



**Governing Council  
of the  
United Nations  
Development Programme**

Distr.  
GENERAL

DP/1990/18  
20 March 1990

ORIGINAL: ENGLISH

Thirty-seventh session  
28 May-22 June 1990, Geneva  
Item 4 (b) (i) of the provisional agenda

POLICY

PROGRAMME IMPLEMENTATION

Role of UNDP in the 1990s

Indicators for national capacity-building

SUMMARY

This report has been prepared in accordance with Governing Council decision 89/20 of 30 June 1989, which requested the Administrator to make proposals for designing indicators to assess progress in the strengthening of national capacity for self-reliant development. The proposals for continuing the work initiated in 1989 are contained in section VI of the paper. Preceding sections review general issues in measuring national capacity and identify the development of institutional capacity as an issue of critical concern. The report recognizes that methods of assessing progress do exist at the level of individual institutions. It goes on to direct attention to the need to develop methods of identifying aggregate institutional capacity. The prospects of developing a national self-reliance index are discussed. Finally, the report points out the need to provide national managers with a set of indicators to assess progress in developing policy-making capacity in a wide variety of institutional settings.

## I. BACKGROUND

1. Since its inception four decades ago, the United Nations Development Programme (UNDP) and, for that matter, all the specialized agencies of the United Nations system, have been directed by their respective governing bodies to place primary responsibility on the provision of technical assistance to developing countries in enhancing national capacity for economic and social development at the macro, sectoral and regional levels.

2. UNDP in particular has been mandated to support national capacity-building for self-reliance, or more specifically, to promote increasing self-reliance in the developing countries with regard to the managerial, technical, administrative and research capabilities required to formulate and implement development plans and policies.

3. In pursuance of the above mandate of UNDP, the Governing Council, in paragraph 5 of part I of decision 89/20, requested the Administrator to make proposals for designing indicators to assess progress in the strengthening of national capacity for self-reliant development. This exercise is expected to bring benefits at two levels: (a) to contribute to policy analysis in this field; (b) to improve the work of UNDP. The first of these two aspects, i.e., the measurement of national capacity so as to enable national managers to make allocative decisions (of available resources, including technical co-operation) will help UNDP programming to be more effective and efficient.

4. Both in the area of progress indicators for national development and in the area of capacity-building, much theoretical work exists. Over the course of the year, work undertaken in response to the Council's request has set the framework for determining what might be appropriate directions of research for UNDP to present as proposals. Four separate activities were organized. First, an expert group undertook the task of establishing possible alternative frameworks for investigations in this field. Second, a paper was commissioned which examined the subject from an institutional perspective. Third, a separate paper on national indicators for self-reliant development was developed. And finally, a literature search was undertaken to determine the extent of work done by United Nations agencies and elsewhere in this field. The results of the investigations and proposals for further work required are presented in this paper.

## II. AN ENABLING ENVIRONMENT AND BUILDING CAPACITY

5. A working definition of "national capacity for self-reliant development" for the purposes of measurement, must include economic, social, institutional, technological, political and human resource dimensions. These six dimensions interact to produce an enabling environment that promotes production and efficiency. They subsume a capacity for efficient resource development and use for sustainable growth, a capacity to distribute equitably the benefits of growth, a capacity to sustain national values in the process of growth and a capacity to participate in the world community.

6. Among the important components that sustain this enabling environment are: institutional capacity (public, private and collective institutions), human resource development and political leadership. In the discussion that follows, institutional capacity will be identified as critical to the concerns of this paper. Institutional capacity exists at three levels and includes: (a) the social systems and norms of a country; (b) the aggregate complex of development-oriented organizations (governmental and non-governmental); and (c) the individual capacity of any one organization in (b). The first category refers to socio-cultural and political systems, norms and traditions that guide individual and group behaviour. Economic relations, markets and legal systems, the control and use of assets such as land and water are central determinants of this view of institutional capacity. For the purposes of this study, however, institutional capacity is used in an organizational sense, covering public and private governmental and non-governmental organizations (NGOs). Measuring the institutional capacity of a country in terms of development-related organizations would, therefore, be based on the development goals of the country. What kind of organizations, in what forms, are required to achieve which goals? This approach in no way diminishes the significance of the other five dimensions of development. Furthermore, measuring the progress achievable by nations along some of these dimensions has had significant theoretical and practical attention paid to it in many parts of the United Nations system, including UNDP.

