

Contextual Indicators

This area groups several indicators related to the overall macroeconomic situation of a given country. We selected- from global data sources- key indicators that could help us to better understand the overall context of the country, its size (population, GDP) as well as the agriculture share of GDP and agricultural land-related indicators.

Context			
Indicators	Years	Value	Source
Total population			WBG
Urban population (%)			UNPD
Rural population (%)			WBG
Poverty headcount ratio at \$2.15 a day (2017 PPP) (% of population)			WBG
GDP (current USD) (billions)			WBG
Agriculture, Forestry and Fishing, value added (constant 2015 USD) (million)			FAO
Agriculture, Forestry and Fishing, value added (constant 2015 USD) (% of GDP)			FAO
Agricultural land (km2)			FAO
Agricultural land (% of land area)			FAO
Arable land (% of land area)			FAO

Agricultural productivity and innovation

This area focuses on the role of innovation in agriculture. It assesses the economic value of the sector and international development assistance. The theme also evaluates efforts to gain a competitive edge through advancements in science and technology in agriculture. It examines the collaboration between universities and the industry in research and development, and measures the capacity for innovation and intensity of agricultural research.

Agro-innovation	Indicators	Years	Value	Source
	Value Added (Agriculture, Forestry and Fishing), USD at 2015 prices (millions)			FAO
	Agricultural research spending (% of AgGDP)			IFPRI
	University-industry cooperation in R&D (index ranking 1-7: no collaboration/ extensive collaboration)			WEF
	Capacity for innovation (index ranking 1-7: not			WEF

	at all/ to a great extent)			
	Agricultural research intensity			ASTI
	Official development assistance for agriculture by all official donors			OECD

Natural resources and environment

This theme examines the interplay between natural resources, environmental conditions and

agricultural activities. Agriculture depends on natural resources such as land, water, and weather, while also significantly impacting the environment. This area looks at the region's natural resources, including land, biodiversity, water, energy, fish stocks, and forests, their sustainable management, and the role of agricultural activities in contributing to environmental degradation and climate change.

Natural Resources and Environment	Indicators	Years	Value	Source
	Percentage of arable land equipped for irrigation (3-year average)			FAO Food Security
	Total internal renewable water resources: m3			FAO AQUAST AT data
	Annual freshwater withdrawals for agriculture, as a percentage of total internal renewable water resources: %			FAO AQUAST AT data
	GHG emissions from agriculture: metric tonnes of CO2 equivalent (MtCO2eq)			FAOSTA T
	Total emissions MtCO2eq			FAOSTA T

Human capital

This area focuses on levels of education and skills, and employment dynamics of the population that are necessary to drive innovation and digitalization in agriculture. It examines the skills necessary to achieve digital literacy, and the state of employment in agricultural and non-agricultural activities.

Human Capital	Sub-themes	Indicators	Year	Value	Source
	Digital skills/ literacy	Literacy rate, adult total (% of people ages 15 and above)			UNESCO
		Literacy rate, youth total (% of people ages 15-24)			UNESCO
		Digital skills among population (index ranking 1-7: not at all/ to a great extent)			WEF
	Employment	Employment in agriculture (% of total employment)			ILO
		Employment in agriculture, female (% of female employment)			ILO
		Unemployment, total (% of total labour force)			ILO

Infrastructure

This theme explores whether the enabling infrastructure exists to drive innovation and digitalization. It measures the availability and access of infrastructure, devices, and technologies, including access to electricity, mobile network coverage, secure access to internet, availability of the latest technologies, mobile subscriptions, and broadband subscriptions.

Infrastructure	Indicators	Years	Value	Source
	Access to electricity (% of population)	2015-2020		WBG
	4G coverage (% of total coverage)			GSMA
	Mobile (device) ownership (% of population)			GSMA
	Secure access to Internet servers (per 1 million people)			WBG
	Availability of the latest technologies (index ranking 1-7: not at all/ to a great extent)			WEF
	Mobile-cellular subscription (per 100 inhabitants)			ITU
	Active mobile broadband subscriptions (per 100 inhabitants)			ITU
	Fixed broadband subscriptions (per 100 people)			ITU

Digital penetration

This area assesses the availability, access, affordability and use of technologies and digital tools, focusing on rural Internet access, overall Internet usage, and affordability of broadband services. It also examines mobile social media penetration and addresses gender disparities in social media use and mobile ownership, providing insights into the inclusivity and reach of digital technologies.

Digital penetration	Indicators	Years	Value	Source
	Households with Internet access at home, rural (%)			ITU
	Individuals using the Internet, total (%)			ITU
	Data-only mobile broadband prices as a % of adjusted per capita income			ITU
	Fixed broadband prices as a % of adjusted per capita income			ITU
	Mobile social media penetration (%)			GSMA
	Gender gap in social media use (%)			GSMA
	Gender gap in mobile ownership (%)			GSMA

Policy and governance

This area evaluates how governance structures and policies provide an enabling environment supporting the agricultural sector, innovation and digitalization. It focuses on assessments of government capacities, regulatory environments, and the collaboration between stakeholders.

Policy and governance	Indicators	Years	Value	Source
	Enabling business in agriculture (WB EBA): overall score			EBA WB
	Importance of ICTs to government's vision (index ranking 1–7: no plan/ there is a clear plan)			WEF
	Government's success in ICT promotion (index ranking 1–7: not successful at all/ extremely successful)			WEF

	Legal framework's adaptability to digital business models (index ranking 1-7: not fast at all/very fast)			WEF
	Laws relating to ICTs (index ranking 1-7: not developed at all/ extremely well developed)			WEF
	ICT regulatory tracker (1-100)*			EC/ITU
	E-participation (0-1)			WEF
	Intellectual property protection (1-7)			WEF
	Government ensuring policy stability (1-7)			WEF
	Multi-stakeholder collaboration			WEF

Business environment

This area provides a snapshot of business environment with a focus on investments and entrepreneurship. A supportive business environment is necessary for the emergence of innovative firms focusing on the agricultural sector.

Business environment	Sub-themes	Indicators	Year	Value	Source
	Investment culture	FDI inflows (millions of USD)			UNCTAD
		Growth of innovative companies (index ranking 1-7: not at all/ to a great extent)			WEF
		Venture capital availability (index ranking 1-7: extremely difficult/			WEF

		extremely easy)			
		Financing of SMEs (1-7)			WEF
	Entrepreneurship	Time required to start a business (days)			WBG
		Ease of access to loans (index ranking 1-7: extremely difficult/ extremely easy)			WEF
		Attitude towards entrepreneurial risk (index ranking 1-7: not at all/ to a great extent)			WEF