



Bangladesh

The Network Readiness Index (NRI) is one of the leading global indices on the application and impact of information and communication technology (ICT) in economies around the world. In its latest version of 2023 the NRI Report maps the network-based readiness landscape of 134 economies based on their performances in four different pillars: Technology, People, Governance, and Impact. Each of these pillars is itself comprised of three sub-pillars (see Figure 1) that have been populated by a total of 58 variables.

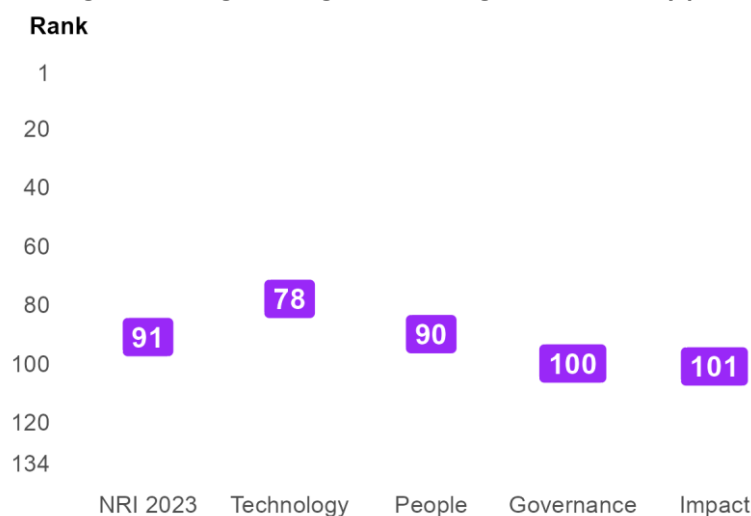
Figure 1: The NRI 2023 model



Global NRI position of Bangladesh

Bangladesh ranks 91st out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Technology. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Bangladesh global ranking, overall and by pillar



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Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Bangladesh relate to Access, Content and Governments, among others (Table 1). More could be done, though, to improve the economy's performances in the Individuals, SDG Contribution and Regulation sub-pillars.

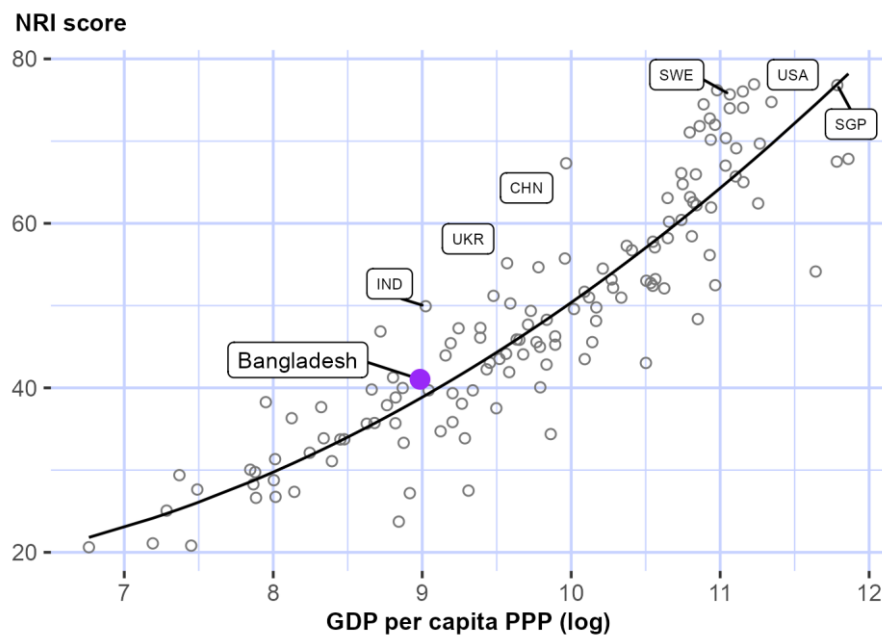
Table 1: Bangladesh rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Access	58	Quality of Life	90
Content	66	Businesses	96
Governments	73	Future Technologies	100
Inclusion	80	Individuals	101
Trust	87	SDG Contribution	115
Economy	88	Regulation	116

NRI score and income

Figure 3 shows the position of Bangladesh in terms of both NRI score and GDP per capita (PPP). The trend line shows the expected NRI score given an economy's income level. As can be seen, Bangladesh is well above the trend line, which suggests that it has a greater network readiness than would be expected given its income level.

