Methodological note: Dashboard and performance evaluation

Selection of thematic areas and indicators

The methodology applied to obtain the Dashboard translates the information on the indicators identified by the Task Teams into a categorical assessment of ECOWAS country-level development performance over a given period. It also allows to analyze country performance across six thematic areas, namely: Economic Situation, Regional Integration, Health-Education, Employment-Poverty-Inequality, Demographic Dynamics, and Gender Equality; each of which is informed by indicators. The choice of these indicators considers three essential criteria: *Relevance:* These indicators make it possible to monitor and explain the socio-economic situation in the West African context and for which a quantitative performance threshold can be established. *Quality and frequency:* These indicators provide the most recent measurements (last five years) published by official sources. *Coverage:* Data on these indicators are available for all 15 countries in the region. However, a targeted indicator for which data are available for at least 80% of countries will be considered.

Table 1: Summary of indicators

Thematic area	No	Indicator	Source
Economic situation	1.1.	Real GDP growth rate (%)	National, IMF
	1.2.	Inflation rate, annual average (%)	National, IMF
	1.3.	Overall budget deficit including grants (% of GDP)	National, IMF
	1.4.	Public debt ratio (% of GDP)	National, IMF
	1.5.	Current account deficit (% of GDP)	National, IMF
	1.6.	Total investment (% of GDP)	National, IMF
Regional Integration	1.7.	Index of Regional Integration in Africa (IIRA)	AfDB, AUC, ECA
	1.8.	Business integration	AfDB, AUC, ECA
	1.9.	Productive integration	AfDB, AUC, ECA
	1.10.	Macroeconomic integration	AfDB, AUC, ECA
	1.11.	Regional infrastructure	AfDB, AUC, ECA
	1.12.	Free movement of people	AfDB, AUC, ECA
Health - Education	2.1.	Infant mortality (per 1,000 live births)	National, UNICEF
	2.2.	Under-5 mortality (per 1,000 live births)	National, UNICEF
	2.3.	Maternal mortality (per 100,000 live births)	National, UNICEF
	2.4.	Number of physicians (per 1,000 people)	National, Word Bank
	2.5.	Births attended by skilled health personnel (% of total)	National, Word Bank
	2.6.	Prevalence of stunting	National, UNICEF
	2.7.	Youth literacy rate (% of youth aged 15-24)	National, Word Bank
	2.8.	Female literacy rate (% of women aged 15 and over)	National, Word Bank
	2.9.	Gross secondary school enrolment rate	National, UNDP
	2.10.	Average number of years of schooling	National, UNDP
	2.11.	Human Capital Index	National, Word Bank
Employment-Poverty-Inequality	2.12.	Unemployment rate (15-24)	National, ILOSTAT
	2.13.	Youth NEET rate (% 15-24)	National, ILOSTAT
	2.14.	Proportion of working poor	National, ILOSTAT
	2.15.	Poverty rate	National, Word Bank
	2.16.	Gini index	National, Word Bank
	2.17.	Population living in slums (% of urban population)	National, Word Bank
	2.18.	Human Development Index (HDI)	National, UNDP
	3.1.	Annual population growth rate (%)	National, UNDESA
	3.2.	Dependency ratio	National, UNDESA

Demographic dynamics	3.3.	Total fertility rate	National, UNDESA
	3.4.	Life expectancy at birth, total (years)	National, Word Bank
	3.5.	Crude birth rate	National, UNDESA
	3.6.	Crude mortality rate	National, UNDESA
Gender Equality	3.7.	Gender Inequality Index	National, UNDP
	3.8.	Proportion of women of reproductive age (15-49) using modern family planning methods	National, WHO
	3.9.	Teenage birth rate (15-19 years) (per 1,000 teenage girls of the same age group)	National, UNFPA
	3.10.	Prevalence of child marriage (percent)	National, UNICEF
	3.11.	Proportion of girls and women aged 15-49 who have undergone female genital mutilation (%)	National, UNICEF

