

# Reforming the criteria for identifying Least Developed Countries according to the rationale of the category \*

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The Least Developed Countries (LDCs) category will be 50 years old in 2021. 2021 is also the year of the next triennial review of the LDCs by the UN CDP (Committee of Development Policy). The next two years are therefore an opportunity to reassess the rationale for, and the implementation of, the LDC category, including a possible revision of the identification criteria. This document attempts to answer three main questions: What is the purpose of the category with respect to the Sustainable Development Goals (SDGs)? What is the nature of vulnerability to be taken into account in identifying the Least Developed Countries? How to ensure an internal and inter-temporal consistency of the category? The technical choices for measuring the indicators used as criteria should be examined accordingly.



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## ► The purpose of the category and the Sustainable Development Goals

It is important to come back to the original objectives that led to the creation of the category to see how well they are adapted to the current international context. LDCs were created in 1971 to identify countries that face particularly severe structural handicaps to economic growth and are more likely to remain poor than others. They are therefore said to be “caught in a trap” (Guillaumont 2009). In 2012, the definition of LDCs was broadened by the CDP to define LDCs as poor countries facing structural handicaps to sustainable development. This definition is more in line with the SDGs adopted three years later, in 2015, by the United Nations General Assembly, but it involves an adaptation of the criteria, which was partially initiated in 2012, but is still subject to discussion. A first objective of the revision of the criteria should therefore be to bring them into line with the new objective assigned to the category and the new International Development Agenda (Guillaumont 2018).

Confusion must be avoided here. Taking sustainable development as an objective, instead of economic growth alone, is indeed consistent with the current development agenda. But, this does not fundamentally change the purpose of the LDC category, which involves *the identification of the structural handicaps* that prevent poor countries from reaching the SDGs, as in the past from achieving significant economic growth. The SDGs, as goals, are not intended to identify handicaps, but handicaps should be examined with regard to them, which besides poverty reduction notably include climate and security. The criteria for identifying LDCs are currently low per capita income, low human capital, and high structural economic vulnerability. It is not clear that the current per capita income criterion can be replaced by a synthetic indicator of sustainable development (as it is so difficult to establish), while the other two indi-

cators should represent structural handicaps to sustainable development. Depending on the countries concerned climate change is probably a major structural handicap in the long or possibly short run. Insecurity is another one, in the short run, and to some extent less structural.

## ► The nature of the vulnerability to be taken into account: Major options

Another problem has arisen repeatedly during the application of the criteria, particularly during the graduation process of some LDCs. The countries graduated or proposed for graduation by the CDP have mostly been small, often island, countries, and highly vulnerable ones. The issue of vulnerability has thus been the subject of a recurring debate between the CDP and various development partners. While the criteria were applied by the CDP in a rigorous and logical manner, as was its role, they were at the same time criticized by various countries and institutions. Without giving up the rationale of the category, it is therefore necessary to see how a new design of the criteria can dispel the persistent misunderstanding, which over the last 20 years has accompanied debates on graduation, in particular about how to take vulnerability into account. This implies examining first the nature of the vulnerability to be taken into account, then its place in relation to other graduation criteria. The first point is examined in this section, the second one in the next section.

Vulnerability was introduced in 1999 as one of the three criteria for identifying LDCs, replacing an “economic diversification index”, which had itself replaced in 1991 the share of manufacturing value added in GDP, used from 1971. Vulnerability was expressed by the Economic Vulnerability Index (EVI), which is supposed to represent a structural economic vulnerability, and was revised in 2005 (to a formula that distinguishes between exposure to shocks and the frequency of shocks), and again in 2012 by add-

ing a new component supposed to represent climate change risk (share of the population living in low elevated coastal zones, LECZ).

Today, in addition to economic vulnerability, two other kinds of structural vulnerability are receiving a particular attention to the international community because of their economic and social consequences. One is *vulnerability to climate change*, which is not just a factor in areas at risk of coastal flooding. If it is to be taken into account, its different forms should be grasped, checking, as was done for EVI, that only structural and exogenous physical shocks are considered.

This raises the question of whether physical vulnerability to climate change should be integrated into the identification of LDCs, or whether it should be addressed separately. The creation of a category of countries particularly vulnerable to climate change would raise more problems than it would solve and seems to have been dismissed by ECOSOC. It is all the less needed because vulnerability to climate change can be measured continuously and therefore lead to incremental instead of binary measures. Finally, since this vulnerability constitutes a structural obstacle to sustainable development for the countries which are poor, it may seem logical today to take it explicitly into account in the identification of LDCs.

