METADATA SHEET

This document provides metadata information on the variables and indicators to monitor, follow-up and review the Istanbul Plan of Action.

For each indicator, the following information is provided:

- Name of the variable as it appears in the heading of the tables

- Definition of the variable, rationale for its inclusion, and limitations or comments concerning its interpretation

- The number of the table containing the data for that specific indicator

- The reference to the institutions or source that provided the data. Full details of all sources and institutions are provided at the end of this document.

In providing the rationale, limitations, and comments for several indicators, use of other metadata sheets published by UN agencies is made. These are:

- *Indicators for Monitoring the Millennium Development Goals*, UNPF, UNDP, and DESA-Statistics Division, ST/ESA/STAT/SER.F/95

- On-line metadata for Millennium Development Goals Indicators, available at http://mdgs.un.org/unsd/mdg/Data.aspx

- On-line glossary of UNESCO Institute for Statistics, available at http://glossary.uis.unesco.org/glossary/en/home

Variable	Definition, rationale, and limitations	Table number	Source

1. Overall Objectives

Variable	Definition, rationale, and limitations	Table number	Source
GDP growth rate	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars Rationale: The indicator provides a synthesis of economic performance. It is well recognised that a solid pace of economic growth is a necessary, albeit not sufficient, condition for socioeconomic development. It is therefore a useful starting point in the understanding of potential development trajectories. Limitations: The rate of economic growth might vary between consecutive years because of cyclical fluctuations, rather than changes in the underlying overall long-term trend. For this reason, the indicator is best interpreted when taken as average over periods of several years. Another shortcoming is that the indicator does not always mirror the rate of progress in human and social development. Therefore it has to be interpreted jointly with social and human development indicators in order to gauge countries' socioeconomic achievements.	1	UNSD
Coefficient of variation of GDP growth	Standard deviation of GDP growth rate over n years divided by average value of GDP growth rate over the same n years Rationale: The indicator provides a summary measure of the extent of volatility of economic growth. A higher coefficient of variation indicates that annual growth rates are more dispersed around the long-term period mean. A more volatile growth process is recognized to be less beneficial to socioeconomic development in general, and to poverty reduction in particular. Hence, countries characterized by a higher coefficient of variation should expect less fast socioeconomic development for any given rate of average long-term growth. Limitations: The indicator provides information on aggregate volatility, without any indication of the sources of this volatility. In terms of policy analysis, the identification of specific sources is important. The optimal stabilization policy, in fact, depends on the nature of the shocks that cause volatility.	2	Computed from UNSD data
Proportion of population below US$ 1.25/1.00 (PPP) per day	Percentage of the population living on less than $1.25 a day at 2005 international prices. Rationale: The indicator allows for comparing and aggregating progress across countries in reducing the number of people living under extreme poverty and for monitoring trends at the global level. Limitations: The international poverty line is expressed in purchasing power parity (PPP) terms. Although PPP rates are designed for comparing aggregates from national accounts, they may not fully reflected the comparative cost of goods typically consumed by the very poor. This might limit comparability across countries. Furthermore, the indicator is constructed from data collected through household survey questionnaires, which in turn	3	UNSD

can differ widely across countries. Finally, data collection for the construction of this indicator is costly and time-consuming. This means that the indicator is often not produced with a regular frequency.

2. Productive Capacity

Value added share of non-extractive sector in total GDP (%)	The non-extractive sector is defined as total GDP minus agriculture, hunting, forestry, fishing, mining and quarrying (ISIC A-C). The share of the extractive sector is expressed in % of total country's GDP Rationale: The indicator allows for a comparison of the importance of the non-extractive sector in the economy. Economic development is generally accompanied by a process of structural change of the production system. As part of this process, the relative share of agriculture and extractive industries tends to decline and the share of manufacturing and other non-extractive industries increases. A growing share of the non-extractive sector may therefore signal that the country is effectively going through the process of transformation related to economic development. Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset.	76	UNCTAD
Total natural resource rents (% of GDP)	Sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents. Oil rents are the difference between the value of crude oil production at world prices and total costs of production. Natural gas rents are the difference between the value of natural gas production at world prices and total costs of production. Coal rents are the difference between the value of both hard and soft coal production at world prices and their total costs of production. Mineral rents are the difference between the value of production for a stock of minerals at world prices and their total costs of production. Minerals included in the calculation are tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate. Forest rents are roundwood harvest times the product of average prices and a region-specific rental rate. Rationale: The indicator provides an indicator of the extent to which the economy is abundant in natural capital. In several countries, the abundance of natural resources has not yet produced any significant contribution to socioeconomic development. However, there various examples of resource-rich economies that have been able to exploit their natural capital to diversify and strengthen their production structures. Limitations: The measure is based on the production of resources, which is not the same as the actual endowment of resources.	4	WDI
Herfindhal-Herschman production concentration index	The index (HH) is computed as follows: $$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$ where s is the value added share of a generic sector i in total GDP. The index therefore ranges from 0 to 1, with higher values denoting greater concentration (and less hence lower diversification) of the production structure. The production sector considered are: (i) Agriculture, hunting, forestry, and fishing; (ii) Manufacturing, (iii) Mining and quarrying, (iv) Utilities (electricity, gas, and water supply); (v) Construction; (vi) Wholesale retail trade, restaurant and hotels; and (vii) other services	53	Computed from UNCTAD data

Rationale: This indicator measures the extent of diversification in production. Higher values of the index denote less diversification. At early stages of development, economies tend to be highly specialized. High specialization makes the country more vulnerable to shocks. Moreover, in the presence of large trade and transport costs, domestic demand for a variety of goods and services requires some diversification in production. Progress in development is therefore associated with an increase in diversification. At sufficiently advanced stages of development, however, reduction in transport costs and the availability of financial instruments for risk sharing lower the need for further diversification and countries tend to specialize again. The indicator therefore allows for monitoring of diversification along the stages of development.

Limitation: The indicator is based on value added shares of sectors. The correlation between shifts in value added and shifts in employment is however not perfect. On the other hand, disaggregated data on sectoral employment are not widely available and not very reliable. Therefore, the indicator cannot be computed using employment shares.

Share of manufacturing exports in total exports (%)	Manufacturing includes division 15 to 37 of ISIC rev. 3. Manufacturing exports are expressed as percentage of total country's merchandise exports	55	

Rationale: The indicator measures the strength of manufacturing export sector. Manufacturing export is generally regarded as the sector where most of technological progress occurs. Therefore, the existence of a strong manufacturing export sector is expected to be a driver of economic growth.

Limitation: The indicator will not pick the strength of manufacturing if production is mainly destined to the domestic market. In LDCs the domestic market is however likely to be small and weak, which implies that in order to prosper and become a source of growth, manufacturing must be outward-oriented. The interpretation of the indicator also does not consider the possibility that some economies might skip the stage of industrialization and develop through services

Share of agricultural exports in total exports (%)	Agricultural sector includes divisions 1, 2 and 5 of ISIC rev. 3. Agricultural exports are expressed as percentage of total country's merchandise exports.	56	

Rationale: This indicator measures the extent of dependence on agricultural exports. While specialization and exports of agricultural products may be a consequence of comparative advantage at early stages of development, a large share of agricultural exports makes the country vulnerable to adverse terms of trade shocks. In fact, international prices of most agricultural goods have been on a declining term for several years now. This in turn results in the pauperization of countries that more heavily rely on agricultural exports.

Limitations: Outward orientation may actually promote technological progress in the agricultural sector and hence stimulate productivity. In this respect, the indicator ought to be presented in conjunction with measures of agricultural productivity.

Share of services exports in total exports (%)	Services include division 50-99 of ISIC rev. 3. Services exports are expressed as percentage of total country's merchandise exports	57	UNCTAD

Rationale: This indicator measures the importance of the service sector in the export structure of the economy. An expansion of the service sector is typically expected to occur after the stage of industrialization. Yet, some countries appear to develop a strong service sector even before industrializing. The indicator also allows for monitoring the process of diversification in exports.

	Limitations: The domestic service sector may produce a large share of non-tradable services, which the indicator would be unable to pick up.		
Value added share of manufacturing (% of GDP)	Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. Rationale: The indicator allows for a comparison of the importance of the manufacturing sector in the economy. Economic development is generally accompanied by a process of structural change of the production system. As part of this process, the relative share of agriculture tends to decline and the share of manufacturing increases. A growing share of manufacturing may therefore signal that the country is effectively going through the process of transformation related to economic development. Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset. Structural changes could also imply transitions from agriculture to high-level productivity activities/sectors outside the manufacturing sector, say services.	5	WDI
Value added share of agriculture (% of GDP)	Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. Rationale: The indicator allows for monitoring the process of structural transformation (see also the comment on "Value added share of manufacturing"). Limitations: it would be inappropriate to think of the minimization of the share of agriculture as a suitable development objective. The interpretation of the indicator is limited by the fact that it does not allow for an assessment of the transformation process within the agricultural sector (that is from traditional to modern agriculture).	6	WDI
Value added share of services (% of GDP)	Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. Rationale: The indicator allows for monitoring the process of structural transformation (see also the comment on "Value added share of manufacturing"). Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset. Further, a growing share of services may not always reflect desired structural changes particularly in situations of growing	7	WDI

informalisation of economies, with services being dominated by low-productivity informal services.

Herfindhal-Herschman export concentration index	The index is computed as follows:	58	UNCTAD

$$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$

where *s* is the export share of a generic product *i* in total exports. The index therefore ranges from 0 to 1, with higher values denoting greater concentration (and less hence lower diversification) of the production structure. The number of products is based on SITC, Revision 3 commodity classification at 3-digit group level. This figure includes only those products that are greater than 100,000 dollars or more than 0.3 per cent of the country's or country group's total exports or imports

Rationale: The index is measures the degree of diversification of the export structure of the country. A highly concentrated export structure denotes lack of production diversification and makes the country more vulnerable to international price shocks.

Limitations: Higher values of the index are certainly desirable, but there is probably an upper limit to desirable diversification. An excess of diversification may be counterproductive, as for instance it would not allow producers to exploit economies of scale.

Gross fixed capital formation (% of GDP)	Gross fixed capital formation includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.	59	WDI

Rationale: This is a proxy for physical capital accumulation. Economic theory suggests that physical capital accumulation is a key determinant of the level of-per capita income in the long-term. By virtue of an accounting decomposition, the rate of growth of GDP can be directly linked to the rate of physical capital accumulation, the rate of human capital and labour accumulation, and the rate of technological progress. In this regard, physical capital accumulation is often regarded as a proximate determinant of growth.

Limitations: The indicator should not be interpreted as a direct measure of total investment, because it only captures the value of net additions to the stock of fixed assets. Financial assets (and stock of inventories) are instead excluded.

Share of employment in industry (% of total employment)	Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Industry corresponds to divisions 2-5 (ISIC revision 2) or tabulation categories C-F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water).	60	WDI

Rationale: The indicator allows for a comparison of the importance of the industry sector in the economy. Economic development is generally accompanied by a process of structural change of the production system. As part of this process, the relative share of agriculture tends to decline and the share of manufacturing increases. A growing share of manufacturing may

therefore signal that the country is effectively going through the process of transformation related to economic development.

Limitations: The indicator does include mining in the industry sector, so that it cannot be readily interpreted as a measure of industrialization, whereby industrialization typically refers to the development of manufacturing.

Share of employment in agriculture (% of total employment)	Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing. Rationale: The indicator allows for monitoring the process of structural transformation (see also the comment on "Share of employment in industry"). Limitations: It would be inappropriate to think of the minimization of the share of agriculture as a suitable development objective. The interpretation of the indicator is limited by the fact that it does not allow for an assessment of the transformation process within the agricultural sector (that is from traditional to modern agriculture).	61	WDI
Share of employment in services (% of total employment)	Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Services correspond to divisions 6-9 (ISIC revision 2) or tabulation categories G-P (ISIC revision 3) and include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services. Rationale: The indicator allows for monitoring the process of structural transformation (see also the comment on "Share of employment in industry"). Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset.	62	WDI
Mobile cellular subscriptions per 100 population	Subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and prepaid subscriptions are included. Rationale: The indicator allow for monitoring progress in the realization of necessary communication infrastructures. Effective communication can help technology diffusion, learning, and help increase government transparency. Effective communication in turn requires infrastructures. Limitations: The prevalence of prepaid subscriptions reduces the comparability of this indicator across countries.	8	WDI
Internet users per 100 population	People with access to the world wide network Rationale: The indicator allow for monitoring progress in the realization of necessary communication infrastructures. Effective communication can help technology diffusion, learning, and help increase government transparency. Effective communication in turn requires infrastructures. Limitations: The quality of internet user data varies, and the quality of data	9	WDI

for smaller developing countries is uncertain. The data can also be misleading owing to multiple prepaid internet accounts.

