Global Innovation Index 2025

United Republic of Tanzania ranking in the Global Innovation Index 2025

United Republic of Tanzania ranks **121st** among the 139 economies featured in the GII 2025.

The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

United Republic of Tanzania ranks 29th among the 37 Lower middle-income group economies.

United Republic of Tanzania ranks 18th among the 32 economies in Sub-Saharan Africa.

United Republic of Tanzania GII Ranking (2020-2025)

The table shows the rankings of United Republic of Tanzania over the past six years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of United Republic of Tanzania in the GII 2025 is between ranks 116 and 125.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	88th	112nd	67th
2021	90th	120th	65th
2022	103rd	100th	99th
2023	113rd	105th	123rd
2024	120th	115th	118th
2025	121st	114th	124th

United Republic of Tanzania performs worse in innovation outputs than innovation inputs in 2025.

This year United Republic of Tanzania ranks 114th in innovation inputs. This position is higher than last year.

United Republic of Tanzania ranks 124th in innovation outputs. This position is lower than last year.

United Republic of Tanzania has no clusters in the world's top innovation clusters of the Global Innovation Index.

Global Innovation Index 2025

> Global Innovation Tracker

The Global Innovation Tracker 2025 shows what is the current state of innovation in United Republic of Tanzania, how rapidly is technology being embraced and what are the resulting societal impacts.

For United Republic of Tanzania, 6 indicators have improved in the short-term and 1 indicator has worsened.

Science and innovation investment

	Scientific publications	R&D investments	Venture capital deal numbers	International patent filings
Short term	▲ 5.8 % 2023 - 2024	n/a	▲ 250 % 2023 - 2024	n/a
Long term (annual growth)	▲ 7 % 2014 - 2024	n/a	▼ -6.1 % 2020 - 2024	n/a

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	▲ 3.6% 2023 - 2024	▲ 16.5% 2022 - 2023	n/a	n/a	n/a
Long term (annual growth)	▲ 4.1% 2014 - 2024	▲ 40.3% 2013 - 2023	n/a	n/a	n/a
Penetration	28.5 per 100 inhabitants in 2024	2.5 per 100 inhabitants in 2023	n/a	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▲ 2.1 % 2023 - 2024	▲ 0.2 % 2022 - 2023	+ 1.3 °C 2024
Long term (annual growth)	▲ 2.2 % 2014 - 2024	▲ 0.7 % 2013 - 2023	+ 0.9 °C 2014
Level	9,480.1 USD in 2024	67 years in 2023	n/a

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the countries. from 1951–1980. Figures are rounded.

