Agricultural R&D Indicators Factsheet | February 2014

TOGO

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KEY INDICATORS, 2000–2011

Total Public Agricultural Research Spending	2000		2008		2011
CFA francs (million constant 2005 prices)	3,277.4		1,991.3		1,817.0
PPP dollars (million constant 2005 prices)	13.6	▼	8.3	▼	7.6
Overall Growth		**–39%**		**–9%**	
Total Number of Public Agricultural Researchers					
Full-time equivalents (FTEs)	94.8	▼	67.1	▲	114.7
Overall Growth		**–29%**		**71%**	
Agricultural Research Intensity					
Spending as a share of agricultural GDP	0.88%		0.40%		0.42%
FTE researchers per 100,000 farmers	8.58		5.36		8.77

Note: Acronyms, definitions, and an overview of agricultural R&D agencies are available on page 4.

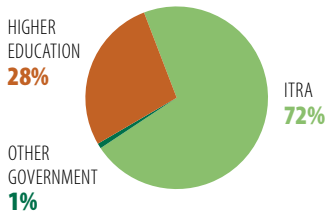
- Total agricultural R&D spending in Togo fell by nearly half during 2000–2011. The country's 2011 intensity ratio (at 0.42 percent) was well below the 1-percent investment target recommended by the NEPAD and the United Nations.
- After a period of steady decline, the national number of agricultural researchers in Togo increased rapidly in response to a general public-sector recruitment competition in 2009, which prompted the influx of a large number of (mostly MSc-qualified) researchers.
- As the 2009 recruitment round was the first since 1992, most of Togo's agricultural researchers are either in their thirties or their fifties. Given that a large number of researchers are set to retire in the coming years, further recruitment efforts are urgently needed.

FINANCIAL RESOURCES, 2011

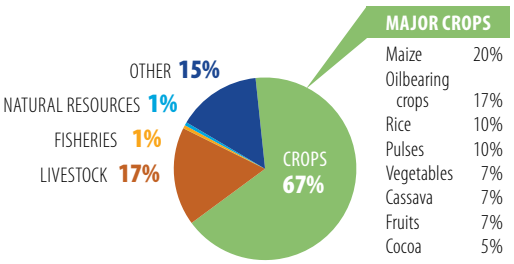
Spending Allocation	
Salaries	26%
Operating and program costs	49%
Capital investments	25%
Funding Sources	
Government	57%
Donors and development bank loans	18%
Sales of goods/services	9%
Other	16%

Note: Shares are based on data for ITRA only.

INSTITUTIONAL PROFILE, 2011



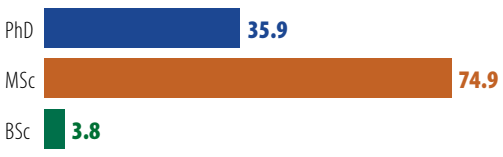
RESEARCH FOCUS, 2011



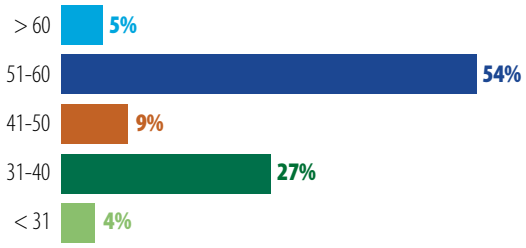
Notes: Major crops include those that are the focus of at least 5 percent of all crop researchers; 17 percent of total crop researchers focused on a wide variety of other crops.

RESEARCHER PROFILE, 2011

Number by qualification (FTEs)



Share by age group (years)



