



# MOROCCO

## KEY INDICATORS

GDP (US\$ billions): **337.48**

Population: **37,712,505**

HDI: **0.698**

**GKI  
RANK** **98** /141

**GKI  
SCORE**

**42.8**

**WORLD  
AVERAGE**

**47.8**

## COUNTRY PERFORMANCE SUMMARY

Morocco is a modest performer in terms of its knowledge infrastructure. It ranks 98th out of 141 countries in the Global Knowledge Index 2024 and 7th out of the 24 countries with medium human development.

## AREAS OF STRENGTH

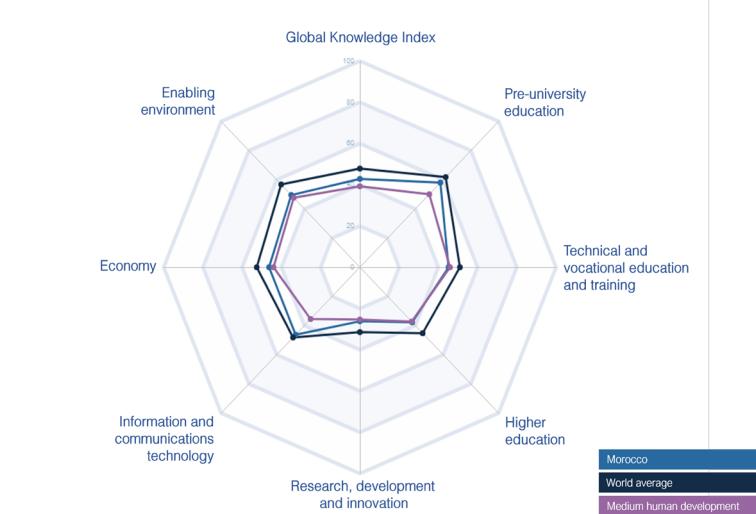
- + Researchers in higher education (%)
- + Poverty headcount ratio (% population)
- + Industrial design applications (per 100 billion GDP)
- + Government expenditure on secondary education (% GDP)
- + Government expenditure on primary education (% GDP)

## AREAS OF IMPROVEMENT

- Unemployment rate with advanced education
- Female-to-male labour force participation
- Citable documents per R&D personnel in higher education
- Firms with products and services new to the market (%)
- Chinn-Ito financial openness

## SECTORAL INDICES

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	93	58
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	100	45.2
HIGHER EDUCATION	102	37.7
RESEARCH, DEVELOPMENT AND INNOVATION	96	26.2
INFORMATION AND COMMUNICATIONS TECHNOLOGY	77	46.3
ECONOMY	96	46.3
ENABLING ENVIRONMENT	95	49.5



