration of this matter is given below (see Chapter III).

- 3. Education, including literacy and skills 1/
 - (1) Proportion of children 5-14 years of age attending or enrolled in schools.
 - (2) Attendance or enrolment in post-primary schools as proportion of children 5-14 in primary schools; and as proportion of population.
 - (3) Number of primary schools (and school rooms) per 100,000 of population in 5-14 year age group.
 - (4) Pupils per teacher in primary schools.
 - (5) Percentage of population literate above some appropriate age, total and by sex.
 - (6) Number of students enrolled in technical institutions of all kinds per 100,000 population.
 - (7) Daily newspaper circulation per 1000 inhabitants.
 - (8) Books (titles) published per 100,000 persons per year.
- 90. The Committee was unanimous in its judgment that every effort should be made to obtain measurements or some satisfactory treatment of the non-material as well as the material aspects of living. The difficult and practically impossible

I/ In a communication received after the preparation of this report, UNESCO has expressed the opinion that there is sufficient information now available to permit use, as an indicator, of the "median number of years of formal schooling completed by population 25 years and over"; and has questioned the comparability of data for the 2nd, 3rd and 6th indicators listed above. The proposed revision suggested by UNESCO is as follows:

⁽a) Proportion of children 5-14 years of age attending or enrolled in schools;

⁽b) Pupils per teacher in primary schools;

⁽c) Percentage of population literate, 15 years of age and over, total and by sex;

⁽d) Median number of years of formal schooling completed by population 25 years old and over, total and by sex;

⁽e) Daily newspaper circulation per 1000 inhabitants;

⁽f) Books (titles) published per year per 100,000 inhabitants.

character of this problem has already been alluded to above (see paragraphs 11, 12 and 63). There are, however, a few points on which it is possible to obtain indicators in this realm of life. School attendance or enrolment and literacy data are - partly as a result of the activities of the United Nations and the United Nations Educational, Scientific and Cultural Organization - available for a relatively large number of countries and territories and do provide some indication of differences in the ability of peoples to participate, in a kroad sense, in various forms of cultural activities. Moreover, literacy in itself may be a direct indicator of the level at which individuals are able to live, in a non-material sense.

- 91. Items 1 to 4 and 6 really describe the facilities or the determinants of the education component of the levels of living, while item 5 attempts to measure one element of the component itself. Items 7 and 8 are also measures of facilities rather than utilization. They do not in any way convey information on the content of the communication. Despite this limitation, the Committee believed that they do, to some extent, indicate the resources available to populations for participation in various non-material aspects of living. The Committee endorsed and recommended the continuation of the efforts of the international organizations to improve the types of data available throughout the world on education and media of communication.
- 92. Items 3 and 4 were considered to give some indication of quality in the facilities furnished by member nations for education and literacy. A separate indicator of university and higher education was left out, not because the Committee did not recognize its importance as an element in the education component, but because of problems of the data and their interpretation. Similar limitations apply to the statistics of periodicals, libraries, museums and the like. It may be objected that item 6 also suffers from the same limitations. Nevertheless, the Committee included it as an indicator because of the immense importance of technical skills, whether of a lower or a higher category, in the determination of the efficient working of a modern society and therefore of the levels of living; the Committee was also influenced by the fact that increasingly and in significantly large parts of the world, systematic training is becoming an essential basis of technical skills, and constitutes one of the important means for the promotion of economic and social development.

93. The Committee was aware of the serious limitations of the indicators dealt with in this section, both for reason of what they include and for reason of what To begin with, it is a moot point whether education itself should they exclude. be regarded as a component of the level of living; while the connotation of the word differs from place to place and country to country and even in the same place and at the same time. Most of the indicators suggested relate chiefly to the achievement of literacy, which is but one, though perhaps an essential, element in the education component. Even in regard to literacy, there is the important question of the utilization of schooling, as well as of the wastage that takes place in the number of students dropping out before their education is really It is doubtful if these problems can be taken care of in international comparisons of a statistical character, but the Committee recommended the use of indicators on these matters for national analyses. Committee also urged that from time to time specialized studies in this connexion be undertaken to improve the interpretation of the international indicators.

- 4. Conditions of Work:
 - Hours of work per week.
 - (2) Wages per week of industrial workers.
 - (3) Real wages of industrial workers.
 - (4) Normal hours of work per week as laid down by law or by collective agreements for workers in industry.
 - (5) Number of paid holidays per year in industry.
 - (6) Minimum age of eligibility for employment.
- 94. Important as are the various aspects of conditions of work in the level of living of the populations of the world, the data available for their measurement and evaluation are exceedingly scanty and deficient. While the interpretation of any one of the items proposed is necessarily ambiguous, the Committee felt that the complex of items taken together may, especially with the passage of time, help to throw some light on this difficult problem.

- 95. Information on hours of work and on remuneration, are certainly important indicators of levels of living. Yet such information is available in the main only for industrial workers who form but a small proportion of the total active population of the world, and even for the industrial workers the information is spotty, deficient and in many respects non-comparable.
- 96. International comparisons of wages or real wages can be made only with the greatest qualifications (see paragraphs 28 and 34). Serious technical problems exist in respect of the translation of wages into real wages that are truly comparable. Some meaningful comparison, however, is possible in rates of change in wages and real wages, and analysis of differences in rates of change, in the context of other information which is available, may be helpful in attempts to assay differences in this important component of living. should be noted that from one point of view wages are not, in the proper sense of the word, a component of the level of living, as wages are used for acquiring most of the other material factors mentioned in this section. Similarly, the data on hours of work must be interpreted with considerable Decreasing hours of work may, on the one hand, mean increased leisure for workers, put on the other hand, it may also reflect underemployment. Comparisons in hours of work must always be made in the context of a general description of the state of the economy.
- 97. The Committee recommended that data on hours of work, wages and real wages be published for the purpose of international comparisons only with the necessary qualifications and explanations, and as applying to specific industrial populations or portions thereof.
- 98. In addition to the indicators listed, it would be highly desirable in the assessment of levels of living to have information of a descriptive and qualitative character that would throw light on the general conditions of work in the various countries. For example, such information should include data on the state of organization of labour, collective bargaining, legal and

administrative restrictions and safeguards, and adherence to International Labour Organisation conventions and agreements and the state of their implementation.

5. Employment Situation

- (1) Proportion of total population in "economically active population" by sex.
- (2) Proportion of persons under 20 years of age in economically active population.
- (3) Proportion of persons 65 years of age and over in economically active population.
- (4) Proportion of economically active population unemployed.
- (5) Percentage distribution of economically active population by status, i.e., employees, employers and workers on own account, and unpaid family workers.
- (6) Percentage distribution of economically active population by principal industrial and occupational categories.
- 99. The employment situation is one of the most difficult of the components from the point of view of getting meaningful and internationally comparable indicators. The main reason for this is the fact that the major portion of the workers of the world, especially in the under-developed regions, are not employees working for wages or salaries but persons who are self-employed and whose economic problem therefore is under-employment and low earnings rather than unemployment and low wages.
- 100. The degree of under-employment is a basic fact which governs the level of living of the majority of workers in the under-developed areas; and yet under-employment, is the one field in which even national studies are not available to any significant extent, let alone statistical computations suitable for international studies. The Committee therefore, was unable to suggest any indicators in regard to under-employment, although some idea of the magnitude of the problem, as well as of changes therein, could be obtained from comparative statistics on the average number of days of work for workers in the different occupational categories and the disparities in their per capita levels of annual earnings. Further discussion of steps to be taken to improve data on under-employment is contained in Chapter III.

101. While the interpretation of any one of the items proposed as indicators above is difficult, the Committee felt that the items, taken together, may be meaningful. In this connexion, it should be observed that there is some inverse correlation between the proportions of persons 65 years of age and over, or under 20 who are economically active on the one hand, and the general level of economic and social development, on the other, there is a similar, although more complicated correlation between the proportion of women in the active population and the economic and social level. These relationships, however, have different meanings for industrial and agricultural economies respectively.

102. Item 4 on unemployment is admittedly of doubtful value as an international indicator of differences in the employment component of the It was judged desirable to have this indicator, not only levels of living. because most developed countries have unemployment statistics, but also because many of the less-developed countries which are undertaking programmes of industrialization or of planned economic development have also started employment exchanges and have begun to maintain statistics of unemployed. This, for example, is true of India. The Committee, therefore, included this indicator; but added the warning that it is subject to serious limitations. It does not deal with the problem of under-employment which, as mentioned above, is the more important aspect in the under developed countries. Where it deals with unemployment proper, the statistics are often inadequate. In any case they relate more specifically to the organized sector of the economy and to the urban section of the population rather than to all workers. 103. Items 5 and 6 provide important background indications of the occupational structure of the active population and may have special significance when analysed in respect to changes over time.

- 6. Aggregate Consumption and Savings
 - (1) Proportion of national income spent on food.
 - (2) Proportion of public expenditure spent on social services. $\frac{1}{2}$

Social services as understood here include education, health services, social security, public assistance and special welfare services whether in the form of current expenditure, capital formation or transfer payments.

- (3) Public expenditure on social services as a proportion of national income.
- (4) Index of, and rate of change of, "personal consumption" per capita.
- (5) "Personal consumption" as a proportion of national income and index of changes therein.
- (6) Index of, and rate of change of, investment and savings per capita.
- (7) Investment and savings as a proportion of national income and index of changes therein.

104. The Committee was cognizant of the limitations of national income data for purposes of measuring differences in levels of living (see paragraphs 130 - 133 below). Total national income and per capita national income do not actually provide an appropriate measure of the level of living of the whole population of a country, and even less of various population sub-groupings. Income figures, moreover - at least in their present state - badly distort comparisons of relatively advanced countries and the less-developed countries whose economies operate primarily on a non-monetary or subsistence basis. Nevertheless, national income figures do represent the best measurement yet devised of the total product or expenditures of a country and in this sense indicate, in a general way, the goods and services available for consumption in relation to the total population.

105. Aggregate consumption figures can be calculated in terms of current prices or in terms of "constant prices." The limitations of money comparisons of aggregate consumption expenditure as an indicator of the absolute levels of living are obvious. To be useful for studies of changes in levels of living, these aggregates and their components should be calculated as index numbers expressed in prices of a chosen base year. 1

^{1/} It is not necessary for the purposes of this report to enter upon a discussion of the construction of this index number, the use of chain indexes or other more complicated index number formulae.

It is a fact, however, that one index of the growth of a level of living is apt to be a diminution of the proportion of total consumption expenditure which is In this respect a caution is necessary, however, in that decreasing proportion of income spent on food cannot always be interpreted as indicating rising levels of living for the various income groupings of a It is also a fact that in addition to consumption effected through private expenditure there is a considerable volume of consumption through public expenditure. These facts explain inclusion of items 1 to 3. 106. Items 4 and 5 may be particularly significant indicators in that they would combine both public and private expenditures for "personal consumption." This sub-total of national income would exclude expenditures for military establishment and like expenditures which are not interpreted as adding to the level of living of a population. (If military expenditures are interpreted to contribute to security, they should in any case be shown separately.) 107. Items 6 and 7 are proposed as indicators to provide some basis for measuring the extent to which a country is in fact contributing to the advancement of its future level of living.