Fixed telephone lines per 100 population	Telephone lines are fixed telephone lines that connect a subscriber's terminal equipment to the public switched telephone network and that have a port on a telephone exchange. Integrated services digital network channels and fixed wireless subscribers are included. Rationale: The indicator allows for monitoring progress in the realization of necessary communication infrastructures. Effective communication can help technology diffusion, learning, and help increase government transparency. Effective communication in turn requires infrastructures. Limitations: The quality of the telephone connection greatly differs across countries and this generates issues of comparability of the indicator. The outstanding expansion of mobile phone subscriptions has leapfrogged the landline around the world and made landline not as relevant as it was a decade ago.	63	WDI
Electricity production (kwh) per capita	Electricity production is measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity only as well as that of combined heat and power plants. Rationale: The indicator measures the capacity of a country to produce electricity for domestic and industrial consumption. While achieving full self-sufficiency in electricity production might be difficult because of natural and technological constraints, a minimum level of domestic production is beneficial to the process of socioeconomic development, particularly in terms of sustaining the expansion of a domestic manufacturing sector. Limitations: Costs of electricity produced domestically might vary considerably across countries, thus affecting the ability of domestic users to benefit from the electricity produced. Increased electricity production does not always translate into improved availability because of leakages that occur during the transmission and distribution of energy,	10	WDI
Share of electricity generated through renewable resources (alternative and nuclear energy in % of total energy use)	Electricity production from renewable sources includes hydropower, nuclear, geothermal, solar, tides, wind, biomass, and biofuels. Rationale: This is an indicator of the capacity of the country to produce energy through alternative, renewable sources. It is therefore relevant in view of achieving the objective of environmental sustainability. Limitations: For many LDCs, the production of energy through renewable resources might not be cost effective and policies to promote these resources might result in allocative inefficiencies. Availability of data is quite limited.	64	IEA
Electric power transmission and distribution losses (% of output)	Electric power transmission and distribution losses include losses in transmission between sources of supply and points of distribution and in the distribution to consumers, including pilferage. Rationale: This indicator proxies the efficiency of the system of transmission and distribution of electric power. A less efficient system implies higher production cost and reduces the competitiveness of domestic production. Limitation: Data are available on annual basis, but only for a relatively small subset of countries.	65	WDI

Roads, total network (Km)	Total road network includes motorways, highways, and main or national roads, secondary or regional roads, and all other roads in a country. Rationale: The indicator allows for comparison of progress in the construction of transport and communication infrastructures conducive to development. The availability of a wide network of roads facilitates the transport of individuals and goods, thus reducing trade costs and allowing even peripheral communities to benefit from socioeconomic development. Limitations: Large values of the indicator might arise in countries with a limited road network and roads mostly clustered in a small number of rural areas. The quality of the surface can also greatly differ across countries depending on quality of the materials, weather conditions, and maintenance. This indicator is to be presented and analysed in conjunction with the indicator "roads paved in % of total road network"	66	WDI
Rail lines (total route km)	Rail lines are the length of railway route available for train service, irrespective of the number of parallel tracks. Rationale: The indicator allows for comparison of progress in the construction of transport and communication infrastructures conducive to development. The availability of a wide network of railways facilitates the transport of individuals and goods, thus reducing trade costs and allowing even peripheral communities to benefit from socioeconomic development. Limitations: The quality of the rail infrastructure can greatly differ across countries depending on quality of the materials, weather conditions, and maintenance.	67	WDI
Roads paved (% of total roads)	Paved roads are those surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones, as a percentage of all the country's roads, measured in length. Rationale: The indicator allows for comparison of progress in the construction of transport and communication infrastructures conducive to development. The availability of a wide network of paved roads facilitates the transport of individuals and goods, thus reducing trade costs and allowing even peripheral communities to benefit from socioeconomic development. Limitations: Large values of the indicator might arise in countries with a limited road network and with paved roads mostly clustered in a small number of rural areas. The quality of the surface can also greatly differ across countries depending on quality of the materials, weather conditions, and maintenance.	11	WDI

3. Agriculture Food Security, and Rural Development

Proportion of population below minimum level of dietary consumption (% of total population)	Percentage of the population that is undernourished or food deprived. The undernourished or food deprived are those individuals whose food intake falls below the minimum level of dietary energy requirements. Rationale: The indicator measures an important aspect of the food insecurity of a population. Sustainable development demands a concerted effort to reduce poverty, including finding solutions to hunger and malnutrition. Alleviating hunger is a prerequisite for sustainable poverty reduction since undernourishment seriously affects labour productivity and earning capacity. Malnutrition can be the outcome of a range of circumstances. In order to work, poverty reduction strategies must address food access, availability (physical and economic) and safety.	68	UNSD

Limitations: Interpretation for policy purposes should take into account three things. First, the estimates are based on food acquired by (or available to) the households rather than the actual food intake of individual household members. Second, any inequity in intra-household access to food is not taken into account. Third, changes in relative inequality of food distribution through the assessed periods are not considered.

Malnutrition prevalence (weight for age), % of children under age 5	Percentage of children under age 5 whose weight for age is more than two standard deviations below the median for the international reference population ages 0-59 months. The data are based on the WHO's new child growth standards released in 2006. Rationale: The indicator provides a summary measure of child malnutrition. Malnourishment in children increases their risk of death, inhibits their cognitive development, and affects their health status later in life. Sufficient and good quality nutrition is generally considered to be a cornerstone for development. Limitations: The indicator reflects body mass relative to chronological age and is influenced by both the height of the child and the weight-for-age. This composite nature makes interpretation complex. For instance, weight for age fails to distinguish between short children of an adequate body weight and tall, thin children. For this reason, it should be considered in conjunction with a measure of height for age (see below).	12 A	WDI
Malnutrition prevalence (height for age), % of children under age 5	Percentage of children under age 5 whose height for age (stunting) is more than two standard deviations below the median for the international reference population ages 0-59 months. For children up to two years old height is measured by recumbent length. For older children height is measured by stature while standing. The data are based on the WHO's new child growth standards released in 2006. Rationale: The indicator provides a summary measure of child malnutrition. Malnourishment in children increases their risk of death, inhibits their cognitive development, and affects their health status later n life. Sufficient and good quality nutrition is generally considered to be a cornerstone for development. Limitations: The accuracy of these nutrition measures depends on proper measurements in age, weight, and height. Assessing the adherence to proper measurement protocols by each survey team is not possible. Similarly to other measures that are constructed from household survey data, the indicator may not be provided with a regular frequency.	12 B	WDI
Agricultural machinery, tractors per 100sq km of arable land	Number of wheel and crawler tractors (excluding garden tractors) in use in agriculture at the end of the calendar year specified or during the first quarter of the following year. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Rationale: The indicator allows for assessment of the use of more modern technology in agricultural production. A growing number of machineries and tractors per 100sq km of arable land suggests that the process of transformation from traditional to modern economy is ongoing. Machineries should increase agricultural productivity, which is in turn a driver of poverty reduction, especially in rural areas.	70	WDI

	Limitations: Agricultural productivity also depends on quality of the soil and other agricultural inputs which this indicator does not capture. The quality of the machineries used greatly differs across countries and even across farmers within the same country. This creates issues of comparability across countries and over time.		
Agricultural irrigated land (% of total agricultural land)	Agricultural areas purposely provided with water, including land irrigated by controlled flooding. Rationale: The indicator provides a measure of the extent to which the agricultural sector can benefit from irrigation systems. Relying on rain for irrigation exposes farmer to high uncertainty and volatility. The existence of systems of irrigation therefore increases productivity and encourages investment. This in turn should be conducive to the process of transformation from traditional to modern agriculture. Limitations: The indicator captures only one of the many measures of agricultural transformation and should be therefore analysed and presented in conjunction with others, i.e. consumption of fertilizers and access to extension services.	13	WDI
Fertilizer consumption (kilograms per hectare of arable land)	Quantity of plant nutrients used per unit of arable land. Fertilizer products cover nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). Traditional nutrients--animal and plant manures--are not included. Rationale: The indicator allows for assessment of the use of more modern technology in agricultural production. A growing volume of fertilizers suggests that the process of transformation from traditional to modern economy is ongoing. Fertilizers should increase agricultural productivity, which is in turn a driver of poverty reduction, especially in rural areas. Limitations: Agricultural productivity also depends on quality of the soil and other agricultural inputs which this indicator does not capture.	71	WDI
Public spending in agriculture (% of GDP)	Current and capital expenditure of general government in agricultural activities expressed in percentage of GDP. For the purpose of this indicator the agriculture sector also includes forestry, fishing, and hunting Rationale: The indicator measures the financial contribution of the government to the development of the agricultural sector. Several factors constraint private investment in agriculture: lack of initial capital and restricted access to credit, uncertainty and vulnerability to extreme climatic conditions, soil deterioration, and uncertain property rights. Government expenditure is therefore crucial to crowd-in private resources. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time. Also related to this is whether reported public expenditure data are drawn from the budget or are on commitment/cash basis.	72	IFPRI/WFP
Food consumption score	The Household Food Consumption Score (FCS) measures the frequency with which different food groups are consumed by a household during the 7 days before the survey. The FCS is recommended as a core indicator for measuring household food consumption. Target: Standard thresholds for the FCS are 21 and 35. • Poor Food Consumption: if FCS is equal or less than 21 • Borderline Food Consumption: if FCS is between 21.5 and 35 • Acceptable Food Consumption: if FCS is higher than 35	73	WFP

Rationale: The indicator provides a synthetic assessment of household food consumption. A higher score indicates better food consumption. A score below 21/28 reflects poor food consumption in terms of quantity (Kcal intake) as well as quality (nutrient intake).

Limitations: The FCS can change quickly in a short period of time. The frequency and timing of follow-up surveys differs by country. Seasonality also has an impact on the FCS. This issue has to be taken into consideration while comparing FCS across time. FCS is a proxy of current household food consumption. It has to be interpreted in conjunction with other indicators related to food security (e.g., livelihoods, expenditures, etc.).

4. Trade

Share of least developed countries' imports of goods and services in total imports of goods and services (%)	Least developed countries imports of goods and services in % of total world exports of goods and services. Imports of goods and services represent the value of all goods and other market services provided by the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments. Rationale: The indicator measures the extent to which least developed countries participate into the global economy. International trade is a key dimension of building a global partnership for development. Through trade least developed countries can expect to receive various benefits, including faster economic growth and technological and knowledge spillovers. Limitations: To be analysed in conjunction with other trade indicators.	74	Computed from WTO data
Share of least developed countries exports of goods and services in world total exports of goods and service (%)	Least developed countries exports of goods and services in % of total world exports of goods and services. Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments. Rationale: The indicator measures the extent to which least developed countries participate into the global economy. International trade is a key dimension of building a global partnership for development. Through trade least developed countries can expect to receive various benefits, including faster economic growth, technological and knowledge spillovers, and a source of foreign currency earnings. Limitations: When countries are particularly rich in natural resources, such as oil or other natural resources, then they tend to have larger export shares, even though they appropriate a relatively small portion of the final product value added. In this regard, the indicator provides only partial information on the ability of countries to enjoy the benefits from trade and it should therefore be analysed in conjunction with other indicators, like the share of manufacturing exports.	14	Computed from WTO
Aid for Trade policies and regulation (% of total DAC countries aid)	Includes aid reported on line 331: III.3.a of CRS. Rationale: The indicator measures the volume of ODA disbursed for the purpose of helping LDCs to improve their trade policies and regulations.	75	OECD DAC

	Limitations: It is sometimes difficult to establish the sectoral allocation of aid flows. A significant proportion of non-allocable aid might also be directed trade policies and regulation		
Proportion of total developed country imports from LDCs admitted free of duty	Imports from LDCs that developed countries admit free of duty expressed in percentage of total imports from LDCs. Data are presented as regional averages for two subcategories: (i) excluding arms and (ii) excluding arms and oil. For each sub-category, a separate total is provided for imports that benefit from preferential treatment under the most favoured nation clause. Rationale: The indicator monitors the international effort made to remove barriers to trade for developing countries, to encourage the achievement of the Millennium Development Goals. Poor people in developing countries work primarily in agriculture and labour-intensive manufacturing, sectors that confront the greatest trade barriers. Removing barriers to merchandise trade, therefore, could increase growth in those countries by a significant amount. Limitations: Indicator is not available at country level. Duty free access alone does not indicate the degree of which countries have market access. Factors such as the existence of quotas, non-tariff barriers, and rules of origin as well as supply responses determine the extent to which countries benefit from duty free access.	92	MDG report 2011
Average tariffs imposed by developed countries on agricultural products and textiles and clothing from LDCs	Average import tariff imposed by developed countries on imports from LDCs of (i) agricultural goods, (ii) textiles, and (iii) clothing. Data are presented as regional averages. Separate entries are provided for each category of products. Rationale: The indicator monitors the international effort made to remove barriers to trade for developing countries in order to encourage the achievement of the Millennium Development Goals. Poor people in developing countries work primarily in agriculture and labour-intensive manufacturing, sectors that confront the greatest trade barriers. Removing barriers to merchandise trade, therefore, could increase growth in those countries by a significant amount. Limitations: There are two types of average tariffs—simple average tariffs, which are used for goals monitoring, and the weighted average. Simple averages are frequently a better indicator of tariff protection than weighted averages, which, because higher tariffs discourage trade and reduce the weights applied to them, are biased downward.	92	MDG report 2011
Agricultural support estimate for OECD countries	Support received by agricultural sector of OECD countries. Data are presented as regional averages both in billions of US dollars and in percent of OECD countries' GDP Rationale: In penetrating foreign markets, developing countries face not only tariffs but also competition from products in developed countries that benefit from government subsidies. The challenge linked to the Doha Development Agenda is to further reduce production and trade-distorting support and implement policies that effectively address both domestic and international goals while ensuring well-functioning markets. Limitations: Differences across countries in total support estimates as a percentage of GDP reflect the level of support and the share of agricultural output in the economy. Changes over time reflect changes in the level of support and in the share of agriculture in GDP, as well as the growth of the economy.	92	MDG report 2011

5. Commodities

| Herfindhal-Herschman production concentration index | The index (HH) is computed as follows: | 53 | Computed from UNCTAD data |

$$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$

where *s* is the value added share of a generic sector *i* in total GDP. The index therefore ranges from 0 to 1, with higher values denoting greater concentration (and less hence lower diversification) of the production structure. The production sector considered are: (i) Agriculture, hunting, forestry, and fishing; (ii) Manufacturing, (iii) Mining and quarrying, (iv) Utilities (electricity, gas, and water supply); (v) Construction; (vi) Wholesale retail trade, restaurant and hotels; and (vii) other services

Rationale: This indicator measures the extent of diversification in production. Higher values of the index denote less diversification. At early stages of development, economies tend to be highly specialized. High specialization makes the country more vulnerable to shocks. Moreover, in the presence of large trade and transport costs, domestic demand for a variety of goods and services requires some diversification in production. Progress in development is therefore associated with an increase in diversification. At sufficiently advanced stages of development, however, reduction in transport costs and the availability of financial instruments for risk sharing lower the need for further diversification and countries tend to specialize again. The indicator therefore allows for monitoring of diversification along the stages of development.

