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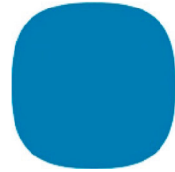
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Least Developed Countries - Newly Defined

Udo E. Simonis

In view of growing environmental problems and unsettled distributional conflicts, the consensus on the concept of development has crumbled away. No better with the question of what underdevelopment means. The Committee for Development Planning of the United Nations (CDP) has therefore been reviewing the adequacy of the established criteria for identifying the least developed among the developing countries since 1988. The Second United Nations Conference on the Least Developed Countries held in Paris from 3-14 September 1990 gave impetus to this work by requesting the CDP to complete the review of criteria for identifying the least developed countries expeditiously. At the same time, the Conference endorsed the introduction of a dynamic element into the application of the criteria, and recommended that the review be submitted to ECOSOC for consideration, and subsequently forwarded to the United Nations General Assembly. The CDP completed to the United Nations General Assembly. The CDP completed its review in March, 1991.

In the following, the main findings and recommendations of the CDP report are presented and the consequences for defining the group of the least developed countries are put forward - underdevelopment is being newly defined.

General Considerations

The original set of criteria for identifying the least developed countries was adopted by the CDP in 1971.¹ Modifications were made in 1973² and again in 1981.³ Since 1981, the CDP has recommended countries for inclusion in the list of the least developed countries based on cut-off points for three indicators:

- upper and lower cut-off points for per capita GDP,⁴
- a manufacturing share of 10 per cent or less in total GDP and
- a literacy rate of 20 per cent or less.

A country would be recommended for inclusion in the list if it satisfied the last two criteria, even if its per capita GDP exceeded the lower cut-off point, as long as it did not exceed the upper cut-off point; or if its per capita GDP fell below the lower cut-off point and it had a manufacturing share of 10 per cent or less in total GDP even if its literacy rate exceeded 20 per cent.

The CDP has long been dissatisfied with these criteria and the way in which they have been applied. In a 1980 review of the criteria, a CDP Working Group concluded that the *per capita income* criterion continued to be important but noted that since the quality of the underlying information varied a great deal among countries, the magnitude of per capita GDP had to be viewed as a broad rather than a precise estimate. It expressed reservations about the other criteria (*adult literacy rate* and *share of manufacturing in GDP*) which were meant to bring out the structural weaknesses of countries.⁵ In 1990, the CDP summed up its position on the issue as follows:

"The Committee wishes to reiterate... that the existing criteria, which were tentatively formulated some two decades ago under the constraint of a paucity of data on development indicators for developing countries, were not adequate to bring out in a conclusive manner the longterm structural weaknesses which underlay the concept of 'least developed'.⁶

The CDP attaches importance to a number of considerations in formulating a new set of criteria:

- The criteria should bring out the salient characteristics of the least developed countries which give rise to special concern for them. These are, in brief, poverty combined with structural impediments which make it more difficult for them to achieve sustained development without special assistance from the international community.
- The indicators selected should be robust so as to minimize the likelihood of easy reversibility from least developed status to non-least developed status and vice versa, as a result of dramatic fluctuations in one or another single indicator; and they should introduce a dynamic element that would serve as a reliable basis for deciding as to whether countries should be added to, or removed from (so-called "graduation"), the list of least developed countries.
- The indicators selected should only be those for which data are reliable and available on a regular basis. Combinations of indicators serving as criteria should be transparent and easily intelligible, and should be consistently applied.
- The criteria should be formulated so as to lend themselves to a great measure of automaticity in application, but should not be rigid as to make application mechanical. In the practical application of the criteria, either for purposes of inclusion in, or graduation from, the list, the CDP would have to exercise judgement, especially in borderline cases.

This exercise of judgement should be done with the greatest possible transparency and consistency, by adhering to certain pre-established guidelines such as:

- Judgement should be based on considerations of poverty and long-term structural impediments, and not on short-term set-backs of windfalls.
- Additional indicators, also related to the salient characteristics of the least developed countries, to those that constitute the formal criteria may be examined to form a judgement on borderline cases.
- Where doubts persist, in-depth country studies should be undertaken.

The CDP considered the issues of human rights and methods of governance. It stressed the importance of these issues in their own rights as well as the relation to economic and social progress. It took the position, however, that it would be inappropriate to use such considerations for decisions regarding inclusion in, or exclusion from, the list of the least developed countries. Most members of the CDP felt, however, that in the future "policy performance" should be taken into account in a more systematic way, and that respective indicators and criteria should get top priority in social science research.