108. There is need for special attention to the problems of effecting better international comparability in total or per capita national income data and components thereof. The Committee recommended that the present efforts of the United Nations to improve national income data not only be continued but also be expanded because of the basic importance of these data in the appraisal of differences in levels of living (as is further indicated below, paragraphs 130 - 136). The Committee also stressed the fact that comparisons of changes in national income figures expressed in constant prices for individual countries may provide a better basis for international comparison than the absolute or per capita figures themselves. Comparisons of change avoid, among other things, the difficult technical problems involved in converting national income data into common monetary units. At the same time, it was recognized that comparisons of this type are more meaningful for economies undergoing the

same type of development; different factors, such as the volume of industrial production and the volume of agricultural production, may by their very nature change at different rates under modern conditions.

7. Transportation

- (1) Kilometres of railways per 100 square kilometres of area.
- (2) Number of passenger kilometres per year per 100,000 population.
- (3) Freight ton-kilometres per year per 100,000 population.
- (4) Kilometres of roads separately for metaled and non-metaled roads per 100 square kilometres of area.
- (5) Number of vehicles, power-driven (separately for trucks and cars), and animal-driven per 100,000 of population.
- (6) Number of air passenger-kilometres per 100,000 of population. 109. Statistics should easily be available on items 1, 2, 3, and 6 of the indicators listed above, while part of the data under items 4 and 5 may be more difficult to get.
- 110. The indicators above have been selected to show not only the existence of the basic facilities relating to this component in the level of living but also, to some extent, the degree of their utilization. It must be added that differences in transport facilities do not necessarily indicate comparative differences in the level of living, as much will depend upon the nature of the country's geography and its economic organization. But there is no doubt that transport is an important component in the level of living not only because of the influence it exerts on the nature and extent of the utilization of the country's resources but also because of the extent to which it facilitates individual mobility and enables a more thorough utilization of the other components in the level of living. Moreover, development of transport forms one of the most important items in the programmes of economic development which are being undertaken by the under-developed countries. Hence, the Committee's inclusion of this item among the components, and its listing of indicators thereof, even though transportation does not figure as a separate rubric either

in the International Labour Office's or the Food and Agriculture Organization's list of components. The indicators given above, however, are subject to the limitation that they do not include all forms of transport facilities, notably those by water or the more personal ones such as bicycles, horses, mules, camels, etc. All the same, they do include most of the modern and post-industrial forms of transport; and differences revealed by these indicators would represent in most cases significant differences in this component and therefore in the level of living itself.

- 111. The Committee was aware of still another limitation of transport indicators, namely, the extent to which they represent items of cost in advancing other components of levels of living. An example of this is afforded by the debatable question of whether the construction of a subway system may be taken as representing an increase in the level of living or an item of cost of living in an urban environment.
 - 8. Housing, including household facilities
- 112. Housing is an important component in the level of living and yet it is a field in which comparatively little statistical work has been done - at least work that can be used for international comparisons. Very few data are available in less-developed countries, except - in some cases - data on the number of dwelling units, collected during the decennial census of population. One great difficulty is the definition of a house. A house may consist only of rooms or it may include enclosed open spaces; it may involve only accommodation for human beings, or (as in a number of countries) also provide for domestic animals including cattle. It may be made of bricks or earth or cement or even of thatched material. It may or may not use iron or glass or even And in regard to the shape and form of the house, there is such a diversity of national or even sub-national factors involved such as environment, climate, availability of building material, kinship system, composition of family, and various local traditions and values, that it would seem almost impossible to devise any indicators that could give even a partial measure of the housing component in the levels of living even within a country,

let alone for purposes of international comparison. Some indicators of determinants of housing (e.g., measurement of production of building materials) are meaningful for national purposes and are already in use in a number of countries; but the Committee could think of no suitable available indicator that can give even a partially meaningful idea of housing as an internationally comparable component in the level of living.

- 1.3. Moreover, the house means more than space, light and air. It should have facilities like water, drainage and lighting, not to speak of other more modern conveniences such as refrigeration, heating and air-conditioning. There is also the question of furniture. Some may even regard the availability of public transport as an element in the component of housing. Certain housing or community facilities are provided by public authorities.
- 114. The Committee was compelled to the negative conclusion that no international indicator of housing is possible in the light of existing The subject, however, in the opinion of the Committee, is too important to be left as it is; comparisons of levels of living lose much meaning when they do not include housing. The Committee, therefore, welcomed the fact that the United Nations, its Regional Commissions and the interested srecialized agencies are carrying out studies in this field. It is not only statistics that are wanted; what is even more important is a discussion of concepts and definitions, and analysis of the universal and the local elements The Committee trusted that as a result of the studies now under rrogress it would become possible at some future date for indicators on housing to be included in United Nations studies of levels of living. Meanwhile, the Committee suggested that it would be useful if Member Governments could send periodic reports to the United Nations conveying their own appreciation of the state of housing in their country and the changes therein, together with such supporting materials as they can conveniently furnish to an international authority.
- 115. More specific suggestions in respect to the development of indicators for levels of housing are presented in Chapter III (needed improvements in the measurement of levels of living).

9. Clothing

116. Indicators of the clothing component in the level of living are subject to great limitations in international comparisons. It is, of course, possible to suggest some indicators, such as the availability per capita of different kinds of cloth, but these will not cover more than a certain proportion of the entire clothing complex. Moreover, the adequacy of clothing as an element in the level of living is significantly affected by climate, occupation, tradition and social status. Comparability in these items is also affected by variations in quality and in the width of cloth and in the weight of the textiles. Another limitation lies in the fact that in many of the less-developed countries where hand looms are important, statistics may not include much of the textile output produced for self-use. In addition, statistics are not commonly available for such allied items as footwear and headwear and, even when available, they too are subject to the limitations inherent in differences in climate, environment, culture, etc. Under the circumstances, it is not possible to recommend at this stage indicators of this component that can be used for international comparison.

117. It is, however, desirable that statements on the level of living should include available data in this field and be supplemented by descriptive materials to permit their interpretation in the context of national or local cultures.

10. Recreation and Entertainment

118. The difficulty of measurement in the case of this component is due to the differences that prevail in different countries in regard to forms of recreation and entertainment, and the virtual impossibility of getting internationally comparable data on the older and more traditional forms. Above all, that element in recreation and entertainment that arises from family and personal relationships and constitutes a rich region in the levels of living all over the world is not measurable by any available indicator.

119. It is nevertheless possible to use certain indicators of the more modern forms of recreation and entertainment, such as the number of cinema seats, theatre seats and radio sets per 100,000 of population. These, however, are of limited significance; museums, art galleries, concerts, dance halls, etc., are also part of the pattern. As regards the non-Western part of the world, they would give a very inadequate and possibly misleading picture of the level of this component. The Committee recommended therefore that efforts be made to obtain descriptive materials on the possible items under this head, including data on such items as cinemas, theatres, radio sets, public parks and playgrounds, eating houses and restaurants, community centres, folk forms of recreation, and other types of both formal and informal means of recreation and entertainment.

11. Social Security

120. Statistics are available on such types of social security as unemployment insurance, health insurance, family allowances, old-age pensions, etc. for a number of the industrially more advanced countries. The International Labour Office in an international survey has given data for forty-five countries. Health many countries do not have such types of social security; at the same time, most of them possess social systems that provide an indigenous version of some of the advantages represented by the modern varieties of social insurance. All the same, technological change is gradually becoming a universal phenomenon, and the transformations it is causing in social organization and in social and political relationships are increasingly throwing into the open needs of a kind that fall within the range of social security. Moreover, the existence of the International Labour Organisation and the influence of its activities on

Besides the figures on participants, beneficiaries, receipts and expenditures for certain types of social security schemes for some 45 countries which are published annually in the Yearbook of Labour Statistics, the International Labour Review for June 1952 and March 1953 contained the results of a survey of costs of social security for 24 countries covering a scmewhat broader concept of social security, including all types of public retirement programmes, disability pensions, public assistance, etc.

levels of national consciousness as well as on governmental policy are such as to encourage the demand for social security as a necessary component in a desirable level of living. The comparative extent of the institution of schemes of social security does reveal real differences in the levels of living especially in regard to workers in factories in different countries. It would be useful, therefore, if Member Governments could send to the United Nations periodic reports on their own appreciation of the nature of the social changes that are taking place in their countries as a result of the implementation of their development programmes, with particular reference to the needs that are thrown up thereby in the field of social security. Moreover, it would be desirable for such descriptive accounts to include reference to provisions for social security of special significance nationally, such as, for example, family allowances. The Committee felt it would also be useful if special international studies of a comparative character were made in this respect.

12. Human Freedoms

- 121. Possession of rights with facilities for their implementation under the law forms an important part of the non-material aspect of the level of living. Recognition of these rights of the individual (accompanied, of course, by his acceptance of the corresponding obligations) is in fact an important index of a rise in the level of living in its most comprehensive sense. The Universal Declaration of Human Rights, which was adopted unanimously by the General Assembly, testifies to the importance attached to this component. Some of the rights mentioned therein are capable of expression in material terms and have found recognition in indicators already listed. Others, however, are more imponderable in nature and defy quantitative expression or statistical measurement, and these may well be regarded by some as the more important of the factors that make life meaningful and worth living.
- 122. The Committee was unable to find indicators that would give any useful comparative idea of the implementation of the many rightsincluded in the Universal Declaration; that omission constitutes a serious limitation on the interpretation that can be made on the basis of the indicators actually

recommended. On the other hand, certain types of data are available which throw some light on this problem. It is possible, for example, to determine the extent to which equality of women is provided for in legislation in connexion with voting, inheritance and ownership, marriage and divorce, etc.; data are also available on participation of women in various types of occupations requiring higher education or skills, etc. Because of the nature of the problem, the Committee did not suggest that special comparative studies should be conducted in this field by the United Nations Secretariat unless it is specifically requested to do so by the Member Governments concerned or by special resolution of international bodies having jurisdiction in this field.

Section III - Inadequacies of Indicators

- 123. The Committee was quite aware that the indicators presented above by no means represent an adequate or satisfactory basis for comparisons of levels of living of the different peoples of the world. Yet, in the judgment of the Committee, they not only represent virtually all the types of comparison of some significance that can be made with available data for any large number of countries, but actually, in a number of instances, involve data subject to great qualification. While realizing the inadequacies of the materials presently at hand, the Committee nevertheless felt that comparisons effected by means of the indicators listed above would at least serve as a first step towards the attainment of the highly desirable objective set forth in the resolutions of the General Assembly and the Economic and Social Council.
- 124. It should be realized that a number of the indicators listed do not directly afford a simple scale according to which high (or low) values necessarily imply high levels of living and vice-versa.
 - (1) Some of the indicators cannot be considered separately, e.g., the transportation indicators must be considered an an entity. A relatively low railway mileage may be compensated by a relatively high number of motor cars, etc.

- (2) In some cases, it is not even obvious which end of the scale should be considered as representing the higher level of living. For instance, this is true of several of the indicators mentioned under the heading "Employment Situation"; such indicators have more the character of necessary background data.
- (3) With respect to many of the indicators, an unrestricted high
 (or low) value cannot be considered desirable. Thus, the concept of
 the optimum must enter into the picture in the case of indicators
 concerned with food intake, number of working hours per week, per cent
 of the population enrolled in technical institutions, etc.
- 125. In addition, the Committee stressed that the publication and the analysis of the indicators proposed above should be supplemented by at least the two following types of background materials.
 - (1) General background information of a quantitative character as available for the various countries of the world.
 - (2) Various <u>qualitative</u> descriptions of general conditions relating to the level of living and of the situation in respect to each of the components and elements of living as available for the various countries.
- 126. In the first category, (e.g., statistics on geographic and climatic conditions, population, production of various specific goods) many types of statistics are available in varying degree and quality for the countries of the world in the yearbooks of the United Nations and the specialized agencies, or in the publications of individual countries. Such information is to some extent already available on a comparable basis, and more data and improved comparability can be expected as the results of the censuses taken in or around 1950 are published.
- 127. The Committee did not have the time available to deal in concrete form with the various individual types of statistics that could be used for such purposes and for general background purposes.