## GKI PILLARS





# MOROCCO

	Rank	Value
<b>PRE-UNIVERSITY EDUCATION</b>	<b>93</b>	<b>58</b>
<b>Knowledge capital</b>	<b>95</b>	<b>57.7</b>
Enrolment	59	90.4
Net enrolment rate in primary education	26	98.5
Net enrolment rate in lower secondary education	55	96.7
Net enrolment rate in upper secondary education	73	76
Completion	93	59.2
Years of compulsory education in primary and secondary	68	69.2
Completion rate in upper secondary education	n/a	n/a
Gross intake ratio to the last grade of lower secondary education	92	49.2
<b>Outcomes</b>	<b>120</b>	<b>23.3</b>
Assessment of 15-year-old students in math, science and reading	80	7.9
Learning-adjusted years of schooling	101	38.8
<b>Educational enabling environment</b>	<b>92</b>	<b>58.4</b>
Expenditure	11	50.6
Government expenditure on primary education (% GDP)	18	51.7
Government expenditure on secondary education (% GDP)	6	53.1
Government funding per primary student (% GDP per capita)	48	47
Government funding per secondary student (% GDP per capita)	n/a	n/a
Resources	77	80.1
Pupil-trained teacher ratio in primary education	52	86.4
Pupil-trained teacher ratio in secondary education	48	85.4
Schools with access to computers in primary education (%)	67	69.7
Schools with access to computers in secondary education (%)	89	79
<b>Early learning</b>	<b>100</b>	<b>44.6</b>
Gross enrolment ratio in early childhood education	103	21.6
Proportion of children who are developmentally on track	n/a	n/a
Proportion of children with stimulating home learning environments	38	23
Pupil-trained teacher ratio in pre-primary education	39	89.2
<b>Equity and inclusiveness</b>	<b>n/a</b>	<b>n/a</b>
Completion rate in upper secondary education, gender parity	n/a	n/a
Completion rate in upper secondary education, wealth parity	n/a	n/a
Completion rate in upper secondary education, location parity	n/a	n/a
<b>TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING</b>	<b>100</b>	<b>45.2</b>
<b>TVET components</b>	<b>87</b>	<b>40.1</b>
Continuous training and skilling	136	13.6
Firms offering formal training (%)	116	6.5
Labour force participation rate with short-cycle tertiary education	n/a	n/a
Participation rate in formal and non-formal education and training	92	20.7
<b>TVET structure</b>	<b>39</b>	<b>56</b>
Government expenditure on vocational education (%)	n/a	n/a
Share of students enrolled in secondary vocational programmes	79	12.1
Share of students enrolled in post-secondary vocational programmes	1	100
<b>TVET quality and qualifications</b>	<b>22</b>	<b>50.6</b>
Extent of staff training	108	48.4
Quality of vocational training	73	52.8
Ratio of high-skill TVET occupations earnings to average wage	n/a	n/a
Ratio of medium-skill TVET occupations earnings to average wage	n/a	n/a
<b>TVET labour market</b>	<b>107</b>	<b>50.3</b>
<b>Efficiency of the labour market</b>	<b>139</b>	<b>36.4</b>
Firms constrained with inadequately educated workforce (%)	99	51
Employment educational mismatch (%)	108	25.5
Proportion of skilled production workers	112	32.9
Unemployment rate with vocational education	n/a	n/a
<b>Post-TVET employment</b>	<b>54</b>	<b>48.3</b>
Share of TVET occupations	59	60.9
Manufacturing employment (%)	64	35.7
<b>Equity and inclusiveness</b>	<b>84</b>	<b>66.1</b>
Enrolment in vocational education, gender parity	55	81.3
Vulnerable employment rate	93	50.8
<b>HIGHER EDUCATION</b>	<b>102</b>	<b>37.7</b>
<b>Inputs</b>	<b>48</b>	<b>44.8</b>
Expenditure	n/a	n/a