The Criteria

Least developed countries shall be defined as those low-income countries that are suffering from long-term handicaps to development, in particular, low levels of human resources development and/or severe structural weaknesses.

The relative level of poverty may be measured by per capita income. A variety of measures of per capita income were considered: per capita GDP, per capita GNP, per capita GDP based on purchasing power parity (PPP), GNP adjusted for compensatory or "defensive expenditures". For the time being, however, the continued use of per capita GDP (annual average for the latest three years for which data are available) was still thought to be the most practical.

In the view of the CDP, evaluating human resources development should focus on achievements in health and education, as a measure of the capacity of a country to take advantage of opportunities for development. In this connection, an Augmented Physical Quality of Life Index (APQLI), comprising four indicators - life expectancy at birth, per capita calorie supplies, combined primary and secondary school enrolment ratio, and adult literacy rate - was considered to be an appropriate measure.⁷

As far as structural weakness is concerned, the CDP considered two main kinds of weaknesses, namely,

- *natural handicaps* such as small population, geographical isolation (e.g. island countries), landlockedness, high climatic risks which may be measured by an index of instability of agricultural production or by specific climatic risks such as proneness to droughts, floods and cyclones, on a case by case basis; and
- *low economic diversifications*. Economic diversification might be measured by a composite index, EDI, comprising share of manufacturing in GDP, share of employment in industry, per capita electricity consumption and export concentration ratio.

The proposed cut-off points on the per capita income indicator (GDP) and the composite indices (APQLI and EDI) and procedures for their application are described below.⁸

Application of the Criteria

As for the per capita income criterion, the World Bank cut-off point for low-income countries as measured by GNP plus 10 per cent to derive an approximate GDP equivalent for less developed countries is recommended. For 1991 the cut-off point on this basis might be US\$ 600 (base year 1987), which corresponds roughly to the upper cut-off point of the per capita GDP used by CDP so far. For additional information a per capita PPP estimate of GDP, if available, might be used in 1991, equal to or less than US\$ 1,000 in 1987. Updated estimates of these measures (US\$ 600 GDP or US\$ 1,000 PPP) would be used in subsequent reviews. Countries will be considered for least developed status only if they meet both these per capita income criteria and population criteria.

Inclusion in the list on the basis of the GDP, APQLI and EDI criteria should not be automatic, but also subject to a review of a number of other indicators representing structural characteristics affecting the state and prospects of development of individual countries, particularly:

- the Natural Endowment Index (NDI) and its component indicators, namely agricultural land per capita, exports of minerals as percentage of total exports, average rainfall and rainfall variability;
- the Instability of Agricultural Production Index or specific climatic risks;
- per capita exports in relation to country size;

Inclusion Rule

A country will qualify for inclusion in the list of least developed countries if:

- it meets all four formal criteria, namely, population size, per capita income, the APQLI and the EDI, subject to the judgement of the Committee for Development Planning on (a) the natural endowment index and its component indicators, (b) exports of petroleum as a percentage of total exports, and (c) Official Development Assistance as a percentage of GNP; or
- it meets the population and per capita income criterion, and the APQLI or the EDI, and is landlocked, is a small country with a population of one million or less, or suffers from frequent severe climatic risks such as droughts, floods and cyclones. Inclusion will be subject to the judgement of the Committee for Development Planning on other considerations just as above.

Graduation Rule

A country will be graduated from the list of least developed countries if:

- it has exceeded the cut-off point on the per capita income criterion relevant at the time a review is carried out, and the cut-off point on either the APQLI or the EDI for three years; or
- it has exceeded the cut-off points on both the APQLI and the EDI even if its per capita income remained below the cut-off point on the per capita income criterion. The margins by which the cut-off points need to be exceeded are set at US\$ 100 on per capita income. 5 points on the APQLI and 3 points on the EDI.

- Official Development Assistance (ODA) as percentage of GNP;
- exports of petroleum as a percentage of total exports.⁹

After examining the data for the EDI and the APQLI, the CDP decided to set the benchmarks at the third quartile on each index for the low-income countries, i.e. 22 for the EDI and 47 for the APQLI.

For those developing countries that met the per capita GDP criterion and whose population size does not exceed 75 million, eligibility for least developed status was determined in three stages: First, a core list of least developed countries was identified among those that fall below the cut-off point on both indices. Next, the remaining countries were assessed on the basis of a set of more qualitative indicators, namely: landlockedness, small population (1 million or less), islands, climatic risks, such as proneness to drought, floods, and cyclones. If any of these countries falls below the cut-off point on the APQLI or the EDI and is landlocked or an island, or has a population of one million or less, or suffers from frequent incidence of cyclones, droughts and floods, it should be included in the list. At each stage of assessment the CDP considered the APQLI or the EDI or both as well as the component indicators of the indices. Moreover, in borderline cases, consideration was given to the additional structural characteristics mentioned above.