128. Many data of this type (e.g., production of specific local goods number of refrigerators per capita, proportion of population suffering from specific local diseases like malaria), even though they do not lend themselves readily to international comparisons may be, in fact, valuable indicators of changes in levels of living within individual countries. The Committee recommended that the United Nations and the specialized agencies utilize such additional statistics where appropriate to provide a better picture of changes in the levels Indicators of this local nature will of living within individual countries. necessarily vary from place to place and time to time. 129. In respect to the qualitative materials that may provide background information for the analysis of levels of living, attention is called to the discussion of social and cultural analyses above (paragraphs 57 - 62). Committee noted that qualitative materials are often based on ad hoc investigations and restricted to relatively small parts of the total population. Despite the fact that such studies may thus have serious deficiencies in respect of the representativeness of the data and may be impressionistic in character, they nevertheless may aid materially in providing a context in which to interpret

I. Synthesis of Indicators

the indicators which are used.

130. It would be obviously desirable if the numerous separate indicators of the different components or elements of the level of living could be synthesized in such a manner as to present a single picture of the whole. In the opinion of the Committee, however, there is no satisfactory method at present of statistically combining existing indicators of health, education, employment, etc. into a single comprehensive indicator. The totality of resources annually available to the community would, however, in some sense be a relatively comprehensive indicator of the determinants of the level of living as a whole. Such a totality of annual resources may be expressed in terms of a single monetary figure representing the national income of the country.

131. The national income, however, is itself a concept not completely free from ambiguity even when viewed in a purely national context. purposes of international comparison, it is subject to a number of grave limitations. Apart from questions of national cultures and values that determine and accompany the figures of national money income, there is the important fact that the official rates of exchange, at which the national incomes expressed in different currencies are reduced to the same currency unit, do not represent in most cases what may be called their purchasing power parities. Thus, for example, a dollar would purchase in the USA a much smaller quantity of most goods and services than could be purchased in India by 4.75 rupees, which is the official value of the dollar; and this is true not only of the American dollar in terms of the Indian rupee but to a certain extent even of the American dollar in terms of the British pound. Disparities between the official ratios of exchange and the purchasing power parities are such that it is almost meaningless to convert the national incomes of different countries at the official rates of exchange for purposes of international comparison. the publication by the United Nations of statistics of national incomes of different countries expressed in terms of the dollar has led to somewhat distorted inferences regarding the differences in levels of living in different parts of the world. It is essential, therefore, that, at least for purposes of comparisons of national income, rates of exchange should be computed on the basis of purchasing power parities. The calculation of such rates of exchange, however, involves a number of problems not only statistical but also Which items should be included in the calculation of purchasing power parities, what weights should be given to the items included and what should be done with the items that do not appear in one country or the other but yet constitute an important subject of national expenditure - these are problems that are exceedingly difficult even when it is a question of calculating purchasing power parities of two countries. When one seeks to

devise purchasing power parity ratios for a number of countries, the problem becomes even more difficult. The whole question of the correction of the official rates of exchange in the light of purchasing power parity differences is one that needs to be studied at the international level. In the meanwhile, the Committee suggested that if the Secretariat of the United Nations should resume the publication of national income and per capita income figures expressed in a single currency, the tables should be annotated to explain the method of calculation used and particularly the extent to which the exchange rates used represent the purchasing powers of the currencies concerned. The Committee also suggested that the national income figures of different countries be given in terms of national currencies and that they be accompanied by tables of comparative prices in terms of the national currencies of a few basic commodities and services for which it is possible to apply a fairly acceptable standard definition. 132. Use of national income data for purposes of international comparisons also involves difficulties of lack of uniformity in computation, especially in regard to commodities and services that do not enter into the monetary economy. This, however, is a matter which is being attended to by the United Nations, whose Statistical Office has been conducting inquiries into the whole subject of definitions and methods of computing national incomes and whose efforts are leading to an increasing measure of standardization in the computation of national income data in different countries. 133. Another difficulty in regard to the use of national income figures for purposes of comparison is the fact that they do not reveal the distribution of income within the country and therefore the actual availability of total resources for different sections of the population. The pattern of income distribution differs not only as between developed and underdeveloped countries, but even within these groups of countries. Moreover, it is not merely the total national income that affects the level of living; it is also the manner of its utilization as between consumption and savings, and as

between different items within the consumption budget.

134. If it is not possible, in the absence of adequate indicators of purchasing power parity rations, to use national income figures for purposes of international comparison, it follows that it is not possible to use one single index, namely, per capita national income, as a synthetic indicator of differences in comparative levels of living. This conclusion is also reinforced by the other considerations mentioned in the two preceding Under the circumstances, the Committee suggested that, in order paragraphs. to give some comparative indication of the total resources available to the community, it would be more convenient to use certain macro-economic data which are related to the national income, rather than the national or per capita income itself. 1/ They comprise a number of items, which have to be taken together in order to make more meaningful the use of this series as a synthetic indicator. In so far as they consist of a number of items, it is perhaps terminologically incorrect to describe them as a synethetic indicator; but they have been given that title in view of the fact that they do perform the function, when taken together, of indicating the complex of economic resources affecting the level of living as a whole.

- 135. The following items may be considered to fall under this group:
 - (1) Percentage of the national income spent on the basic needs of life, namely, food, clothing, shelter and fuel;
 - (2) Percentage of national income saved;
 - (3) Cultivated area per 100,000 population;
 - (4) Productivity per hectare of main crops;
 - (5) Output of food in calories per person occupied in agriculture;
 - (6) Output of electric power per 100,000 of population;
 - (7) Output plus import of steel per 100,000 of population;
 - (8) Output plus import of coal per 100,000 of population.

In the case of <u>national</u> studies of the level of living, per capita national income figures in constant prices do constitute a most important single indicator of changes in the level of living; and the Committee did not in any way wish to minimize the importance of continuing national income studies.

136. It is not enough to have some idea of the actual resources available to a community: it is at least equally important to know whether the rate at which available resources increase is keeping pace with, lagging behind, or going ahead of the growth of the population. A comparison of the growth of production of significant commodities and services with the growth of population would give a good comparative index of the changes that are taking place in the levels of living in different parts of the world. The Committee. therefore, suggested as a second synthetic indicator, the ratio of the index of change in national income or its elements to the index of change in population (which equals the index of change in per capita national income). In the case of this indicator, while it would be useful to have the figures of the index of change of selected key commodities and services in the economy, it would also be legitimate to use the figures of total national income, since the comparisons would not be in terms of the money values of national income but the index of national income in relation to that of population. 137. The two synthetic indicators thus far suggested are, in a sense, measures of the availability of total resources and the growth thereof which may be said to be determinant of the levels of living in a broad sense. There is a third possible synthetic indicator - which has already been mentioned under the component "Health" (paragraphs 76-81). It is non-monetary and represents more than anything else the resultant of a given level of living; this is the average expectation of life at different ages. of the individual's life is not only a result of such factors as medical services, food, clothing, housing and fuel, but also takes into account such other factors as education, security, moral and spiritual values and the desire for living. Of all the needs and values relating to levels of living, the most universal, both historically and culturally, is the desire for life itself, the fulfillment of which may be expressed by expectation of life at different ages. It may, however, not be possible in the context of available data to get figures in this respect every year and for every country.

Moreover, as an indication of trends, annual figures of this kind are of somewhat doubtful value. Changes in the pattern of age composition should give some indication of changes in the average years of life completed. The Committee recommended that a careful study should be made on a sample basis at the time of each decennial census into the age composition of the population. It must be noted in general that as a synthetic indicator, the state of longevity or the average expectation of life at different ages needs to be supplemented by data indicating the state of physical and mental health of a population; as pointed out in paragraph 78, the lengthening of life by modern medical techniques does not necessarily imply improvement of living in other respects. 138. In conclusion, it must be stressed that it is not possible to have one unified or single index that could be used to compare existing levels of living either in space for different countries or even in time for the same country, although certain synthetic indicators of determinants and consequents of the level of living may be useful. The level of living is a composite concept involving a pattern of quantities and relationships, and its totality cannot be derived merely by summing up the constituent items. It is perhaps impossible to arrive at anything like a complete picture of the level of living or achieve complete comparisons of levels of living. But it is possible to get near enough to an understanding to make meaningful a certain measure of comparison. The indicators we have listed in this section and in the previous section will, in the opinion of the Committee, be useful in this connexion. More useful, however, will be the approach suggested in Chapter III of this report, namely the institution of family living studies in different countries at periodic intervals on the basis of sample surveys which would give a more direct and a more complete picture and thus enable a more meaningful comparison of changes over time and over space.

II. Priorities of Indicators

139. The indicators listed to this point are rather numerous and many will not be available for a number of countries for some time to come. The Committee, therefore, gave some consideration to priorities of the indicators, and proposed that the highest priority be given, in the utilization and development of data for comparing levels of living, to the indicators listed below.

- (1) Expectation of life at birth.
- (2) Infant mortality rate.
- (3) National average food supplies in terms of calories at the "retail level" compared with estimated calorie requirements.
- (4) Proportion of children 5-14 years of age enrolled in schools.
- (5) Percentage of population literate, above some appropriate age, total and by sex.
- (6) Proportion of economically active population unemployed.
- (7) Percentage distribution of economically active population by principal industrial and occupational categories.
- (8) "Personal consumption" as a proportion of national income and index of changes therein.

In addition to the above, the Committee placed a similar priority on the three synthetic indicators, namely,

- (9) The items listed under "national income data".
- (10) The ratio of the index of change in national income (in constant prices) to the index of change in population (equals index of change in per capita national income).
- (11) Average expectation of life (at birth and at various ages).

CHAPTER III - NEEDED IMPROVEMENTS IN THE MEASUREMENT OF LEVELS OF LIVING

140. Considering the gaps and deficiencies in present data, the Committee indicated the spheres in which, in its judgment, it is most important to take the next steps to improve the quality of available indicators and to expand their range and scope.

Section I - Methods of Improvement

Strengthening of Statistical Systems

- 141. The improvement of present indicators of levels of living and the development of new indicators will depend in general upon three broad sources: first, the strengthening of statistical systems, especially in the less-developed areas of the world; second, the design and tabulation of special analytical tables from the censuses taken in and around 1950; third, and of the greatest potential importance, the utilization of special purpose and multi-purpose sample surveys.
- 142. Certainly in no country in the world today are statistics collected and compiled in an entirely satisfactory manner for purposes of measuring the level of living or changes therein. Even in the more-developed countries the statistics currently compiled have in the main not been designed for the express purpose of measuring levels of living and are generally not as well adapted as they might be for international studies. The problem is, of course much more acute in the less-developed areas. In many such areas only rudimentary statistical systems are to be found and a satisfactory statistical output cannot be expected until competent statistical personnel are trained and adequate provision made in budget and other facilities for statistical work.

 143. Progress has been made in recent years in the development of statistical systems in the less-developed areas with the aid of the technical assistance programmes of the United Nations and the specialized agencies and other programmes.

The Committee recommended that the Secretariat of the United Nations and the specialized agencies continue and, if possible, expand their efforts to develop strong statistical centres, uniform methods and procedures, and trained personnel, through the various technical assistance projects requested by Member Governments. The Committee further recommended that in the development of statistical work special attention be devoted to the strengthening of the data which can best serve the purposes of indicating differences and changes in levels of living.