A third kind of vulnerability, which is increasingly attracting the attention and resources of the international community, is *political fragility*. The list of countries considered fragile, which varies both over time and on the institutions which use it, largely overlaps with the list of LDCs. Although not all fragile countries are LDCs and not all LDCs are considered to be fragile, all have been considered fragile at one time. In the past, the CDP did not wish to take political fragility into account among the criteria for identifying LDCs and at that time was right not to do so. Indeed, political fragility was often defined on the basis of the same indicator of the quality of policies and institutions as that used

to measure performance and allocate aid on the basis of it<sup>2</sup>. However, the analysis of political fragility has evolved in recent years and indicators have been proposed to capture a structural or exogenous component of political fragility and take it into account in aid allocation without questioning the principle of an allocation based primarily on performance, which is dear to many donors (Feindouno S., Goujon M., Wagner L. and ongoing work on an index of structural risk of conflict by Feindouno S. and Wagner L., FERDI).

The above remarks show the similarity of the problems to be solved in order to measure the structural components of the various kinds of vulnerability (economic, climate, political). These components correspond to structural handicaps to sustainable development that must be taken into account both for the identification of LDCs and for the allocation of development assistance. It is important to note here the intent of some multilateral development banks to take into account these three dimensions of structural vulnerability through appropriate indicators to be introduced into their concessional fund allocation formula.

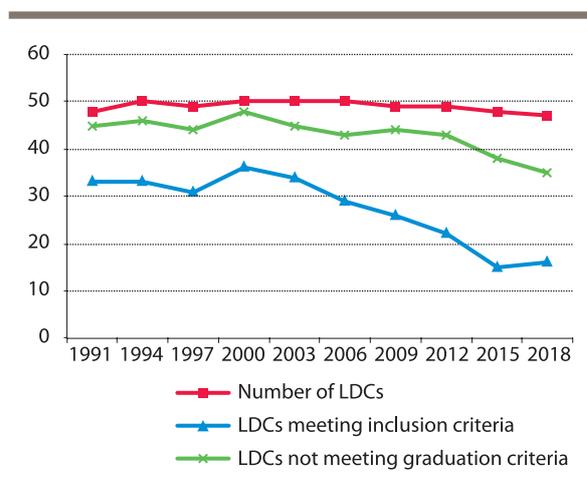
### ► **Strengthening the consistency of the criteria: Implications for the content of the category**

Due to the asymmetry introduced between the inclusion criteria and the graduation criteria, the scope of the category has gradually lost coherence. In 2018, after the last triennial review of the list of LDCs, *only 16 out of 47 LDCs still met the inclusion criteria*, with 31 no longer meeting them. However, out of these 31, only 9 met the graduation criteria (7 of which have been recommended by the CDP for graduation). This means that *22 countries met neither inclusion nor graduation criteria*, a number that is significantly higher than in the past: There were only 11 such

2. The CPIA (Country Policy and Institutional Assessment), calculated by the multilateral development banks

countries in 2000 (see Figure 1). This large fringe of countries has weakened the coherence of the category, all the more so because for a long time non-LDC countries were in the same situation: Not meeting the inclusion criteria, they would not have met the graduation criteria had they been LDCs.

**Graph 1.** Inclusion and graduation: How the composition of the category has evolved, weakening its consistency.



The existence of these countries that meet neither the inclusion criteria nor the graduation criteria may seem paradoxical in view of the difficulty of making progress towards the goal set by the Istanbul Programme of Action (to enable half of LDCs to meet the graduation criteria in 2020).

To understand this situation, it is necessary to refer to the origin of the category and to the way in which the possibility of graduation according to specific criteria was introduced in 1991. *From the outset, the three inclusion criteria were complementary*, meaning that LDCs were low-income countries simultaneously facing two categories of structural handicaps, one relating to human capital and the other to economic structure. This complementarity principle has remained unchanged for almost half a century. Its rationale was that the combination of the two kinds of structural handicap kept

countries in a low-level trap. There were theoretical and empirical reasons for this (Guillaumont 2009), which may have diminished over time. It would have been conceivable from the outset to measure the severity of structural handicaps by a single composite indicator combining low human capital and weak economic structure with a certain degree of substitutability.

When the graduation criteria were defined in 1991, it would have been logical to apply a perfect symmetry with inclusion criteria and consider that no longer fulfilling one of the three complementary inclusion criteria (indeed with a margin between the inclusion and graduation thresholds) would be enough to make a country eligible for graduation. But the rule adopted, in order to reduce the risk of early graduation, was that to be eligible for graduation a country had to stop fulfilling not only one, but two of the three inclusion criteria (with a margin). In 2005 an additional rule was introduced allowing eligibility in the event that per capita income is more than twice the ordinary graduation threshold (i.e. 2.4 x the inclusion threshold). Despite this rule, as graduation eligibility appeared essentially with regard to per capita income and human capital thresholds and the high vulnerability of eligible countries was not an active criterion, a criticism emerged which proposed that the graduation criterion relating to vulnerability should also be met to make a country eligible for graduation. Such a change would have increased the asymmetry between inclusion and graduation criteria and even more weakened the consistency of the category.