Limitations: The indicator is based on value added shares of sectors. The correlation between shifts in value added and shifts in employment is however not perfect. On the other hand, disaggregated data on sectoral employment are not widely available and not very reliable. Therefore, the indicator cannot be computed using employment shares.

Value added share of non-extractive sector in total GDP (%) — The non-extractive sector is defined as total GDP minus agriculture, hunting, forestry, fishing, mining and quarrying (ISIC A-C). The share of the extractive sector is expressed in % of total country's GDP — 76 — UNCTAD

Rationale: The indicator allows for a comparison of the importance of the non-extractive sector in the economy. Economic development is generally accompanied by a process of structural change of the production system. As part of this process, the relative share of agriculture and extractive industries tends to decline and the share of manufacturing and other non-extractive industries increases. A growing share of the non-extractive sector may therefore signal that the country is effectively going through the process of transformation related to economic development.

Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset.

Primary commodity export dependence (% of total exports) — Exports of primary commodities in percent of total country exports. Primary commodities include: agricultural raw materials (SITC section 2 excluding divisions 22, 27, and 28), food and beverages (SITC sections 0, 1, and 4, and SITC division 22), fuels (SITC section 3), and metals and ores (SITC sections 27, 28, and 68) — 15 — Computed WDI data

Rationale: This indicator summarizes the extent of a country's dependence on primary commodity exports. This dependence is often associated with greater macroeconomic instability and wider income inequalities. Greater dependence on primary commodity, while possibly the result of specialization along the lines of comparative advantage, may not be conducive to diversification and economic transformation, thus exposing the country to the risk of shocks and the volatility of international commodity prices.

Limitations: This is not a measure of abundance of natural resources. It is possible that a country with a large endowment of natural capital exports relatively little of this capital in proportion to the rest of its exports. In the interpretation of this indicator, the notion of dependence should be therefore kept separate from the notion of abundance.

| Herfindhal-Herschman export concentration index | The index is computed as follows: | 58 | UNCTAD |

$$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$

where s is the export share of a generic product i in total exports. The index therefore ranges from 0 to 1, with higher values denoting greater concentration (and less hence lower diversification) of the production structure. The number of products is based on SITC, Revision 3 commodity classification at 3-digit group level. This figure includes only those products that are greater than 100,000 dollars or more than 0.3 per cent of the country's or country group's total exports or imports

Rationale: The index is measures the degree of diversification of the export structure of the country. A highly concentrated export structure denotes lack of production diversification and makes the country more vulnerable to international price shocks.

Limitations: Higher values of the index are certainly desirable, but there is probably an upper limit to desirable diversification. An excess of diversification may be counterproductive, as for instance it would not allow producers to exploit economies of scale.

6. Human development (Education and Training)

| Primary completion rate (%) | Total number of new entrants in the last grade of primary education, regardless of age, expressed as percentage of the total population of the theoretical entrance age to the last grade of primary. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music. | 16 | UNESCO |

Rationale: This indicator measures the success of the education system in bringing students to the end of the primary education cycle. Achieving universal primary education is one of the key internationally agreed development objectives. Individuals who have gone through the cycle of primary education have basic reading, writing, and mathematical skills that can significantly improve their human development in the rest of their life.

Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that children receive.

Adjusted net intake rate to primary education (%)	Net intake rate is the number of new entrants in the first grade of primary education who are of official primary school entrance age, expressed as a percentage of the population of the corresponding age. Rationale: The indicator provides a measure of access to primary education by the eligible population of primary school-entrance age. Intake to primary education is instrumental to the achievement of the objective of universal primary education. Limitations: This indicator can be distorted by an incorrect distinction between new entrants and repeaters in the first grade. This can be the case especially for under-aged pupils who may repeat the first grade at the official entrance age	77	UNESCO
Adjusted net enrolment in primary education (%)	Net enrolment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music. RationaleThe indicator shows the extent of coverage in primary education of children and youths belonging to the official age group corresponding to primary education. Limitations: Difficulties in calculating the net enrolment may arise when the indicator approaches 100% if: 1. the reference date for entry to primary education does not coincide with the birth dates of all of the cohort eligible to enrol at this level of education; 2. a significant portion of the population starts primary school earlier than the prescribed age and consequently finishes earlier as well; 3. there is an increase in the entrance age to primary education but the duration remains unchanged.	78	UNESCO
Survival rate to last grade of primary (%)	Percentage of a cohort of pupils (or students) enrolled in the last grade of primary education who are expected to reach successive grades. Rationale: This indicator measures the retention capacity and internal efficiency of an education system. It illustrates the situation regarding retention of pupils (or students) from grade to grade in schools, and conversely the magnitude of dropout by grade. Rates approaching 100% indicate a high level of retention and low incidence of dropout. The distinction between survival rate with and without repetition is necessary to compare the extent of wastage due to dropout and repetition. Limitations: Given that this indicator is usually estimated using cohort analysis models that are based on a number of assumptions (i.e. the observed flow rates will remain unchanged throughout the cohort life), care should be taken in using of the results in comparisons. Care should also be taken in calculating the indicator at sub-national level because of possible pupils' transfers between localities	79	UNESCO
Percentage of repeaters in primary education (%)	Total number of pupils who are enrolled in the same grade as in a previous year of primary education, expressed as a percentage of the total enrolment to the specified grade. Rationale: This indicator measures the extent and patterns of repetition by grade, as part of the internal efficiency of education system. High percentage reflects serious problems of grade repetition or the internal efficiency of the education system.	80	UNESCO

	Limitations: The level and maximum number of grade repetitions allowed can in some cases be determined by the educational authorities with the aim of coping with limited grade capacity and increasing the internal efficiency and flow of pupils (or students). Care should be taken in interpreting this indicator, especially in comparisons between education systems.		
Primary completion rate (%)	Total number of new entrants in the last grade of primary education, regardless of age, expressed as percentage of the total population of the theoretical entrance age to the last grade of primary. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.	16	UNESCO
	Rationale: This indicator measures the success of the education system in bringing students to the end of the primary education cycle. Achieving universal primary education is one of the key internationally agreed development objectives. Individuals who have gone through the cycle of primary education have basic reading, writing, and mathematical skills that can significantly improve their human development in the rest of their life.		
	Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that children receive.		
Effective transition rate to secondary education (%)	The number of pupils (or students) admitted to the first grade of secondary education in a given year, expressed as a percentage of the number of pupils (or students) enrolled in the final grade of primary education in the previous year.	81	UNESCO
	Rationale: This indicator shows the real transition from primary to secondary education regardless of repetition. This indicator better reflects situations in which pupils repeat the last grade of the given education level but eventually make the transition to the higher level. Low values of the effective transition rate indicate a low share of students continuing their education at the next level of education.		
	Limitations: This indicator does not consider migration flows. It can also be distorted by incorrect distinction between new entrants and repeaters. Additionally, the effective transition rate assesses only the transition from the last grade of a given education level to the first grade of the following level and does not take into account the characteristics of the entire given level of education.		
Gross enrolment in secondary education (%)	Total number of students enrolled in secondary education, regardless of age, expressed as percentage of the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.	17	UNESCO
	Rationale: This indicator measures the potential for human capital development beyond the primary level. In the globalized economy, countries need human capital at a level that goes beyond basic readings and writings. Moreover, individuals who achieve secondary education generally benefit from steeper wage profiles throughout the rest of their life.		

	Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that children receive.		
Percentage enrolment in technical and vocational programmes at secondary level (%)	Number of students enrolled in technical/vocational secondary education programmes in percentage of students enrolled in all secondary education programmes	82	UNESCO
	Rationale: This indicator reflects the orientation and capacity of secondary education programmes as well as the potential supply of skilled workers in different specializations. The relative concentration of students in a particular orientation of education depicts on the one hand high preference and capacity, on the other hand may reflect job opportunities as well as relative earnings across different occupations and industries		
	Limitations: Cross-country comparability of this indicator can be affected by different ways in which national secondary education systems are organized according to different orientations (e.g. general, technical-vocational, etc.).		
Gross enrolment in tertiary education (%)	Total number of students enrolled in secondary education, regardless of age, expressed as percentage of the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level	18	WDI
	Rationale: This indicator measures the potential for human capital development beyond the primary level. In the globalized economy, countries need human capital at a level that goes beyond basic readings and writings. Moreover, individuals who achieve tertiary education generally benefit from steeper wage profiles throughout the rest of their life.		
	Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that students receive. In some least developed countries, lack of employment opportunities and specialization in sectors that are not intensive in the use of skilled labour might significantly reduce the return on investment in tertiary education.		
Pupil/teacher ratio in primary education	Number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their teaching assignment).	19	UNESCO
	Rationale: This indicator is a measure of the shortage of supply of teachers relative to the demand. It can also be interpreted as a measure of quality of education, as a lower ratio should generally guarantee that each student can be better followed by the teacher.		
	Limitations: The indicator is constructed from information reported by administrator. There could be instances where this information does not reflect actual situations. For instance, administrators might have an incentive to under-report or over-report depending on financial incentives. Other quality dimension, such as the availability of teaching materials or the existence of an updated curriculum of study should also be considered.		
Pupil/teacher ratio in	Number of pupils enrolled in primary school divided by the number of	20	UNESCO

secondary education	primary school teachers (regardless of their teaching assignment). Rationale: This indicator is a measure of the shortage of supply of teachers relative to the demand. It can also be interpreted as a measure of quality of education, as a lower ratio should generally guarantee that each student can be better followed by the teacher. Limitations: The indicator is constructed from information reported by administrator. There could be instances where this information does not reflect actual situations. For instance, administrators might have an incentive to under-report or over-report depending on financial incentives. Other quality dimension, such as the availability of teaching materials or the existence of an updated curriculum of study should also be considered.		
Gross graduation rate from lower secondary education (%)	Total number of graduates from the last grade of secondary education, regardless of age, expressed as a percentage of the population at the theoretical graduation age for secondary. Rationale: This indicator measures the effectiveness of the education system in bringing students to the completion of the lower secondary education cycle. In addition to factors pertaining the education system (i.e. limited access, lack of infrastructure, inadequate supply of teachers and teaching materials), the indicator is affected by the incentive of individual to remain in school through the lower secondary cycle. This in turn may depend on job market opportunities and the expected wage profile for graduates versus non-graduates. Limitations: Cross-country comparability may be complicated by the different job-market value that a degree from lower secondary education has.	83	UNESCO
Youth literacy rate (% of population ages 15-24)	Percentage of people ages 15-24 who can, with understanding, read and write a short, simple statement on their everyday life. Rationale: The Youth Literacy Rate reflects the outcomes of primary education over the previous 10 years or so. As a measure of the effectiveness of the primary education system, it is often seen as a proxy measure of social progress and economic achievement. The literacy rate for this analysis is simply the complement of the illiteracy rate. It is not a measure of the quality and adequacy of the literacy level needed for individuals to function in a society. Reasons for failing to achieve the literacy standard may include low quality of schooling, difficulties in attending school or dropping out before reaching grade 5. Limitations: Literacy is measured crudely in population censuses, either through self or household declaration or by assuming that people with no schooling are illiterate. This causes difficulty for international comparisons. Comparability over time, even for the same survey, may also be a problem because definitions of literacy used in the surveys are not standardized. Shortcomings in the definitions of literacy, measurement problems and infrequency of censuses and household surveys weaken this indicator as a means of the annual monitoring of education outcomes related to the goal of achieving universal primary education.	33	UNESCO
Adult literacy rate (% of total population)	Percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Rationale: The indicator shows the accumulated achievement of primary education and literacy programmes in imparting basic literacy skills to the population, thereby enabling them to apply such skills in daily life and to continue learning and communicating using the written word. High literacy	84	UNESCO

rate (or low illiteracy rate) suggests the existence of an effective primary education system and/or literacy programmes that have enabled a large proportion of the population to acquire the ability of using the written word (and making simple arithmetic calculations) in daily life and to continue learning.