144. The Committee recommended also that special attention be paid to the systematization and refinement of statistics collected by governments as part of their ordinary routine for informing themselves of the workings of their administrative machine. Although these often do not bear at all directly on the study of levels of living, they frequently furnish important background material.

II. Special Census Tabulations

145. Some eighty countries with the encouragement of the United Nations and the specialized agencies conducted censuses in and around 1950. These censuses vary considerably in scope, range, quality and degree of completeness. To a greater extent than ever before, however, the censuses have followed the minimum list of subjects and the uniform definitions and procedures proposed by the United Nations and the specialized agencies and by the Inter-American Statistical Institute and other groups.

146. In most countries of the world the major task in respect to these censuses is still the completion of the processing of the data and the publication of the basic statistics desired. Many of the standard tabulations, and additional tabulations designed by individual countries, were not planned primarily for measuring levels of living. Although all of the censuses will undoubtedly provide valuable background information for this purpose, it is possible that it many cases pertinent and significant information relating to levels of living could be obtained from special cross-tabulations of the data.

The Committee recommended therefore that the Secretariat of the United Nations and the specialized agencies concerned review the materials available in the various censuses with the special purpose of designing and proposing tabulations and cross-tabulations that would maximize information available for individual countries on levels of living and also permit international comparisons.

III. Sample Surveys

147. During the last fifteen years important developments have occurred in the theory and practice of sampling human populations. In consequence, it is possible to use sample survey methods to obtain a wide variety of data for a nation as a whole or for various population groupings with great efficiency and with relatively low costs. Many of the deficiencies in present indicators of levels of living and a considerable portion of the new types of data desired can most effectively be obtained through sample surveys designed in accordance with modern principles of sampling theory and practice.

148. To meet the needs for data for measuring levels of living, it is desirable to plan sample surveys of two types:

- (1) the special purpose survey; and
- (2) the multi-purpose survey.

The special purpose survey may be defined as an investigation focussing on a single set of objectives which because of their complexity or scope cannot readily be incorporated into a single general study. An example of this type is afforded by a nutrition survey on a consumer expenditure survey. The multi-purpose sample survey is one designed to obtain a wide range of data on a number of relatively simple items. Examples of this type are the continuing sample survey of the United States Bureau of the Census which produces the "Current Population Reports", and the multi-purpose sample survey now in operation in India.

- 149. The Committee could not stress too strongly the importance of using sample survey methods to fill in gaps in the data required for analysis of levels and changes of levels of living. To this end the Committee recommended that the Secretariats of the United Nations and the specialized agencies concerned co-operate in the design of standard and uniform sample surveys to obtain better indicators of levels of living; and that the joint secretariats make the results of such investigations available to member countries and give priority to meeting the requests for technical assistance for the conduct of such surveys. The development of an organization and personnel competent to conduct sample surveys, in the judgment of the Committee, is of the highest priority, and merits the concerted attention of Member Governments.

 150. The types of improvement in data and indicators which, in the judgment of the Committee, should be considered as short-run objectives are presented below under the following headings:
 - (1) Needed improvements in present indicators, and
 - (2) Desired additional indicators.
- 151. In its recommendations for improvements, the Committee was necessarily restricted to the presentation of broad general plans. A detailed implementation of these plans must be the task of the experts in the various countries in co-operation with the Secretariats of the United Nations and the specialized agencies, and with such technical assistance as may be marshalled from time to time for specific tasks.

Section II - Needed Improvements in Present Indicators

152. In respect to the components and indicators proposed in Chapter II, data are not yet available for most of the countries of the world; this is true even of the proposed priority and synthetic indicators (see Tables A and B). As a first step, therefore, in the improvement of measurements of levels of living, the Committee recommended that Member Governments, in co-operation with the United Nations and the specialized agencies concerned, make every effort to collect and publish data that would increase the possibilities of international comparisons in terms of the indicators proposed.

^{1/} Individual members of the Committee have submitted more detailed "aide
memoires" in this connexion.

Table A. Availability of statistics referring to "priority indicators"

1 - 8 (cf. para. 139)

Countries or territories with: (a) complete or fairly complete data (b) incomplete (or obsolete) data; (c) no data		Life expect- ancy at birth		Food supplies in rela- tion to calorie needs	schoo		Economi- ically active by indus- tries and occupa- tion	Total nation- al in- come	Total personal expendi- tures
available.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
AFRICA	(a) (b) (c)	2 2 45	2 12 3 5	8 2 <u>9</u> / 36	46 - 3	11(20) 4 1 ⁴	2(24) 1 22	7 1 41	3 - 46
AMERICA, NORTH	(a) (b) (c)	4 8 15	3 19 5	4 - 23	27 - -	15 (9) 3	3(21) 3 -	8 - 19	6 - 21
AMERICA, SOUTH	(a) (b) (c)	1 2 11	2 9 3	8 - 6	14 - -	3 (10) 1 -	(13) - 1	5 - 9	. 3 - 11
ASIA	(a) (b) (c)	2 4 33	5 4 3 0	14 - 25	33 2 4	15(3) 8 13	5(15) - 19	7 2 30	5 - 34
EUROPE	(a) (b) (c)	17 7 4	22 2 4	22 - 6	24 - 4	19(4) 4 1	12(10) - 6	16 2 10	12 - 16
OCEANIA	(a) (b) (c)	3 - 16	4 3 12	2 - 17	17 - 2	8 (5) 1 5	3(9) - 7	2 - 17	2 - 17
WORLD TOTAL	(a) (b) (c)	29 23 124	38 49 89	⁵⁸ 2/ 113	161 2 13	71(51) 21 33	25(92) 4 55	45 5 126	31 - 145

(Notes on following page)

Note: The table does not include item 6 (Proportion of economically active population unemployed) listed among the indicators which should receive priority, as it is not known at present what countries have collected information on unemployment on the occasion of their recent population censuses. Only a few countries collect such data currently by means of labour force surveys. There is also a question corcerning the significance of data relating to labour force and unemployment in underdeveloped countries (cf. discussion, para. 99-102).

- (1) The information given in this column refers to life tables, of which life expectancy at birth constitutes the first entry. Lacking the detailed information which would allow the computation of such tables, a few countries seem to have computed approximately the life expectancy at birth only, but the results have not been compiled by international agencies.
- (2) Number of deaths of infants under one year of age per 1,000 births per annum.
- (3) This column refers to "food balance sheets" computed by FAO. Calorie requirements have been estimated summarily, taking into account, inter alia the age-sex composition of populations. This composition is known, or will be known, for most of the countries concerned, when the results of the recent population censuses become available.
- (4) In order to compute the proportion of children 5-14 years of age enrolled in schools, it is often necessary to know also the enrolment in post-primary and secondary schools. Statistical data are available in practically all countries where these schools play an important role, but are sometimes difficult to use as no age classification of the pupils is given.
- (5) Additional countries for which literacy data from recent population censuses are expected shortly are indicated in brackets.
- (6) Additional countries for which the industrial and occupational distribution of the population ought to be available shortly, when their census data have been tabulated, are indicated in brackets.
- (7) and (8) A number of countries which have undertaken the computation of their national income are not able at present to provide data concerning personal expenditures, but might consider this item when developing their calculations according to international recommendations. To obtain "personal consumption" appropriate adjustment has to be made to figures of private and public consumption expenditures (cf. paragraph 106).
- (9) Including Kenya-Uganda, treated as one territory, and "French North Africa", embracing Algeria, French Morocco and Tunisia.

Table B. Availability of statistics referring to "priority indicators" 9-11 ("synthetic indicators") (cf. para. 139 and 135)

Countries or territories with: (a) complete or fairly complete data; (b) incomplete (or obsolete) data; (c) no data available.		Personal Total expendi- savings ture items		Culti- vated area	Produc- tivity of main	of food	Output of electric	Output plus import of (7)	
					crops per hectare	person occupied in agri- culture		crude steel	coal
		(1)	(2)	(3)	(4)	(5)	(6)(7)		
AFRICA	(a) (b) (c)	1 1 47	4 - 45	19 16 14	11 25 13	3 ⁸ / - 45	5 14 30	13 ² / 2 26	23 ¹⁰ / 4 16
AMERICA, NORTH	(a) (b) (c)	5 - 22	6 - 21	14 9 4	4 11 12	4 - 23	5 6 16	4 - 23	12 1 14
AMERICA, SOUTH	(a) (b) (c)	_ _ 14	4 - 10	5 6 3	6 5 3	7 - 7	1 9 4	7 - 7	9 1 4
ASIA	(a) (b) (c)	3 1 35	3 - 36	15 10 14	7 19 13	9 - 30	5 9 25	13 <u>11/</u> 1 24	13 ¹¹ / 8 17
EUROPE	(a) (b) (c)	9 2 17	10 - 18	25 3 -	19 4 5	20 - 8	17 8 3	13 ¹² / 14	19 ¹² / 6 2
OCEANIA	(a) (b) (c)	1 18	2 • - 17	9 - 10	2 1 16	2 - 17	1 1 17	2 - 17	3 3 13
WORLD TOTALS	(a) (b) (c)	18 5 153	29 - 147	87 44 45	49 65 62	45 <u>8</u> / - 130	34 47 95	52 ¹³ / 3 111	79 ¹⁴ / 23 66

(Notes on following page)

Fore: Concerning item 11 among the indicators which should receive priority, cf., column 1 and footnote 1 of Table A. As to item 10 (the ratio of the index of national income in constant prices to the index of population), its computation would depend on the availability of the following data:

- (i) Total national income (cf. Table A, column 7) in successive years. Some countries have hitherto undertaken the computation of their national income only once (usually for 1950 or 1951), but may be expected to repeat this operation at regular intervals. For under-developed areas, particularly, caution must be taken that changes do not just reflect improvement of basic statistical information and more accurate estimates;
- (ii) Relevant price index series.
- (iii) Changes in total population; accurate data often not available in under-developed countries.
 - (1) In order to evaluate the percentage of the national income spent on the basic needs of life (food, clothing, shelter and fuel), it would in many cases also be necessary to get information concerning public expenditures on these items.
 - (2) Available data on total savings are very often obtained as a residual or balancing item in the national accounts and not through a direct evaluation. One might similarly derive total savings from the national accounts of certain countries where this item is not shown separately.
 - (3) For practically all countries which possess information concerning the total cultivated area, the total population is also known, at least approximately, so as to make possible the computation of cultivated area per 100,000 of the population.
 - (4) The data refer to the yield of cereals (including rice) and potatoes, whereas other subsistence crops or industrial crops have not been taken into consideration.
 - (5) Countries for which the total agricultural production has been evaluated in the "food balance sheets" (cf. Table A, column 3), and for which the industrial and occupational composition of their populations is also known, or will be known shortly (cf. Table A, column 6), are indicated in this column under (a).
 - (6) In some of the territories for which no data are available, the production of electric power is undoubtedly small.
 - (7) The data refer to existing information on the items mentioned, assuming that for practically all countries which possess such information, the total population is known at least approximately, so that the computation of output (plus import) per 100,000 of the population would be possible.