Figure 3: NRI score and GDP per capita PPP (log)



Note: USA = United States (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Bangladesh belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Asia & Pacific-is Singapore (SGP).

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Performance against its income group and region

Lower-middle-income countries

Bangladesh is ranked 15th in the group of lower-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in each of the four pillars. At the sub-pillar level, it outperforms lower-middle-income countries in six of the twelve sub-pillars: Access, Content, Governments, Trust, Inclusion and Quality of Life.

Asia & Pacific

Bangladesh is ranked 18th within Asia & Pacific (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it trails the regional average in each of them.

Figure 4: Performance of Bangladesh against its income group and region, overall and by pillar

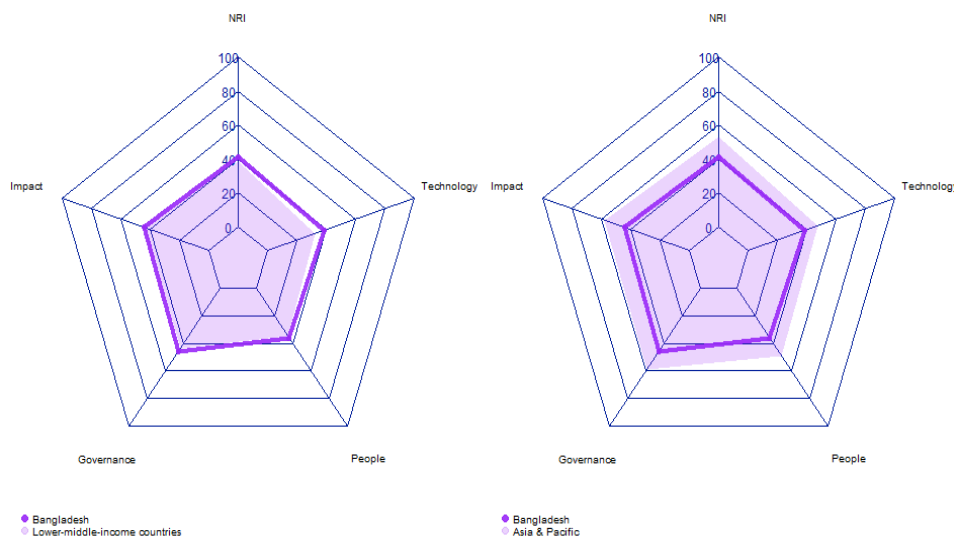


Table 2: Bangladesh scores vs. averages of its income group and region, overall and by pillar

Dimension	Bangladesh	Lower-middle-income countries	Asia & Pacific
NRI	41.04	38.41	53.28
Technology	38.23	32.12	47.34
People	35.85	34.38	48.95
Governance	45.94	43.27	59.22
Impact	44.14	43.89	57.62

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Strongest and weakest indicators

The indicators where Bangladesh performs particularly well include 1.1.3 FTTH/building Internet subscriptions, 4.3.4 SDG 7: Affordable and Clean Energy, and 1.2.4 AI scientific publications (Table 3). By contrast, the economy's weakest indicators include 4.1.2 High-tech exports, 4.3.3 SDG 5: Women's economic opportunity, and 4.2.1 Happiness.

Table 3: Highlight of Strengths and Opportunities for Bangladesh

Strongest indicators	Rank	Weakest indicators	Rank
1.1.3 FTTH/building Internet subscriptions	5	3.3.4 Gender gap in Internet use	100
4.3.4 SDG 7: Affordable and Clean Energy	15	3.1.4 Internet shopping	119
1.2.4 AI scientific publications	19	4.2.1 Happiness	124
2.1.1 Mobile broadband internet traffic within the country	21	4.1.2 High-tech exports	127
1.1.5 International Internet bandwidth	24	4.3.3 SDG 5: Women's economic opportunity	127
4.1.4 Domestic market size	24		
4.2.3 Income inequality	32		
3.3.5 Rural gap in use of digital payments	36		
4.2.2 Freedom to make life choices	43		
1.1.1 Mobile tariffs	44		

Note: For the full list of strengths and weaknesses, see At-A-Glance table.