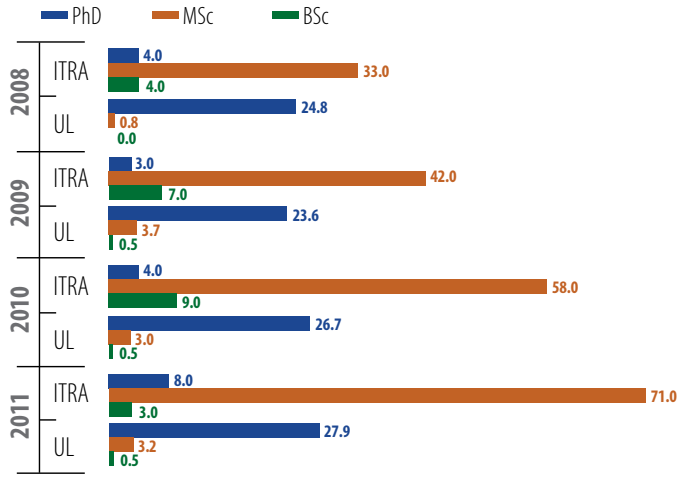
CHALLENGE

- Despite large-scale recruitment in recent years, ITRA is at risk of losing researchers to UL and international organizations due to large gaps in salary levels and the fact that ITRA's official status does not entitle its researchers to the same benefits as professional staff at UL.

POLICY OPTIONS

- Since ITRA maintains much stronger linkages with farmers than UL, it is essential that ITRA's capacity is further enhanced so as to more effectively address farm productivity challenges and poverty issues. The government needs to consider granting ITRA scientists with official "researcher" status (as opposed to civil servant status), in line with their colleagues at UL. This would increase salary levels and make ITRA a more attractive employer to agricultural scientists.

Number of agricultural researchers at ITRA and UL by degree, 2008–2011 (FTEs)



Note: UL includes ESA, ESTBA, and the Faculty of Science. Data for UL staff reflect the allocation of their time to agricultural R&D only, as opposed to teaching.

Number of PhD-qualified agricultural researchers, 2011 (FTEs)

Note: CSIR Ghana oversees 13 institutes, 10 of which are involved in agricultural R&D.

The number of researchers at ITRA doubled from 41 in 2008 to 82 in 2011. This capacity increase largely occurred among researchers qualified to the MSc level. In 2011, close to 80 percent of Togo's agricultural researchers with PhD degrees (in FTEs) were employed at UL.

BUILDING PhD CAPACITY AT ITRA

A minimum number of PhD-qualified scientists is generally considered fundamental to the conception, execution, and management of high-quality research and to effective communication with policymakers, donors, and other stakeholders, both locally and through regional and international forums. Despite the recent increase from four PhD-qualified researchers in 2008 to eight in 2011, ITRA lacks a critical mass of PhD-qualified scientists compared with national agricultural research institutes in neighboring countries.

Togo's long-term embargo has precluded it from taking advantage of donor-funded postgraduate training programs, which have benefitted many of its neighbors over the years. WAAPP—a five-year, largely World Bank-funded program aimed at improving the productivity and sustainability of agriculture, while promoting regional integration—is set to change this. Based on a thorough analysis of skills gaps, 50 of ITRA's researchers and technicians will receive MSc and PhD training under WAAPP, both locally and abroad. The final plan was approved in December 2012, but training had yet to commence as of December 2013. Given that a large discrepancy remains between the salary levels offered by ITRA and UL, the policy that scientists return to ITRA upon completing postgraduate training needs to be more strictly enforced.

CROSS-COUNTRY COMPARISONS OF KEY INDICATORS

	Total number of researchers, 2011 (FTEs)	Growth in number of researchers, 2008–2011	Share of PhD researchers, 2011 (FTEs)
Togo	**114.7**	**71%**	**31%**
Benin	155.7	28%	54%
Ghana	607.0	22%	38%
Burkina Faso	218.0	–12%	48%

CHALLENGE

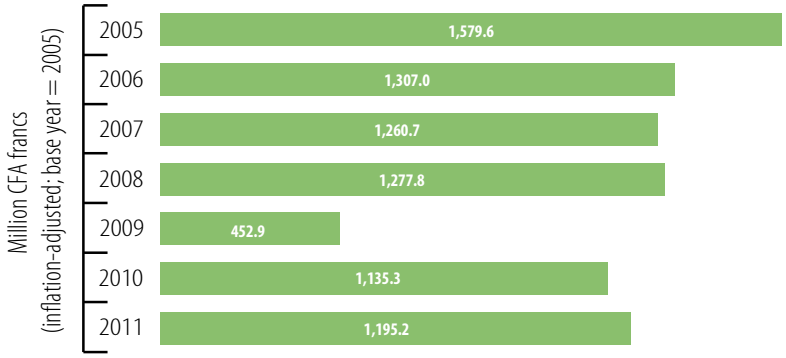
- Of the funding ITRA receives from the government, only a very limited amount is allocated to actual research programs. As a result, ITRA is highly dependent on volatile donor support, which it is less successful in attracting compared with many counterpart institutes across West Africa. This situation puts the long-term continuity and effectiveness of ITRA's research programs at risk.