- (8) Including Kenya-Uganda, treated as one territory.
- (9) Including the following territories taken together: Belgian Congo and Ruanda-Urundi (1), British Somaliland, Kenya and Nyasaland (1), French West Africa and Togo (Fr.) (1), Gold Coast, Nigeria and Sierra Leone (1), Morocco, French and Spanish (1), North and South Rohodesia (1).
- (10) Including the following territories taken together: Basutoland, Bechuanaland, Swaziland, South-West Africa and Union of South Africa (1), French Morocco, Spanish Morocco and Spanish North Africa (1).
- (11) Including Singapore and Federation of Malaya, treated as one territory.
- (12) Including Belgium-Luxembourg, treated as one territory.
- (13) Cf. footnotes 9, 11 and 12.
- (14) Cf. footnotes 10, 11 and 12.

153. Furthermore, in respect to the indicators already listed, it is highly desirable that efforts be made to obtain the necessary data to show frequency distributions (which would permit one to ascertain, inter alia, the percentage of a population falling below a given point on a scale with regard to, say, calorie consumption, income, etc.) as well as national aggregates or averages, and to present such information for the various significant areas and for the social and economic groupings of the population. One cannot deny that the data on averages by population groups present a real interest. But the average man does not exist, and the individuals comprising the population of a country belong to different social strata, to different institutional arrangements and to local and family groups which tend to be related to very different levels of living. 154. Moreover, data presented in frequency distribution by nations, by regions, or by various specific population groupings, would enable policy-makers to see at once the complete range from low to high of any aspect of the level of living. With such data, it would be relatively easy to determine what point in a given distribution might be regarded as a "norm", and to set such a point as a target or goal for either short-run or long-run purposes. Moreover, if the data were available in such frequency distributions, it would be a relatively simple matter to measure deviations from a selected point in the scale as representing either "deficiencies" or "above norm" levels for any particular nation or population grouping. It is partly out of this consideration that the Committee. as indicated at several points in this report, underscored the importance of obtaining frequency distributions in addition to global aggregates and averages. 155. In the utilization of certain of the proposed indicators, as well as certain of the suggested supplementary types of information, the Committee believed that there would be much value in making comparisons among groupings of relatively homogeneous countries or territories. Such comparisons could be made perhaps on a regional basis or in terms of a similar degree of economic development, or both, in addition to comparisons which are made on a broad world basis. Comparisons of relatively homogeneous groupings of nations or territories may actually be more useful than other comparisons for certain planning, administrative and

evaluative purposes of the various operating units of the United Nations and the specialized agencies; and they may be expected to be more meaningful in that they would involve fewer questions about the significance and comparability of the indicators.

156. Apart from identification of groupings of relatively homogeneous countries, there might also be considerable value in making comparisons on a regional basis In various parts of the world there are regions of a cross-national kind. which, by reason of climate, terrain and other characteristics, present a fairly uniform environment and in which a fairly uniform way of life goes on. for example, are the Oceanic region of the Pacific and in the dry belt zones of Central and Western Africa. Similarity of agricultural, pastural and craft techniques, type of dwellings, etc. would facilitate comparison of levels of living over wide areas. The aid of geographers and cultural anthropologists, sociologists and economists could be sought for eleser definition of such regions or zones, of which a considerable number have already been The Committee recommended that the Secretariats of the United Nations and the specialized agencies pay special attention to techniques of obtaining measurements of change in levels of living quite apart from the measurement of absolute differences. The Committee was mindful of the fact that such measurements of change may be possible for purposes of international comparison and quite meaningful even when many difficulties beset direct comparison of measurements of absolute levels. As a caution, however, it emphasized that temporal comparisons of indicators may be affected by improvements which have occurred in the data. Apparent changes may thus reflect more the development of statistical methods or refinement of concepts than actual changes in conditions of living.

Section III. Desired Additional Indicators

157. The Committee was mindful of the fact that the indicators listed in Chapter II by no means cover all, or even a reasonably large part, of the

significant aspects of levels of living. Moreover, the indicators proposed are of varying degrees of relevance; they represent measurements of means or facilities as well as ends of living; and they are partly measurements of environmental conditions and of global aggregates, as well as measurements of personal conditions of living.

158. It would be highly desirable to work out a logical frame in which distinctions would be made between measurements of actual personal conditions of living and measurements of facilities or means to such ends; between measurements of individual or family conditions and environmental conditions; between measurements of determinants of levels of living and resultants; between measurements of material and non-material aspects of living. While it is possible to make such conceptual differentiations, the Committee in the short time available for its deliberations, was not able to effect such an orderly classification and treatment of the available data. Moreover, the Committee felt that its assignment necessarily restricted it to realistic recommendations reasonably capable of fulfilment over the period of the next few years. It is with this perspective that the Committee made the recommendations which follow in respect to obtaining additional indicators.

159. The materials are presented in the same order of components as presented in Chapter II.

Additional Indicators for the Different Components

1. Health, including demographic conditions

- 160. In respect to health, the Committee recommended that, as a first step, efforts be made to obtain data on expectation of life at various selected ages, in addition to expectation of life at birth.
- 161. These data would permit the measurement of changes in expectation of life and ages above infancy or childhood. It is widely known that initial decreases in mortality occur disproportionately in infant or child mortality.

- 162. A second type of needed demographic statistic is the infant mortality rate minus neo-natal infant mortality. Studies have shown that the infant mortality which occurs during the last eleven months of the first year of life is much more sensitive to social and economic conditions than is total infant mortality. This indicator, when obtained, would therefore undoubtedly afford a more sensitive measurement of improvement in these conditions.
- 163. Statistics are already available in a large number of countries on facilities for the preservation or restoration of health in terms of such indices as number of physicians in relation to the population and number of hospital beds in relation to the population. Further data, however, are desirable. It would be useful to obtain accurate information concerning facilities for maternity aid - such as medical centres for pre-natal care, number of midwives and maternity beds and also, for certain countries, dental services. Statistical information should also include the number of medical, dental and nursing schools, schools of social work and pharmacology and training establishments for midwives, as well as figures on the number of students graduated therefrom over a period. Among the descriptive information for background, it would be useful to know what types of specialization exist among physicians, dispensaries, laboratories and hospitals. In particular, having regard to the importance of nutrition as an indicator, it would be valuable to have information about the existence of institutes of nutrition and the number of nutrition and research workers available.
- 164. In respect to health facilities, it would be highly desirable to obtain measurements of their utilization as well as of their existence. In addition, the Committee recommended consideration of the possibility of obtaining data on private and public expenditure on health, which might be presented on a per capita basis along with some indication of the quantity and character of the health services obtained.
- 165. To obtain a better measurement of the health of the population, indicators of morbidity conditions are badly needed. The Committee recognized that such data are in a far from satisfactory state, even in the more developed countries. Continued and expanded efforts will also be necessary to initiate and improve vital registration systems and obtain better data on mortality, including

cause-specific mortality. It would be especially important to obtain cause-specific mortality and morbidity rates for the diseases most highly correlated with social and economic conditions. Since such diseases are, to a considerable extent, associated with climatic and regional differences, it would be desirable to obtain, for purposes of comparison, morbidity data of greatest significance for specific regions. Thus, for example, in the tropical parts of the world it is of special importance to obtain data on the parasitical diseases and diseases of bacterial origin. Morbidity rates for such diseases would have relatively little usefulness for comparisons with the more developed countries in the temperate zones. But they would have great significance as indicators of changes in levels of living for most of the less-developed countries.

2. Food and nutrition

166. Such data as are available for purposes of international comparison of food consumption are derived primarily from the World Food Surveys of the Food and Agriculture Organization, using the "food balance sheet methods". It has already been indicated that international comparisons of data obtained through this method are subject to serious errors and that these data have greater usefulness when analysed to obtain some measure of changes over time for individual nations. The Committee recommended that the Secretariat of the Food and Agriculture Organization continue its efforts to improve its present indicators of the qualitative and quantitative aspects of food consumption, and urged Member Governments to co-operate fully in providing and improving the desired data.

167. In addition to the available indicators, however, there is a great need for additional measurements of the quality and quantity of food consumed in the different nations of the world and in the various significant population groupings within nations. Attention needs to be paid also to the quality of the diet as consumed, taking into account the effects of cooking and preparation of food, and to the balance of diets. The Committee agreed that such information must be obtained on a family basis in addition to the global aggregate approach. The Committee strongly felt that it is only through obtaining data on actual patterns of consumption on a family basis that satisfactory measurements of the quality and quantity of food consumption can

ever be obtained. Since the consumption of food is such a fundamental element of the level of living and since large areas of the world are characterized by chronic hunger and malnutrition, it would seem that the highest priority should be placed on obtaining adequate indicators of this basic aspect of living conditions.

3. Education, including literacy and skills

168. Basically, the significance of education as an end in itself and as a means whereby various aspects of life become comprehensible or available, justifies an extension of the indicators of this component of the level of living. In addition to the indicators which have been proposed, the following item should be developed and made available for large numbers of countries: Years of formal schooling completed for the adult population.

169. Data on years of schooling completed would have much more meaning than the relatively limited data on illiteracy. They would permit a more adequate measurement of not only the proportions of the population with varying degrees of education but also the measurement of that exceedingly significant part of the population, the professional and technical workers.

170. In using these data, however, it must be borne in mind that "years of school completed" has different meanings in varying cultures. It is desirable, therefore, that such statistics be supplemented by descriptive material so that they may be interpreted in their proper context.

171. The Committee noted with satisfaction results of the efforts of the United Nations Educational, Scientific and Cultural Organization to obtain basic statistics on education and on non-material aspects of culture. It expressed the hope that better data will permit the construction of better indicators in this area.

4. Conditions of work

172. Because of the difficult and complex character of the task, considerable effort and expenditure will be necessary to bring about substantial improvements even in the limited list of indicators of conditions of work which have already been proposed above, let alone to obtain additional indicators. Again, however,

^{1/} Cf. footnote 1/, p. 33.

the basic nature of the problem and the major interest of individual governments and of the international organizations, especially the International Labour Office, in conditions of work warrant the major efforts necessary to improve measurements in this field.

173. There are major lacunae in data relating to almost all conditions of

work (hours, wages or income, etc.), in the agricultural and other nonindustrial sectors of the economy. Since most of the economically active population of the world is not industrial, there is obviously a need for indicators of the conditions of work of such persons. The Committee therefore recommended that special emphasis be placed upon the development of indicators of conditions of work for the non-industrial parts of the working population and suggested that the utilization of modern sampling methods affords the possibility of obtaining such data at relatively low cost. 174. The Committee believed that it would be useful to expand the material already gathered, with regard to certain industries and occupations, on wage disparities. In particular, more information should be sought concerning disparities between the levels of agricultural and industrial wages, between skilled and unskilled workers in the same occupations, and between the wages of other major groups in significant classifications of the employed population. 175. For certain societies in the less-developed countries, a considerable amount of qualitative material has been accumulated already on topics such as working conditions, stimuli to work, incomes and regularity of work. Moreover, for agriculture, systems of land tenure have been studied in detail, giving closely related data. Systematic study of this material would be useful partly as providing direct information of levels of living and partly as providing a

5. Employment situation

176. The Committee recommended that, with regard to indicators under this heading, a special effort be made by the Secretariats of the United Nations and of the International Labour Office to develop methods of measuring underemployment. In respect to unemployment, reasonably satisfactory methods of measurement have been developed in recent years. But there remains the task of extending these measurements to large areas of the world and obtaining them in such a manner as to maximize their comparability.

preparatory framework for sampling and more intensive studies.

