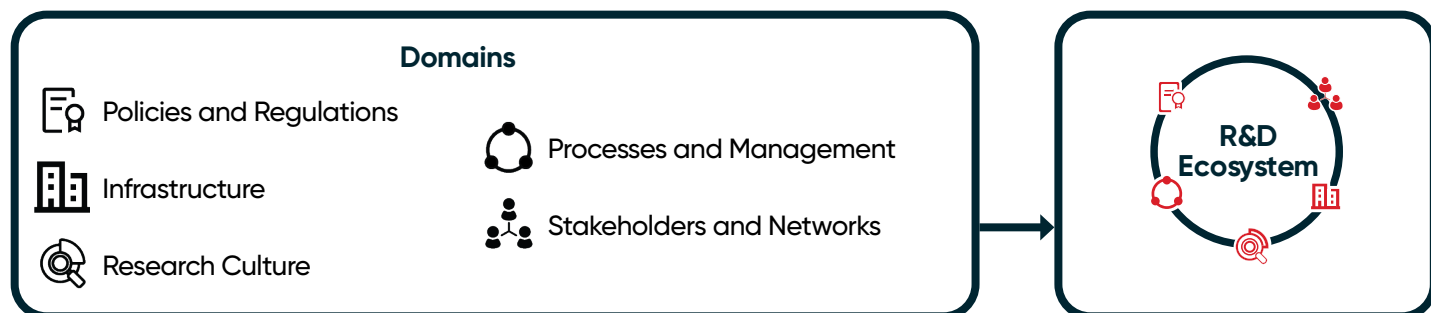


West African Research & Development Ecosystem Scorecards



Expert Perceptions on Vaccines in Ghana



R&D expenditure (% of GDP): 0.38%¹ | University-Industry R&D Collaboration (GII Rank): 74^{th 2} |
Public research-industry co-publications (GII Rank): 125^{th 2} | FDI Net Inflows (% of GDP) (GII Rank): 37^{th 2}

¹The Global Economy: accessed on 3 November 2025. https://www.theglobaleconomy.com/Ghana/Research_and_development/; ²WIPO Global Innovation Index 2025: accessed on 28 November 2025. <https://www.wipo.int/gii-ranking/en/ghana>

 Ghanaian experts consider that national health policy –to some extent– prioritises and promotes vaccine research and development (R&D) and manufacturing. Government bodies coordinate a common vaccine R&D agenda, and diverse stakeholders can participate in vaccine policy processes, moderately well. Likewise, policies moderately well allow R&D to rapidly respond to emerging infectious threats. The government to some extent adopts financial instruments that support vaccine use in the country. Input procurement and import policies moderately well support vaccine R&D. Moreover, intellectual property law protects domestic vaccine R&D, licensing, collaboration and technology transfer to some extent. While incentives leverage private sector investment moderately adequately, transparent budget processes are only slightly developed, and a public investment agenda for vaccine R&D is delivered on just to a small extent.

 Research institutions in Ghana are moderately ready to run their own clinical trials, and moderately able to maintain physical infrastructure (i.e., labs, equipment etc.) independently, and to employ well-trained staff for vaccine R&D. ICT infrastructure and collaborative hubs with shared specialised infrastructural equipment to benefit multiple vaccine research and development (R&D) institutions are moderately well developed. However, physical infrastructure for pre-clinical and clinical vaccine research, such as laboratory facilities (including high-containment laboratories, e.g., BSL-3 or BSL-4, cold chain capacity), is inadequate. Likewise, in-country capacity for vaccine manufacturing, including the ability to meet international Good Manufacturing Practice (GMP) standards is inadequate and poorly suited to scale up production rapidly in response to infectious outbreaks.

 As these emerge, research institutions are moderately responsive, adjusting their R&D priorities to emerging vaccine needs to some extent. Civil society and community actors inform R&D agendas to some extent and are fairly well-recognised as legitimate stakeholders in planning and implementation. SOPs and quality standards for key aspects of the R&D lifecycle (e.g., trial design, data collection, manufacturing), and university curricula and regional/national capacity-building efforts to strengthen the R&D human resource base are moderately well-developed. Overall, national platforms moderately well enable knowledge sharing and information flows between various actors in vaccine R&D.

 Experts consider that the private sector is important in promoting vaccine R&D in the country. Formal mechanisms to enable collaboration between public and private sector actors are moderately well developed, yet moderately strong barriers to interaction between stakeholders remain. Researchers disseminate vaccine research findings to relevant stakeholders moderately well. R&D actors are to some extent able to engage in global networks or knowledge platforms; they are moderately well encouraged by political leadership to act strategically. However, such networks are poorly able to sustain themselves, remaining dependent on continued external support.