Source: CEA

Construction of the dashboard

The methodology for constructing the dashboard is based on the definition of standard quantitative thresholds for each of the indicators, to which colors and scores are associated. For a given indicator, four quantitative thresholds are established to categorize its value (see Table 2). These thresholds used for categorizing the indicators are based on available international standards, including (i) thresholds defined for the construction of the SDG Index dashboard in Africa, (ii) ECOWAS convergence criteria, (iii) thresholds defined by international institutions (WHO, UNICEF, UNESCO, UNFPA, etc.), (iv) thresholds established as part of AU and ECOWAS commitments on key indicators in specific sectors such as health, education, etc. Where no global threshold is applicable for a given indicator, the classification (threshold) is based on performance relative to other countries, using statistical methods: quartiles[1]. Table 2 presents the thresholds applied in the categorization of the indicators selected in the construction of the dashboard.

Table 2: Thresholds applied in the categorization of selected indicators

Thematic Area/Indicator		Categorization thresholds, colors and associated values			
		4	3	2	1
Economic performance					
1.1.	Real GDP growth rate (%)	≥5	2≤x<5	0≤x<2	<0
1.2.	Inflation rate, annual average (%)	≤5	5<x≤7	7<x≤10	>10
1.3.	Overall budget deficit including grants (% of GDP)	≤3	3<x≤5	5<x≤8	>8
1.4.	Public debt ratio (% of GDP)	≤70	70<x≤90	90<x≤120	>120
1.5.	Current account deficit (% of GDP)	≤5	5<x≤7	7<x≤10	>10
1.6.	Total investment (% of GDP)	≥25	20≤x<25	15≤x<20	<15
Regional Integration					
1.7.	Index of Regional Integration in Africa (IIRA)	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
1.8.	Business integration	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
1.9.	Productive integration	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
1.10.	Macroeconomic integration	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
1.11.	Regional infrastructure	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33

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[1] Method of dividing a sample of data into four parts of equal size

		≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
1.12.	Free movement of people	≥0.66	0.5≤x<0.66	0.33≤x<0.5	<0.33
Health and Education					
2.1.	Infant mortality (per 1,000 live births)	≤12	12<x≤17	17<x≤22	>22
2.2.	Under-5 mortality (per 1,000 live births)	≤25	25<x≤42	42<x≤60	>60
2.3.	Maternal mortality (per 100,000 live births)	≤70	70<x≤119	119<x≤168	>168
2.4.	Number of physicians (per 1,000 people)	≥0.1	0.08≤x<0.1	0.05≤x<0.08	<0.05
2.5.	Births attended by skilled health personnel (% of total)	≥98	85≤x<98	72≤x<85	<72
2.6.	Prevalence of stunting	≤7.5	7.5<x≤15	15<x≤22	>22
2.7.	Youth literacy rate (% of youth aged 15-24)	≥95	82≤x<95	68≤x<82	<68
2.8.	Female literacy rate (% of women aged 15 and over)	≥70	50≤x<70	30≤x<50	<30
2.9.	Gross secondary school enrolment rate	≥90	70≤x<90	50≤x<70	<50
2.10.	Average number of years of schooling	≥6.5	5≤x<6.5	3.5≤x<5	<3.5
2.11.	Human Capital Index	≥0.55	0.45≤x<0.55	0.35≤x<0.45	<0.35
Employment, Poverty and Inequality					
2.12.	Unemployment rate (15-24)	≤5	5<x≤7	7<x≤10	>10
2.13.	Youth NEET rate (% 15-24)	≤10	10<x≤12	12<x≤15	>15
2.14.	Proportion of working poor	≤10	10<x≤30	30<x≤45	>45
2.15.	Poverty rate	≤15	15<x≤34	34<x≤50	>50
2.16.	Gini index	≤30	30<x≤46	46<x≤62	>62
2.17.	Population living in slums (% of urban population)	≤15	15<x≤25	25<x≤66	>66
2.18.	Human Development Index (HDI)	≥0.8	0.7≤x<0.8	0.555≤x<0.7	<0.555
Demographic dynamics					
3.1.	Annual population growth rate (%)	≤1	1<x≤2	2<x≤3	>3
3.2.	Dependency ratio	≤50	50<x≤70	70<x≤90	>90
3.3.	Total fertility rate	≤2	2<x≤4	4<x≤6	>6
3.4.	Life expectancy at birth, total (years)	≥80	64≤x<80	48≤x<64	<48
3.5.	Crude birth rate	≤20	20<x≤30	30<x≤40	>40
3.6.	Crude mortality rate	≤5	5<x≤7	7<x≤10	>10
Gender equality					
3.7.	Gender Inequality Index	≤0.20	0.20<x≤0.35	0.35<x≤0.50	>0.50
3.8.	Proportion of women of reproductive age (15-49) using modern family planning methods	≥75	50≤x<75	25≤x<50	<25
3.9.	Teenage birth rate (15-19 years) (per 1,000 teenage girls of the same age group)	≤25	25<x≤40	40<x≤60	>60
3.10.	Prevalence of child marriage (percent)	≤25	25<x≤50	50<x≤75	>75
3.11.	Proportion of girls and women aged 15-49 who have undergone female genital mutilation (%)	≤25	25<x≤50	50<x≤75	>75

