

PANAMA

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KEY INDICATORS, 2006–2012

Total Agricultural Research Spending	2006		2009		2012
Balboa (million constant 2011 prices)	6.7		8.7		8.5
PPP dollars (million constant 2011 prices)	12.3		16.0		15.5
Overall Growth		30%		-3%	
Total Number of Agricultural Researchers					
Full-time equivalents (FTEs)	149.0		131.7		133.0
Overall Growth		-12%		1%	
Agricultural Research Intensity					
Spending as a share of agricultural GDP	0.49%		0.76%		0.74%
FTE researchers per 100,000 farmers	56.00		50.27		51.93

Notes: Research conducted by the private for-profit sector is excluded from this factsheet due to lack of available data. Acronyms, definitions, and an overview of agricultural R&D agencies are provided on page 2.

- ▶ Agricultural R&D in Panama is primarily funded by the government. In 2012, for example, the country's main agricultural R&D agency, IDIAP, was 94 percent government funded.
- ▶ Investment in agricultural R&D in Panama increased somewhat during 2006–2012, despite some fluctuations, but growth in spending as a share of AgGDP actually reflected a decline in AgGDP levels.
- ▶ The number of agricultural researchers in Panama decreased slightly during 2006–2012, and as of 2012 more than half of all researchers were only qualified to the BSc-degree level. The number of PhD-qualified researchers changed little over time and remained low (10 FTEs as of 2012). MSc and PhD training for junior researchers will be an important priority in building the institute's research capacity to meet emerging national challenges.

FINANCIAL RESOURCES, 2012

Spending Allocation

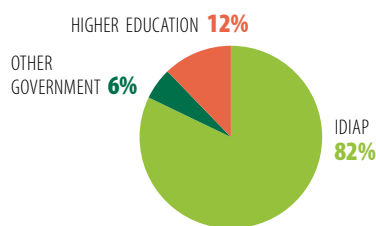
Salaries	75%
Operating and program costs	25%
Capital investments	0%

Funding Sources

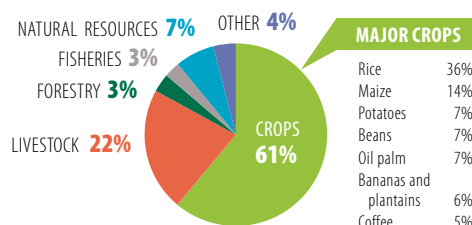
Government	94%
Development bank loans	3%
Sales of goods and services	4%

Note: Shares are based on data for IDIAP only.

INSTITUTIONAL PROFILE, 2012



RESEARCH FOCUS, 2012



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.

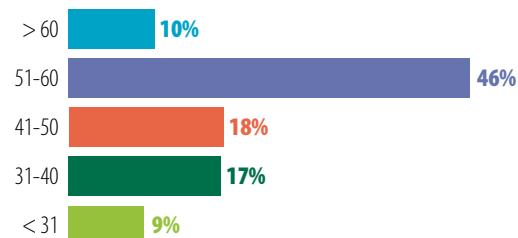
RESEARCHER PROFILE, 2012



Number by qualification (FTEs)

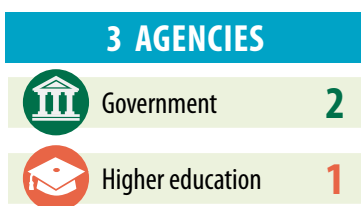


Share by age group (years)



OVERVIEW OF PANAMA'S AGRICULTURAL RESEARCH AGENCIES

Three agencies conduct agricultural R&D in Panama. IDIAP (employing 109 FTE researchers in 2012) is the country's largest agricultural R&D agency, accounting for 82 percent of national research capacity. IDIAP, a semiautonomous agency based in Panama city, has a broad mandate to coordinate and conduct agricultural R&D on crops, livestock, natural resources management, agribusiness, and rural development. The institute has a network of 6 agricultural research centers, 13 agricultural R&D subcenters, and 4 experimental farms located across the country. The other government agency, ARAP (8 FTEs), conducts research on aquatic resources. The country's only higher education agency involved in agricultural research is the University of Panama's Faculty of Agricultural Science (16 FTEs), which mainly conducts research on soil, crops, and livestock. The private sector also conducts a minimal amount of agricultural research in Panama.



Note: Exclude private for-profit agencies.

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

ASTI DATA PROCEDURES AND METHODOLOGIES

- ▶ The **data underlying this factsheet** were predominantly derived through primary surveys, although some data were drawn from secondary sources or were estimated.
- ▶ **Agricultural research** includes research conducted by the government, higher education, and nonprofit sectors; Research conducted by the private for-profit sector is excluded due to lack of available data.
- ▶ 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 2011 local currencies and **2011 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 Panama, visit www.asti.cgiar.org/panama.

ACRONYMS USED IN THIS FACTSHEET

AgGDP	Agricultural gross domestic product
ARAP	Panamanian Authority of Aquatic Resources
IDIAP	Agricultural Research Institute of Panama
FTE(s)	Full-time equivalent (researchers)
PPP(s)	Purchasing power parity (exchange rates)
R&D	Research and development

ABOUT ASTI, IFPRI, AND IDIAP

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 **Agricultural Research Institute of Panama (IDIAP)** is the country's principal agricultural research agency. As a semiautonomous body, the institute is managed by a board of directors chaired by the Ministry of Agricultural Development, the institute's research activities focus on crops, livestock, natural resources management, agribusiness, and rural development.

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