Limitations: It has been observed that some countries apply definitions and criteria for literacy which are different from the international standards defined above, or equate persons with no schooling to illiterates, or change definitions between censuses. Practices for identifying literates and illiterates during actual census enumeration may also vary, as well as errors in literacy self-declaration can affect the reliability of literacy statistics.

Ratio of female to male in primary education	Ratio of female to male gross enrolment rates in primary education	21	UNESCO

Rationale: The indicator of equality of educational opportunity, measured in terms of school enrolment, is a measure of both fairness and efficiency. Education is one of the most important aspects of human development. Eliminating gender disparity at all levels of education would help to increase the status and capabilities of women. Female education is also an important determinant of economic development.

Limitations: The indicator is an imperfect measure of the accessibility of schooling for girls because it does not allow a determination of whether improvements in the ratio reflect increases in girls' school attendance (desirable) or decreases in boys' attendance (undesirable). It also does not show whether those enrolled in school complete the relevant education cycles. Another limitation of the indicator is that the ratio reflects the sex structure of the school age population. When the sex ratio in the school age population deviates significantly from 1, the indicator will not adequately reflect the actual differences between girls' and boys' enrolment. This happens in countries where boys outnumber girls at younger ages.

Ratio of female to male in secondary education	Ratio of female to male gross enrolment rates in secondary education	22	UNESCO

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Limitations: The indicator is an imperfect measure of the accessibility of schooling for girls because it does not allow a determination of whether improvements in the ratio reflect increases in girls' school attendance (desirable) or decreases in boys' attendance (undesirable). It also does not show whether those enrolled in school complete the relevant education cycles. Another limitation of the indicator is that the ratio reflects the sex structure of the school age population. When the sex ratio in the school age population deviates significantly from 1, the indicator will not adequately reflect the actual differences between girls' and boys' enrolment. This happens in countries where boys outnumber girls at younger ages.

Female participation in secondary technical and vocational programmes % of female students)	Number of female students enrolled in technical/vocational secondary education programmes in percentage of female students enrolled in all secondary education programmes. Rationale: This indicator measures the extent to which the female population chooses technical and vocational training instead of academic secondary education. Higher values might reflect better job market opportunities for the female population as well as lower returns on academic education. Limitations: Cross-country comparability of this indicator can be affected by different ways in which national secondary education systems are organized according to different orientations (e.g. general, technical-vocational, etc.).	85	UNESCO
Public education expenditure as a % of government expenditure	Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). Rationale: This is an indicator of the strength of public education financing. As a public good, public education is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public education. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time.	86	UNESCO
Public education expenditure (% of GDP)	Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). Two tables reported. Data by country and year are identical. Differences relate to the computation of regional averages. In Table 11.39, regional averages are computed using country's relative GDP as weight. In table 22.40 averages are computed using country's relative population as weight. Rationale: This is an indicator of the strength of public education financing. As a public good, public education is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public education. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate.	38	UNESCO

Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time. Also related to this is whether reported public expenditure are drawn from the budget, or are on commitment/cash basis.

Percentage of female tertiary graduates from fields of science and technology (%)	Number of female graduates from ISCED fields of science and technology education in tertiary education, expressed as a percentage of the total number of graduates from the fields of science and technology education in tertiary education	87	UNESCO

Rationale: This indicator measures the extent to which female students participate and complete higher education in fields that are (i) of critical importance to technological progress and hence economic growth and (ii) often not easily accessible to women. In a broader interpretation, this indicator can be seen as a measure of women empowerment and gender equality.

Limitations: Cross-country differences in the organization of education systems might make comparisons more difficult.

7. Human development (Population and Primary Health)

Under 5 mortality rate per 1000 live births	Probability per 1,000 that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates. For the purpose of this indicator a live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life—such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached.	24	UNSD

Rationale: This is an indicator of child survival that directly relates to one of the key internationally agreed development objectives. Under-five mortality better captures the effect of gender discrimination than infant mortality, as nutrition and medical interventions are more important in this age group, while biological differences have a higher impact during the first year of life. However, the infant mortality rate is considered to be a more robust estimate than the under-five mortality rate if the information is drawn from vital statistics registration. There may be gender-based biases in the reporting of child deaths.

Limitations: In developing countries, household surveys are essential to the calculation of the indicator, but there are some limits to their quality. Survey data are subject to recall error; in addition, surveys estimating under-five deaths require large samples because such incidences are uncommon and representative households cannot ordinarily be identified for sampling. Moreover, the frequency of the survey is generally only every three to five years. Therefore, when using household surveys it is important to take sampling errors into account. In addition, indirect estimates rely on estimated actuarial ("life") tables that may be inappropriate for the population concerned

Infant mortality per 1000 live births	Probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of one if subject to current age-specific mortality rates. For the purpose of this indicator, a live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life—such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached.	25	UNSD

Each product of such a birth is considered a live birth.

Rationality: This indicator measures survival in the age group where biological factors are more important than nutrition and medical interventions. It is a key component of under-five mortality. Since data on the incidence and prevalence of disease are not always available, mortality rates are often used to identify vulnerable populations. The infant mortality rate is considered to be a more robust estimate than the under-five mortality rate if the information is drawn from vital statistics registration

Limitations: In developing countries, household surveys are essential to the calculation of the indicator, but there are some limits to their quality. Survey data are subject to recall error; in addition, surveys estimating under-five deaths require large samples because such incidences are uncommon and representative households cannot ordinarily be identified for sampling. Moreover, the frequency of the survey is generally only every three to five years. Therefore, when using household surveys it is important to take sampling errors into account. In addition, indirect estimates rely on estimated actuarial ("life") tables that may be inappropriate for the population concerned

Proportion of 1 year old children immunized against measles (%)	Percentage of children ages 12-23 months who received vaccinations before 12 months or at any time before the survey. A child is considered adequately immunized against measles after receiving one dose of vaccine. Rationale: The indicator provides a measure of the coverage and the quality of the child health-care system in the country. Immunization is an essential component for reducing under-five mortality. Governments in developing countries usually finance immunization against measles and diphtheria, pertussis (whooping cough) and tetanus (DPT) as part of the basic health package. Among these vaccine-preventable diseases of childhood, measles is the leading cause of child mortality. Limitations: The first dose of measles vaccine is supposed to be administered to all children at the age of nine months or shortly after. By 2000, most countries were providing a "second opportunity" for measles vaccination, either through a two-dose routine schedule or through a combined routine schedule and supplementary campaigns. Measles immunization coverage is expressed as the percentage of children who have received at least one dose. Vaccination coverage for measles needs to be above 90 per cent to stop transmission of the virus—not only because measles is so contagious, but also because up to 15 per cent of children vaccinated at nine months fail to develop immunity. In many developing countries, lack of precise information on the size of the cohort of children under one year of age makes immunization coverage difficult to estimate.	88	UNSD
Malnutrition prevalence (weight for age), % of children under age 5	Percentage of children under age 5 whose weight for age is more than two standard deviations below the median for the international reference population ages 0-59 months. The data are based on the WHO's new child growth standards released in 2006. Rationale: The indicator provides a summary measure of child malnutrition. Malnourishment in children increases their risk of death, inhibits their cognitive development, and affects their health status later n life. Sufficient and good quality nutrition is generally considered to be a cornerstone for development. Limitations: The indicator reflects body mass relative to chronological age and is influenced by both the height of the child and the weight-for-age. This composite nature makes interpretation complex. For instance, weight for age	12 A	WDI

	fails to distinguish between short children of an adequate body weight and tall, thin children. For this reason, it should be considered in conjunction with a measure of height for age (see below).		
Malnutrition prevalence (height for age), % of children under age 5	Percentage of children under age 5 whose height for age (stunting) is more than two standard deviations below the median for the international reference population ages 0-59 months. For children up to two years old height is measured by recumbent length. For older children height is measured by stature while standing. The data are based on the WHO's new child growth standards released in 2006. Rationale: The indicator provides a summary measure of child malnutrition. Malnourishment in children increases their risk of death, inhibits their cognitive development, and affects their health status later n life. Sufficient and good quality nutrition is generally considered to be a cornerstone for development. Limitations: The accuracy of these nutrition measures depends on proper measurements in age, weight, and height. Assessing the adherence to proper measurement protocols by each survey team is not possible. Similarly to other measures that are constructed from household survey data, the indicator may not be provided with a regular frequency.	12 B	WDI
Proportion of population below minimum level of dietary consumption (% of total population)	Percentage of the population that is undernourished or food deprived. The undernourished or food deprived are those individuals whose food intake falls below the minimum level of dietary energy requirements. Rationale: The indicator measures an important aspect of the food insecurity of a population. Sustainable development demands a concerted effort to reduce poverty, including finding solutions to hunger and malnutrition. Alleviating hunger is a prerequisite for sustainable poverty reduction since undernourishment seriously affects labour productivity and earning capacity. Malnutrition can be the outcome of a range of circumstances. In order to work, poverty reduction strategies must address food access, availability (physical and economic) and safety. Limitations: Interpretation for policy purposes should take into account three things. First, the estimates are based on food acquired by (or available to) the households rather than the actual food intake of individual household members. Second, any inequity in intra-household access to food is not taken into account. Third, changes in relative inequality of food distribution through the assessed periods are not considered.	68	UNSD
Maternal mortality ratio per 100000 live births	Ratio of the number of maternal deaths during a given time period per 100,000 live births during the same time-period. A maternal death refers to a female death from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy. Rationale: The indicator monitors deaths related to pregnancy. Such deaths are affected by various factors, including the general health status, education and services during pregnancy and childbirth. It is important to monitor changes in health conditions related to sex and reproduction. Limitations: Difficulties in ascertaining the true cause of death (i.e. whether the death of a pregnant woman is effectively due to the pregnancy or not) make the reliability of the indicator uncertain. Because pregnancy is a relatively rare event, large sample sizes are need if household surveys are used. This increases costs and hence reduces frequency of data. In some instances, household surveys attempt to measure maternal mortality by	26	UNSD

asking respondents about survivorship of sisters. This partially addresses the sample size problem, but produces estimates covering some 6-12 years before the survey, which renders the interpretation of the indicator difficult for policy purposes.

| Proportion of births attended by skilled health personnel (%) | Percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labour, and the postpartum period; to conduct deliveries on their own; and to care for newborns. | 89 | UNSD |

Rationale: Measuring maternal mortality accurately is unusually difficult, except where there is comprehensive registration of deaths and causes of death. Several process indicators have been proposed for tracking progress by focusing on professional care during pregnancy and childbirth, particularly for the management of complications. The most widely available indicator is the proportion of women who deliver with the assistance of a medically trained health-care provider.

Limitations: The indicator is a measure of a health system's ability to provide adequate care for pregnant women. Concerns have been expressed that the presence of a skilled attendant may not adequately capture women's access to good quality care, particularly when complications arise, and information on the supplies and equipment a skilled attendant may or may not have is lacking. In addition, standardization of the definition of skilled health personnel is sometimes difficult because of differences in training of health personnel in different countries. Although efforts have been made to standardize the definitions of doctors, nurses, midwives and auxiliary midwives used in most household surveys, it is probable that many skilled attendants' ability to provide appropriate care in an emergency depends on the environment in which they work

| Contraceptive prevalence (% of women ages 15-49) | Percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception. It is usually measured for married women ages 15-49 only | 27 | UNSD |

Rationale: This indicator measures the use of contraception among women. It relates to two important aspects: family planning and spread of sexually transmitted diseases. This second aspects depends on the methods of contraception.

Limitations: Statistics on contraception prevalence rates are based primarily on women, mainly because contraception is more easily measured in this way. Further, contraception, or its absence, affects the health and well-being of women more than it does their sexual partners. Similarly, condom use is still at the discretion of male partners, and the female condom is not as widely available. The rising number of women and girls infected by HIV/AIDS indicates that condom use needs further promotion and that women need to be empowered to refuse unprotected sex.

| Adolescent fertility rate (births per 1000 women ages 15-19) | Number of births per 1,000 women ages 15-19. | 90 | UNSD |

Rationale: This indicator represents the risk of childbearing among adolescent women 15 to 19 years of age. It is also referred to as the age-specific fertility rate for women aged 15-19.

Limitations: There are a number of limitations in the estimates:
(a) For civil registration, rates are subject to limitations which depend on the completeness of birth registration, the treatment of infants born alive but dead before registration or within the first 24 hours of life, the quality of the reported information relating to age of the mother, and the inclusion of births

from previous periods. The population estimates may suffer from limitations connected to age misreporting and coverage.