POLICY OPTIONS

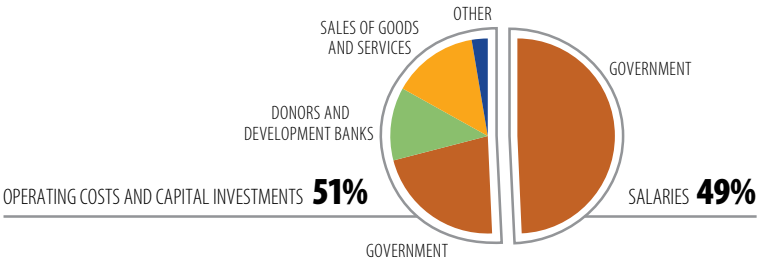
- If agricultural R&D in Togo is to become more productive and efficient, higher levels of funding need to be secured. The government needs to clearly define its long-term R&D priorities and allocate sustained funding, not only to staff salaries, but also in support of actual R&D activities. Donor funding needs to be firmly aligned with these national priorities, and more creative mechanisms to stimulate private funding for agricultural R&D need to be explored.

ITRA's total spending declined between 2005 and 2011 (in inflation-adjusted terms), but WAAPP (2012–2017) is likely to reverse this negative trend. In 2009, the Ministry of Finance failed to disburse the so-called investment budget to ITRA. This in combination with lower levels of internally generated income is at the basis of the dramatic drop in ITRA's total spending that year.

ITRA's total expenditures, 2005–2011



ITRA's funding sources, 2005–2011



ITRA'S RESEARCH PROGRAMS ARE SEVERELY UNDERFUNDED

More than 70 percent of ITRA's total funding was derived from the national government during 2005–2011. These funds cover the cost of staff salaries, as well as unrestricted resources. In reality, ITRA generally uses a significant share of its government-funded operating budget to pay short-term contract staff, which leaves very little for the day-to-day costs of running R&D programs. The shortfall is filled by international and subregional organizations, particularly AfricaRice and FAO, as well as competitive project funds from CORAF/WECARD, among others.

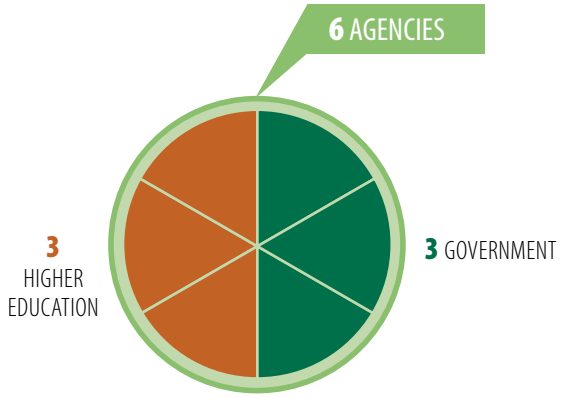
ITRA reverted from a semiautonomous agency to a public agency in 2008, and with that change ceased to benefit from any revenues it generates though the sale of good and services. The disincentive effect of this change can be seen in the contraction of these revenues by half since 2008, indicating a missed funding opportunity. The only private company currently funding research at ITRA is NSCT, the country's largest cotton corporation. Although WAAPP has provided an injection of funding to ITRA (90 million CFA in 2013), most of these funds are allocated to the rehabilitation of livestock and poultry stations and to training researchers and technicians. It is essential that ITRA's R&D programs receive a similar increase in funding if the institute is to effectively address Togo's agricultural productivity challenges.