7. This paper, therefore, will briefly review the progress made in developing indicators to measure national capacity in economic, human and technological dimensions. It will also discuss the state of the art in the measurement of institutional capacity and will then make proposals for important continuing research work in this area. This paper has benefited from inputs from United Nations agencies and outside experts.

### III. NATIONAL CAPACITY AND SELF-RELIANCE

8. In this section, two issues are briefly discussed. The first is that even well-known indicators have to be used with care and in context. The second is that self-reliance, although a crucial aspect of development, is not easy to define nor to measure. The familiar ratio of foreign to indigenous inputs, for example, is only a partial measure of self-reliant achievement.

9. A national self-reliance index. Probably the most straightforward way to measure progress towards capacity for self-reliant development is to establish ratios for national development programmes of nationally provided capacity to externally provided inputs. Capacity in this context refers to human, financial, technical and managerial resources. Ratios to be developed would relate to the number of nationals versus expatriates in the labour force; to the amount of nationally generated funds versus the amount of grants and loans; to the value of external technical assistance relative to gross national product (GNP) or GNP per capita; and to the number of nationals versus expatriates in management positions.

10. While this information would be relatively simple and inexpensive to collect and maintain, its use would be very limited and confined to (a) broad goal-setting

when dealing with capacity-building objectives in the context of a development strategy and (b) making macro-level comparisons between countries. More in-depth work would be needed for deriving operational indicators which offer opportunities to develop concrete policies and strategies to build national capacity. UNDP proposes to examine the measurement of self-reliant development more closely.

11. The concept of national capacity for self-reliant development has rightly pre-occupied nations, especially in the developing world. The translation of this concept into a set of measurable indicators raises a range of interesting issues, many of which merit further research. The first issue which must be addressed is whether the indicators are to measure potential or outcomes. For example, the ratio of primary school teachers, classrooms, desks and textbooks to the numbers of children enrolled in primary schools is a measure of the capacity of the primary school system to deliver education; the proportion of children entering primary school who leave with basic numeracy and literacy is the outcome, and the relationship between the former and the latter is an indication of the effectiveness of the primary school system. The measurement of inputs is in general more easily and accurately carried out than the measurement of outcomes, but to assess effective capacity requires that both be known with some reliability. With respect to certain other indicators, the issue is more complex, and is more related to the time horizon over which the indicator is being monitored: for example, measures of national output, GNP or gross domestic product (GDP).

12. Measures of total output (GNP or GDP) are at first glance a measure of outcomes, since they represent the sum of all output produced in a country (i.e., GDP) or the sum of all output produced by nationals of a country (i.e., GNP). However, if these measures are examined over a very short period, they may reflect potential rather than achievement. Output is being produced which can be used either for the benefit of society, such as the construction of schools or food-processing plants, or for its detriment. If this indicator is to capture economic outcome as well as potential, then one solution is to consider only medium- or long-term GNP or GDP movements, since an economy in which socially unproductive activities are given prominence is not likely to sustain its increase in GNP or GDP.

13. The exception to this is an economy in which extra resources are continuously generated by a set of natural resources in circumstances of favourable world market conditions. Even though the identification of and exploitation of natural resources requires skill, technology, etc., there is an important sense in which the growth may be in part attributable to fortune. A method of separating the effects of fortune from those of effort is not immediately obvious, but if the focus is on rates of change of the indicator, then fortune is unlikely to account for consistent long-term increases, since it is likely to be a fluctuating rather than a reliable and sustained phenomenon.