Should the assessment of eligibility on the basis of the selected criteria and procedures turn out to be inconclusive with regard to one or more countries, the CDP suggests commissioning in-depth country studies before reaching a definitive conclusion.

The above procedure constitutes the *inclusion rule*, which applies only to countries that are not currently on the list of the least developed countries. For countries that are already on the list, the *graduation rule* as set out in the next paragraph will apply.

With regard to graduation from the list, the CDP recommends that a country should be considered no longer eligible for least developed status after it has exceeded the cut-off point on the GDP criterion, relevant at the time the review is carried out, and the cut-off point on either the APQLI or the EDI for at least three years. However, certain margins are suggested: margins by which the cut-off points need to be exceeded were set at US\$ 100 on per capita GDP, 5 points on the APQLI, and 3 points on the EDI. A country might also be graduated from the list if it exceeds the cut-off points by the margins indicated for both the APQLI and the EDI (i.e. 52 APQLI and 25 EDI) even if per capita income remains below the cut-off point (US\$ 600 or 700) of GDP.

The CDP suggests that a general review of the list of the least developed countries should be undertaken once every three years. This review should automatically include all low-income countries; thus, it would no longer be necessary for countries to request their inclusion in the list.

Table 1
Group I: Countries with per capita GDP of US \$ 600
or less, population of 75 million or less, APQLI of
47 or less, and EDI of 22 or less

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|-----------------------------------|--|-------|-----|
| Afghanistan | 276 | 17 | 19 |
| Benin | 385 | 26 | 18 |
| Bhutan | 195 | 27 | 20 |
| Burkina Faso | 200 | 16 | 17 |
| Burundi | 215 | 27 | 8 |
| Central African Republic | 375 | 28 | 18 |
| Chad | 177 | 18 | 15 |
| Comoros | 431 | 44 | 8 |
| Democratic Kampuchea ¹ | 82 | 44 | 21 |
| Djibouti | below 400 ^a | 15 | 15 |
| Equatorial Guinea | 400 | 32 | 14 |
| Ethiopia | 120 | 19 | 14 |
| Gambia | 313 | 26 | 16 |
| Ghana ¹ | 360 | 42 | 19 |
| Guinea | 435 | 17 | 4 |
| Guinea Bissau | 174 | 31 | 15 |
| Kenya ¹ | 375 | 44 | 22 |
| Liberia | 474 | 32 | 14 |
| Madagascar ¹ | 149 | 47 | 19 |
| Malawi | 171 | 26 | 17 |
| Mali | 233 | 16 | 13 |
| Mauritania | 466 | 28 | 13 |
| Nepal | 131 | 30 | 22 |
| Niger | 305 | 18 | 9 |
| Rwanda | 327 | 26 | 9 |
| Sao Tome & Principe | 430 | 46 | 10 |
| Sierra Leone | 289 | 18 | 21 |
| Solomon Islands ¹ | 566 | 23 | 21 |
| Somalia | 216 | 9 | 9 |
| Sudan | 302 | 26 | 21 |
| Tanzania | 127 | 35 | 19 |
| Togo | 389 | 37 | 18 |
| Uganda | 231 | 35 | 3 |
| Zaire ¹ | 95 | 41 | 22 |
| Zambia ¹ | 367 | 45 | 14 |

¹ Not on current list of least developed countries.

^a Estimated per capita GDP accruing to Djiboutians.

Recommendations

On the basis of the criteria and their applications the CDP has assessed the eligibility of countries as follows:

At the first stage, countries were identified regarding per capita GDP (US\$ 600 or less), APQLI (47 or less), EDI (22 or less), and population (75 million or less). The following 35 countries (Group I) meet all four criteria (see Table 1): Afghanistan, Benin, Bhutan, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Kampuchea, Djibouti, Equatorial Guinea, Ethiopia, Gambia, Ghana, Guinea Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Nepal, Niger, Rwanda, Sao Tome & Principe, Sierra Leone, Solomon Islands, Somalia, Sudan, Tanzania, Togo, Uganda, Zaire, Zambia.

Of this total of 35 countries, seven countries, namely Ghana, Kampuchea, Kenya, Madagascar, Solomon Islands, Zaire and Zambia are not currently on the list of the least developed countries.