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NRI 2023 At-A-Glance: Bangladesh

Network Readiness Index

Rank: 91 (out of 134)

Score: 41.04

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	78	38.23	C. Governance pillar	100	45.94
1st sub-pillar: Access	58	67.04	1st sub-pillar: Trust	87	34.28
2nd sub-pillar: Content	66	22.90	2nd sub-pillar: Regulation	116	46.96
3rd sub-pillar: Future Technologies	100	24.75	3rd sub-pillar: Inclusion	80	56.57
B. People pillar	90	35.85	D. Impact pillar	101	44.14
1st sub-pillar: Individuals	101	36.27	1st sub-pillar: Economy	88	21.56
2nd sub-pillar: Businesses	96	35.17	2nd sub-pillar: Quality of Life	90	61.31
3rd sub-pillar: Governments	73	36.12	3rd sub-pillar: SDG Contribution	115	49.56

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	78	38.23	C. Governance pillar	100	45.94
1st sub-pillar: Access	58	67.04	1st sub-pillar: Trust	87	34.28
1.1.1 Mobile tariffs	44	72.17	3.1.1 Secure Internet servers	97	39.30
1.1.2 Handset prices	108	29.45	3.1.2 Cybersecurity	61	80.94
1.1.3 FTTH/building Internet subscriptions	5	71.36	3.1.3 Online access to financial account	97	14.08
1.1.4 Population covered by at least a 3G mobile network	74	99.44	3.1.4 Internet shopping	119	2.79
1.1.5 International Internet bandwidth	24	80.53	2nd sub-pillar: Regulation	116	46.96
1.1.6 Internet access in schools	52	49.30	3.2.1 Regulatory quality	117	30.50
2nd sub-pillar: Content	66	22.90	3.2.2 ICT regulatory environment	117	59.41
1.2.1 GitHub commits	97	2.31	3.2.3 Regulation of emerging technologies	91	28.83
1.2.2 Internet domain registrations	119	0.22	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	65	65.49	3.2.5 Privacy protection by law content	100	49.40
1.2.4 AI scientific publications	19	23.59	3rd sub-pillar: Inclusion	80	56.57
3rd sub-pillar: Future Technologies	100	24.75	3.3.1 E-Participation	74	51.16
1.3.1 Adoption of emerging technologies	107	27.75	3.3.2 Socioeconomic gap in use of digital payments	53	82.35
1.3.2 Investment in emerging technologies	99	29.00	3.3.3 Availability of local online content	88	50.00

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	100	25.62 ○
1.3.4 Computer software spending	75	17.51	3.3.5 Rural gap in use of digital payments	36	73.73 ●
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>	90	35.85	<i>1st sub-pillar: Economy</i>	101	44.14
2.1.1 Mobile broadband internet traffic within the country	21	36.94 ●	4.1.1 High-tech and medium-high-tech manufacturing	88	21.56
2.1.2 ICT skills in the education system	77	40.77	4.1.2 High-tech exports	97	6.06 ○
2.1.3 Use of virtual social networks	106	22.78	4.1.3 PCT patent applications	127	0.31 ○
2.1.4 Tertiary enrollment	91	15.10	4.1.3 PCT patent applications	NA	NA
2.1.5 Adult literacy rate	88	65.74	4.1.4 Domestic market size	24	69.84 ●
2.1.6 AI talent concentration	NA	NA	4.1.5 Prevalence of gig economy	103	24.42
<i>2nd sub-pillar: Businesses</i>	96	35.17	4.1.6 ICT services exports	90	7.18
2.2.1 Firms with website	98	18.83	<i>2nd sub-pillar: Quality of Life</i>	90	61.31
2.2.2 GERD financed by business enterprise	NA	NA	4.2.1 Happiness	124	19.62 ○
2.2.3 Knowledge intensive employment	110	9.07	4.2.2 Freedom to make life choices	43	81.56 ●
2.2.4 Annual investment in telecommunication services	69	77.59	4.2.3 Income inequality	32	76.88 ●
2.2.5 GERD performed by business enterprise	NA	NA	4.2.4 Healthy life expectancy at birth	84	67.17
<i>3rd sub-pillar: Governments</i>	73	36.12	<i>3rd sub-pillar: SDG Contribution</i>	115	49.56
2.3.1 Government online services	74	61.55	4.3.1 SDG 3: Good Health and Well-Being	109	36.88
2.3.2 Publication and use of open data	86	11.76	4.3.2 SDG 4: Quality Education	NA	NA
2.3.3 Government promotion of investment in emerging tech	71	35.04	4.3.3 SDG 5: Women's economic opportunity	127	28.32 ○
2.3.4 R&D expenditure by governments and higher education	NA	NA	4.3.4 SDG 7: Affordable and Clean Energy	15	82.30 ●
			4.3.5 SDG 11: Sustainable Cities and Communities	88	50.75

NOTE: ● a strength and ○ a weakness.

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