



Digitalization in BRICS: Prospects for Cooperation

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Digitalization: Three aspects



**SOCIAL
ADVANTAGES**

Which people obtain from using ICTs in their day-to-day operations

DIGITAL SKILLS

Capabilities for harnessing digital data and frontier technologies

INFRASTRUCTURE

Access to infrastructure and ICT



Digitalization is a key aspect of cooperation

Reduction of digital inequality constitutes a sustainable development priority (SDG 17)
Digital technologies have become particularly significant during the pandemic

National priorities

	BRAZIL	INDIA	CHINA	RUSSIA	SOUTH AFRICA
	Brazilian Digital Transformation Strategy	The National Digital Communications Policy. 2018	The 13th Five-Year Plan	National project "Digital economy"	South Africa Connect
Term	2021	2022	2020	2024	2030
Goal: Speed		10 Gb/s for all Gram Panchayats 100 Mbit/s for key institutions	100 Mbit/s : Rural and urban. where possible; 50 Mbit/s : 50% b/b in rural areas	10 Mbit/s – communities from 250 people; 1 Mbit/s - remote and less than 250 people	10 Mbit/s for 100% pop. and 100 Mbit/s for 80% pop. 1 Gb/s for 100% schools and hospitals
Goal: Coverage	All municip.: mob. b/b Most of pop.: optic fiber Remote and isolated areas: b/b	100%: broadband; 50% households: fixed b/b	70% households: fixed b/b 85% households: mob. b/b 98% villages: optic fiber	97% households: b/b; 13 958 communities with pop. from 250 to 500: access to internet	100%

BRICS Digital Inequality

Brazil

India

China

Russia

**South
Africa**

Access

Fixed broadband
subscriptions (per 100 pop.)

90.2

25.8

83.6

80.8

70

Download speed, fixed bb
(Mbit/s)

47.8

38

101.3

60.7

27.9

Usage

Use of virtual social
networks (% pop.)

66

23

71

49

40

Internet shopping (%
pop.)

14.2

2.9

45.3

26.9

7.9

Adult literacy (% pop.)

93.2

74.4

96.8

99.7

87

Opportunities

**OSI (Online Service Index).
UN DESA**

0.92

0.95

0.86

0.92

0.83

**Firms with website (%
of firms)**

54

48.9

66.1

64.6

36

BRICS in international ratings

	Brazil	India	China	Russia	South Africa
ICT Development Index 2017 ITU (place out of 176)	67	138	83	43	88
Pillar 3 ICT Adoption Global Competitiveness Index 2019 (place out of 141)	67	120	18	22	89
E-Government Development Index UN DESA 2018 (place out of 193)	44	96	65	32	68
Network Readiness Index Portulans 2019 (place out of 121)	59	79	41	48	72
Inclusive Internet Index The Economist 2020 (place out of 100)	34	46	36	26	33



Competencies in different spheres of digitalization

Countries differ in education, digital technologies, social inequality spheres – potential for exchange of best practices опытом



Great development potential

Digitalization (and technological advance) might become a leverage for increase of productivity and education level

Regional inequality in internet coverage

Brazil

India

China

Russia

**South
Africa**

Groups of regions (average share of population using internet in the group)

Fin. and econ. centers	81	96	76	88	72
Developed	73	46	59	81	55
Middle-income	63	36	50	79	59
Less developed	56	29	44	83	48
Total	70	37	53	82	62

Inequality indicators for the share of population using internet

Relative range of variability	0.56	3.58	0.72	0.34	0.51
Variation ratio	0.138	0.687	0.190	0.071	0.160
Theil index	0.009	0.02	0.168	0.002	0.011

