



OF FACTS AND BIASES

A brief review of the debate on statistics in Africa

Against the background of food security strategies, over the past two decades, there has been a lively international debate on the quality of the statistical data in sub-Saharan Africa. Whereas there is general agreement that data availability is insufficient, explanations of the reasons for this diverge considerably. Our author demonstrates the context of the on-going debate and the challenges the area currently faces.

By Kalifa Traoré

In the 2000s, the economic historian Morten Jerven published a series of articles, of which *Random Growth in Africa* in 2010 and *Poor numbers* in 2013 evoked numerous responses in Africa and among researchers in the countries of the North. Subsequently, Shanta Devarajan, then Chief Economist of the World Bank's Middle East and Northern African Region, published *Africa's Statistical Tragedy*, a gloomy assessment of the state of the statistics on the continent, citing among other factors the lack of capacity in the statistical institutes, unstable funding, confused management of re-

sponsibilities, and also the destructuring effect of funding by donors.

There were few written responses by statistical professionals in sub-Saharan Africa, except for the discussion published by Joseph Tedou, Director General of the National Statistical Institute of Cameroon in 2014. He wrote in the 2014 issue of *Stateco* (a journal published by the Economic and Statistical Observatory of sub-Saharan Africa, Afristat) that Jerven's judgment on African statistics was based on the case of Ghana and could not be gener-

alised to the whole continent, and furthermore that African professionals of statistics were aware of the problem of quality and were putting all their efforts into improving it. More recently, in a study of the Pan-African Institute for Statistics, John Kahimbara recognises the existence of the problem but thinks that the current international debate on the quality of African statistics is a source of confusion because it does not help solve the problem. In the same document, he recognises that the state of African statistics is mediocre and misleading, but that while



Food security, nutrition and resilience are central issues of the Permanent Interstate Committee for drought control in the Sahel.

Photo: Jörg Böthling

MAINTAINING DATA QUALITY IN A COMPLEX CONTEXT

There were three phases in DIAPER over more than 15 years which contributed to strengthening national structures technically and operationally, particularly the agricultural and livestock statistical services in the Sahel countries. In the meantime, by the middle of the 1990s, the number of CILSS member states increased to 13 (Benin, Burkina Faso, Cape Verde, Chad, Côte d'Ivoire, Gambia, Guinea, Guinea-Bissau, Mauritania, Mali, Niger, Senegal and Togo), with the central issues being food security, nutrition and resilience. These two latter concepts prompted the collection, processing and analysis of new types of data, further raising the complexity of the information systems. The Food Crises Prevention Network (FCPN) promoted by the CILSS and the Sahel and West Africa Club Secretariat, whose goal is to promote dialogue and coordination, establish a coherent and consensual view of the food and nutritional situation, thus assisting decision-making, is based essentially on the results of various statistical instruments for coordination and advocacy on issues of managing food and nutritional security in West Africa.

some regard this as a tragic situation, others see it as a passing phenomenon that will be remedied by technological progress in the data collecting and processing field. Each of these points of view offers part of the truth, but not all of it; what is important is that there are indications of mistrust in and illegitimacy of African statistics.

HOW FOOD SECURITY STATISTICS EVOLVED

It is worthwhile to have a look at the past in order to understand and assess criticism. Let's start with Vincent Bonnescase. In his publication *La pauvreté au Sahel* (Poverty in Sahel), the researcher describes and analyses the history of the implementation of statistics in the French East African colonies, particularly in Upper Volta (now Burkina Faso), Niger and Mali. The work covers the period from 1930–1970, with the emergence of the term “Sahel”, which we recognise today as a geopolitical region at international level. Bonnescase describes how, as a result of the famines in the 1970s, aid programmes and studies in the

region are becoming more and more important and perennial, leading to the construction and instrumentalisation of indices of poverty marked by intervention by international organisations, themselves seeking to justify their role, and governments increasingly dependent on international aid.

This was the context in which the CILSS (Permanent Interstate Committee for drought control in the Sahel) was created in 1973, with the goal or mandate of “investing in research for food security and the fight against the effects of drought and desertification for a new ecological balance in the Sahel”. The Permanent Regional Project for Diagnosis of Food Security in the Sahel (DIAPER), funded by the European Union, was established in 1984 and ran until 2000. Its principal objective was to provide technical and material support to the national agricultural statistics services of the CILSS countries in carrying out agricultural surveys and producing a cereal balance sheet needed to analyse the countries' food situation, and especially to devise measures to be implemented to ensure and manage food security, particularly for establishing national security stocks.

As can be seen, the establishment of agricultural surveys and information systems on food and nutritional security in West Africa began in Sahel, where food is based on cereals, particularly millet, maize, sorghum and rice. Given this, over a long period, agricultural surveys were concerned with estimating production of these cereals. Subsequently, with the evolution of food security concepts, estimates of production of other foodstuffs (leguminous, oleaginous, tuberous) have begun to be taken into account. After more than 35 years of estimating agricultural production, with the evolution of new technologies, the quality of the methods used has improved somewhat. However, the following questions arise: To what degree does the conformity of the statistical methods used regionally compare to the standards and methodologies of the national statistical institutions? Have the sampling frames in most of the countries become obsolete as a result of the lack of a general census of the population and housing, or an agricultural census, all this against the background of budgetary shortages and political insecurity? Have the methods of estimating yields, such as establishing use per

area regionally and calculating average yield at the national level, proved themselves?