14. In the medium and longer term, increases in any economic variables have in general been brought about by a combination of productive investments (including education and health) and technical progress. Similar arguments concerning time horizons must apply to development in any sphere, i.e., that the measurement be

carried out over a sufficiently long period of time to indicate sustainability and that the focus should be on the way in which the indicators change over time.

15. Secondly, while self-reliance is central to the process of nation-building, it does not lend itself easily to being considered an indicator of national capacity, since to some extent, its achievement is reflected more in attitudes: national pride, national cohesiveness and cultural values. Self-reliance also has very different meanings for small countries, with populations of less than 1 million, than for larger countries; even in the latter cases, however, the degree of international interdependence regarded as desirable has changed significantly over time.

16. Self-reliant development is furthermore concerned with a set of choices and trade-offs, since self-reliance is in general achieved at an economic cost. For example, attention to regional equality (within a country) may lead to a distribution of resources which is not the most efficient from the viewpoint of economic growth, but its achievements in terms of national integration may be considered worthwhile. Then, a nation which has placed self-reliance as its primary objective may experience less economic development than another which gives more priority to economic growth. To aggregate such achievements requires a weighing of the relative merits of different political and national values, which is not a technical exercise. Although the decision is ultimately a political one, and must always reflect the historical and cultural processes in particular countries, it is important that the resource costs of particular choices are known.

17. The index could also encompass measures of human resource flows involving both changes in the degree to which national institutions rely on international expertise, and the changes over time in the level of net outmigration of highly skilled and professional labour. This element would also involve an analysis of the changing extent to which highly skilled and professional labour is being trained domestically and abroad, and the training in one country of students from elsewhere.

18. Research into this area could be useful in further clarifying the issues. However, much of it can only be examined over the long run, since the absence of attention to self-reliance may over time produce socio-political forces which ultimately negate economic achievements.

#### IV. INDICATORS OF CAPACITY - A GENERAL DISCUSSION

19. A working definition of national capacity for self-reliant development for the purposes of measurement must include economic, social, institutional, political, technological and human resource dimensions. Briefly, these dimensions can be described as follows:

(a) Indicators of development which include economic and social, as well as human resource development. Technological, cultural and political dimensions can also be included, although technological development will to an important extent be reflected in economic development and in the development of human resources;

cultural and political dimensions, however, do not lend themselves to clear-cut, unambiguous methods of measurement;

(b) Elements of institutional capacity, involving human, financial, material, technical and managerial resources. A central dimension of institutional capacity is concerned with the capacity for policy-making, policy implementation, policy analysis and review: although intangible, these have frequently proved to be the key to successful processes of social transformation. The major concern of UNDP has been with capacity-building, which does not lend itself to output measurement, since it is an activity rather than outcome. The focus here, however, will be on institutional capacity, as the intended outcome of capacity-building activities. In measuring institutional capacity, it is necessary to address the issue of aggregation. It is possible to assess the effectiveness of an institution in terms of the criteria set for that institution; what is more difficult is to assess whether the existence of any given institution is warranted, in the light of the severe public sector resource constraints which have increasingly come to condition government policy in all areas. Furthermore, the issue arises of how to add up institutional performance: in all societies, some institutions perform well, some less well, and although it is possible to assess each institution individually, it remains problematic to arrive at an aggregate assessment of institutional capacity as a whole. While qualitative judgements can be used and institutional development has been used in evaluating institutional development, quantitative indicators have yet to be developed;

(c) Technological capacity must be an important dimension of national capacity, whether this refers to the capacity to undertake original research; the capacity to adapt and modify techniques to the specific conditions prevailing in particular countries; the capacity to diffuse techniques from one sector or branch of production to another; or the capacity to introduce new techniques in the productive activities of a country.

#### Indicators of development

20. Much work has been undertaken on this topic by a range of United Nations agencies, other multilateral agencies including the World Bank, and by academics in all of the social sciences. The United Nations Statistical Office, for example, has produced a Handbook on Social Indicators, the Statistical Commission of the Economic and Social Council has adopted a number of reports on social statistics and indicators of development. The Administrative Committee on Co-ordination task force on long-term development objectives adopted in September 1989 a list of development indicators regarded as desirable for monitoring economic and social development, including indicators of child welfare, poverty reduction, the advancement of women, the environment and endogenous capacity-building in science and technology (see annex).