177. The situation in respect to the measurement of under-employment is much

less satisfactory. Yet, as noted above (cf. paragraphs 99-100), in many parts of the world, and especially in the less-developed areas, low levels of production and living are associated with under-employment; basic differences in levels of living between the more and less-developed areas arise from under-employment in the latter. The situation calls for greater effort to devise and utilize methods of measuring under-employment. 178. The problem of finding indicators for under-employment is not only statistical; it is also conceptual and calls for careful analysis and vigorous discussion of concepts and definitions. The Committee suggested, therefore, that Member Governments should be called upon to pay urgent attention to the need for setting up studies on the problem of under-employment and that all possible technical assistance should be afforded to them in this task by the United Nations Secretariat and the specialized agencies concerned. 179. The Committee noted that the report of the Group of Experts on the reduction of unemployment and under-employment previously appointed by the Secretary-General is mainly concerned with remedies, notably economic development, rather than with analysis of the problem. The Committee therefore recommended that, as a complement to the work of that Group, the whole question of concepts, definitions and techniques required in studies of under-employment should be entrusted to a committee of experts appointed by the United Nations and the specialized agencies concerned. The work of this committee should carry further the relevant studies already undertaken, especially by the International Labour Office. 2/

6. Aggregate consumption and savings

180. In recent years, the number of countries preparing estimates of national income and related totals has been rapidly increasing. Nevertheless, in many

Measures for the Economic Development of Underdeveloped Countries, United Nations, New York, 1951.

^{2/} Vide: Action Against Unemployment, Studies and Reports, New Series, No. 20, Chapter VII; Under-employment in Asia, AAC/III/D.2; Under-employment in Asia, AAC/IV/D.4; Under-employment in Asia, by Chiang Hsieh, in International Labour Review, Vol. LXV, No. 6, June 1952, and Vol. LXVI, No. 1, July 1952.

countries, and particularly in the less-developed areas, the estimates must still be based on incomplete data, and therefore they cannot be used for purposes of detailed analysis of changes in levels of living. Improvement of basic economic and financial statistics is a prerequisite for the compilation of accurate annual estimates of national income. Sampling methods should be introduced to obtain information for sectors of the economy and on flows of transactions for which complete information cannot easily be obtained. 181. The development of a suitable framework for the construction of tables of national income and expenditure and of national accounts may serve as a programme for the collection of necessary basic statistics, and may be used to ensure logical consistency and accuracy of the various estimates. 182. For the study of changes in levels of living, estimates of national income and of the components of national expenditure expressed in constant prices are of primary importance. Estimates of national income may be obtained on the basis of estimates of the net output of all branches of economic activity, or as the sum of all income payments to factors of production. Expressing the estimates requires the compilation of special price indices to be used as "deflators", or the construction of quantity indices. In many less-developed countries, the construction of these price or quantity indices would require considerable improvement in the compilation of necessary basic data. Thus, the construction of estimates of national income and expenditure in constant prices is likely to require work programmes of several years' duration. 183. Estimates of private consumption expenditure $\frac{1}{m}$ must be based on detailed statistics of production and foreign trade, supplemented by information provided by a census of distribution, or on detailed family living studies, which do not exist in most underdeveloped countries. Therefore, the preparation of annual estimates of private consumption expenditure, by major commodity groups, and expressed in current as well as in constant prices, is likewise expected to require long-run work programmes.

184. Statistics of the distribution of individual and family income by size, by occupation, family composition and other characteristics, is generally possible only on the basis of sample surveys.

^{1/} To obtain "personal consumption" as defined in paragraph 106, appropriate items of public expenditure have to be added to private consumption expenditure.

185. The General Assembly and the Economic and Social Council have adopted resolutions requesting all Member Governments to undertake the preparation of national income estimates, and have recommended that high priority be given to requests for technical assistance in this field. The Economic and Social Council has also stressed the importance of studies of the distribution of income by size of income, and by socio-economic population groups. The Statistical Commission, at various sessions, has studied proposals for the formulation of international standards in national accounting and has requested the Secretariat to prepare a manual on methods of estimating national income. The Committee expressed its support of these proposals.

7. Other components

186. The components listed in Chapter II numbered 8 to 12, are those for which the present indicators are, on the whole, quite inadequate as contrasted with components 1 to 7. In Chapter II the discussion of components 8 to 12 is, on the whole, of a character which points to the next steps which must be taken to provide better data for measurement in these aspects of living. Additional comment will be made, therefore, only for certain types of data, most of which must be obtained from special statistical undertakings of the sample survey type rather than through the regular statistical systems of most countries.

187. Nothing further will be said specifically about the problems of obtaining indicators for the following listed components:

- 7. Transportation
- 9. Clothing
- 10. Recreation and entertainment
- 11. Social security
- 12. Human freedoms

188. The Committee felt, however, that some additional observations should be made in respect to housing.

General Assembly Resolution 403 (V), Economic and Social Council Resolution 299 E (XI).

^{2/} Economic and Social Council Resolution 369 (XIII).

8. Housing, including household facilities

- 189. It is practically universally recognized that adequate shelter represents one of the most fundamental elements in the level of living, but the fact is, as noted in Chapter II, that there are no indicators available for any appreciable number of countries, permitting international comparisons of conditions of housing. The problems involved in obtaining such indicators have been discussed above.
- 190. Valuable information is expected from the housing censuses undertaken in connexion with the recent population censuses. These contain information on the number of dwelling units, materials of construction, number of rooms per dwelling, density of occupation and availability of certain facilities. Many of these data, however, do not lend themselves easily to international comparisons because of differences in climate, kinship, composition of families, traditions and values.
- 191. The Committee wished to emphasize the great need for collecting and publishing better data on housing both for national purposes and purposes of international comparison. Sufficient experience has been accumulated both in the less-developed and developed parts of the world to justify the conclusion that useful and comparable data can, in effect, be obtained on housing through the census, or sample survey, method. On the substantive side, the Committee recommended that in the collection of housing information, consideration be given to the collection of the following types of data, although specific decisions must be a function of local conditions:
 - 1. Types of dwelling, including indication of construction materials used
 - 2. Area per occupant
 - 3. Number of persons per dwelling unit
 - 4. Water supply drinking water and for other purposes
 - 5. Toilet facilities and sewage disposal
 - 6. Utilities and community facilities
 - 7. Household facilities of significance in specific cultures.

192. The Committee recommended that the United Nations and the interested specialized agencies develop a programme for uniform housing surveys so as to obtain comparable data, at least on a regional basis, on levels of housing.

Section IV. Studies of Family Living

193. The representation of levels of living and changes therein obtained from an analysis of all the indicators discussed up to this point would still fall short of providing a comprehensive indication of the whole of the level of living. In order best to achieve this purpose, from a long-range point of view, the Committee was agreed on the desirability of developing "family living studies" that would more directly and more comprehensively approach the level of living than is possible through an assortment of uncoordinated (and often highly inferential) indices. Such studies, designed primarily to obtain first-hand information on patterns of actual living, including patterns of consumption and expenditure in the context of general background information, would, in the opinion of the Committee provide the best information obtainable as an approximation of the total level of living situation. Such data should be obtained not only for the nation as a whole but for appropriate regional racial or ethnic, social and economic groupings. It should include statistics on size and composition of family, housing and household amenities, and various other items, such as direct data on the state of health, nutrition, education, recreation, cultural activities and the like. Studies of this type to provide a direct measurement of differences in levels of living, and repeated over time to provide a measurement of changes, would undoubtedly come closer than anything else to the type of information required for purposes of the resolutions of the General Assembly and the Economic and Social Council. 194. Unfortunately, such comprehensive family living studies are, on the whole, not available on any extensive scale and representative basis even in the most highly developed countries. The position is much worse in the case of countries which are less-developed in the fields of statistics and economic and social research. With the advances that have taken place in the technique of sampling, however, and in other methods of the social survey, including attitude

measures, the use of various scales, etc., it is becoming increasingly feasible to undertake such studies, and to attempt to solve through them many of the problems of gaps and inadequacies in measurement noted in this report. The Committee recommended, therefore, that consideration be given to the planning of such studies by the Secretariat of the United Nations and the specialized agencies concerned and to the provision of technical assistance to Member nations when requested to conduct such surveys. The Committee was aware, of course, of the great importance in this connexion:

- a. of trained personnel,
- b. careful designing, and,
- c. limiting of the information sought to the most essential items.

It also recognized the need for careful analysis of the assumptions, concepts, and definitions involved in such studies, and the importance of arriving at uniform procedures, both for purposes of national use and international analysis and comparison. The Committee noted with satisfaction the steps being taken in this direction in the considerations of the ILO and in the programme of the Interamerican Statistical Institute.

195. The Committee also observed with satisfaction that the Seventh International Conference of Labour Statisticians, in dealing with the methods of family living studies, recommended the widening of the scope of family living enquiries to cover "as full information as possible with regard to levels and standards of living" (Resolution III). The Committee further noted that the same Conference requested the governing body of the International Labour Office "to set up a special committee, after consultation with the United Nations, of qualified technical experts to study the problems of making family living studies in less well developed areas with a view to developing plans for such studies and creating a body of experience which could be drawn upon to assist countries to carry through such plans, with due regard to the special problems of sampling, and the particular adjectives sought in these surveys" (Resolution XIV).

196. The Committee recommended that the international organizations concerned proceed to set up such a special committee as soon as possible, with the aim particularly of establishing uniform methods and, so far as possible, a uniform international schedule for family living studies, taking into account the analyses of components and indicators of levels of living presented in this report, the importance of the conceptual background provided by social and cultural analyses and the desirability of using sampling methods to ensure that the information obtained is representative of large and well-defined population groups.

CONCLUSION

I. The Problem

197. The General Assembly of the United Nations, in Resolution 527 (VI), requested that steps be taken towards the preparation of annual reports on differences and changes in the absolute levels of living of the different peoples of the world. The measurement of differences and changes in the levels of living is a complex problem which has no completely adequate or satisfactory solution. The level of living is an organic unity embracing both material and non-material aspects of existence. It consists in large measure of a state of mind as well as of the consumption of material goods and services, and of participation in non-material aspects of culture. With regard to a given population, it involves questions of distribution (rather than merely averages). Moreover, the evaluation of a level of living is necessarily a function of a ^ given set of values. From this it follows inevitably that the level of living as a whole, or the level of any of the components or elements into which it may be sub-divided, will have different meanings in the context of varying cultures. 198. Quite apart from such general but fundamental considerations, the measurement of the level of living, whether measurement of absolute level or of changes therein, is beset with a large number of difficult technical problems. These have been set forth in the body of the report and must be considered in any attempts to compare levels of living from group to group, place to place or time to time.

II. Components

199. The Committee sought to analyse the level of living into quantifiable or potentially quantifiable components or elements. Such analyses have been attempted by a number of agencies and persons over many decades and are necessarily arbitrary. Any given classification of levels of living into components or elements can be justified only by its utility for a given purpose. The Committee proposed one such classification of components as a possible way

of dealing with this complex problem for the purpose of international reporting. These components are:

- 1. Health, including demographic conditions
- 2. Food and nutrition
- 3. Education, including literacy and skills
- 4. Conditions of work
- 5. Employment situation
- 6. Aggregate consumption and savings
- 7. Transportation
- 8. Housing, including household facilities
- 9. Clothing
- 10. Recreation and entertainment
- 11. Social security
- 12. Human freedoms

III. Indicators

200. Given a classification of components, there still remains the problem of obtaining measurements for this purpose. The Committee considered both the types of data row available for international comparisons and the types of data it would be desirable to have. The Committee recommended the use of a set of indicators for purposes of international comparisons of levels of living. These are shown below linked to their appropriate components:

1. Health, including demographic conditions:

- Expectation of life at birth,
- Crude death rate,
- Infant mortality rate,
- Number of hospital beds in relation to the population,
- Number of physicians in relation to the population.