Table 3: Dashboard reading grid

Color Strips		Related notes	Description
	White	0	Missing value
🟥	Red	1	Level rated critical
🟧	Orange	2	Level rated low
🟦	Blue	3	Level rated moderate
🟩	Green	4	Level rated high

Source: CEA

Performance analysis: Calculation of scores and interpretation

Two levels of performance analysis:

1. Visual assessment of performance based on color dominance and calculation of the following statistics:
   - Percentage of missing data
   - Percentage of indicator values rated as "critical" and "low"
   - Percentage of indicator values rated as "moderate" and "high".

2. Calculation of performance scores by thematic area: The dashboard provides an analysis of the performance of ECOWAS countries in each thematic area. To do this, for each indicator, a score is calculated by taking the ratio of the value associated with its value by the maximum value i.e. 4 (Value rated as "high") and then multiplying it by 100. The performance score for a given thematic area is calculated as an unweighted arithmetic average of the scores for the indicators in that thematic area.

The scores range from 0 to 100 and reflect the efforts/progress of countries in a thematic area. This makes it possible to immediately identify the area in which a country is doing relatively well or not. The score obtained by a country for a given area can also be compared to the median score for all ECOWAS countries. Based on the scores obtained and the evaluation grid defined (Table 4), a visual performance map of West Africa is produced that places each member country in one of the performance categories.

Table 4: Performance evaluation grid

General category	Indicator scores in each area	Color associated with the performance map
Low performance	Score below 50	
Moderate performance	Score between 50 and 70	
High performance	Score above 70 and 100	

Caveats, limitations and perspectives

Given the methodology described above, specific indicators may not have been considered in this first edition of Dashboard. Therefore, caution should be exercised in interpreting results based on scores alone.

The enrichment of this tool through frequent updating of the database and the report offers opportunities to address certain limitations, with a view to ensuring better ownership of the tool by all ECA partners. Thus, the following main actions may be necessary for future editions:

- Incorporate new thematic areas (sub-areas) and/or relevant indicators over time and give priority to national sources. In view of the initiatives to support the

development of statistics at the sub regional level with a view to strengthening the data and knowledge production ecosystem, better prospects should arise for regular updating of the Dashboard and thus integrating relevant indicators into future editions with priority to be given to national sources. To this end, the contribution of ECA/SRO-WA partners (CREG, National Institute of Statistics, other data producers, etc.) will make it possible to strengthen the availability and quality of data on the indicators;

- Incorporate trends into the analysis of performance progress: The current Dashboard and report provide indications of country performance at a specific time. Yet country trajectories are also important for assessing progress in each thematic area/sub-area and commitments to strategic objectives. The current tool can be adapted using statistics from previous years, such as 2015, which will allow for 2015 and 2020 Dashboards. Better yet, scores from 2015 to 2020 can also be generated and then projections made (for 2030, for example); and

- Improve the dissemination of this tool to all potential users. To facilitate ownership of this tool and make it accessible to all, the report could be accompanied by an appropriate framework (e.g., dedicated website) and a data visualization tool to improve communication about the status of West African countries with respect to key indicators or thematic areas.