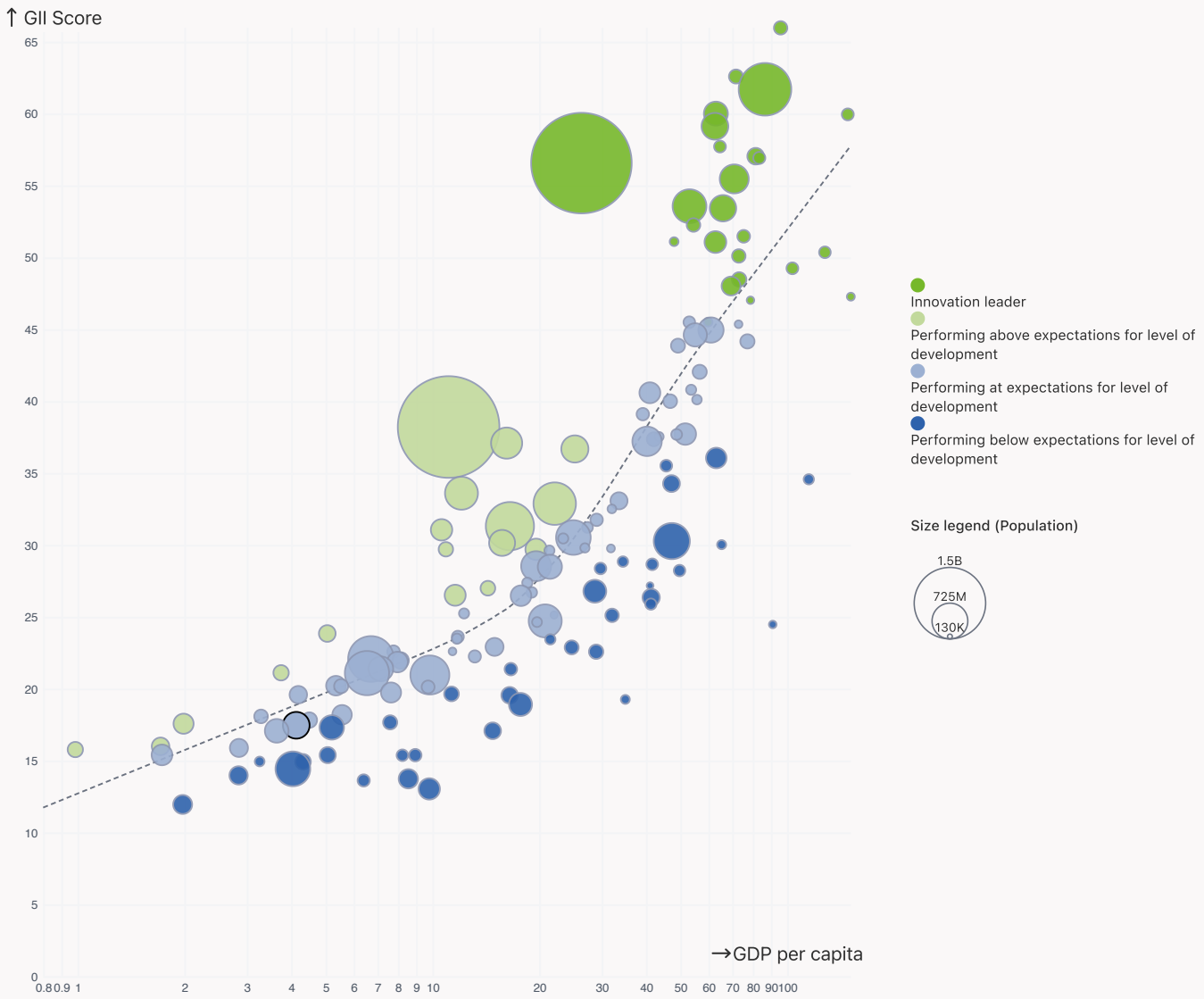
Global Innovation Index 2025

Expected vs. Observed Innovation Performance

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Relative to GDP United Republic of Tanzania performs at expectations for its level of development.