These questions are particularly urgent considering the different possible uses of the data and information produced in this way. Cereal production data enters into the CILSS cereal balance sheet, making it possible to calculate the cereal surplus or deficit which should (depending on the case) determine the country's food security strategy. For a long period, action by the various stakeholders (government, donors, NGOs, etc.) to increase supply or provide food aid was only prompted by deficits, while it was very unusual for this information to be used to manage surpluses and maintain production in the context of a liberalised market.

ARE TOO MANY COOKS SPOILING THE BROTH?

Cereal balance sheets are still prepared and used, but CILSS prefers establishing a "harmonised framework" for analysing food security which is much more complex and demanding in terms of data in order to be an adequate decision-making tool. While the 2000s have not seen crises on the scale of those in the 1970s, the same situation nevertheless prevails in which insecurity of the Sahelian populations in terms of food and nutrition is leading to a major need for quality data and information to manage these crises, with the risk of only producing diverse statistics to meet the interest of those producing them. As Bonnecase stresses, data and information is also produced by NGOs and professional agricultural organisations whose methodologies are not necessarily those promoted by the national statistical institutions, despite the fact that most countries have a law on statistics intended to regulate the sector.

Furthermore, there are contradictions between data from agricultural statistics and other sources and data from agronomical research institutes whose results are intended to promote development. This is particularly the case at the level of agricultural yields. For example, according to data of the Ecowas Agriculture Regional Information System (Ecoagris), the maize yield in Côte d'Ivoire in 2017 is estimated at almost 90 tonnes per hectare. This is surprising, bearing in mind that in the USA, where agriculture is more intensive, the news and marketing organisation Farmer Pro and the United States Department of Agriculture (USDA) put yields at 11.1 t/ha and 11.2 t/ha respectively for 2017. In Burkina Faso, during drafting of an action plan for the cowpea supply chain, yields published in

THE LATEST INITIATIVES

Several initiatives are in place or are being implemented at both continental and national levels to improve the quality of African statistical data. At continental level, there are the adoption of the African Charter on Statistics in 2009 by the African Union (providing a global framework for improving quality), the Strategy for the Harmonisation of Statistics in Africa 2017–2026 (SHaSA 2) to increase capacity at pan-African organisations and the African Data Consensus on data which is open (Open Data Platform – ODP) and oriented towards demand in decision-making on development, so as to create a statistical culture which in the long term will ensure the independence of national statistical offices. And last but not least, there is the creation of an African Union Institute for Statistics (Afristat), inaugurated in Tunis in November 2018.

SDGS, STATISTICS AND THE ROLE OF THE NORTH

In its 2016 publication entitled *Révolution des données et enjeux de la statistique en Afrique* (Revolution in the data and issues in African statistics), the periodical Cairn.Info looks at several studies and assesses the trend in the quality of the data in recent decades. The article ends by considering the capacity of African countries to implement the Agenda 2030 within the framework of the SDG and the role of public development aid in developing statistics in Africa. It comes to the following conclusion: "This destabilization of public statistics in Africa from the North, whether it is experienced as an all-out attack against the credibility of the African statistical institutes or considered as a progressive conquest by the flourishing market for statistical data, has drawn a number of critical reactions."

the agricultural surveys reached 3–4 t/ha, while researchers of the Environmental Institute for Agricultural Research – Burkina Faso (INERA) published yields for the improved cowpea variety IT98K-205-8 "Niizwe" of 1–1.5 t/ha. The yield estimated by the ministry of agriculture from the yearly surveys was the only data that could be used for planning development programmes because it is the recognised data, so it proved impossible to propose a programme to improve yields, since farmers were already achieving good results. These basic examples show that work is still needed to decompartmentalise the various services in order to improve the quality of statistical information.

MORE THAN A TECHNICAL CHALLENGE

As the history of establishing statistical systems in Sahelian Africa shows, the constraint here is not simply technical. The need to collect, process, disseminate and use information in the agricultural sector is mainly the consequence of the famines in the 1970s and 1980s. The data initially supported the developed countries in putting in place aid for the poor Sahelian countries and then justifying NGO interventions, in a context of expanding media coverage of the crises and of an increasing number of actors generating statistical information. At the same time, there was a real and growing demand for statistical information, but no serious methodological work involving research institutions, including in particular agronomic

research institutes, followed to validate some of the findings.

As far as possible, the priority of Sahelian nations was to carry out agricultural surveys to determine the outcome of the agricultural campaign in progress, mostly to respond to donor demands in terms of food and nutritional security. Agricultural-sector statistics are used more for solving current food security crises than for planning agricultural development. Strategies and development plans for the rural sector formulated on the basis of unreliable data are at serious risk of missing their goals, or if they do reach them, of not reflecting reality on the ground. For development partners, each of them with their own strategy, it seems difficult to coordinate efforts in an area where everyone would gain from working with the same good quality information. Aware of this situation, interregional organisations such as CILSS, Ecowas and the West African Economic and Monetary Union (UEMOA) are starting to address the question of governance in information systems on food and nutritional security, the primary concern being to unify information sources and improve their quality.

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