More consistent with the rationale of the category, and without fully diverging from the previous practice, a reform could easily avoid the paradoxical situation which we have reached and the equally paradoxical criticism to which this situation has led. The reform could cover both inclusion and graduation criteria or possibly be limited to graduation criteria. It would involve *combining the human capital index and the structural vulnerability index into a*

single criterion of structural handicap, which for convenience we call here *SHI*.<sup>3</sup> To be eligible for inclusion, a country should have both a low income and a high level of structural handicap. To be eligible for graduation, an LDC should either stop meeting the per capita income criterion and the structural handicap criterion (with margins), or as now, have reached twice the ordinary per capita income graduation threshold (2.4 x the low income exit threshold).

In order for this reform not to deviate too far from the rationale that prevailed when the category was created (that of complementarity between the two categories of handicap), the two corresponding indices *should be aggregated into a SHI index* not by an arithmetic average but *by a quadratic one*, so as to give the most impact to the most severe handicap. Such a reform could strengthen the inter-temporal consistency of the list and reduce the eligibility to graduation of the LDCs that are among the most vulnerable.

Applied to the data of the 2018 review of the list, without making new non-LDC country eligible for inclusion, it would have increased the number of existing LDCs that still meet the inclusion criteria. It would also have shown Kiribati and Tuvalu as not meeting the SHI graduation criterion (while meeting the income only criterion).

It should be noted that this solution would easily allow the extension of the scope of the structural vulnerability index to the three dimensions of vulnerability previously described. The vulnerability criterion would then rely on an average of a revised index of structural economic vulnerability (revised EVI) and a physical vulnerability to climate change, or possibly on an average of these two indices and an index of structural socio-political fragility.<sup>4</sup>

3. The principles on which such an index can rely are presented in Guillaumont P., 2009. This solution was already suggested by the CDP in its 2005 report

4. If we wish to distinguish several vulnerability/fragility indices, each of which intended to be an identification criterion, we would have to modify the working of the criteria more deeply and in a way that would deviate more from previous rationale and practice.

An additional step towards simplification could be to calculate a (quadratic) average of the three indicators used as (complementary) criteria for the LDC identification: an index of low income per capita (income expressed in logs), an index of low level of human capital, and an index of structural vulnerability (with the chosen scope). The three criteria would then be taken into account simultaneously, but without being perfectly substitutable (Guillaumont P., 2009). It would result in a country ranking according to a kind of “*Least Development Index*”, to which only one inclusion and one graduation threshold would be applied. Such an exercise, conceivable for inclusion and graduation, could be limited to graduation, where it would help most. Tentatively applied from the 2018 Review data (GNIpc, HAI, EVI), it would have made Tuvalu still eligible for graduation, but Kiribati clearly not (see Annex).

### ► The correlative refinement of indicators

Adaptation to the SDGs, a more comprehensive treatment of vulnerability, and strengthening the coherence of the category are thus three important challenges for a reform of the criteria. A reform of the criteria gives an opportunity to revise the content of the indicators used in order to bring them more in line with the objectives assigned to the category, as well as with the current state of scientific knowledge. Three issues are to be addressed: (i) the way in which the component indicators are combined in a composite criterion indicator; (ii) the thresholds used for the application of the criteria; (iii) the actual definition of the components of each indicator.

For the aggregation of the indicators of human assets (HAI) and vulnerability (presently EVI) into a synthetic indicator of structural handicap, in order to *not deviate too much from the initial assumption of “handicap complementar-*

ity”, we have suggested above the use of a *quadratic average* which gives greater impact to the most severe handicap. This kind of averaging may also be used for the calculation of the HAI and EVI indices, instead of the current practice of using an arithmetic average. It is particularly relevant (and done) for the calculation of the Physical Vulnerability to Climate Change Index (PVCCI). However, if such an index was merged with a revised EVI in a broader vulnerability index, it could be done through an arithmetic average to make clearer the kind of vulnerability taken into account.

The *thresholds* to be applied to the synthetic criteria indices corresponding to the two structural handicaps (HAI) and (EVI) were established in 1991, relative to the quartile of a group of countries including the LDCs and other low-income countries. With the decline in the number of low-income countries, the reference group has included reduced number of countries, and could not be maintained as it was. So, in 2012 it was decided to set a fixed threshold corresponding to the quartile measured for the year reviewed. But, since the indicators’ content can be modified, and with regard to the possibility that vulnerability be broadened to other dimensions, *the fixed thresholds* have lost their meaning. Their very principle seems less relevant because each time an indicator is modified, the threshold will have to be modified. To this argument can be added the fact that in a globalised world structural handicaps should be assessed in a relative rather than an absolute way - relative to a comparable set of countries. A solution would be to use a reference group including, in addition to LDCs, all other countries whose per capita income is below the “income only” graduation threshold, i.e. 2.4 times the low income threshold, and then repeat the quartile rule (64 countries in 2018, with a quartile at the 48<sup>th</sup> rank), or to add to this group all other countries below the lower middle income threshold and to directly use the median as the production threshold, which would make graduation

eligibility easier (80 countries in 2018, with a median at the 40<sup>th</sup> rank).