> Innovation overperformers relative to their economic development



Global Innovation Index 2025

Effectively translating innovation investments into innovation outputs

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

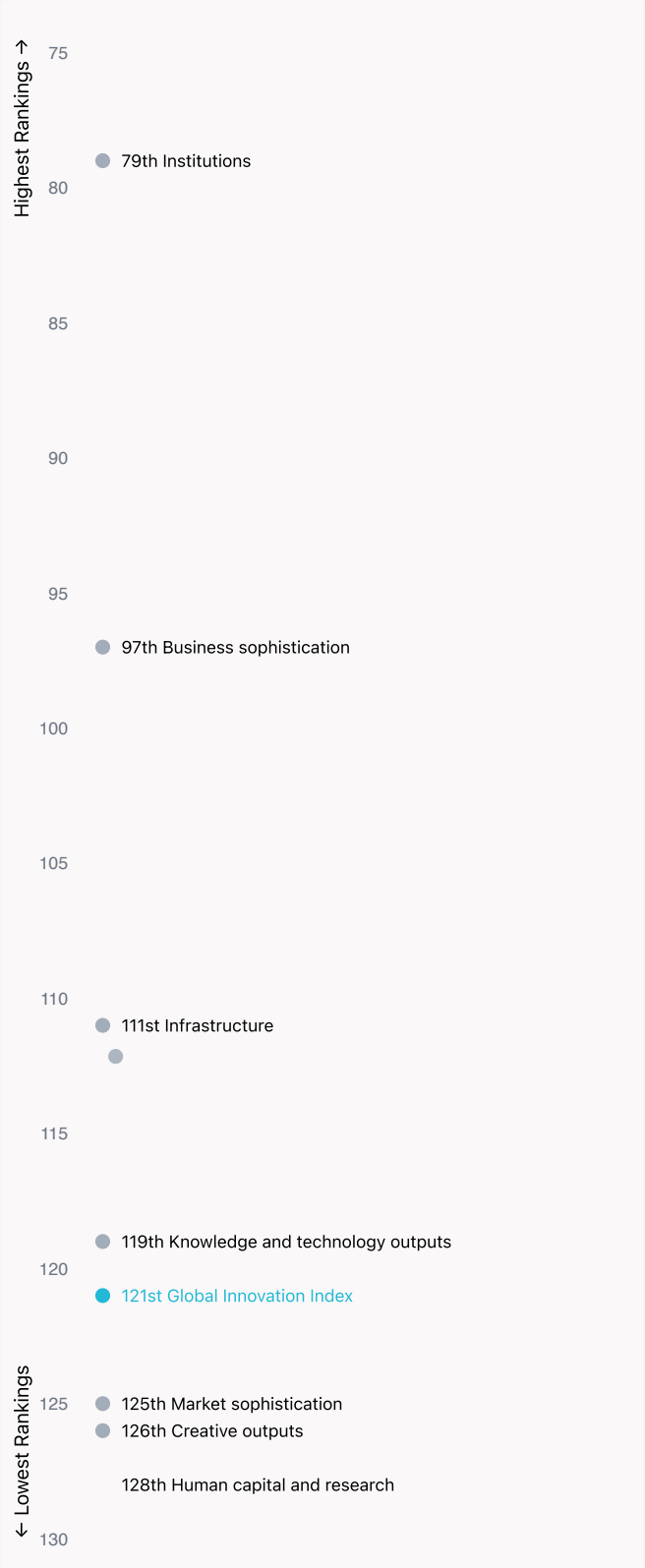
United Republic of Tanzania produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

Global Innovation Index 2025

Overview of United Republic of Tanzania's rankings in the seven areas of the GII in 2025

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for United Republic of Tanzania are those that rank above the GII (shown in blue) and the weakest are those that rank below.



Highest Rankings

United Republic of Tanzania ranks highest in Institutions (79th), Business sophistication (97th), Infrastructure (111st) and Knowledge and technology outputs (119th).

Lowest Rankings

United Republic of Tanzania ranks lowest in Human capital and research (128th), Creative outputs (126th) and Market sophistication (125th).

The full WIPO Intellectual Property Statistics profile for United Republic of Tanzania can be found on https://www.wipo.int/edocs/statistics-country-profile/en/tz.pdf

Global Innovation Index 2025

Benchmark of United Republic of Tanzania against other economy groupings for each of the seven areas of the GII Index

Lower middle-income economies

Tanzania performs above the Lower middle-income group average in Institutions.

Sub-Saharan Africa

Tanzania performs above the regional average in Institutions, Infrastructure.

Institutions

- Top 10 | Score: 78.63
- Tanzania | Score: 46.48
- Sub-Saharan Africa | Score: 40.29
- Lower middle-income | Score: 37.2

Human capital and research

- Top 10 | Score: 59.30
- Lower middle-income | Score: 20.9
- Sub-Saharan Africa | Score: 18.06
- Tanzania | Score: 13.55

Infrastructure

- Top 10 | Score: 61.36
- Lower middle-income | Score: 32.1
- Tanzania | Score: 29.78
- Sub-Saharan Africa | Score: 27.58

Market sophistication

- Top 10 | Score: 61.82
- Lower middle-income | Score: 28.1
- Sub-Saharan Africa | Score: 22.67
- Tanzania | Score: 18.37