21. The forthcoming Human Development Report produced by UNDP will include a human development index, a composite index of different aspects of human welfare, including life expectancy, education, and the command over the resources needed to secure the necessities of life.

22. It is not possible to resolve the debate concerning the appropriateness of any one indicator of development. However, there has been much work on this, and there have been many attempts to examine the extent to which indicators are correlated with others, to enable the use of summary, or proxy indicators, as well as attempts to construct hybrid indicators which combine a variety of different measures. One example of a hybrid indicator is the physical quality of life index, which aggregated three simple indicators with equal weights: life expectancy at age one, infant mortality and literacy. Such a hybrid indicator raises the problem of the arbitrariness of the weighting, and also the issue of what is to be gained from a composite indicator compared with the use of the various component indicators. The United Nations Research Institute for Social Development, for example, argues that infant mortality is assumed to be a good indicator of the availability of sanitation and clean water facilities. While literacy is a good general measure of progress in education, the percentage of the relevant age group enrolled in primary school is included to measure country effort. Input measures have also been identified for water supply and sanitation as supplementary measures. It has not been possible, however, to identify a satisfactory measure of housing needs. The only readily available indicator is people per room, but this does not capture much of the quality of housing, only the number of rooms, which in turn, is a very rough index of crowding.

23. If an acceptable system of weights could be developed, it would be possible to combine such core indicators into a composite basic needs index. The chances of an acceptable system of weights being developed, however, are extremely small. Future research may be better directed towards developing more accurate data on existing indicators, on separating more clearly the input, outcome and institutional dimensions of these indicators, and on refining proxy indicators, i.e., those which capture a range of improvements in living conditions.

24. Furthermore, in the context of national capacity-strengthening, there is room for the development of more resource-efficient methods of collecting, analysing and utilizing data by a more direct focus on policy issues. For example, under the project Social Dimensions of Adjustment (RAF/86/037), UNDP is attempting to support the development of a social audit as a policy tool in the social sectors: data would be gathered on capital stock (buildings, equipment, etc.), human resources (levels of skills, output of training institutions, etc.), equipment and supplies, and would be combined with an assessment of needs, based largely on demographic data. This tool, using data frequently available at local levels, which does not rely on expensive household surveys, can make an important contribution to the formulation of medium- and long-term social policy. Further avenues of future development include the more effective utilization of existing data, and the greater pooling and dissemination of existing information.

#### V. INDICATORS OF INSTITUTIONAL DEVELOPMENT

25. This area has received much less attention than indicators of economic and social development, partly because of the inherent difficulties of arriving at measurable concepts. For a given institution, institutional capacity can be broken down into three elements, i.e., delivery (the institution's output), resources (the

institution's inputs), and the "condition" (the institution's collective moral values, leadership, commitment, etc.). The constituent elements can then be developed into a matrix which will permit systematic analysis of the capacity of an institution to define its operational objectives. Performance can then be tested against this standard. Performance can also be tested against external standards, especially its impact on socio-economic change. Here there is a wide variety of standards, varying from psychological benefits to the societal contributions of the institution. A variety of qualitative and quantitative indicators exist to measure capacity at the single institutional level.

26. In judging performance, however, it is crucial to distinguish between efficiency, effectiveness and impact on development. For example, an institution could be efficiently producing graduates not useable by the country, hence it is not effective. Effectiveness, therefore, relates to policy objectives; which in turn, require such capacity to be built into an institution. Impact, in turn, requires national capacity to use outputs for a social and economic purpose.