2. Food and nutrition:

- National average food supplies in terms of calories at the "retail level" compared with estimated calorie requirements,
- National average food supplies in terms of total proteins at the "retail level",
- National average food supplies in terms of animal protein at the "retail level".

3. Education, including literacy and skills: $\frac{1}{2}$

- Proportion of children 5-14 years of age attending or enrolled in schools,
- Attendance or enrolment in post-primary schools as proportion of children 5-14 in primary schools; and as proportion of population,
- Number of primary schools (and school rooms) per 100,000 of population in 5-14 year age group,
- Pupils per teacher in primary schools,
- Percentage of population literate, above some appropriate age, total and by sex,
- Number of students enrolled in technical institutions per 100,000 population,
- Daily newspaper circulation per 1,000 inhabitants,
- Books (titles) published per 100,000 persons per year.

4. Conditions of work:

- Hours of work per week,
- Wages per week of industrial workers,
- Real wages of industrial workers,
- Normal hours of work per week as laid down by law or by collective agreement for workers in industry,
- Number of paid holidays per year in industry,
- Minimum age of eligibility for employment.

5. Employment situation:

- Proportion of total population in "economically active population" by sex,
- Proportion of persons over 20 years of age in economically active population,
- Proportion of persons 65 and over in economically active population,
- Proportion of economically active population unemployed,
- Percentage distribution of economically active population by status, i.e., employees, employers and workers on own account, and unpaid family workers,
- Percentage distribution of economically active population by principal industrial and occupational categories.

^{1/} Cf. footnote 1/, p.33.

6. Aggregate consumption and savings:

- Proportion of national income spent on food,
- Public expenditure spent on social services as a proportion of national income,
- Index of, and rate of change of, "personal consumption" per capita,
- "Personal consumption" as a proportion of national income and index of changes therein,
- Index of. and rate of change of, investment and savings per capita,
- Investment and savings as a proportion of national income,

7. Transportation

- Kilometres of railways per 100 square kilometres of area,
- Number of passenger-kilometres per year per 100,000 population,
- Freight ton-kilometres per year per 100,000 population,
- Kilometres of roads separately for metaled and non-metaled roads per 100 square kilometres of area,
- Number of vehicles, power-driven (separately for trucks and cars), and animal-driven, per 100,000 of the population,
- Number of air passenger-kilometres per 100,000 of population.
- 201. In addition, specific types of <u>descriptive</u> materials were proposed to supplement the indicators for each component. Moreover, for the components 8 through 12 listed above, various types of quantitative and descriptive material were suggested to provide some indication of differences and changes in the factors to which they refer.

IV. Supplementation of Indicators

- 202. In addition to using the listed indicators for measuring the various components in the level of living, the Committee proposed their supplementation in general:
 - 1. by means of general background statistics, whether internationally comparable or available only for individual nations,
 - 2. by descriptive qualitative materials in the light of which the indicators could be better interpreted. In connexion with the descriptive materials, special stress was laid on obtaining, as far as possible, analyses of social structure and values.

V. Synthetic Indicators

203. In addition to the analysis of the individual indicators the Committee considered the question of a single unified index which would present a picture of the level of living as a whole. The Committee agreed that such a single unified index of the level of living was neither possible nor desirable, for purposes of international comparison under present circumstances. 204. At the same time, the Committee proposed the use of certain indicators which, while subject to great limitations, would nevertheless provide in some measure for broad general comparisons of levels of living and might in this sense be considered to be "synthetic". First, because of the limitations of the over-all national income figures for international comparisons, it was proposed that a series of macro-economic items related to national income and indicating resource availability and utilization be jointly used to provide some global indications of determinants of the level of living in important sectors of the economy. Second, it was suggested that as a means of gaining an idea of changes in the level of living, comparisons be made of the ratio (for individual countries) of the index of change in national income in constant prices to the indes of change in population (equals the index of change of per capita national income). Third, and of a somewhat different order, it was proposed that average expectation of life at various ages might be used as a synthetic indicator, in view of the fact that this item may be regarded - under certain defined circumstances - as a resultant of many other factors in the level of living.

VI. Priorities of Indicators

205. The Committee was aware of the fact that the indicators mentioned above are somewhat numerous and it may be difficult to have them treated adequately within a reasonably short time. The Committee singled out certain indicators as having, in its opinion, the highest priority. It therefore recommended that efforts be directed as far as possible to the combinations of data that would make possible the use of these priority indicators:

- 1. Expectation of life at birth.
- 2. Infant mortality rate.
- 3. National average food supplies in terms of calories at the "retail level" compared with estimated calorie requirements.

- 4. Proportion of children 5-14 years of age attending or enrolled in schools.
- 5. Percentage of population literate, above some appropriate age, total and by sex.
- 6. Proportion of economically active population unemployed.
- 7. Percentage distribution of economically active population by principal industrial and occupational categories.
- 8. "Personal consumption" as a proportion of national income and index of changes therein.
- 206. In addition to the above, the committee placed a similar priority on the three synthetic indicators, namely,
 - 9. Macro-economic items related to national income.
 - 10. The ratio of the index of change in national income (in constant prices) to the index of change in population
 - 11. Average expectation of life (at birth and) at various ages.

VII. Next Steps

207. The Committee also recommended specific steps that should be taken to improve the measurement of differences and changes in levels of living.

208. These steps included in general the obtaining of proposed indicators for the various countries that do not now have the necessary data, the improvement of the quality and international comparability of available data and the increase of the number of indicators for the components listed. Moreover, stress was particularly laid on the importance of obtaining the following types of data: data by frequency distribution (e.g., percentage of population falling at or below various levels of calorie consumption) as well as national aggregates or averages; data for various significant groupings of population within countries (regional, urban-rural, racial and ethnic groupings, social strata, age and sex groups); and data collected for relatively homogeneous groupings of countries. Stress was laid also on the need for continuing efforts to deal with the various specific problems of measurement discussed, including timing, accuracy, representativeness, and comparability of data.

- 209. In respect to specific additional indicators, it was proposed for "health" (including demographic conditions) to obtain the following additional indicators: expectation of life at various selected ages in addition to expectation of life at birth; the infant mortality rate minus neo-natal infant mortality; measurements of utilization of hospitals and physicians, as well as of avilability; private and public expenditure per capita on health, together with some indication of health services obtained; morbidity and cause-specific mortality rates, on a regional as well as world-wide basis.
- 210. In regard to "food and nutrition", it was proposed that data be obtained on actual patterns of consumption on a family basis which would permit measurement of quality and quantity, in addition to the data now being obtained on a global basis.
- 211. For the component "education", it was suggested that years of formal schooling completed for the adult population be obtained.
- 212. For "conditions of work", it was suggested that data be developed for the non-industrial parts of the working population of the world, paralleling those for industrial workers.
- 213. For improving the data on "employment situation", the importance of developing methods of measuring under-employment was indicated.
- 214. In respect to "aggregate consumption and savings", the importance of improving basic data used in preparation of the national income estimates was dwelt upon, as was also the need for statistics on the distribution of individual and family income by size, and by various other personal and social characteristics.
- 215. Finally, in regard to "housing", specific proposals were made concerning methods for the development and conduct of housing surveys which would permit international comparison of housing conditions.
- 216. In addition, stress was placed on the desirability of obtaining general background information on social structure and allied matters.

VIII. Family Living Surveys

217. The Committee suggested, however, that the analysis of all of the indicators proposed, even in the context of materials relating to social structure and general background, would not provide an adequate total picture of the level of living.

Even the use of the synthetic indicators suggested would fall short of this goal. In consequence, the Committee laid great stress on the desirability of planning and conducting "family living surveys" designed to obtain a more direct and comprehensive measurement of actual family living conditions. Such studies would be desirable not only for nations as a whole, but also for various groupings of the population by regions, for urban-rural areas, for racial and ethnic groups, and for significant social and economic groupings. They should be planned as far as possible in reference to social and cultural analyses of the communities concerned. 218. It was expected by the Committee that these surveys would not only serve routine administrative ends of collection of information on levels of living, but that they would also serve the ends of stimulating research further into the topic. They should play a part in enlarging the conceptual range of ideas about levels of living, and give the opportunity of testing out hypotheses about the relations of elements therein. Apart from encouraging the pursuit of such work by international agencies and governmental agencies, the Committee felt the need to stress the importance of research directed to the subject and to its allied aspects by private workers and institutions. The Committee recommended that the United Nations Educational, Scientific and Cultural Organization make use of its contacts and facilities to encourage such non-governmental research.

IX. Methods for Improving Data

- 219. It has been stated that the strengthening of the suggested indicators of levels of living and obtaining additional indicators could be achieved through three main sources:
 - 1. The improvement of national statistical systems;
 - 2. The design of special cross tabulations of the data obtained in the censuses taken in or around 1950; and
 - 3. The utilization of modern sampling survey techniques.
- 220. The Committee laid special emphasis upon the importance of developing organizations in the various countries competent to design and conduct sample surveys.
- 221. It was felt that the relatively recent developments in survey method including improvements in the sampling of human populations, in the measurement of

attitudes, and in the use of scaling and similar techniques - have made this method a most effective, efficient and relatively low-cost way of obtaining the kinds of information needed to implement the resolutions of the General Assembly and the Economic and Social Council.

X. Annual Reports

- 222. Resolution 527 (VI) of the General Assembly requests that steps be taken towards preparation of annual reports on differences and changes in levels of living of the various countries of the world.
- 223. The Committee felt it necessary to emphasize the impracticability of expecting at the present time or in the near future significant measurements of changes in levels of living on an annual basis. The Committee endorsed the continuation of efforts to expand statistical activities and made recommendations in this respect. But the Committee felt it important to indicate that it is not realistic in the present state of knowledge and with available techniques to expect that annual changes can be measured in many of the components of levels of living for purposes of either national or international comparison.
- 224. The Committee recommended that, as a more realistic first approach, efforts be continued to develop reasonably comparable measurements of differences in levels The Committee noted with of living within and between the countries of the world. satisfaction the first such general attempt by the United Nations as contained in This report is admittedly the Preliminary Report on the World Social Situation. far from comprehensive or exact because of the nature of the data available. must be expected that the preparation of a second such report, which is envisaged for 1956, will not permit extensive measurement of intervening changes, as much as it will permit improvement in the measurement of existing levels of living. Improvement in such measurement may confidently be expected as the results of the censuses taken in or around 1950 become more generally available. These censuses, taken by some eighty countries (in general in accordance with suggestions made by the United Nations and the specialized agencies in the interest of uniformity and international comparability), will both improve the accuracy of present measurements and provide a more satisfactory bench mark for the measurement of changes in the coming years.

225. The Committee therefore recommended that, for the immediate future at least, no attempt be made to publish a general report on levels of living more often than every four years. This is not to deny the desirability of publication of ad hoc studies of levels of living in different countries of the world as available data may permit, nor the desirability of the present annual publication of the Statistical and Demographic and other Yearbooks of the United Nations and the specialized agencies.

226. Within this framework, the Committee nevertheless emphasized the basic importance of focusing on measurement of change in levels of living. fundamentally important for the evaluation of the progress that is being made in raising the level of living of a given population or in narrowing the great differences in levels of living among the different peoples of the world. Committee recognized that in some situations, measurements of change may be more comparable than measurements of differences in level. The Committee agreed, however, that despite the basic importance of such measurements, more harm than good may result from premature attempts to draw conclusions about the magnitude or direction of changes in levels of living from data which do not meet reasonably adequate standards of accuracy, or which are based on assessment of unreported levels, and merely state percentage improvements. Absolute levels should be known in view of the fact that different but closely related indices may have different rates of change by their very nature, and the same index may be normally capable of quite different rates of growth at different stages or levels of development.