Business sophistication

- Top 10 | Score: 59.10
- Lower middle-income | Score: 25.3
- Sub-Saharan Africa | Score: 25.36
- Tanzania | Score: 24.51

Knowledge and technology outputs

- Top 10 | Score: 54.93
- Lower middle-income | Score: 15.4
- Sub-Saharan Africa | Score: 11.53
- Tanzania | Score: 10.38

Creative outputs

- Top 10 | Score: 55.98
- Lower middle-income | Score: 13.8
- Sub-Saharan Africa | Score: 10.61
- Tanzania | Score: 6.35

Global Innovation Index 2025

Innovation strengths and weaknesses in United Republic of Tanzania

The table below gives an overview of the indicator strengths and weaknesses of United Republic of Tanzania in the GII 2025.

United Republic of Tanzania's best-ranked innovation strengths are **Youth demographic dividend, %** (rank 7), **Gross capital formation, % GDP** (rank 8) and **Intellectual property receipts, % total trade** (rank 30).

Strengths

Rank	Code	Indicator name
7	5.1.3	Youth demographic dividend, %
8	3.2.3	Gross capital formation, % GDP
30	6.3.1	Intellectual property receipts, % total trade
42	5.2.2	University–industry R&D collaboration†
44	6.2.1	Labor productivity growth, %
48	1.3.1	Policy stability for doing business†
50	5.2.4	State of cluster development†
61	5.3.2	High-tech imports, % total trade
67	4.3.3	Domestic market scale, bn PPP$
80	6.1.5	Citable documents H-index

Weaknesses

Rank	Code	Indicator name
135	6.2.3	Software spending, % GDP
132	2.2.1	Tertiary enrolment, % gross
125	5.1.2	Females employed w/advanced degrees, %
120	5.1.1	Knowledge-intensive employment, %
115	4.2.5	VC investor co-participation/bn PPP$ GDP
109	6.1.2	PCT patents by inventor origin/bn PPP$ GDP
100	5.2.5	Patent families/bn PPP$ GDP
80	2.3.4	QS university ranking, top 3*
53	6.2.2	Unicorn valuation, % GDP
44	2.3.3	Global corporate R&D investors, top 3, mn USD

Global Innovation Index 2025

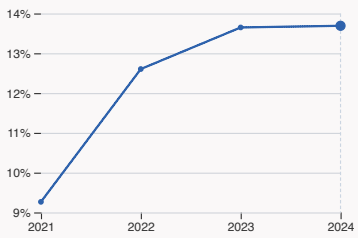
United Republic of Tanzania's innovation system

As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in United Republic of Tanzania

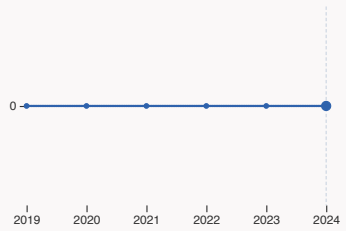
2.1.1 Expenditure on education

was equal to 3.16 % GDP in 2024, down by 0.1 percentage points from the year prior – and equivalent to an indicator rank of 107.



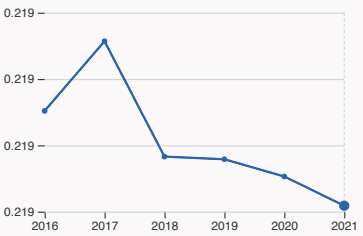
2.2.2 Graduates in science and engineering

was equal to 13.69 % of total graduates in 2024, up by 0.04 percentage points from the year prior – and equivalent to an indicator rank of 109.



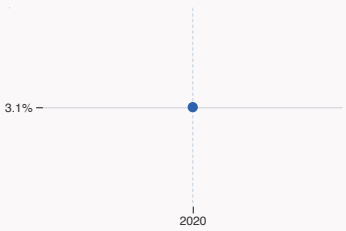
2.3.4 QS university ranking

The country does not have any universities in the QS world universities ranking in 2024.



