

## Feed the Future Enabling Environment for Food Security EBA Distance to the Frontier Scoring Basics

The World Bank's Enabling the Business of Agriculture (EBA) Index provides quantitative scoring of the strength of a country's enabling environment for agriculture. EBA measures both the quality of the regulatory framework and the efficiency with which it is implemented. The EBA methodology generates cross-country comparable data that can be used to track progress in enabling environment reforms over time. EBA serves as the best available means of benchmarking an agricultural sector's business enabling environment.

### What does EBA measure?

As of 2017, EBA examines eight topic areas of agricultural regulation and assigns a set of indicators to each topic.<sup>1</sup> EBA employs two types of indicators: (1) legal indicators compare the types of regulations in force in a country against a list of global good practices; (2) efficiency indicators examine the time, cost, and number of procedures or documents required for full compliance with the regulations. Both legal indicators and efficiency indicators are scored according to their performance against a global ideal or distance to frontier (DTF) on a scale of 0-100, **with a larger DTF score indicating better performance in that area**. The topic score is a simple average of the DTF score for each of the topic's top 5 indicators.

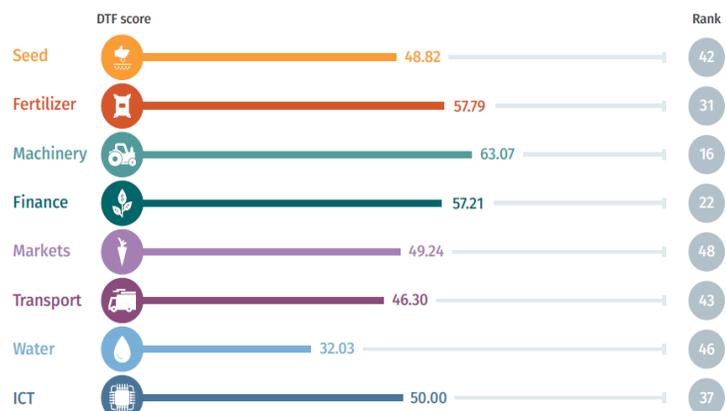
### What is distance to frontier, and why is it useful for benchmarking?

While EBA scores can be presented in relative terms through a country's performance ranking relative to other EBA countries, the methodology is built around the country's performance in absolute terms, using a DTF approach. The World Bank's Ease of Doing Business team developed the DTF score to address criticisms that a ranking system fails to reflect a country's score improvement when all other countries also improve. Individual performance is lost in herd behavior. By contrast, Distance to the Frontier measures a country's performance against the best possible score for each indicator. By establishing an absolute score, the DTF approach ensures that a country is truly competing against itself rather than the herd of countries scored by EBA.

### What about the ranking system?

EBA also provides an overall ranking in each topic area based on a simple ordering of DTF scores for that topic from highest to lowest. **While the ranking may draw the attention of policymakers or other stakeholders, it applies only at the topic level and is not the primary EBA scoring system.** Figure 1 shows the DTF scores and relative rank for Nigeria on each of the eight EBA topic areas for 2017. **Note that a lower rank indicates better performance in that topic area. For example, the Netherlands ranks first in**

Figure 1: Nigeria's 2017 EBA Scores, DTF and Ranking



Source: World Bank.

<sup>1</sup> Four additional topics are under development but were not scored for the World Bank's EBA 2017 report. These topics include two technical areas (land and livestock) and two cross-cutting issues (gender and environmental sustainability). It is expected that most if not all of these topics will be scored beginning in 2019.

the seed topic out of all 62 economies scored in 2017, indicating that it is the top performer in that topic area. The Netherlands' DTF score for seed is therefore high (88/100).

### Understanding the EBA DTF scoring system

Taking the seed topic as an example, a country's DTF score is an average of DTF scores across four indicators, as shown below. The first three are legal indicators; the last one is an efficiency indicator measuring the time and cost (each sub-indicators) of registering a new seed variety.<sup>2</sup>

**Figure 2: EBA 2017 Seed Topic Scores for Zambia**

<u>Legal Indicators</u>	<u>Number of good practices</u>	<u>Sub-indicator DTF Score</u>	<u>Indicator DTF Score</u>	<u>Seed Topic DTF Score</u>
Plant breeding index (0-10)	8.0		80.0	69.4
Variety registration index (0-8)	5.5		68.8	
Seed quality index (0-12)	8.0		66.7	
<u>Efficiency Indicator</u>	<u>Time/cost data</u>			
Time to register a new variety (days)	544 days	31.2	62.0	
Cost to register a new variety (% of income per capita)	70.1%	92.8		

### How does the EBA team establish the best performer; i.e. the frontier?

For a legal indicator, EBA evaluates a country's regulatory framework against a list of global good practices for that topic area, which have been selected in consultation with technical experts and key stakeholders. Each good practice is assigned a score between 0-1. The indicator DTF score is a simple percentage of the number of total good practices reflected in that country's regulatory framework. For example, as seen in Figure 2 above, eight out of the 12 good practices in seed quality are practiced in Zambia, generating a DTF score of 66.7 ( $8/12 = 66.7\%$ ) on the seed quality index indicator.

For an efficiency indicator, EBA determines the time, cost, and (in some cases) number of procedures or documents required to comply with regulatory requirements. These elements comprise the sub-indicators for the efficiency indicator. A DTF score for each of these sub-indicators is calculated in relation to the best performer on that sub-indicator on the EBA Index for that year.<sup>3</sup> The indicator DTF score is an average of the sub-indicator DTF scores.

### Is there an overall EBA Index score?

EBA does not calculate an overall index score. Each country's score snapshot, as shown in Figure 1, is a listing of the country's individual topic DTF scores. However, an overall EBA index score can be easily calculated by averaging the topic DTF scores into a single composite DTF score.

### How can EBA be used to benchmark and monitor Mission performance within GFSS?

DTF scores can be employed in a variety of ways to monitor progress toward Global Food Security Strategy (GFSS) goals. Missions could choose to employ a composite EBA Index DTF score, a topic-level DTF score (e.g. seed), or the DTF score for an individual EBA indicator (e.g., seed certification or variety registration). Alternatively, Missions could eschew DTF and simply track improvements in the time/cost/procedure data captured through the efficiency indicators.

To learn more on the EBA scoring system and the indicators for each topic area visit [here](#). For more on the Feed the Future Enabling Environment for Food Security Project and related resources visit [here](#).

<sup>2</sup> Time, cost, and other measures of regulatory compliance burden are often combined into one indicator score, which is the simple average of the individual DTF scores for these sub-indicators.

<sup>3</sup> Importantly, outliers are discounted through a score normalization process.