It is not the purpose of this note to examine in detail the *possible changes in the various components* of the indices used. Since criteria other than income per capita correspond to structural handicaps, they must be based on components that truly express an obstacle to sustainable development. Improvements can be made to the human assets index provided that it remains an index of capital, not of well-being, and to take into account the fact that the indicator is used in a comparative and cross-sectional way rather than to monitor developments within the same country. Thus, if the weight for height (or height for age) ratio is a better indicator for measuring the evolution of the food situation than the percentage of the population under-nourished, it is probably not so relevant to compare this situation between countries with very different population characteristics.

Perhaps *the most useful improvements are to be made to the Structural Economic Vulnerability Index (EVI)*, especially if an index of physical vulnerability to climate change is to be used in parallel. The innovation that consisted in 2012 of including in the EVI the proportion of the population living at low elevation, to the detriment of the “small population size” component, captures, as already noted, only a fraction of the risks associated with climate change. It would no longer be appropriate if a broader index of vulnerability to climate change were used. Moreover, its introduction, as previously noted (Guillaumont, 2014), had a paradoxical effect on the ranking of countries by vulnerability, as shown by the case of Vanuatu, which became relatively less vulnerable after this reform! Also, small arid countries threatened by global warming, saw their relative level of vulnerability decline.<sup>5</sup>

A recently published study by the Asian

5. The main shortcoming of the index could be easily avoided by retaining the ratio of arid areas to the total of the non-desertic areas, by the same way that the share of population living in low elevated coastal areas...or the relative share of population living in these arid areas.

Development Bank on vulnerability in its various dimensions applied to three countries that are, or have been LDCs, Bhutan, Nepal, Maldives, highlighted, among other things, “what EVI does not say” with regard to structural economic vulnerability. This is the case, for example, for the instability of remittances received from migrants (transfers whose average level in Nepal is much higher than that of exports) or, for Nepal and Bhutan the risk of flooding due to the rupture of glacial lakes (as high as the risk for other countries due to sea level rise (recorded since 2012 in EVI)), or the geographical concentration of exports which makes these countries more vulnerable than product concentration (Guillaumont 2017).

Another study (unpublished) prepared for the African Development Bank measures the structural vulnerability of African countries eligible for the African Development Fund in each of its three components (economic, climate and socio-political) and combines them into a synthetic indicator to guide resource allocation. The indicators used in this context are an indicator of structural economic vulnerability (revised EVI), an indicator of physical vulnerability to climate change (PVCCI), and an indicator of internal violence (and structural risk of conflict).

There are other possible improvements to the various component indicators of EVI, in particular in the calculation of the trends with respect to which instabilities are calculated, Moreover the design of some components of the HAI index could be improved from elements of the recent improvements in the Human Development Index by the UNDP or from the new human capital index by the World Bank.

### ► Briefly stated

The revision of the criteria used for the identification of the LDCs, and in particular for their graduation, gives the opportunity to reinforce the rationale of the category, and to avoid the recurrent, though not always relevant, criti-

cism about the way by which vulnerability is taken into account, and to be more in line with the SDGs. At the same time, it should preserve the inter-temporal consistency of the category, result in clear rules, and ensure the credibility and the transparency of the process of LDC identification.

To be in line with the new development agenda the identification criteria relating to structural handicaps could take into account not only the economic vulnerability as presently measured by the EVI, but also the physical vulnerability to climate change, within a synthetic index of structural vulnerability (it could include insecurity too, if measurable).

To enhance the consistency of the category, it seems useful, while keeping an income per capita criterion, to merge into just one criterion of structural handicaps the two kinds of handicaps treated until now as separate criteria, weakness of human capital and vulnerability. This structural handicap index (SHI) should be calculated through a quadratic average, which gives a higher impact to the more severe handicap, in order to reflect the initial concept of the category where the two kinds of handicap are complementary.

So as to not slow down the process of graduation following the Istanbul Programme of Action, and aiming to enable significantly more LDCs to meet the graduation criteria, the graduation threshold for the structural handicap criterion should be designed consistently.

An even simpler solution (for graduation) would be to refer to an index of “least development” combining indicators of low income per capita, low human capital, and structural vulnerability, still with a limited substitutability (i.e. through a quadratic average).

The various refinements that can also be made to the measurement of the composite and component indicators should fit the rationale of the category.

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