4.3.2 Domestic industry diversification

was equal to an index score of 0.219 in 2021, down by – and equivalent to an indicator rank of 79.

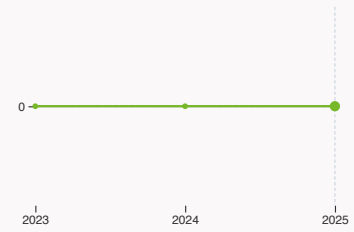


5.1.1 Knowledge-intensive employment

was equal to 3.1 % of total workforce in 2020 – and equivalent to an indicator rank of 120.

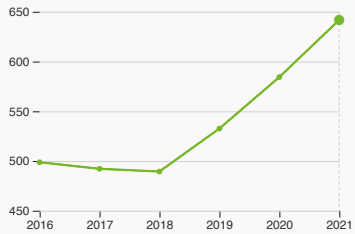
Global Innovation Index 2025

Innovation outputs in United Republic of Tanzania



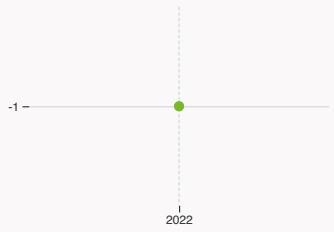
6.2.2 Unicorn valuation

The country does not have unicorns in 2025.



6.2.4 High-tech manufacturing

was equal to 641.73 high-tech manufacturing output in million USD in 2021, up by 9.83% from the year prior – and equivalent to an indicator rank of 96.

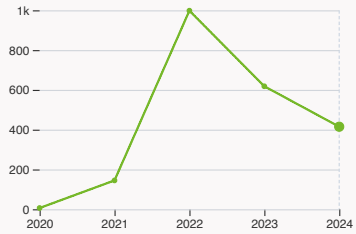


6.3.2 Production and export complexity

was equal to a score of -1 in 2022 – and equivalent to an indicator rank of 115.

6.3.3 High-tech exports

was equal to 46.89 million USD in 2023, up by 95.13% from the year prior – and equivalent to an indicator rank of 105.



7.3.3 Mobile app creation

was equal to 414.92 thousand global downloads of mobile apps in 2024, down by 32.88% from the year prior – and equivalent to an indicator rank of 118.

United Republic of Tanzania

GII 2025 rank **121**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
124	114	Lower middle	Sub-Saharan Africa	68.6	269.7	4,134.1

	Score / Value	Rank	
Institutions	**46.5**	**79**	
1.1 Institutional environment	**41.9**	**93**	
1.1.1 Operational stability for businesses*	52	93	
1.1.2 Government effectiveness*	31.9	97	
1.2 Regulatory environment	**38.2**	**99**	
1.2.1 Regulatory quality*	33.2	105	
1.2.2 Rule of law*	43.2	89	
1.3 Business environment	**59.3**	**[37]**	
1.3.1 Policy stability for doing business†	59.3	48	●
1.3.2 Entrepreneurship policies and culture†	n/a	n/a	
Human capital and research	**13.6**	**[128]**	
2.1 Education	**35.7**	**[118]**	
2.1.1 Expenditure on education, % GDP	3.2	107	
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	9.4	116	◇
2.1.4 PISA scales in reading, maths and science	n/a	n/a	
2.1.5 Pupil–teacher ratio, secondary	23.4	110	
2.2 Tertiary education	**5**	**126**	◇
2.2.1 Tertiary enrolment, % gross	4	132	○ ◇
2.2.2 Graduates in science and engineering, %	13.7	109	◇
2.2.3 Tertiary inbound mobility, %	0.4	103	
2.3 Research and development (R&D)	**0**	**[124]**	
2.3.1 Researchers, FTE/mn pop.	n/a	n/a	
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a	
2.3.3 Global corporate R&D investors, top 3, mn USD	0	44	○ ◇
2.3.4 QS university ranking, top 3*	0	80	○ ◇
Infrastructure	**29.8**	**111**	
3.1 Information and communication technologies (ICTs)	**40.8**	**120**	
3.1.1 ICT access*	48.7	118	
3.1.2 ICT use*	36.3	119	◇
3.1.3 Government's online service*	37.3	109	
3.2 General infrastructure	**40.4**	**42**	◆
3.2.1 Electricity output, GWh/mn pop.	163	122	
3.2.2 Logistics performance*	n/a	n/a	
3.2.3 Gross capital formation, % GDP	38.1	8	● ◆
3.3 Ecological sustainability	**8.1**	**122**	◇
3.3.1 GDP/unit of energy use	6.7	104	
3.3.2 Low-carbon energy use, %	9.1	96	
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.3	114	
Market sophistication	**18.4**	**125**	
4.1 Credit	**2.4**	**135**	◇
4.1.1 Finance for startups and scaleups†	n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP	16.4	121	
4.1.3 Loans from microfinance institutions, % GDP	0.1	57	
4.2 Investment	**1.1**	**113**	
4.2.1 Market capitalization, % GDP	9.4	76	
4.2.2 Venture capital (VC) received, deal count/bn PPP$ GDP	0.03	103	
4.2.3 Late-stage VC deal count, % global VC	0.008	76	
4.2.4 VC investors, deal count/bn PPP$ GDP	0.01	112	
4.2.5 VC investor co-participation/bn PPP$ GDP	0.002	115	○ ◇
4.3 Trade, diversification and market scale	**51.7**	**110**	
4.3.1 Applied tariff rate, weighted avg., %	8.5	122	
4.3.2 Domestic industry diversification	68.5	79	
4.3.3 Domestic market scale, bn PPP$	269.7	67	●