27. Although it is possible to envisage further developments along these lines, in terms of assessments of the effectiveness of institutions in delivering services, several issues have arisen as a result of the policy reforms undertaken in large numbers of developing countries via structural adjustment programmes. In large part, the circumstances in which structural adjustment has emerged have been characterized by the expansion of the public sector in many developing countries far beyond the taxable capacity of the economy; structural adjustment has therefore entailed drastic curtailment of the activities of the public sector. To some extent, this has involved the closure of institutions which may have been performing adequately, if judged on their own terms. However, a central question which this latter approach does not address is whether this institution should continue to exist, given the pressure of competing claims on limited public sector resources. Any approach to institutional capacity must then involve some conception of the economic costs of the output of the institution, and an assessment of whether, given these costs, the value to society of this output merits its continued existence. This involves the following questions: can the output of the institution be purchased from abroad without damage to future economic/technological capacity? What institutional arrangements are most effective in delivering the service - public sector, private sector or hybrid forms involving sub-contracting arrangements between the two? What should be the limits of market or competitive forces in the allocation of resources to institutions?

28. In this area, either benchmark prices or productivity ratios available internationally enable some comparison of the level of efficiency of such institutions; however, in many areas there are no clear-cut standards of comparison, for example in railway transportation. Furthermore, in all cases the issues are pervaded by political judgements concerning the respective roles of the market and the public sector, and the limitations which are to be imposed on financial incentives as the allocating principle, compared with the importance of social values such as public service morale and commitment, social responsibility, etc.



29. Two conclusions arise from the above. First, further research is needed into the comparative experience of different countries in the form in which public goods are provided, and the effects of these different forms. For example, there are wide variations in the institutional forms of delivery of health care, involving different combinations of public, private commercial, private NGO/non-commercial, with and without health insurance. The nature, functioning and effects of these different institutional forms on the health of the population, the access of the mass of the population to health care, etc., are vital areas of inquiry, which will indicate the systematic connections between differences in institutional arrangements and differences in outcomes.

30. The second conclusion is the importance of financial transparency: decisions concerning institutional arrangements are rarely made on the basis of economic considerations alone: the decision of whether or not to maintain the national airline will not be made according to its budgetary cost; however, the decision must always be informed by this cost, and in general, some form of benchmark prices are available, which provide an indication of the resource cost of particular forms of institutional arrangements.

31. By combining these two conclusions, it may be possible to answer questions such as the following. How effective have existing health institutions proved to be in delivering health-care to the population? What has been the impact and economic cost of this health care delivery? How does this cost compare with alternative institutional arrangements? How far are those institutional arrangements associated elsewhere with different outcomes in terms of the distribution of access to health care?

32. Many institutions which contribute positively to social harmony, stability and progress do not produce tangible outputs nor services which are amenable to economic valuation. These include co-operatives, farmers' organizations, trade unions, etc. Such institutions by their very nature do not lend themselves to quantifiable indicators. They are, however, valuable policy-determining organizations. The development of techniques to assess the institutional health of such organizations, both individually and at the aggregate, national level, must rely in part on the work of NGOs, and in part on assessments of the legal framework which facilitates or hinders the development and diversity of such institutions.

33. In addition, certain central aspects of institutional capacity are inherently intangible, such as the capacity to undertake policy analysis, review and implementation. Their measurability is also limited because such capacities are generally diffused in research institutions and universities as well as located in government ministries. Just as with other aspects of institutional capacity, the assessment of each institution in terms of its own purposes is less problematic than an assessment of aggregate national capacity in these areas. The latter must involve, for example, the degree to which policy analysts, researchers and policy-makers interact constructively with each other; it must also involve an assessment of broader aspects of policy effectiveness which are not reflected in immediate and direct outcomes at the level of institutions, such as the degree to which the policy framework facilitates and supports dynamic, innovative private sector activities in areas consistent with overall macro-economic plans.

34. The measurement of institutional capacity is also rendered difficult by national specificity. The particular institutional arrangements that prevail in each country are the result of unique historical development; unlike technology, their transfer is hazardous. Clearly, the examination of institutional arrangements in countries that have achieved sustained development in the economic and social spheres is extremely valuable and lessons may be derived from such research. However, any attempt at the straightforward transferability of institutions or the clear-cut adaptation to a different environment of arrangements successful elsewhere is an exercise fraught with problems. Measurement, too, if it is to be relevant, must find a way of combining useful generalizations with a regard for the specificities of particular countries. This may be most usefully explored at the subregional level: groups of countries which share some important features of their historical experience have differing institutional arrangements, and transferability may be considered more feasible within a subregional context. This is certainly a topic for further research.