However, among these countries Kenya is right on the cut-off point on the Edi, and Madagascar is on the cut-off point of the APQLI. These two countries are both of medium size. Kenya suffers from frequent droughts, and Madagascar is prone to cyclones and droughts. These countries are borderline cases, Madagascar having a stronger case for inclusion than Kenya. On balance, the CDP therefore recommends the inclusion of Madagascar but not of Kenya.

The second stage of assessment was based on the APQLI and the other indicators relevant for countries in Group II. Two countries, namely, Haiti and Mozambique are eligible as they both meet the per capita GDP criterion and the APQLI, but not the EDI criterion. Both are already on the list and should be retained since they do not meet the graduation rule.

Table 2
Group II: Countries with per capita GDP of
US \$ 600 or less, population of 75 million or less,
APQLI of 47 or less, EDI above 22

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|------------|--|-------|-----|
| Haiti | 358 | 34 | 28 |
| Mozambique | 78 | 24 | 24 |

The third stage of assessment was based on the EDI and the other indicators relevant for countries in Group III.

Table 3
Group III: Countries with per capita GDP of
US \$ 600 or less, population of 75 million or less,
EDI of 22 or less, but with APQLI above 47

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|----------|--|-------|-----|
| Kiribati | 405 | 73 | 3 |
| Laos | 178 | 53 | 21 |
| Lesotho | 240 | 51 | 18 |
| Maldives | 441 | 50 | 18 |
| Tuvalu | 245 | 65 | 19 |

Five countries, namely, Kiribati, Laos, Lesotho, Maldives and Tuvalu are eligible on these considerations. They all meet the per capita GDP criterion and the EDI, but not the APQLI criterion. Moreover, Kiribati, Maldives and Tuvalu are islands with very small populations; Lesotho is landlocked, and Laos is both landlocked and suffers from frequent incidence of droughts and floods. Again, these countries are already on the list and should be retained since they do not meet the graduation rule.

Table 4
Group IV: Countries with per capita GDP of
US \$ 600 or less, population of 75 million or less,
but with APQLI above 47, and EDI above 22

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|------------------------|--|-------|-----|
| Guayana ¹ | 376 | 68 | 23 |
| Myanmar | 318 | 57 | 24 |
| Nicaragua ¹ | 393 | 61 | 25 |
| Vietnam ¹ | 119 | 58 | 25 |

¹ Not on current list of least developed countries.

Four countries, namely Guayana, Myanmar, Nicaragua and Vietnam (Group IV) have a per capita GDP well below the cut-off point, but do not meet either the APQLI or the EDI. Myanmar, which already is on the list, does not meet the graduation rule and the CDP recommends it be retained.

Six countries have a per capita income below US\$ 600 but have a population size greater than 75 million (Group V). Of these countries, only Bangladesh is presently on the list. Since it does not meet the graduation rule, the CDP recommends it be retained.

Table 5
Group V: Countries with per capita GDP of
US \$ 600 or less, but with population greater than
75 million

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|------------------------|--|-------|-----|
| Bangladesh | 202 | 27 | 22 |
| China ¹ | 291 | 68 | 34 |
| India ¹ | 328 | 42 | 31 |
| Indonesia ¹ | 477 | 58 | 22 |
| Nigeria ¹ | 230 | 35 | 5 |
| Pakistan ¹ | 366 | 31 | 29 |

¹ Not on current list of least developed countries.

The foregoing assessment was done for all low-income countries, defined as those whose per capita GDP falls below the cut-off point on the per capita GDP criterion (US\$ 600). The per capita GDP of five countries presently on the list of least developed countries (Group IV), namely, Botswana, Cape Verde, Samoa, Vanuatu, and the Republic of Yemen exceeds the cut-off point on the per capita GDP criterion. Therefore, these countries have been assessed separately in the light of the graduation rule proposed. (Yemen A.R. and Yemen P.D.R. have been kept separate for the purpose of the exercise because integrated data on all the indicators used are not yet available for the unified country, the Republic of Yemen.) At any rate, the Republic of Yemen will be retained since both the former Yemen A.R. and Yemen P.D.R. met both the APQLI and the EDI, and their combined annual average per capita GDP (period 1987-1989) was estimated at US\$ 674. The country, therefore, does not meet the graduation rule.

Table 6
Group VI: Countries currently classified as least developed with per capita GDP above US\$ 600

| | Per capita GDP (US dollar) annual average 1987-1989 | APQLI | EDI |
|-------------------|--|-----------------|-----------------|
| Botswana | 1,625 | 52 | 12 |
| Cape Verde | 741 | 49 | 17 |
| Samoa | 748 | 68 | 14 |
| Vanuatu | 881 | 48 | 14 |
| Republic of Yemen | 663 | 29 ^a | 14 ^a |
| | | 34 ^b | 6 ^b |

^a For the former Yemen, Arab Republic.