(b) For survey and census data, both the numerator and denominator come from the same population. The main limitations concern age misreporting, birth omissions, misreporting the date of birth of the child, and sampling variability in the case of surveys.

The adolescent birth rate is commonly reported as the age-specific fertility rate for ages 15 to 19 in the context of calculation of total fertility estimates. It has also been called adolescent fertility rate. A related measure is the proportion of adolescent fertility measured as the percentage of total fertility contributed by women aged 15-19.

Unmet need for contraception (% of married women ages 15-49)	Percentage of fertile, married women of reproductive age who do not want to become pregnant and are not using contraception.	91	WDI

Rationale: Women with unmet need are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behaviour.

Limitations: According to the standard definition, women who are using a traditional method of contraception are not considered as having an unmet need for family planning. As traditional methods can be considerably less effective than modern methods, additional analyses often distinguish between traditional and modern methods and also report on unmet need for effective contraception. The assumption of universal exposure among married women increases the estimate (additional questions probing reasons for non-use of family planning often elicit reports of low risk due to infrequent sexual activity, including spousal separation resulting from labour migration). There can be differences in the precise definition being used.

HIV prevalence (% of total population ages 15-49)	Percentage of people ages 15-49 who are infected with HIV	28	UNSD

Rationale: This indicator allows for an assessment of progress in combating the spread of HIV/AIDS. Being HIV a global pandemic, combating its spread has become a global priority. Improved methods, enhanced data and new estimation tools are enabling a better understanding of the degrees of uncertainty that surround HIV and AIDS estimates. This is part of an ongoing process of improving estimates and developing appropriate ranges—all of which are vital for effective HIV/AIDS planning and programming at national and regional levels.

Limitations: Because the quality of data varies from country to country, the ranges of uncertainty surrounding estimates can widen or narrow depending on the country. The ranges reflect the degree of uncertainty associated with estimates and define the boundaries within which the actual numbers lie. Four factors determine the extent of the ranges around the HIV estimates: the HIV prevalence level (ranges tend to be smaller when HIV prevalence is higher), the quality of the data, the number of steps or assumptions used to arrive at an estimate, and the type of epidemic (generalized or concentrated).

Condom use for high-risk-sex, 15-24 years old (%)	Percentage of the population ages 15-24 who used a condom at last intercourse in the last 12 months. Data are separated presented for male and female population	93	UNSD

Rationale: This indicator measures the extent to which individuals use condoms during sexual intercourse with a non-cohabiting, non-marital sexual partner; that is, in situations that present a potential high risk of contagion. Use of condoms in such situations is particularly important to limit the spread

of HIV/AIDS and other sexually transmitted diseases.

Limitations: A rise in the indicator is a sign that condom promotion campaigns are having the desired effect among their main target market. However, condom promotion campaigns aim for consistent use of condoms with non-regular partners rather than simply occasional use. Some surveys have tried to ask directly about consistent use, but the question is subject to recall bias and other biases. The current indicator is therefore considered adequate to address the target since it is assumed that if consistent use rises, use at last high-risk sex will also increase.

| Population with comprehensive correct knowledge of HIV/AIDS (%) | Percentage of young persons aged 15–24 years who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission and who know that a healthy-looking person can transmit HIV. Data are separately presented for male and female population | 94 | UNSD |

Rationale: This indicator measures the extent of people's knowledge of basic facts about HIV/AIDS. The belief that a healthy-looking person cannot be infected with HIV is a common misconception that can result in unprotected sexual intercourse with infected partners. Correct knowledge about false beliefs of possible modes of HIV transmission is as important as correct knowledge of true modes of transmission. This indicator is particularly useful in countries where knowledge about HIV and AIDS is poor because it allows for easy measurement of incremental improvements over time. However, it is also important in other countries because it can be used to ensure that pre-existing high levels of knowledge are maintained.

Limitations: Surveying most-at-risk populations can be challenging. Consequently, data obtained may not be based on a representative sample of the national, most-at-risk population being surveyed. If there are concerns that the data are not based on a representative sample, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality and reliability of the data, and any related issues should be included in the report submitted with this indicator.

| Proportion of population with advanced HIV infection with access to antiretroviral drugs (%) | Percentage of adults and children with advanced HIV infection currently receiving antiretroviral therapy according to nationally approved treatment protocols (or WHO/Joint UN Programme on HIV and AIDS standards) among the estimated number of people with advanced HIV infection. | 95 | UNSD |

Rationale: The indicator provides a summary measure of access to treatment for HIV/AIDS for those who need it. Together with prevention, which in turn relates to knowledge and use of condom protection, access to antiretroviral drugs is the key dimension of the strategy to combat the spread of HIV.

Limitations: To analyse and compare antiretroviral therapy coverage across countries, standardized estimates of treatment need derived using UNAIDS/WHO methods are utilized. Specialized software is used to generate uncertainty ranges around estimates for antiretroviral therapy need. Depending on the quality of surveillance data, the ranges for some countries can be large. The accuracy of the reported number of people on antiretroviral therapy is an issue as programme monitoring systems are still being developed and strengthened. Although this indicator allows trends to be monitored over time, it does not attempt to distinguish between the different types of treatment regimens available nor does it measure the cost, quality or effectiveness of treatment.

Malaria death rate per 100,000 population, all ages	Number of deaths caused by malaria per 100,000 population of all ages	29	UNSD

Rationale: Information on the incidence of disease is required to determine the needs for treatment of malaria. Data on treatment needs can be compared to existing levels of service provision to identify underserved populations and, in situations of resource constraint, to target interventions to high priority areas. Data on changes in disease incidence can help to judge the success of program implementation, and help to determine whether programs are performing as expected or whether adjustments in the scale or in the blend of strategies are required.

Limitations: Estimates of incidence and death rates are critically dependent on the information provided to WHO by NMCPs, and on the data available in published household surveys. Estimates of the number of malaria cases are particularly sensitive to the completeness of health facility reporting.

Proportion of children under 5 sleeping under insecticide-treated bed nets (%)	Use of insecticide-treated bed nets refers to the percentage of children under age five who slept under an insecticide-treated bed-net to prevent malaria.	96	

Rationale: The indicator allows monitoring progress in preventing and combating malaria. The use of bed-nets is a primary prevention tool to protect children against mosquito bites. The Roll Back Malaria Initiative, established in late 1998 by the WHO, the UNICEF, and the World Bank, identifies the use of insecticide-treated bednets as one of the four main interventions to reduce the burden of malaria in Africa.

Limitations: Because of issues of date recall of last impregnation, this indicator may not provide reliable estimates of net retreatment status. Furthermore, the standard survey instrument does not collect information on whether the net was washed after treatment, which can reduce its effectiveness. Typically, estimates are provided for the national level, which may underestimate the level of coverage among subpopulations living in localized areas of malaria transmission.Another limitation is that survey data are subject to sampling errors and are undertaken only every few years. As the data on bednet use are new, no trend data are yet available.

Proportion of children under 5 with fever who are treated with appropriate anti-malaria drugs (%)	Percentage of children aged 0-59 months with fever in the two weeks prior to the survey who received any anti-malarial medicine.	97	UNSD

Rationale: This indicator monitors the access to malaria treatment for children showing symptoms of the disease. Effective and timely treatment is critical in combating malaria. The Roll Back Malaria Initiative identifies access to effective treatment near home as one of the four main interventions to ease the burden of malaria in Africa.

Limitations: Interpretation must take into account that the indicator reports on receiving any anti-malarial medicine and includes anti-malarial medicines, such as chloroquine, that may be less effective due to widespread resistance and treatment failures.

Prevalence of tuberculosis per 100,000 population	Number of cases of TB (all forms) in a population at a given point in time (sometimes referred to as "point prevalence"). It is expressed as the number of cases per 100,000 population. Estimates include cases of TB in people with HIV.	30	UNSD

Rationale: This indicator allows for monitoring progress in combating tuberculosis. Information on the prevalence and incidence of disease is required to determine the needs for treatment of TB. Data on treatment needs can be compared to existing levels of service provision to identify underserved populations and, in situations of resource constraint, to target

interventions to high priority areas. Data on changes in disease incidence and prevalence can help to judge the success of program implementation, and help to determine whether programs are performing as expected or whether adjustments in the scale or in the blend of strategies are required

Limitations: Prevalence of disease surveys are costly and logistically complex, but they do provide a direct measure of bacteriologically confirmed, prevalent TB disease, and can serve as a platform for other investigations, e.g., the interactions between patients and the health system. Surveys are particularly useful where routine surveillance data are poor. Direct measures of tuberculosis prevalence, which come from vital registration, are uncommon. In the absence of direct measures of prevalence and death rates, a variety of techniques can be used to estimate these values. Administrative data are derived from the administration of health services. Data can also be obtained from household surveys such as the Multiple Indicator Cluster Surveys (MICS) or the Demographic Health Surveys, although they usually refer only to children under five or provide death rates.

Incidence rate of tuberculosis per 100,000 population	Estimated number of new tuberculosis (TB) cases arising in one year per 100,000 population. All forms of TB are included, as are cases in people with HIV. Rationale: This indicator allows for monitoring progress in combating tuberculosis. Information on the prevalence and incidence of disease is required to determine the needs for treatment of TB. Data on treatment needs can be compared to existing levels of service provision to identify underserved populations and, in situations of resource constraint, to target interventions to high priority areas. Data on changes in disease incidence and prevalence can help to judge the success of program implementation, and help to determine whether programs are performing as expected or whether adjustments in the scale or in the blend of strategies are required Limitations: Routine surveillance data provide a good basis for estimating incidence in countries where the majority of incident cases are treated and notified to WHO. Where the proportion of cases notified is consistent over time (even if it is low), trends in incidence can be judged from trends in notified cases. Where TB control efforts change over time it is difficult to differentiate between changes in incidence and changes in the proportion of cases notified. A national surveillance system is an integral part of good TB control, and one of the components of DOTS, which forms the core of the Stop TB Strategy. As surveillance improves in countries implementing the strategy, so will estimates of TB incidence. Prevalence and death rates are more sensitive markers to the changing burden of tuberculosis than incidence (new cases), although data on trends in incidence are for more comprehensive and give the best overview of the incidence of tuberculosis control	31	UNSD
Tuberculosis death rate per 100,000 population.	Estimated number of deaths due to tuberculosis (TB) in a given time period. In this database, the indicator reflects the number of deaths per 100,000 population per year. Deaths from all forms of TB are included. However, deaths in HIV positive people with TB as a contributory cause are coded under HIV chapters of ICD10 and therefore, not included in this indicator. Rationale: This indicator allows for monitoring progress in combating tuberculosis. Information on the prevalence and incidence of disease is required to determine the needs for treatment of TB. Data on treatment needs can be compared to existing levels of service provision to identify underserved populations and, in situations of resource constraint, to target interventions to high priority areas. Data on changes in disease incidence and prevalence can help to judge the success of program implementation, and help to determine whether programs are performing as expected or whether	32	UNSD

adjustments in the scale or in the blend of strategies are required

Limitations: TB mortality can be measured directly only where there is a good vital registration system, with accurate coding of cause-of-death. The number of patients dying while on TB treatment (as reported in routine follow-up of cohorts of TB patients) is not an indication of true TB mortality, as it includes deaths from causes other than TB, excludes deaths from TB among people not on treatment, and excludes deaths among people that are treated for TB but who are not registered in routine TB surveillance systems.

Proportion of tuberculosis cases detected and cured under directly observed treatment short course (%)	Percentage of estimated new infectious tuberculosis cases detected and cured under the internationally recommended tuberculosis control strategy directly observed treatment short course (DOTS). Rationale: Since tuberculosis is an airborne contagious disease, primary control is affected through finding and treating infectious cases and thus limiting the risk of acquiring infection. The recommended approach to primary control is the DOTS strategy, an inexpensive strategy that could prevent millions of tuberculosis cases and deaths over the coming decade. Limitations: Tuberculosis cases reported by ministries in developing countries are usually only a fraction of the number of cases in the population. It is estimated that in 2000 only 27 per cent of new cases were notified under DOTS and only about 19 per cent of cases were successfully treated.	98	UNSD

8. Human development (Youth development)

Youth literacy rate (% of population ages 15-24)	Percentage of people ages 15-24 who can, with understanding, read and write a short, simple statement on their everyday life. Rationale:The Youth Literacy Rate reflects the outcomes of primary education over the previous 10 years or so. As a measure of the effectiveness of the primary education system, it is often seen as a proxy measure of social progress and economic achievement. The literacy rate for this analysis is simply the complement of the illiteracy rate. It is not a measure of the quality and adequacy of the literacy level needed for individuals to function in a society. Reasons for failing to achieve the literacy standard may include low quality of schooling, difficulties in attending school or dropping out before reaching grade 5. Limitations: Literacy is measured crudely in population censuses, either through self or household declaration or by assuming that people with no schooling are illiterate. This causes difficulty for international comparisons. Comparability over time, even for the same survey, may also be a problem because definitions of literacy used in the surveys are not standardized. Shortcomings in the definitions of literacy, measurement problems and infrequency of censuses and household surveys weaken this indicator as a means of the annual monitoring of education outcomes related to the goal of achieving universal primary education.	33	UNESCO
Percentage enrolment in technical and vocational programmes at secondary level (%)	Number of students enrolled in technical/vocational secondary education programmes in percentage of students enrolled in all secondary education programmes Rationale: This indicator reflects the orientation and capacity of secondary education programmes as well as the potential supply of skilled workers in different specializations. The relative concentration of students in a particular orientation of education depicts on the one hand high preference and capacity, on the other hand may reflect job opportunities as well as relative	82	UNESCO

earnings across different occupations and industries

Limitations: Cross-country comparability of this indicator can be affected by different ways in which national secondary education systems are organized according to different orientations (e.g. general, technical-vocational, etc.).