	Score / Value	Rank	
Business sophistication	**24.5**	**97**	
5.1 Knowledge workers	**30.9**	**[95]**	
5.1.1 Knowledge-intensive employment, %	3.1	120	○ ◇
5.1.2 Females employed w/advanced degrees, %	0.1	125	○ ◇
5.1.3 Youth demographic dividend, %	62.5	7	● ◆
5.1.4 GERD performed by business, % GDP	n/a	n/a	
5.1.5 GERD financed by business, %	n/a	n/a	
5.2 Innovation linkages	**24.4**	**69**	
5.2.1 Public research–industry co-publications, %	1	92	
5.2.2 University–industry R&D collaboration†	44.8	42	● ◆
5.2.3 University industry & international engagement, top 5*	13.1	87	
5.2.4 State of cluster development†	55.6	50	●
5.2.5 Patent families/bn PPP$ GDP	0	100	○ ◇
5.3 Knowledge absorption	**18.2**	**118**	
5.3.1 Intellectual property payments, % total trade	0.04	122	
5.3.2 High-tech imports, % total trade	8.6	61	●
5.3.3 ICT services imports, % total trade	0.3	131	
5.3.4 FDI net inflows, % GDP	1.9	92	
5.3.5 Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs	**10.4**	**119**	
6.1 Knowledge creation	**4.4**	**120**	
6.1.1 Patents by origin/bn PPP$ GDP	0.009	133	
6.1.2 PCT patents by inventor origin/bn PPP$ GDP	0	109	○ ◇
6.1.3 Utility models by origin/bn PPP$ GDP	0.005	73	
6.1.4 Scientific and technical articles/bn PPP$ GDP	6.2	97	
6.1.5 Citable documents H-index	9.6	80	●
6.2 Knowledge impact	**16.1**	**116**	
6.2.1 Labor productivity growth, %	1.5	44	●
6.2.2 Unicorn valuation, % GDP	0	53	○ ◇
6.2.3 Software spending, % GDP	0.01	135	○ ◇
6.2.4 High-tech manufacturing, %	6.9	96	
6.3 Knowledge diffusion	**10.6**	**101**	
6.3.1 Intellectual property receipts, % total trade	0.6	30	● ◆
6.3.2 Production and export complexity	26.4	115	
6.3.3 High-tech exports, % total trade	0.3	105	
6.3.4 ICT services exports, % total trade	0.3	120	
6.3.5 ISO 9001 quality/bn PPP$ GDP	0.5	123	
Creative outputs	**6.4**	**[126]**	
7.1 Intangible assets	**5.1**	**[120]**	
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	10.4	111	
7.1.3 Global brand value, top 5,000, % GDP	n/a	n/a	
7.1.4 Industrial designs by origin/bn PPP$ GDP	n/a	n/a	
7.2 Creative goods and services	**1.1**	**[123]**	
7.2.1 Cultural and creative services exports, % total trade	n/a	n/a	
7.2.2 National feature films/mn pop. 15–69	n/a	n/a	
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4 Creative goods exports, % total trade	0.08	99	
7.3 Online creativity	**14**	**120**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.2	125	
7.3.2 GitHub commits/mn pop. 15–69	0.5	126	
7.3.3 Mobile app creation/bn PPP$ GDP	41.3	118	