^b For the former Yemen, People's Democratic Republic.

Cape Verde, Samoa and Vanuatu are all micro-states and islands. All of them have very low values on the EDI. Vanuatu and Cape Verde are marginally above the cut-off point on the APQLI, much less than required for the purpose of graduation; Samoa, however, is well above it (APQLI: 68). The current per capita GDP of all three countries is above the cut-off point on the per capita GDP criterion, and they are even above the US\$ 100 margin required for graduation. In the case of Cape Verde, however, the current level of per capita GDP is a result of strong currency appreciation since 1986, which is to say that the current level is highly unrealistic and has been that high only for a few years. All three countries are recipients of substantial official development assistance. For the period 1970-1987, ODA as a percentage of GDP was estimated at 60.0 for Cape Verde, 25.3 for Samoa and 51.2 for Vanuatu. This suggests that the levels of incomes in these countries have for a long time been dependent on external assistance, without which they could not be sustained. While such high levels of ODA are typical for very small countries and do not directly affect the calculation of GDP measured in local currency units, it is also true that their exchange rates are influenced by such flows. In the absence of such flows, their exchange rates would be much higher, and their GDP expressed in US dollars lower. At any rate, Cape Verde and Vanuatu do not meet the graduation rule. Because of the above considerations, the CDP suggests that all these three countries should be retained on the list.

By contrast, Botswana, as the only one of all the developing countries assessed, satisfies the graduation rule, and should therefore be removed from the list.

Conclusions

The work of the CDP, it seems, has considerably improved the methodology of defining development - and underdevelopment. New, additional indicators were introduced, particularly the APQLI and the EDI, to complement the major conventional development criterion, per capita GDP.

In applying this new system of indicators, in defining respective cut-off points on the indicators, in including additional qualitative information, and in using a clear graduation rule, the following consequences emerge regarding the list of least developed countries.

All the countries currently on the list are retained, except Botswana, and six countries, namely, Ghana, Kampuchea, Madagascar, Solomon Islands, Zaire and Zambia are included in the list. Thus, counting the former Yemen A.R. and Yemen P.D.R. as one country, as is the case now, there are 47 countries on the list of the least developed countries. It could well be that this new list - and its sophisticated methodological basis - will have important implications for development assistance in general and for the "Programme of Action" for the least developed countries in the 1990s in particular.¹⁰

Notes

- 1) See *Official Records of the ECOSOC*, Supplement No. 7, 1971, E/4990, Chapter 2.
- 2) See *Official Records of the ECOSOC*, Supplement No. 5, 1973, E/5293, p. 31.
- 3) See *Report of the Working Group of the Committee for Development Planning on the Identification of the least developed among the developing countries*, November 14, 1980, pp. 6-7; and *Official Records of the ECOSOC*, Supplement No. 7, 1981, E/1981/27, p. 27.
- 4) US\$ 473 and US\$ 567 in 1990, based on a three-year average for the years 1985-1987. The benchmarks have been regularly updated by the growth rate of nominal GDP per capita in world market economies.
- 5) See *Report of the Working Group of the CDP*, 1980, pp. 6-7.
- 6) See *Report of the Committee for Development Planning, Official Records of the ECOSOC*, 1990, E/1990/27, p. 46.
- 7) This approach has its origin in studies by M.D. Morris. See M.D. Morris: "A Physical Quality of Life Index", in: *Urban Ecology*, 1978, No. 3, pp. 225-240; M.D. Morris et al: *Measuring the Condition of the World's Poor: The Physical Quality of Life Index*, Oxford 1979.

- 8) An overview on the complex of indicator research, including a comprehensive bibliography, is to be found in: U.E. Simonis: "Alternative Wirtschaftsrechnungen", in: *Möglichkeiten einer realitätsgerechteren Wohlstandsberechnung*, Dokumentation, Forum der SPD-Fraktion im Schleswig-Holsteinischen Landtag, 10 January 1990, Kiel 1990, pp. 10-34.
- 9) These specific indicators had been tested empirically in a study by the CDP Secretariat, but were not included in the officially accepted CDP report. Therefore, in the following I shall focus only on GDP, the APQLI and the EDI criteria.
- 10) Cf. U.E. Simonis: "A Development Strategy for the 1990s", in: *INTERECONOMICS*, Vol. 25, No. 3, 1990, pp. 111-121.