Gross enrolment in secondary education (%)	Total number of students enrolled in secondary education, regardless of age, expressed as percentage of the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers. Rationale: This indicator measures the potential for human capital development beyond the primary level. In the globalized economy, countries need human capital at a level that goes beyond basic readings and writings. Moreover, individuals who achieve secondary education generally benefit from steeper wage profiles throughout the rest of their life. Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that children receive.	17	UNESCO
Gross enrolment in tertiary education (%)	Total number of students enrolled in secondary education, regardless of age, expressed as percentage of the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level Rationale: This indicator measures the potential for human capital development beyond the primary level. In the globalized economy, countries need human capital at a level that goes beyond basic readings and writings. Moreover, individuals who achieve tertiary education generally benefit from steeper wage profiles throughout the rest of their life. Limitations: Over-reporting is often an issue in this type of indicators. Survey data might not reflect actual attendance or dropout during the school year. At the same time, administrator may over-report if there is a financial incentive to do so. The indicator also does not account for the quality of the education that students receive. In some least developed countries, lack of employment opportunities and specialization in sectors that are not intensive in the use of skilled labour might significantly reduce the return on investment in tertiary education.	18	WDI

9. Human development (Shelter and Water Sanitation)

Proportion of population living in slums (%)	The Proportion of urban population living in slums is the proportion of urban population living in slum households. A slum household is defined as a group of individuals living under the same roof lacking one or more1 of the following conditions: •Access to improved water •Access to improved sanitation •Sufficient-living area •Durability of housing •Security of tenure However, since information on secure tenure is not available for most of the	99	UNSD

countries, only the first four indicators are used to define slum household, and then to estimate the proportion of urban population living in slums.

Rationale: The indicator is intended to provide an overview of the share of urban population living in conditions of poverty and physical and environmental deprivation.

Limitations: The definition lacks the spatial component of slum as well as the type of shelter deprivation. Four out of five of the slum definition indicators measure physical expressions of slum conditions: lack of water, lack of sanitation, overcrowded conditions, and non-durable housing structures. These indicators focus attention on the circumstances that surround slum life, depicting deficiencies and casting poverty as an attribute of the environments in which slum dwellers live.

Proportion of population using an improved drinking water source (%)	Percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling. Rationale: This indicator is a proxy for access to safe drinking water. Sustainable access to safe drinking water is one dimension of environmental sustainability and as such it is integrated in the millennium development goals framework. Limitations: The indicator does not take actual drinking water quality into account, nor does it reflect the time spent on getting water from improved sources, which are not on premises. Both these determinants though are important parameters of access	34	UNSD
Proportion of population using an improved sanitation facility (%)	Access to improved sanitation facilities refers to the percentage of the population with at least adequate access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. To be effective, facilities must be correctly constructed and properly maintained. Rationale: The indicator records the proportion of the population using an improved sanitation facility. The collection of data on the proportion of the population using shared or public sanitation facilities, unimproved sanitation facilities and those practising open defecation, however is also important to track behavioural changes in sanitation practices. Limitations: Though there is a demand for information on the use of improved sanitation facilities disaggregated by sex and age – this information is currently not routinely collected by the globally used monitoring instruments.	35	UNSD

10. Human Development (Gender Equality and Empowerment of Women)

Ratio of boys to girls in primary education	Ratio of the number of female students enrolled at primary level of education to the number of male students in primary level. To standardise the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER) for primary education is used. Rationale: The GPI measures progress towards gender parity in education participation and/or learning opportunities available for women in relation to	100	UNSD

those available to men. It also reflects the level of women's empowerment in society. A GPI equal to 1 indicates parity between females and males. In general, a value less than 1 indicates disparity in favour of boys/men and a value greater than 1 indicates disparity in favour of girls/women. However, the interpretation should be in the other way round for indicators that should ideally approach 0% (e.g. repetition, dropout, illiteracy rates, etc). In these cases, a GPI of less than 1 indicates a disparity in favour of girls/women and a value greater than 1 indicates a disparity in favour of boys/men.

Limitations: The index does not show whether improvement or regression is due to the performance of one of the gender groups. Interpretation requires trend analysis of the underlying indicators.

Ratio of boys to girls in secondary education	Ratio of the number of female students enrolled at secondary level of education to the number of male students in secondary level. To standardise the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER) for secondary education is used. Rationale: The GPI measures progress towards gender parity in education participation and/or learning opportunities available for women in relation to those available to men. It also reflects the level of women's empowerment in society. A GPI equal to 1 indicates parity between females and males. In general, a value less than 1 indicates disparity in favour of boys/men and a value greater than 1 indicates disparity in favour of girls/women. However, the interpretation should be in the other way round for indicators that should ideally approach 0% (e.g. repetition, dropout, illiteracy rates, etc). In these cases, a GPI of less than 1 indicates a disparity in favour of girls/women and a value greater than 1 indicates a disparity in favour of boys/men Limitations: The index does not show whether improvement or regression is due to the performance of one of the gender groups. Interpretation requires trend analysis of the underlying indicators.	101	UNSD
Ratio of boys to girls in tertiary education	Ratio of the number of female students enrolled at tertiary level of education to the number of male students in tertiary level. To standardise the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER) for tertiary education is used. Rationale: The GPI measures progress towards gender parity in education participation and/or learning opportunities available for women in relation to those available to men. It also reflects the level of women's empowerment in society. A GPI equal to 1 indicates parity between females and males. In general, a value less than 1 indicates disparity in favour of boys/men and a value greater than 1 indicates disparity in favour of girls/women. However, the interpretation should be in the other way round for indicators that should ideally approach 0% (e.g. repetition, dropout, illiteracy rates, etc). In these cases, a GPI of less than 1 indicates a disparity in favour of girls/women and a value greater than 1 indicates a disparity in favour of boys/men. Limitations: The index does not show whether improvement or regression is due to the performance of one of the gender groups. Interpretation requires trend analysis of the underlying indicators.	102	UNSD
Proportion of seats held by women in national parliaments (%)	Number of seats held by women members in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats. Rationale: this is an indicator of reduced discrimination and disparity in	36	UNSD

women's access to important political positions. There is evidence that parliaments with a larger proportion of seats held by women tend to work more transparently and are likely to be more responsive to citizens. More generally, this indicator allows for an assessment of gender equality and women empowerment.

Limitations. Suspensions and dissolutions of parliaments imply that the number of countries covered significantly varies by year. There are difficulties in obtaining information on by-elections results and this in turn make the indicator less comprehensive and accurate. The indicator also does not measure the effective power of women in the legislature. In fact, parliaments vary considerably in their internal workings and procedures. It may be possible that even if formally elected in office, women face obstacles in fully and efficiently carrying out their mandate.

Contraceptive prevalence (% of women ages 15-49)	Percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception. It is usually measured for married women ages 15-49 only	27	UNSD

Rationale: This indicator measures the use of contraception among women. It relates to two important aspects: family planning and spread of sexually transmitted diseases. This second aspects depends on the methods of contraception.

Limitations: Statistics on contraception prevalence rates are based primarily on women, mainly because contraception is more easily measured in this way. Further, contraception, or its absence, affects the health and well-being of women more than it does their sexual partners. Similarly, condom use is still at the discretion of male partners, and the female condom is not as widely available. The rising number of women and girls infected by HIV/AIDS indicates that condom use needs further promotion and that women need to be empowered to refuse unprotected sex.

Adolescent fertility rate (births per 1000 women ages 15-19)	Number of births per 1,000 women ages 15-19.	90	UNSD

Rationale: This indicator represents the risk of childbearing among adolescent women 15 to 19 years of age. It is also referred to as the age-specific fertility rate for women aged 15-19.

Limitations: There are a number of limitations in the estimates:
(a) For civil registration, rates are subject to limitations which depend on the completeness of birth registration, the treatment of infants born alive but dead before registration or within the first 24 hours of life, the quality of the reported information relating to age of the mother, and the inclusion of births from previous periods. The population estimates may suffer from limitations connected to age misreporting and coverage.
(b) For survey and census data, both the numerator and denominator come from the same population. The main limitations concern age misreporting, birth omissions, misreporting the date of birth of the child, and sampling variability in the case of surveys.
The adolescent birth rate is commonly reported as the age-specific fertility rate for ages 15 to 19 in the context of calculation of total fertility estimates. It has also been called adolescent fertility rate. A related measure is the proportion of adolescent fertility measured as the percentage of total fertility contributed by women aged 15-19.

Unmet need for contraception (% of married women ages 15-49)	Percentage of fertile, married women of reproductive age who do not want to become pregnant and are not using contraception.	91	WDI

Rationale: Women with unmet need are those who are fecund and sexually

active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behaviour.

Limitations: According to the standard definition, women who are using a traditional method of contraception are not considered as having an unmet need for family planning. As traditional methods can be considerably less effective than modern methods, additional analyses often distinguish between traditional and modern methods and also report on unmet need for effective contraception. The assumption of universal exposure among married women increases the estimate (additional questions probing reasons for non-use of family planning often elicit reports of low risk due to infrequent sexual activity, including spousal separation resulting from labour migration). There can be differences in the precise definition being used.

11. Human Development (Social protection)

Public health expenditure (% of GDP)	Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds. Rationale: This is an indicator of the strength of public health financing. As a public good, public health is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public health. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time.	37	WHO
General government expenditure on health (% of total expenditure on health)	General government expenditure on health comprises the outlays on health by all levels of government, social-security agencies, and direct expenditure by parastatals and public firms. Expenditures on health include final consumption, subsidies to producers, and transfers to households (chiefly reimbursements for medical and pharmaceutical bills). It includes both recurrent and investment expenditures (including capital transfers) made during the year. Besides domestic funds it also includes external resources (mainly as grants passing through the government or loans channelled through the national budget). Rationale: This is an indicator of the strength of public health financing. As a public good, public health is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public health. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time.	102	WHO
Public education expenditure (% of GDP)	Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). Two tables reported. Data by country and year are identical. Differences	38	UNESCO

relate to the computation of regional averages. In Table 11.39, regional averages are computed using country's relative GDP as weight. In table 22.40 averages are computed using country's relative population as weight.

Rationale: This is an indicator of the strength of public education financing. As a public good, public education is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public education. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good.

Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time. Also related to this is whether reported public expenditure are drawn from the budget, or are on commitment/cash basis.

Social security expenditure on health (% of general government expenditure on health)	Social security expenditure on health (SSHE) includes outlays for purchases of health goods and services by schemes that are mandatory and controlled by government. Such social-security schemes that apply only to a selected group of the population, such as public sector employees only, are also included here Rationale: This is an indicator of the strength of public health financing. As a public good, public health is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public health. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time.	103	WHO
Public education expenditure as a % of government expenditure	Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). Rationale: This is an indicator of the strength of public education financing. As a public good, public education is to a large extent publicly provided. However, budget constraints and competing priorities limit the extent of resources the government can devote to public education. This indicator monitors the progress in the mobilization of domestic resources towards the provision of the public good. Limitations: Budgetary data are not always complete and accurate. Categorization of expenditure might be difficult in certain cases and this could reduce comparability across countries and over time.	86	UNESCO

12. Multiple Crisis and Emerging Challenges

Herfindhal-Herschman production concentration index	The index (HH) is computed as follows: $$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$ where s is the value added share of a generic sector i in total GDP. The index therefore ranges from 0 to 1, with higher values denoting greater	53	Computed from UNCTAD data

concentration (and less hence lower diversification) of the production structure. The production sector considered are: (i) Agriculture, hunting, forestry, and fishing; (ii) Manufacturing, (iii) Mining and quarrying, (iv) Utilities (electricity, gas, and water supply); (v) Construction; (vi) Wholesale retail trade, restaurant and hotels; and (vii) other services

Rationale: This indicator measures the extent of diversification in production. Higher values of the index denote less diversification. At early stages of development, economies tend to be highly specialized. High specialization makes the country more vulnerable to shocks. Moreover, in the presence of large trade and transport costs, domestic demand for a variety of goods and services requires some diversification in production. Progress in development is therefore associated with an increase in diversification. At sufficiently advanced stages of development, however, reduction in transport costs and the availability of financial instruments for risk sharing lower the need for further diversification and countries tend to specialize again. The indicator therefore allows for monitoring of diversification along the stages of development.