NOTES: ● indicates a strength ○ a weakness ◆ an income group strength ◇ an income group weakness * an index † a survey question ◷ that the economy's data is outdated. Square brackets [ ] indicate the the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level, n/a represents missing values, a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.

Global Innovation Index 2025

Data Availability

The following tables list indicators that are either missing or outdated for United Republic of Tanzania.

United Republic of Tanzania has missing data for sixteen indicators and outdated data for thirteen indicators.

Missing data for United Republic of Tanzania

Code	Indicator name	Economy year	Model year*	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2024	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2021	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.3.1	Researchers, FTE/mn pop.	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023
4.1.1	Finance for startups and scaleups†	n/a	2024	Global Entrepreneurship Monitor
5.1.4	GERD performed by business, % GDP	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	GERD financed by business, %	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
7.1.1	Intangible asset intensity, top 15, %	n/a	2024	Brand Finance
7.1.3	Global brand value, top 5,000, % GDP	n/a	2025	Brand Finance; International Monetary Fund
7.1.4	Industrial designs by origin/bn PPP$ GDP	n/a	2023	World Intellectual Property Organization; International Monetary Fund
7.2.1	Cultural and creative services exports, % total trade	n/a	2023	World Trade Organization, Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development
7.2.2	National feature films/mn pop. 15–69	n/a	2023	OMDIA; United Nations, World Population Prospects
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2024	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Global Innovation Index 2025

Outdated data for United Republic of Tanzania

Code	Indicator name	Economy year	Model year*	Source
2.1.3	School life expectancy, years	2021	2023	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2020	2023	UNESCO Institute for Statistics
4.1.3	Loans from microfinance institutions, % GDP	2022	2023	International Monetary Fund, Financial Access Survey (FAS)
4.3.2	Domestic industry diversification	2021	2022	United Nations Industrial Development Organization (UNIDO)
5.1.1	Knowledge-intensive employment, %	2020	2024	International Labour Organization
5.1.2	Females employed w/advanced degrees, %	2020	2024	International Labour Organization
5.3.1	Intellectual property payments, % total trade	2022	2023	World Trade Organization, Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development
5.3.3	ICT services imports, % total trade	2022	2023	World Trade Organization and United Nations Conference on Trade and Development
6.1.1	Patents by origin/bn PPP$ GDP	2015	2023	World Intellectual Property Organization; International Monetary Fund
6.1.3	Utility models by origin/bn PPP$ GDP	2020	2023	World Intellectual Property Organization; International Monetary Fund
6.2.4	High-tech manufacturing, %	2021	2022	United Nations Industrial Development Organization (UNIDO)
6.3.4	ICT services exports, % total trade	2022	2023	World Trade Organization and United Nations Conference on Trade and Development
7.1.2	Trademarks by origin/bn PPP$ GDP	2020	2023	World Intellectual Property Organization; International Monetary Fund

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Global Innovation Index 2025

About the Global Innovation Index

- The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.
- Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 140 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a "tool for action" for economies that incorporate the GII into their innovation agendas.

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research infrastructure, credit, investment, linkages, the creation, absorption and diffusion of knowledge and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.