XI. Concluding Recommendations

227. The importance of the resolutions of the General Assembly and the Economic and Social Council in respect to obtaining measurements of differences and changes of levels of living is self-evident. They are consonant with a major objective set forth in Article 55 of the Charter of the United Nations, namely,

"With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

a. higher standards of living..."

- 228. The Committee felt compelled to point out the great deficiencies in the data available for implementing these resolutions and the many obstacles to be overcome if the objective of the resolutions is to be attained. Satisfactory analysis of levels and changes in levels of living can be achieved only after a considerable increase in efforts to develop and improve the requisite statistical data. Towards this goal, the Committee made a number of recommendations which have been indicated at different places in this report. The more significant ones, in addition to those discussed above, are presented in summary below:
- 229. The Committee recommended that the United Nations and the appropriate specialized agencies:
 - (1) co-operate in endeavours to improve the accuracy of data pertaining to the measurement of levels of living, having in mind their reliability, validity, precision, representativeness and their international comparability;
 - (2) continue and, if possible, expand their efforts to assist in the development and strengthening of national statistical centres as requested by Member Governments;
 - (3) co-operate in review of the study of materials available in the various censuses taken in or around 1950, with the purpose of designing and proposing tabulations that would maximize information available for individual countries on levels of living and also permit international comparisons;
 - (4) include in appropriate publications explicit descriptions of the methods and procedures used in compilation of data and indicate the way variations in such methods and procedures may affect the comparability of indicators of levels of living;
 - (5) improve and modify data now collected and published in the periodic or <u>ad hoc</u> publications of the United Nations and the specialized agencies, so that they will better serve the purpose of measuring differences and changes in levels of living;
 - (6) prepare appropriate <u>ad hoc</u> documents and working papers as guides for developmental activity in improving data for measurement of differences and changes in levels of living;

- (7) continue efforts to improve and enlarge the scope of data available for use as indicators for each of the components listed above, and to evaluate and utilize the data available for individual countries which may be used to supplement them;
- (8) develop specific and detailed plans for the various programmes indicated, including proposed uniform concepts, definitions, procedures, tabulations and analyses of data;
- (9) conduct research as far as possible on the difficult substantive and methodological problems involved and encourage research into these problems by Member Governments and by private research institutions and individuals;
- (10) co-operate in the design of standard and uniform procedures for sample surveys to obtain better indicators of levels of living and make the results of such investigations available to Member Governments;
- (11) recommend employment, as far as possible, of probability theory and practice in the selection of samples for studies relating to levels of living so as to assure the representativeness of the results obtained;
- (12) place the highest priority on activities aimed at the development of organizations and personnel competent to conduct sample surveys in all nations which desire it;
- (13) encourage by all means possible the social and cultural analyses needed for background data on the structures and values of the peoples and groups whose levels of living are being studied;
- (14) establish an appropriate joint secretariat working party competent adequately to deal with the complex problem involved;
- (15) establish a special committee in accordance with the recommendations of the Seventh International Conference of Labour Statisticians to consider appropriate matters on family living studies, conceived in a broad sense, with particular reference to the development of a uniform international schedule and taking into account the components, indicators and background analyses suggested in this report;
- (16) appoint a committee of experts, as a complement to the work of a group of experts on the reduction of unemployment and under-employment previously appointed by the Secretary-General of the United Nations, to consider the whole problem of concepts, definitions and techniques required in studies of under-employment;

- (17) co-operate with Member Governments, as requested, in providing technical assistance on any of these matters.
- 230. The Committee emphasized strongly the great need for continuing and concerted effort on the part of the joint Secretariats if the resolutions of the General Assembly and the Economic and Social Council are to be adequately implemented.
 231. Finally, the Committee recommended that Member Governments be encouraged and requested to co-operate to the best of their abilities in providing the necessary information so as to contribute most effectively towards improvement in international analyses of levels of living, and to consider the desirability of providing periodic reports on the whole complex of social and economic changes with special reference to the influence they have on levels of living within their countries.
- 232. Raising the levels of living of the peoples of the world is an agreed-upon objective of the United Nations and the specialized agencies and Member Governments. Effective measurement of differences and changes in levels of living is a prerequisite to planning and administering development programmes and to evaluating the effects of specific projects undertaken. Improvement in measurements of levels of living merits the highest priority in the statistical work of Member Governments and of the United Nations and the specialized agencies. The Committee was confident that the objectives of the resolutions of the General Assembly and of the Economic and Social Council can be attained if the proposals made are pursued whole-heartedly.

ANNEX I

LIST OF EXPERTS WHO MADE SUBSTANTIVE COMMENTS IN RESPONSE TO REQUEST $^{\underline{1}}/$

Professor Edward Batson, University of Cape Town, Union of South Africa

Professor Thomas C. Blaisdell, Jr., University of California, U.S.A.

Miss Marguerite C. Burk, United States Department of Agriculture, U.S.A.

Professor Arthur R. Burns, Columbia University, U.S.A.

Professor Helen G. Canoyer, School of Business Administration, Univ. of Minnesota, Minneapolis 14, U.S.A.

Professor Josué de Castro, University of Brazil, Brazil

Professor Joseph S. Davis, Stanford University, U.S.A.

Professor Dorothy Dickins, Mississippi Agricultural Experiment Station, State College, U.S.A.

Dr. Sumitro Djojahadikusumo, Ministry of Finance, Indonesia

Professor O. D. Duncan, Oklahcma Agricultural and Mechanical College, U.S.A.

Dr. Halbert L. Dunn, United States Department of Health, Education and Welfare, U.S.A.

Professor D. R. Gadgil, Gokhale Institute of Politics and Economics, India

Professor Norton S. Ginsburg, University of Chicago, U.S.A.

Professor Trygve Haavelmo, University of Oslo, Norway

Professor A. J. Jaffe, Columbia University, U.S.A.

Professor Henri Labouret, France

Dr. T. Wilson Longmore, United States Department of Agriculture, U.S.A.

Dr. A. M. Lorenzo, Tata Institute of Social Sciences, India

Mr. O. J. McDiarmid, Director, Fiscal and Trade Policy Division, Mutual Security Agency, Special Technical and Economic Mission, Manila, The Philippines

Mrs. Ida C. Merriam, United States Department of Health, Education and Welfare, U.S.A.

Mr. M. Mukherjee, Ministry of Finance, India

Professor Radhakamal Murkerjee, Lucknow University, India

^{1/} The list contains the names of those private scholars who made substantive comments on the question of international definition and measurement of standards and levels of living in response to a request sent out by the Assistant Secretary-General, Departments of Economic Affairs and Social Affairs; also the names of scholars who submitted to the Public Administration Clearing House substantive comments (forwarded to the United Nations) on the report of the preliminary meeting convened by that organization to assist the United Nations in this project.

Mr. M. Raja-Nayagam, Ministry of Labour, Ceylon
Professor Moisés Poblete Troncoso, University of Chile, Chile
Mrs. Aryness Joy Wickens, United States Department of Labor, U.S.A.
Professor Herman Wold, University of Uppsala, Sweden
Mr. Charles Wolf, Jr., United States Department of State, U.S.A.
Mr. Tadao Yanaihara, University of Tokyo, Japan

ANNEX II

DOCUMENTS DISTRIBUTED TO PARTICIPANTS IN THE MEETING

I. Documents prepared for the meeting

- 1. Check List of Documents (2 pp.)
- 2. List of Participants (2 pp.)
- 3. Annotated Provisional Agenda of the Meeting (3 pp.)
- 4. Text of General Assembly Resolution 527 (VI) concerning "Living Standards of the Working Population" and Excerpts from Relevant Discussions in the Second Committee of the General Assembly, and

Text of the Economic and Social Council Resolution 434 B (XIV) concerning "Standards of Living" and Excerpts from Relevant Discussions in the Social Committee of the Economic and Social Council (9 pp.)

- 5. Report of Experts convened by the Public Administration Clearing House (25 pp. plus 3 appendices totalling 39 pp.)
- 6. Some Background Notes on International Definition and Measurement of Standards of Living (prepared by the United Nations Social Welfare Division) (39 pp.)
- 6.a. Supplementary Notes on International Definiton and Measurement of Standards of Living (prepared by the United Nations Social Welfare Division) (9 pp)
- 7. Comments by Various Experts
- 8. Availability of Statistics Referring to Levels of Living (prepared by the United Nations Statistical Office) (25 pp.)
- 9. The ILO and "Standards of Living" (issued by the International Labour Organisation as ILO/MSL/1) (7 pp.)
- 10. Current Methods of Measurement and Indicators of "Standards of Living" in the Field of Labour Statistics (issued by the International Labour Organisation as ILO/MSL/2) (15 pp.)
- 11. International Definition and Measurement of Standards of Living (issued by the International Labour Organisation as ILO/MSL/3) (12 pp.)
- 12. The Definition and Measurement of Food Consumption in Relation to Standards of Living (issued by the Food and Agriculture Organization) (11 pp.)

II. Additional documents distributed during the meeting

Introductory Statement by M. Georges-Picot, Assistant Secretary-General for the Departments of Economic Affairs and Social Affairs (4 pp.)

International Comparisons of Real Wages and Costs of Living (a set of draft reports by the International Labour Organisation: PMSE/1953/4, 46 pp.; PMSE/1953/4A, 22 pp.; and PMSE/1953/4/Part II, 41 pp.)

- Statement by the Representative of UNESCO on 8 June (5 pp.)
- Statement by the Representative of UNESCO on 10 June conveying a memorandum from the Statistical Division, UNESCO
- Memorandum from the Representative of UNESCO on the Collection of Statistical Data on Educational, Scientific and Cultural Matters, as Provided for in the Constitution of UNESCO, the Agreement between the United Nations and UNESCO and the Organization's Approval Programme for 1953-1954 (3 pp.)
- Some Reflections on the Comparability of Real National Incomes of Industrialized and Under-developed Countries (talk delivered by V.K.R.V. Rao at the first meeting of International Association for Research in Income and Wealth; 21 pp.)
- Provisional Design for Analytical Studies of Varied Levels in Homogeneous Territorial Units (Areas) and Social Strata (prepared by Father Louis Joseph Lebret) (3 pp.)
- Schedules Used for Investigations into the Typology and Levels of Living in Villages or "Communes" in France (prepared by Father Louis Joseph Lebret) (29 pp.)
- Questionnaires and Instructions for Interviews Aimed at Comparisons between Homogeneous Zones (prepared by Father Louis Joseph Lebret) (28 pp.)
- Notes on Housing Aspects pertaining to International Definition and Measurement of Standards of Living (prepared by the United Nations Division of Social Welfare) (32 pp.)

III. Printed materials distributed to the experts

- Preliminary Report on the World Social Situation (United Nations, E/CN.5/267/Rev.1, 1952; 180 pp.)
- Enquiries into Household Standards of Living in Less-Developed Areas (United Nations, ST/SOA/1, 1950; 191 pp.)
- The Worker's Standard of Living (International Labour Organisation, Studies and Reports, Series B. No. 30, 1938: 101 pp.)
- Essentials of Rural Welfare (Food and Agriculture Organization, 1949: 43 pp.)
- <u>Dietary Surveys:</u> Their Technique and Interpretation (Food and Agriculture Organization, 1949; 108 pp.)