Limitation: The indicator is based on value added shares of sectors. The correlation between shifts in value added and shifts in employment is however not perfect. On the other hand, disaggregated data on sectoral employment are not widely available and not very reliable. Therefore, the indicator cannot be computed using employment shares.

| Herfindhal-Herschman export concentration index | The index is computed as follows:

$$\frac{\sum_{i=1}^{N} s_i^2 - \left(\frac{1}{N}\right)}{1 - \left(\frac{1}{N}\right)}$$

where s is the export share of a generic product i in total GDP. The index therefore ranges from 0 to 1, with higher values denoting greater concentration (and less hence lower diversification) of the production structure. The number of products is based on SITC, Revision 3 commodity classification at 3-digit group level. This figure includes only those products that are greater than 100,000 dollars or more than 0.3 per cent of the country's or country group's total exports or imports

Rationale: The index is measures the degree of diversification of the export structure of the country. A highly concentrated export structure denotes lack of production diversification and makes the country more vulnerable to international price shocks.

Limitations: Higher values of the index are certainly desirable, but there is probably an upper limit to desirable diversification. An excess of diversification may be counterproductive, as for instance it would not allow producers to exploit economies of scale. | 58 | UNCTAD |

| Value added share of non-extractive sector in total GDP (%) | The non-extractive sector is defined as total GDP minus agriculture, hunting, forestry, fishing, mining and quarrying (ISIC A-C). The share of the extractive sector is expressed in % of total country's GDP

Rationale: The indicator allows for a comparison of the importance of the non-extractive sector in the economy. Economic development is generally accompanied by a process of structural change of the production system. As part of this process, the relative share of agriculture and extractive industries tends to decline and the share of manufacturing and other non-extractive industries increases. A growing share of the non-extractive sector may | 76 | UNCTAD |

therefore signal that the country is effectively going through the process of transformation related to economic development.

Limitations: The indicator should be considered in combination with other measures of structural transformation, including sectoral labour share and diversification indices. These indicators are, in fact, also provided as part of this dataset.

Coefficient of variation of ODA to LDCs over the past 3 years	The coefficient of variation is computed as the standard deviation of ODA to LDCs over a three year period divided by the average ODA to LDCs over the same period. ODA is expressed in percentage of OECD/DAC donors' GNI	104	Computed from data in OECD DAC
	Rationale: This indicator measures the volatility of development aid assistance provided to LDCs. A volatile ODA creates uncertainty and severely complicates policy and project implementation in recipient countries. This in turn is likely to reduce the extent to which ODA is effective in promoting development.		
	Limitations: There are likely to be two sources of volatility: one associated with commitment and one with actual disbursement of aid. The volatility associated with disbursement is partly a consequence of volatility associated with commitment and partly a consequence of reneging on previously taken commitments. This indicator measures aggregate volatility in disbursement, without separating between the possible sources or causes of this volatility.		
Coefficient of variation of remittances to LDCs over the past 3 years.	The coefficient of variation is computed as the standard deviation of workers' remittances and compensation of employees to LDCs over a three year period divided by the average remittances over the same period. Remittances and compensation of employees are expressed in % of the GDP of the receiving country.	105	Computed from data in WDI
	Rationale: This indicator measures the volatility of the flow of remittances received by LDC countries. Remittances have become an important source of finance for many countries. Studies show that remittances have a significant effect on the macroeconomy of the recipient country, particularly in terms of growth, investment, consumption, and poverty reduction. When remittances are more volatile, the economy of the recipient country becomes more unstable and this in turn can have adverse consequences on the welfare of poorer households.		
	Limitations: Remittances are often transmitted through informal channels. This indicator is therefore subject to a potentially large measurement error.		
Disaster preparedness index	The Disaster Preparedness Index (DPI) is the sum of three variables related to Contingency Plans, Food Security Monitoring System and Early Warning Systems. The focus of the index is less on the quality and more on the ownership of these systems by the government, i.e. the sustainability. The DPI is based on a tool to measure national capacities to respond to food security crises (Response Capacity Matrix), which was developed, field tested and widely applied by WFP in 2007/2008. Hence, the structure and the logic of the DPI have already been tested in the context of the Response Capacity Matrix. Target is DPI > 8.	106	WFP
	Rationale: The index measures the degree to which the government, with the support of WFP, is committed and has the capacity to develop and regularly update Contingency Plans at national and sub-national level and owns and manages Food Security Monitoring Systems (FSMS) and Early Warning Systems. For each variable, four different levels of capacities are defined by benchmarks, ranging from extremely low to high. Values from 0 to 3 are assigned to each level, with lower values corresponding to lower levels of		

capacity. At the end, an index for Disaster Preparedness is calculated ranging from 0 – 9.

Limitations: The index is for now available only for very few LDCs.

Total reserves (% of total external debt)	International reserves to total external debt stock	39	WDI

Rationale. This indicator measures the extent to which a country disposes of reserves of international currencies to face its obligations on international markets and to manage operations on the exchange rate markets. The volume of available reserves affects the vulnerability of countries to speculative attacks and volatile capital flows. It also provides an indication of country's solvency.

Limitations: Country's vulnerability is affected by multiple factors and in some circumstances international reserves might not work as a buffer. In this respect, large reserves are not a sufficient condition for a country to be safely isolated from external shocks.

Present value of external debt (% of exports of goods, services, and income)	Sum of short-term external debt plus the discounted sum of total debt service payments due on public, publicly guaranteed, and private nonguaranteed long-term external debt over the life of existing loans. The exports denominator is a three-year average.	40	WDI

Rationale: This is an indicator of the extent to which a country is able to meet its debt obligations through revenues from exports. Exports provide countries with valuable revenues and international currency. A large debt value relative to exports is generally a signal of possible problems in servicing and/or repaying debt

Limitations: Where formal registration of foreign borrowing is not mandatory, compilers must rely on balance of payments data and financial surveys. A majority of the countries are fully current in their reporting under the DRS and the reported data give an adequate and fair representation of the countries' total public debt. In some cases, when debtor reports are not available or incomplete, World Bank staff make estimates based on previously reported data, creditor reports, and other sources. Every effort has been made to ensure the accuracy and completeness of the debt statistics. Nevertheless, quality and coverage vary among debtors and may also vary for the same debtor from year to year.

Total debt service (% of exports of goods, services, and income)	Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF.	41	WDI

Rationale: This is an indicator of the extent to which a country is able to meet its debt obligations through revenues from exports. Exports provide countries with valuable revenues and international currency. A large debt value relative to exports is generally a signal of possible problems in servicing and/or repaying debt

Limitations: Where formal registration of foreign borrowing is not mandatory, compilers must rely on balance of payments data and financial surveys. A majority of the countries are fully current in their reporting under the DRS and the reported data give an adequate and fair representation of the countries' total public debt. In some cases, when debtor reports are not available or incomplete, World Bank staff make estimates based on previously reported data, creditor reports, and other sources. Every effort has been made to ensure the accuracy and completeness of the debt statistics. Nevertheless, quality and coverage vary among debtors and may also vary for

the same debtor from year to year.

Relief assistance (USD, millions, current prices)	Official development assistance provided by DAC countries for (i) Reconstruction Relief and Rehabilitation (line 730:VIII.2. of CRS) and (ii) Disaster Prevention and Preparedness (line 740: VIII.3 of CRS) Rationale: The indicator measures the volume of ODA disbursed for the purpose of reconstruction relief, rehabilitation, and disaster prevention. Limitations: It is sometimes difficult to establish the sectoral allocation of aid flows. A significant proportion of non-allocable aid might also be directed to relief assistance.	108	OECD DAC
Humanitarian aid (USD millions, current prices)	Official development assistance provided by DAC countries for humanitarian aid (line 700: VIII of CRES). Rationale: The indicator measures the volume of ODA disbursed for the purpose of humanitarian assistance Limitations: It is sometimes difficult to establish the sectoral allocation of aid flows. A significant proportion of non-allocable aid might also be directed to humanitarian aid.	109	OECD DAC
Number of deaths due to natural disasters	Total number of deaths caused by natural disasters. Victims of natural disasters are defined as people killed or affected (i.e., people requiring immediate food, water, shelter, sanitation or medical assistance). It covers weather and climate-related disasters (such as floods, landslides, storms, droughts and extreme temperatures) as well as geo-physical disasters (such as earthquakes or volcanoes). Relevance: The indicator reflects vulnerability to natural shocks, in particular the human impact of natural disasters associated with these shocks. Limitations: The number of deaths is a function of two broad factors: (i) exposure to disaster and intensity of disaster events and (ii) preparedness and response. A low number of deaths might still occur in countries that are exposed to disasters, but that also have developed a relatively better capacity to respond to these events. Interpretation might therefore be somewhat confusing.	110	EM-DAT

13. Mobilizing Financial Resources for Development and Capacity Building (Domestic Resource Mobilization)

Gross domestic savings (% of GDP)	Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption). Rationale: This indicator measures the potential for domestic resource mobilization to finance development. While least developed countries clearly need external financial support to finance their development needs, the mobilization of a growing volume of domestic resources is desirable in many respects. Domestic resources tend to be less volatile and do not create dependence. Limitations: This is not a measure of domestic investment. International financial integration may actually cause domestic savings to differ from domestic investment to a considerable extent.	42	WDI
Gross national savings (% of GDP)	Gross national savings are calculated as GNI less final consumption expenditure (total consumption)	43	WDI

Rationale: This indicator measures the potential for domestic resource mobilization to finance development. While least developed countries clearly need external financial support to finance their development needs, the mobilization of a growing volume of domestic resources is desirable in many respects. Domestic resources tend to be less volatile and do not create dependence. It has an advantage of taking into account potential leakages, in particular net factor income The indicator may also be interpreted as a measure of country's sustainability. If country's saving is positive, then the value of its set of assets is increasing and hence the present value of social welfare should also be increasing.

Limitations: The previous interpretation is complicated by the consumption of fixed capital. This is the replacement value of capital used in the production process. To be a correct measure of the change in assets value, gross savings should be expressed net of fixed capital consumption. A measure of net national savings (gross national savings – consumption of fixed capital) should therefore also be presented and analysed.

Government revenues (excluding grants) % of GDP	Revenue is cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also considered as revenue but are excluded here.

Rationale: The indicator measures the extent of domestic resource mobilization through the government budget. Long-term development required LDCs not to rely exclusively on external funding. The importance of mobilizing domestic financial resources for development was clearly established at the International Conference on Financing for Development of Monterrey in 2002.

Limitations: The quality of budget data may significantly vary across countries. | 111 | WDI |
| Tax revenues (% of GDP) | Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.

Rationale: The indicator measures the extent of domestic resource mobilization through taxation. In a long-term perspective, an efficient, fair, and transparent taxation system is essential to guarantee the delivery of public goods and the effectiveness of government and public administration.

Limitations: As an aggregate quantitative indicator, the tax revenues to GDP ratio does not provide much on information on the extent to which taxation is regressive or progressive. It also does not provide information on whether or not the burden of taxation is fairly shared by different sectors or socioeconomic groups. The "optimal" level of tax revenues in proportion of GDP is also likely to differ sharply across countries depending on the export and production structure, comparative advantage, international economic integration, and demographic composition of the population. | 112 | WDI |
| Domestic credit (% of GDP) | Credit to various sectors on a gross basis, with the exception of credit to the central government, which is net. The banking sector includes monetary authorities and deposit money banks, as well as other banking institutions where data are available (including institutions that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other banking institutions are savings and mortgage loan institutions and building and loan associations.

Rationale: The indicator is a proxy of the depth of financial international in | 113 | WDI |

the domestic economy. Strengthening and developing the domestic financial sector is one of the key dimensions of domestic financial resource mobilization acknowledged in the Monterrey Consensus. Economic theory and empirical evidence indicate that there is a strong, causal relationship from financial development to economic development.

Limitations: The way in which credit is allocated is as important as the quantity of credit provided. Credit contributes to development if also initially poorer individuals have access to it. If credit is only granted to initially richer individuals, then it can become a major source of inequality. This aspect is not captured by the indicator.

14. Mobilizing Financial Resources for Development and Capacity Building (Official Development Assistance)

Net ODA, total and to the least developed countries as percentage of OECD/DAC donors' gross national income (GNI)	Net Official development assistance (ODA) comprises grants or loans to developing countries and territories on the Organization For Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded are aid to more advanced developing and transition countries as determined by the DAC. Rationale: This indicator measures the contribution of donor countries to official development assistance. ODA is critical to address the financing gap that slows development progress in most low income economies. Limitation: ODA to LDCs through multilateral institutions is estimated. Any methodology for imputing multilateral flows can only ever be an approximation. This measure does not capture the growing aid flows from emerging countries.	44A and 44B	UNSD/OECD DAC
Percent of aid flows that use public financial management systems in LDCs (Q11-bis)	ODA received by LDCs from donors that use public financial management system as reported in question 11 of the Survey on Monitoring of the Paris Declaration provided by OECD CRS. Expressed in percentage of total aid disbursed as reported in question 1 of the same survey. Rationale: This indicator monitors the use of public management financial (PFM) systems in aid disbursement. Evidence shows that providing aid in a manner that uses and is integrated with partner countries' fiduciary systems can yield benefits ranging from better availability of information on aid flows, improved inter and intra-sectoral resource allocation and strengthened control and accountability. In aid-dependent countries, it can also have a catalytic effect on the strengthening of institutions, systems and capacities for sound public financial management. Limitations: Data are for now available only for three years and for a subsample of all LDCs	116	OECD
Percent of aid flows that use LDC procurement systems (Q12-bis)	ODA received by LDCs from donors that use LDC procurement systems as reported in question 12 of the Survey on Monitoring of the Prais Declaration provided by OECD CRS. Expressed in percentage of total aid disbursed as reported in question 1 of the same survey Rationale: This indicator monitors the use of procurement systems in LDCs. Procurement is an important element of sound public financial management. The alignment of aid with LDCs' procurement systems is therefore critical to	117	OECD

ensure increase transparency and accountability and hence to strengthen the effectiveness of aid.