 Vaccine research culture is characterised by moderately well-developed research leadership and incentives to engage in interdisciplinary collaborations to deliver world class research. Researchers adhere well to ethical standards.

KEY

● = 0% - 20% | ● = 21% - 40% | ● = 41% - 60% | ● = 61% - 80% | ● = 81% - 100%

POLICIES AND REGULATIONS

Indicator	Score		Rank
 Vaccines a priority in national health R&D policies including manufacturing	44.31%	●	3
 Intra-Government coordination to jointly advance the vaccine R&D agenda	47.52%	●	2
 Deliver on a public investment agenda for vaccine R&D	39.36%	●	3
 Use of financial instruments to support vaccine use	42.82%	●	3
 Supportive national procurement and import policies for vaccine R&D and manufacturing sector	42.33%	●	3
 (Diverse) Stakeholders are able to participate in vaccine policymaking processes	50.99%	●	3
 Accountable and transparent budget allocation, release and spending processes to support vaccine R&D	36.39%	●	2
 Progress towards development of a national vaccine R&D strategy or policy	50.00%	●	3
 Incentives or matching grants by government or international donors to leverage private sector investment in vaccine R&D	41.34%	●	2
 Vaccine R&D protected by enforceable intellectual property laws and regulations (IP)	46.04%	●	3
 IP laws and regulations support collaboration, licensing, and technology transfer—especially with local or regional manufacturers	43.32%	●	3
 National health or vaccine policies/strategies allow for rapid mobilisation of vaccine R&D in response to emerging infectious threats	44.80%	●	2

INFRASTRUCTURE

Indicator	Score		Rank
 Physical infrastructure for pre-clinical and clinical vaccine research	39.85%	●	2
 Collaborative hubs with shared specialised infrastructural equipment to benefit multiple vaccine R&D institutions	41.83%	●	2
 Research institutions and universities able to independently maintain physical infrastructure for vaccine R&D	49.26%	●	2
 Research institutions and universities able to employ well-trained staff to maintain physical infrastructure for vaccine R&D	51.98%	●	2
 ICT infrastructure for vaccine R&D	42.57%	●	2
 In-country capacity for vaccine manufacturing, including ability to meet international Good Manufacturing Practice (GMP) standards	39.60%	●	2
 Manufacturing infrastructure suited to scale up production rapidly in response to outbreaks	37.13%	●	2
 Readiness to set up and run clinical trials through local research institutions	47.28%	●	2

PROCESSES AND MANAGEMENT

Indicator	Score		Rank
 (Diverse) local stakeholder voices inform vaccine R&D agendas	40.59%		2
 Community and civil society actors recognised as legitimate stakeholders in vaccine R&D planning and implementation	43.56%		2
 National platforms enable knowledge-sharing, discussing and debating issues in vaccine R&D among diverse stakeholders	45.30%		3
 Established SOPs and quality standards for key aspects of the vaccine R&D lifecycle	51.24%		2
 Established processes for coordinating across institutions involved in vaccine R&D to enable synergy, facilitate information flow and avoid duplication	47.03%		2
 Regional/national capacity-building strategies or initiatives to strengthen the human resource base for vaccine R&D	42.33%		3
 University curricula to train the next generation of vaccine R&D researchers, scientists and technicians	44.06%		2
 Vaccine R&D priorities updated in a coordinated manner in response to emerging evidence or needs	41.09%		2
 Research institutions/universities responsive/agile to emerging vaccine need, global health emergencies, unexpected challenges or opportunities	42.08%		2

STAKEHOLDERS AND NETWORKS

Indicator	Score		Rank
 Barriers to interaction and communication among stakeholders within the vaccine R&D ecosystem	43.32%		3
 National political leadership motivates strategic action by vaccine R&D networks	42.82%		3
 National vaccine R&D actors able to engage in global networks, alliances, or knowledge platforms	53.22%		3
 Formal mechanisms or frameworks enabling collaboration between public institutions and private-sector actors in vaccine R&D	46.04%		2
 Importance of the private sector in promoting vaccine R&D	64.85%		3
 Vaccine research findings disseminated by researchers to relevant stakeholders	45.79%		3
 Networks or platforms on vaccine R&D able to sustain themselves, without external support	33.91%		2

RESEARCH CULTURE

Indicator	Score		Rank
 Vaccine researchers incentivised to deliver world class research	40.59%		2
 Leadership in research institutions/university champions vaccine R&D	52.97%		2
 Vaccine R&D actors comply with ethical principles and regional guidelines on R&D and manufacturing	63.86%		3
 Vaccine R&D systems promote interdisciplinary collaboration among researchers	52.97%		2

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