Government expenditure per tertiary student	n/a	n/a
Teaching staff compensation (% tertiary expenditure)	n/a	n/a
Enrolment	57	25.1
Enrolment in bachelor's or equivalent level (%)	70	23
Enrolment in master's, doctoral or equivalent (%)	52	27.3
<b>Resources</b>	<b>66</b>	<b>64.5</b>
Pupil-teacher ratio in tertiary education	109	37
Researchers in higher education (%)	4	92
<b>Learning environment</b>	<b>109</b>	<b>39.4</b>
Diversity and academic freedom	99	39.4
Teachers in tertiary education, gender parity	84	51.1
Inbound mobility rate	80	4.4
Academic freedom	89	62.8
<b>Equity and inclusiveness</b>	<b>n/a</b>	<b>n/a</b>
Gross attendance ratio for tertiary education, gender parity	n/a	n/a
Gross attendance ratio for tertiary education, wealth parity	n/a	n/a
Gross attendance ratio for tertiary education, location parity	n/a	n/a
<b>Outputs</b>	<b>136</b>	<b>28.9</b>
Attainment	n/a	n/a
Educational attainment rate, bachelor's or equivalent	n/a	n/a
Educational attainment rate, master's or equivalent	n/a	n/a
Educational attainment rate, doctoral or equivalent	n/a	n/a
<b>Employment</b>	<b>137</b>	<b>37.1</b>
Labour force participation rate with advanced education	122	61
Unemployment rate with advanced education	138	13.2
<b>Impact</b>	<b>129</b>	<b>20.8</b>
University-industry collaboration in R&D	99	38.4
Citable documents per R&D personnel in higher education	94	3.1
<b>RESEARCH, DEVELOPMENT AND INNOVATION</b>	<b>96</b>	<b>26.2</b>
<b>Inputs</b>	<b>65</b>	<b>28.2</b>
Inputs of R&D institutions	38	39.7
GERD (% GDP)	n/a	n/a
GERD per researcher	n/a	n/a
Researchers per thousand labour force	45	19.5
Tertiary graduates from STEM programmes (%)	44	59.8
<b>Inputs of RDI in business enterprises</b>	<b>104</b>	<b>13.5</b>
GERD performed by business enterprises (%)	n/a	n/a
GERD financed by business enterprises (%)	n/a	n/a
Researchers in business enterprises (%)	63	8.2
Firms that spend on R&D (%)	69	18.7
<b>Inputs of societal innovation</b>	<b>115</b>	<b>19.9</b>
High-skilled employment (%)	116	7.7
Intellectual property payments (% total trade)	86	5.2
State of cluster development	71	46.9
<b>Outputs</b>	<b>91</b>	<b>31.7</b>
Outputs of R&D institutions	98	30.6
Average documents per researcher	103	4
Citations per document	75	34.4
Resident patent applications (per 100 billion GDP)	61	53.3
<b>Outputs of RDI in business enterprises</b>	<b>67</b>	<b>28.4</b>
Intellectual property receipts (% total trade)	95	5.2
Industrial design applications (per 100 billion GDP)	6	91.2
PCT applications (per 100 billion GDP)	60	3.4
Firms producing new products and services (%)	98	13.6
<b>Outputs of societal innovation</b>	<b>62</b>	<b>37.4</b>
Trademark applications (per 100 billion GDP)	25	28.9
Cultural goods exports (% exports)	85	57.3
Printing and publishing output (% manufactured output)	29	25.9
<b>Impact</b>	<b>112</b>	<b>18.6</b>
<b>Quality</b>	<b>84</b>	<b>17.3</b>
Research institutions prominence	53	13.6
Growth of innovative companies	110	41.2
ISO 9001 quality certificates (per billion GDP)	72	8.9
ISO 14001 environmental certificates (per billion GDP)	80	5.5
<b>Linkages</b>	<b>81</b>	<b>12.9</b>
GERD financed from abroad (%)	n/a	n/a
Joint ventures per strategic alliance deals (per billion GDP)	88	3.2
Computer software spending (% GDP)	59	22.6
<b>Business development</b>	<b>118</b>	<b>25.6</b>
New business density per thousand population	58	10.5
Firms with products and services new to the market (%)	112	40.7