Limitations: Data are for now available only for three years and for a subsample of all LDCs

Proportion of ODA provided to LDC that is channelled to economic infrastructure and the productive sector (%)	ODA provided for Economic infrastructure and services (line 200:II in CRS) and for production sector (line 300:III in CRS) in percent of total ODA provided all donors		

Rationale: The indicator measures the volume of ODA disbursed for the purpose of creating economic infrastructure and sustain the productive sector of the economy

Limitations: It is sometimes difficult to establish the sectoral allocation of aid flows. A significant proportion of non-allocable aid might also be directed to humanitarian aid.

15. Mobilizing Financial Resources for Development and Capacity Building (External Debt)

Total number of LDCs that have reached their HIPC decision points and number that have reached their HIPC completion points	Dates are provided for each country and the following stages:	120	UNSD

- Country still to be considered
- Country has reached pre-decision point
- Country is no longer considered to be a HIPC
- Country has reached completion
- Country has reached completion under the enhanced HIPC initiative
- Country has reached decision point

Rationale: The indicator provides qualitative information on the status of accession/completion of the HIPC initiative for LDCs. A global partnership for development requires increased debt reduction for heavily indebted poor countries. The indicator will monitor the Heavily Indebted Poor Countries Initiative, a major international effort targeted specifically at improving developing countries' debt sustainability. Launched in 1996 and enhanced in 1999 to broaden and accelerate debt relief, the HIPC Initiative marked the first time that multilateral, official bilateral and commercial creditors united in a joint effort to reduce the external debt of the world's most debt-laden poor countries to sustainable levels.

Limitations: Data are available since 2000 only as the HIPC initiative was launched in 1996.

Debt relief committed in favour of LDCs (cumulative, millions of US dollars)	Cumulative volume of debt relief committed in favour of LDCs under HIPC, MDRI and other initiatives. The commitment is expressed in end of 2009 Net Present Value terms.	121	UNSD

Rationale: The indicator provides qualitative information on the volume of debt relief granted under various initiatives. A global partnership for development requires increased debt reduction for heavily indebted poor countries. The indicator monitors major international efforts targeted specifically at improving developing countries' debt sustainability. While debt can be an important source of external finance for low income countries, excessive debt levels cause overhang and adversely affects the growth and development potential of the economy. Debt relief is therefore a key contribution that the international community can give to promote the development of lower income economies.

Limitations: The indicator shows the net present value of committed debt relief under the assumption that all creditors will participate. Thus, the values

do not indicate the actual delivery of debt relief received by debtor countries.

Debt forgiveness or reduction (current US dollars)	Change in debt stock due to debt forgiveness or reduction. It is derived by subtracting debt forgiven and debt stock reduction from debt buyback. Rationale: The indicator sows the amount of debt forgiven or reduced by creditors. In view of the potential adverse effect of excessive debt on the development prospects of LDCs, debt forgiveness is regarded as a crucial development policy dimension. Limitations: Terms of forgiveness and reduction may significantly differ across countries.	47	WDI
External debt stock (% of GNI)	Total external debt is debt owed to nonresidents repayable in foreign currency, goods, or services. Total external debt is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt. Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt. Rationale: This is an indicator of the burden of external debt on the national economy. While borrowing from richer countries can help a low income economy bridge the financing gap, excessive debt can determine overhang and result in a sharp contraction of growth. Debt crises resulting from excessive levels of debt have strong negative implications in terms of capacity of governments to supply public goods and overall macroeconomic stability. Limitations: Where formal registration of foreign borrowing is not mandatory, compilers must rely on balance of payments data and financial surveys. A majority of the countries are fully current in their reporting under the DRS and the reported data give an adequate and fair representation of the countries' total public debt. In some cases, when debtor reports are not available or incomplete, World Bank staff make estimates based on previously reported data, creditor reports, and other sources. Every effort has been made to ensure the accuracy and completeness of the debt statistics. Nevertheless, quality and coverage vary among debtors and may also vary for the same debtor from year to year	46	WDI
Gross national income (GNI)	GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.	General	WDI
Debt forgiveness or reduction (current US dollars)	Change in debt stock due to debt forgiveness or reduction. It is derived by subtracting debt forgiven and debt stock reduction from debt buyback. Rationale: The indicator sows the amount of debt forgiven or reduced by creditors. In view of the potential adverse effect of excessive debt on the development prospects of LDCs, debt forgiveness is regarded as a crucial development policy dimension. Limitations: Terms of forgiveness and reduction may significantly differ across countries.	47	WDI

15 Mobilizing Financial Resources for Development and Capacity Building (FDI and Remittances)

FDI net inflows (% GDP)	Net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the	48	Computed from UNCTAD data

balance of payments.

Rationale: The indicator measures the volume of foreign direct investment received by LDCs. Attracting capital from abroad is important under several respects. First, FDI can produce spillovers and externalities that benefit the local economy. Second, FDI facilitates the spread of knowledge and hence helps the destination country accelerate its rate of technological progress. Third, FDI is a relatively stable form of capital inflow, which is therefore less subject to sudden changes and reversals. The Monterrey Consensus also recognizes that international capital flows, particularly foreign direct investment, are vital complements to national and international development efforts.

Limitations: The development effects of FDI depend on various factors, including the sectoral allocation of the flows. Disaggregate information on FDI allocation should therefore also be considered when analysing and presenting this indicator.

16. Good governance at all levels

Proportion of seats held by women in national parliaments (%)	Number of seats held by women members in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats.	36	UNSD

Rationale: this is an indicator of reduced discrimination and disparity in women's access to important political positions. There is evidence that parliaments with a larger proportion of seats held by women tend to work more transparently and are likely to be more responsive to citizens. More generally, this indicator allows for an assessment of gender equality and women empowerment.

Limitations. Suspensions and dissolutions of parliaments imply that the number of countries covered significantly varies by year. There are difficulties in obtaining information on by-elections results and this in turn make the indicator less comprehensive and accurate. The indicator also does not measure the effective power of women in the legislature. In fact, parliaments vary considerably in their internal workings and procedures. It may be possible that even if formally elected in office, women face obstacles in fully and efficiently carrying out their mandate.

Status of ratification of the 17 international human rights treaties and optional protocols	For each country, number of ratified treaties is provided	123	UN OHCHR

Rationale: The indicator is a broad proxy for good governance and institutional accountability. It focuses on the crucial issue of human rights. It is now widely recognized that socioeconomic development cannot occur and be sustainable in the long-term without a thorough recognition and enforcement of basic human rights.

Limitations: The indicator does not provide information on the status of implementation of the treaties

Type of accreditation of National Human Rights Institutions by the rules of procedure of the International Coordinating Committee of National Institutions	For each country, information is provided on type of accreditation. Three accreditation types are used: A = compliance with Paris Principle B = not fully in compliance with Paris Principle C = Non compliance with Paris Principle	124	UN OHCHR

Rationale: The indicator is a broad proxy for good governance and institutional accountability. It focuses on the crucial issue of human rights. It is now widely recognized that socioeconomic development cannot occur and

be sustainable in the long-term without a thorough recognition and enforcement of basic human rights.

Status of United Nations Convention Against Corruption	Indicates for each country the date of (i) signature (if applicable), (ii) ratification (if applicable), and (iii) acceptance (if applicable) Rationale. This indicator provides information on progress made in fighting corruption. Corruption and bad governance are among the primary causes of bad economic performance. The status of adoption of the UN Convention Against Corruption signals the effective willingness of countries to take action. Limitations: Implementation depends on various factors, including institutional and political reforms.	49	UNODC
Percent of aid flows that use public financial management systems in LDCs (Q11-bis)	ODA received by LDCs from donors that use public financial management system as reported in question 11 of the Survey on Monitoring of the Paris Declaration provided by OECD CRS. Expressed in percentage of total aid disbursed as reported in question 1 of the same survey. Rationale: This indicator monitors the use of public management financial (PFM) systems in aid disbursement. Evidence shows that providing aid in a manner that uses and is integrated with partner countries' fiduciary systems can yield benefits ranging from better availability of information on aid flows, improved inter and intra-sectoral resource allocation and strengthened control and accountability. In aid-dependent countries, it can also have a catalytic effect on the strengthening of institutions, systems and capacities for sound public financial management. Limitations: Data are for now available only for three years and for a subsample of all LDCs	116	OECD
Percent of aid flows that use LDC procurement systems (Q12-bis)	ODA received by LDCs from donors that use LDC procurement systems as reported in question 12 of the Survey on Monitoring of the Paris Declaration provided by OECD CRS. Expressed in percentage of total aid disbursed as reported in question 1 of the same survey Rationale: This indicator monitors the use of procurement systems in LDCs. Procurement is an important element of sound public financial management. The alignment of aid with LDCs' procurement systems is therefore critical to ensure increase transparency and accountability and hence to strengthen the effectiveness of aid. Limitations: Data are for now available only for three years and for a subsample of all LDCs	117	OECD
Parliament legal authority	Set of three indicators concerning the following dimensions of legal authority: (i) Does the parliament have the legal authority to ratify loan agreements with World Bank and/or IMF loans? (ii) Can parliaments amend loan agreements? (iii) Does parliament have the legal authority to approve PRSPs? Indicators (i) and (iii) are provided as Yes/No answers. For indicator (ii), three possible answers are provided: accept/reject only; request amendments; law does not specify. Rationale: These indicators monitor the extent to which the parliament can take part in the decision-making process on issues like poverty reduction	125	IPU

	strategy papers and loans with international donors. For one thing, in a representative democracy, the parliament is the primary channel through which citizens can affect the decision making process. The involvement of the parliament in issues like the ratification of loans and the approval of PRSP should therefore be taken as an indicator of better governance and more transparent government. For another thing, a legally empowered parliament can provide useful checks and balances in decision-making, thus avoiding situations where the executive can make unilateral, unchallenged, and non-transparent decisions.

Limitations: even if provided with formal legal authority to ratify, amend, and approve agreement, the parliament might still be substantially ineffective for a number of reasons, depending on the overall institutional setting. | | |
| Voting shares IMF (% of total) | Percentage of votes allocated to the country in percent of total available votes

Rationale: This indicator is a proxy of the power of LDCs in international organizations that are strongly involved in international development assistance.

Limitations: This indicator does not give indication about the modalities of engagement of IMF with recipient countries, including the policy space given to these countries. | 50 | IMF |
| Voting shares World Bank Group (% of total) | Percentage of votes allocated to the country in percent of total available. Data are separately presented for four institutions within the World Bank Group: (i) International Bank for Reconstruction and Development (IBRD), (ii) International Finance Corporation (IFC), (iii) Multilateral Investment Guarantee Agency (MIGA), and (iv) International Development Association (IDA)

Rationale: This indicator is a proxy of the power of LDCs in international organizations that are strongly involved in international development assistance.

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List of data sources:

WDI: Word Development Indicators : http://data.worldbank.org/data-catalog
UNSD: United Nations Statistical Division: http://unstats.un.org/unsd/databases.htm
UNESCO: United Nations Educational, Scientific, and Cultural Organization, Institute for Statistics: http://www.uis.unesco.org/Pages/default.aspx
UNCTAD: United Nations Conference on Trade and Development: http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx
OECD DAC: Organization for Economic Cooperation and Development, Creditor Reporting System (CRS): http://stats.oecd.org/Index.aspx?datasetcode=CRS1#
WTO: World Trade Organization: http://stat.wto.org/Home/WSDBHome.aspx?Language=
WFP: World Food Programme
MDG report 2011: http://www.un.org/millenniumgoals/11_MDG%20Report_EN.pdf
UNOHCHR: United Nations Office of the High Commissioner for Human Rights: http://www.ohchr.org/EN/Pages/WelcomePage.aspx
WHO: World Health Organization: http://www.who.int/whosis/en/
IEA: International Energy Agency: http://www.iea.org/stats/index.asp
IMF: International Monetary Fund: http://www.imf.org/external/np/sec/memdir/members.aspx#2

World Bank (for voting shares): http://web.worldbank.org/

IFPRI: Institute Food Policy Research Institute http://www.ifpri.org/book-39/ourwork/programs/priorities-public-investment/speed-database)

UNIDO: United Nations Industrial Development Organization

UNODC: United Nations Office on Drugs and Crime: http://www.unodc.org/unodc/en/treaties/CAC/

IPU: Inter-Parliamentary Union

EM-DAT: Emergency Events Database http://www.emdat.be/