#### Human resource flows

35. Ultimately, institutional capacity depends upon the level of skill, experience, commitment and the pattern of deployment of high-level labour. From the viewpoint of an individual institution, its labour turnover, i.e., its capacity to attract and retain skilled, professional and managerial staff is one measure of its effectiveness. For a nation, the capacity to produce, reproduce and effectively deploy skilled, professional, scientific and managerial labour is a key determinant of its institutional capacity. This lends itself to quantification: the proportions of the high-level labour force in key categories which are domestically trained, the numbers of such workers who emigrate, the proportions of such posts occupied by short-term or donor-funded long-term expatriates, all provide some indication of the nation's capacity for self-sustained institutional development. For example, large numbers of doctors may be trained in national medical schools, yet a significant proportion of them emigrate, thereby exacerbating the shortages of medical personnel, which are in turn filled by expatriates, funded by donors. The problem then is one of the relative unattractiveness of national health institutions, including the capacity to pay adequate salaries, rather than the capacity of training institutions to produce qualified personnel. In fact, because of the access which such persons have to the international labour market, it means that national capacity to train such persons is being judged to be satisfactory. This analysis must be undertaken on a net basis, since international flows of labour into and out of countries has contributed immeasurably to the development of many countries; however, a trend in the net outmigration of high-level labour does provide an indication of the overall institutional health of a nation.

#### VI. PROPOSALS FOR FURTHER WORK

36. It is clear, therefore, that while self-reliant national capacity in general and institutional capacity in particular are basically comprehensible phenomena, a set of practical and usable indicators to measure growth in either area is not yet available.

37. The Administrator, therefore, proposes that further work be developed on the following lines. The work will be both country-specific and conceptual.
38. At the level of individual organizations, attempts will be made to develop a simple set of indicators for use by a wide variety of institutions to judge impact, effectiveness and efficiency. While a great variety of techniques are available to help improve institutional tasks - derived from behavioural and engineering sciences, a set of indicators that measure the effect of an institution on its clients has yet to evolve.
39. At the national level, the aggregate contribution of a complex of institutions has to be studied. What is the minimal institutional level needed in a sector or subsector? How is this to be judged? When is external technical co-operation no longer needed in developing institutional capacity? When does a nation graduate to self-sufficiency in its organizational strength? The policy implications that can benefit from this inquiry will be addressed.
40. A third area to be further explored is the value of developing a national self-reliance index. While the concept has limits as to quantification, a more comprehensive attempt will be made to study this issue further and publish the results.
41. Another area is the development of capacity for policy-making. The elements of policy development/implementation capacity have been articulated by a UNDP-supported project within the Latin American Center for Administration and Development. It relates to the following specifics:
- (a) Capacities to produce timely, accurate, and relevant information: statistical data, policy-monitoring information and evaluation feedback;
  - (b) Capacities to analyse information in formulating public policies;
  - (c) Capacities for a proper definition of the public policy agenda;
  - (d) Popular participation in public policy formulation;
  - (e) Adequate institutional capacities for public policy development, implementation, monitoring and evaluation.
42. The basis for an assessment is whether the policies formulated are having the intended result and impact. Each of the above components contains organizational, institutional and resource elements which would be subject to assessment criteria, and used as indicators of adequacy or deficiency.
43. However, policy development and implementation are carried out by the entire machinery of government as well as the political process. Coverage of one sector would entail organizational, institutional and resource assessments of a wide range of institutions and institutional relationships at all levels of government. The situation is further complicated when policy formulation, implementation, monitoring and evaluation are carried out through separate sets of institutions. A

means of rapid assessment may therefore have to rely more on the observable than the measurable.