CROSS-COUNTRY COMPARISONS OF KEY INDICATORS *continued*

	Total spending, 2011 (million 2005 PPP dollars)	Overall spending growth, 2008–2011	Spending as a share of AgGDP, 2011
Togo	**7.6**	**–9%**	**0.42%**
Benin	26.2	13%	0.62%
Ghana	68.1	18%	0.69%
Burkina Faso	25.4	29%	0.42%

OVERVIEW OF TOGO'S AGRICULTURAL RESEARCH AGENCIES

Six public agencies conduct agricultural R&D in Togo. ITRA (employing 82 FTE researchers in 2011) is the largest by far, accounting for more than 70 percent of Togo's agricultural researchers (in FTEs) in 2011. ITRA conducts research on crops, livestock, fisheries, natural resource management, and food technology. In addition to its headquarters and stations in Lomé, the institute operates research centers in each of the country's four agroecological zones: coast, forest, humid savannah, and dry savannah. In addition to ITRA, DPV and DSID are the only two other government that conduct agricultural R&D, albeit at very limited levels. The three higher-education agencies that conduct agricultural R&D—ESA, the Faculty of Science, and ESTBA—all fall under UL and together employed 32 FTE agricultural researchers in 2011. ESA is the largest of the three (22 FTEs) and conducts research on plant virology, biotechnology, soil fertility management, farm mechanization, postharvest conservation, and socioeconomics. No nongovernmental organizations or private-sector companies were identified as conducting in-house R&D; some, however, do outsource their research to ITRA and UL.



For a complete list of the agencies included in ASTI's dataset for Togo, visit **www.asti.cgiar.org/togo.**

ASTI DATA PROCEDURES AND METHODOLOGIES

- The **data underlying this fact sheet** were predominantly derived through primary surveys, although some data were drawn from secondary sources or were estimated.
- **Public agricultural research** includes research conducted by government agencies, higher education agencies, and nonprofit institutions.
- ASTI bases its calculations of human resource and financial data on **full-time equivalent (FTE) researchers**, which take into account the proportion of time staff actually spend on research compared with other activities.
- ASTI presents its financial data in 2005 local currencies and **2005 purchasing power parity (PPP) dollars**. PPPs reflect the relative purchasing power of currencies more effectively than do standard exchange rates because they compare prices of a broader range of local—as opposed to internationally traded—goods and services.
- ASTI estimates the **higher education sector's research expenditures** because it is not possible to isolate them from the sector's other expenditures.
- Note that, due to **decimal rounding**, the percentages presented can sum to more than 100.

For more information on ASTI's data procedures and methodology, visit **www.asti.cgiar.org/methodology**; *for more information on agricultural R&D in Togo, visit* **www.asti.cgiar.org/togo.**

ACRONYMS USED IN THIS FACT SHEET

AgGDP	Agricultural gross domestic product
CORAF/ WECARD	West and Central African Council for Agricultural Research and Development
DPV	Plant Protection Directorate
DSID	Agricultural Statistics, Information, and Documentation Directorate
ESA	Advanced School of Agronomics
ESTBA	Advanced School of Biological and Food Technology
FAO	Food and Agriculture Organization of the United Nations
FTE(s)	Full-time equivalent (researchers)
ITRA	Togolese Agricultural Research Institute
NEPAD	New Partnership for Africa's Development
NSCT	New Cotton Company of Togo
PPP(s)	Purchasing power parity (exchange rates)
R&D	Research and development
UL	University of Lomé
WAAPP	West Africa Agricultural Productivity Program

ABOUT ASTI, IFPRI, AND ITRA

Working through collaborative alliances with numerous national and regional R&D agencies and international institutions, **Agricultural Science and Technology Indicators (ASTI)** is a comprehensive and trusted source of information on agricultural R&D systems across the developing world. ASTI is led by the **International Food Policy Research Institute (IFPRI)**, which—as a CGIAR member—provides evidence-based policy solutions to sustainably end hunger and malnutrition and reduce poverty. The **Togolese Agricultural Research Institute (ITRA)** Togo's principal agricultural R&D agency; the institute falls under the Ministry of Agriculture, Livestock, and Fisheries and focuses its research on agricultural systems, crops, livestock, fisheries, natural resource management, and food technology.

ASTI/IFPRI and ITRA gratefully acknowledge participating agricultural R&D agencies for their contributions to the data collection and preparation of this country factsheet. ASTI also thanks the Bill and Melinda Gates Foundation for its generous support of ASTI's work in Africa south of the Sahara. This factsheet has been prepared as an ASTI output and has not been peer reviewed; any opinions are those of the authors and do not necessarily reflect the policies or opinions of IFPRI or ITRA.