# MOROCCO

	Rank	Value	Rank	Value	
<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<b>77</b>	<b>46.3</b>	<b>ENABLING ENVIRONMENT</b>	<b>95</b>	<b>49.5</b>
<b>Infrastructure</b>	<b>82</b>	<b>50.9</b>	<b>Governance</b>	<b>84</b>	<b>39.1</b>
<b>Coverage</b>	<b>75</b>	<b>56.7</b>	Political environment	93	33.6
3G/4G mobile network coverage (% population)	46	99.1	Peace and stability	87	34.4
Secure Internet servers per 1 million population	81	47.6	Voice and accountability	97	32.9
Investment in telecommunication services (% GDP)	72	23.3	Quality of institutions	77	44.5
<b>Quality</b>	<b>94</b>	<b>10.1</b>	Rule of law	78	44.8
Mobile upload and download speeds	73	12.1	Control of corruption	79	41.5
Fixed-broadband upload and download speeds	101	8.6	Government effectiveness	78	47.2
Fixed-broadband subscriptions by speed per hundred people	91	9.7	<b>Socio-economic</b>	<b>102</b>	<b>46.7</b>
<b>Affordability</b>	<b>66</b>	<b>85.8</b>	Gender equity	122	52.5
Fixed broadband basket (% GNI per capita)	83	63.3	Female-to-male ratio in parliament	83	32.1
Mobile broadband basket (% GNI per capita)	69	94	Female-to-male labour force participation	136	29.5
Internet and telephony competition	1	100	Female-to-male ratio in Internet usage	78	96
<b>Access</b>	<b>67</b>	<b>45.5</b>	<b>Social inclusion</b>	<b>123</b>	<b>38.4</b>
<b>Subscriptions</b>	<b>62</b>	<b>64.6</b>	Social protection coverage (% population)	99	19.8
Active mobile-broadband subscriptions per hundred inhabitants	72	46.1	Adult literacy rate	89	68.9
International Internet bandwidth per user	44	60.6	Youth not in employment, education or training (%)	129	26.5
Households with Internet access at home (%)	61	87.2	Standard of living	44	49.3
<b>Skills and employment</b>	<b>68</b>	<b>26.3</b>	Poverty headcount ratio (% population)	5	92.6
Individuals with standard ICT skills (%)	43	36.5	GDP per capita	99	6
Tertiary graduates from ICT programmes (%)	34	37.9	<b>Health and environment</b>	<b>86</b>	<b>62.7</b>
ICT employment (%)	96	4.6	Health	87	72.4
<b>Usage</b>	<b>84</b>	<b>42.7</b>	Universal health coverage	80	69.5
<b>Services</b>	<b>72</b>	<b>50.5</b>	Healthy life expectancy (years)	82	61
Government online services	94	56.2	Under-five mortality rate	87	86.7
Fixed broadband Internet traffic per subscription	41	33.5	<b>Environmental performance</b>	<b>79</b>	<b>53</b>
Mobile broadband Internet traffic per subscription	52	23.5	Renewable energy consumption (%)	112	11.3
Internet users (%)	41	88.8	Ecological footprint per capita	43	90.6
<b>Outcomes</b>	<b>95</b>	<b>34.9</b>	Natural hazard exposure	94	57
ICT PCT patent applications (per 100 billion GDP)	58	44.1			
E-participation	96	43.8			
Internet activities by individuals (%)	67	26			
Trade in digitally deliverable services (% total trade)	88	25.4			
<b>ECONOMY</b>	<b>96</b>	<b>46.3</b>			
<b>Economic competitiveness</b>	<b>68</b>	<b>53.9</b>			
Infrastructure investment	69	52.2			
Gross fixed capital formation (% GDP)	24	47.7			
Logistics performance	97	38.5			
Transport productive capacity	78	35.8			
Building quality control	24	86.7			
<b>Business agility</b>	<b>68</b>	<b>55.7</b>			
Ease of starting a business	37	93			
Insolvency recovery rate	93	31.2			
Entrepreneurial employee activity rate	58	12.7			
Extent of corporate transparency	12	85.7			
<b>Economic openness</b>	<b>100</b>	<b>42.3</b>			
Trade and diversification	50	53.3			
Trade (% GDP)	50	22.8			
High-technology trade (% total trade)	66	18.4			
Product concentration	51	81.1			
Market concentration	64	90.9			
Financial openness	120	31.2			
Chinn-Ito financial openness	88	16.3			
Foreign direct investment, net inflows (% GDP)	104	37.3			
Debt dynamics	89	40			
<b>Financing and domestic value added</b>	<b>114</b>	<b>42.6</b>			
Financing and taxes	108	49.8			
Domestic credit to private sector (% GDP)	29	33.7			
MSME financing gap (% GDP)	90	58.9			
Tax and contribution rate (% profit)	108	48.3			
Bank non-performing loans (%)	103	58.5			
<b>Domestic value added</b>	<b>110</b>	<b>35.4</b>			
Medium- and high-tech activities value added	53	30.3			
Industry and services value added (% GDP)	104	63.3			
Labour underutilization rate	121	36.3			
Output per worker	86	11.7			

\* All values are normalized to a scale from 0 (worst) to 100 (best).