44. The four areas encompassing individual institutions, national strategies for institutional decision-making, self-reliance measures and efficiency in policy-making, will be the ongoing work of UNDP. Pending decisions on a central research budget for 1992-1996, preliminary work outlining research proposals and identifying countries for further study will be developed. In the mean time, tentative indicators and methodologies will be elaborated with specific reference to the countries being currently identified, with the participation of national institutions, local academic institutions and the United Nations system. To the extent feasible, these tentative indicators and methodologies will then be tested in these countries. The results will serve as a basis for the elaboration of more refined indicators and methodologies through further research and testing under the UNDP central research programme for 1992.

45. Considerable work is being undertaken by a wide range of United Nations agencies. A collaborative process will be developed to involve them in the research tasks ahead. Furthermore, within UNDP, a wide range of initiatives such as the Management Development Programme, the Special Action Programme for Public Administration and Management and other programmes will also produce data that will support the research. Ex-post institutional evaluation activity will also provide valuable inputs to the research process.

Annex

REPORT OF THE TASK FORCE ON LONG-TERM DEVELOPMENT OBJECTIVES ON  
ITS EIGHTEENTH SESSION a/

(New York, 18-20 September 1989)

The list of development indicators as revised by the Task Force is given below. It was recognized that adequate data are not yet available in many countries for some of these indicators, but it was considered desirable to begin the collection and compilation of the necessary data.

<u>Area of focus</u>	<u>Indicator</u>
Aggregate production and inflation	Growth of domestic product Saving and investment as share of GDP Consumer price index
Trade and balance of payments	Growth of exports and imports of goods and non-factor services Current account balance as a share of GDP Terms of trade of developing countries Net flow of resources to/from developing countries
External debt	Ratio of debt service to exports of goods and non-factor services Ratio of debt to GNP Average interest rates paid by developing countries
Agriculture and food security	Growth of agricultural and cereal production Cereal stocks as a percentage of cereal consumption Calories, apparent consumption, per capita, per day Shares of developing countries in world agricultural production and trade Food price index
Industrial development	Share of developing countries in world industrial production Rate of growth of industrial production

<u>Area of focus</u>	<u>Indicator</u>
Population	Annual population growth Total fertility rate Life expectancy at birth Proportion of population using family planning methods Young age and old age dependency ratio Percentage of the population which is urban
Labour and employment	Employment levels in the modern sector Open unemployment Non-agricultural self-employed plus unremunerated family workers as a percentage of the labour force Minimum wages Industrial wages Construction wages
Education and health	First level enrolment ratio, male and female Proportion of students enrolled in scientific and technological subjects in higher education Percentage literate, 15 years of age and over, male and female Public expenditure on education as a percentage of GNP Numbers suffering from nutritional deficiency diseases (vitamin A, goitre, iron deficiency)
Child welfare	Infant mortality rate Child mortality rate Proportion of births with low birth weight Immunization rates of children against diseases
Poverty reduction	Life expectancy Number of undernourished people, total and children percentage of families below poverty line
Human settlements	Percent of population with reasonable access to water supply sanitation and waste disposal Average number of persons per room Rate of urbanization Per cent of population living in cities of over 1 million Ratio of housing costs to income

<u>Area of focus</u>	<u>Indicator</u>
Advancement of women	Female infant mortality rate Female primary and secondary school enrolment rates Expectation of life at birth, female and male Percentage of women in the labour force
Environment	Actual closed forest cover as a percentage of declared target Degraded cropland as a percentage of total cropland Degraded pastoral land as a percentage of total pastoral land Growth of energy production from renewable sources Percentage(s) of the population exposed to excessive levels of air pollution and freshwater pollution
Endogenous capacity-building in science and technology	Science and technology investment from government and non-governmental sources in priority national development programmes or sectors Proportion of scientists and technologists engaged in activities of direct relevance to national development objectives Imports of technology-intensive products as proportion of total domestic demand for technology-intensive products

Notes

a/ This information originally appeared in document ACC/1989/CRP.13.

-----