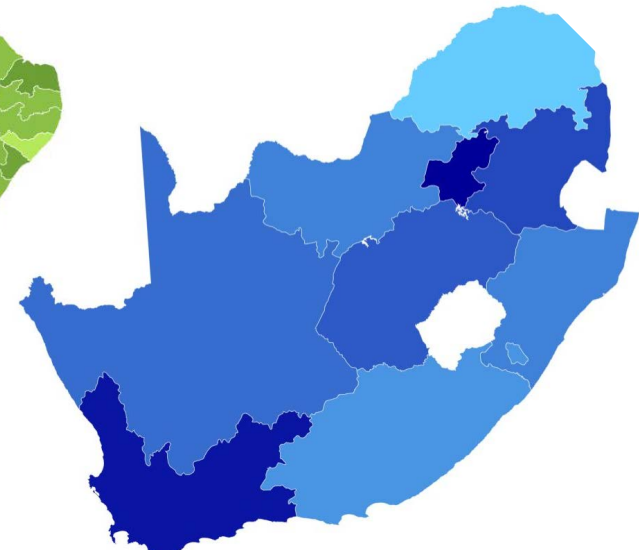
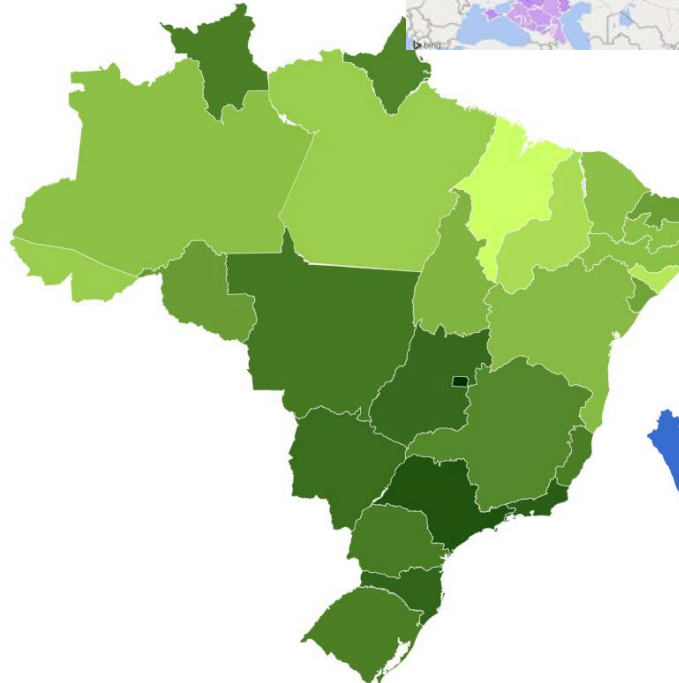
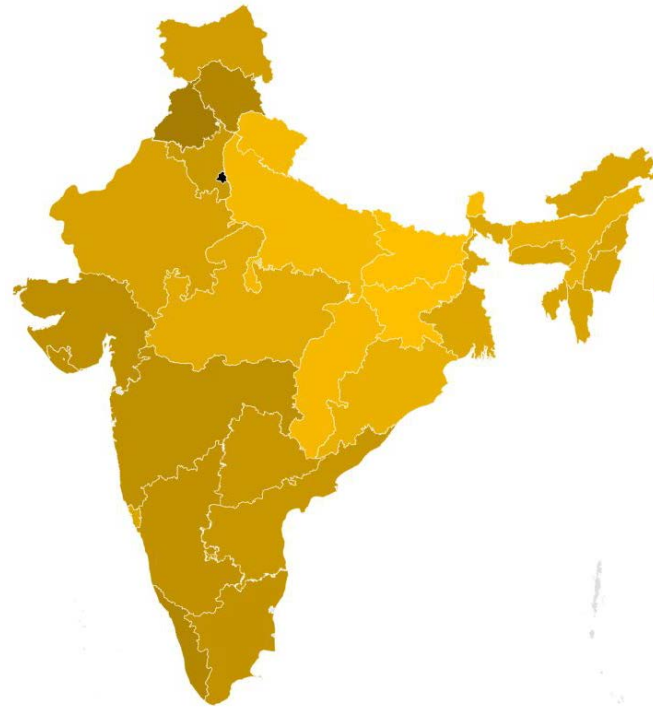
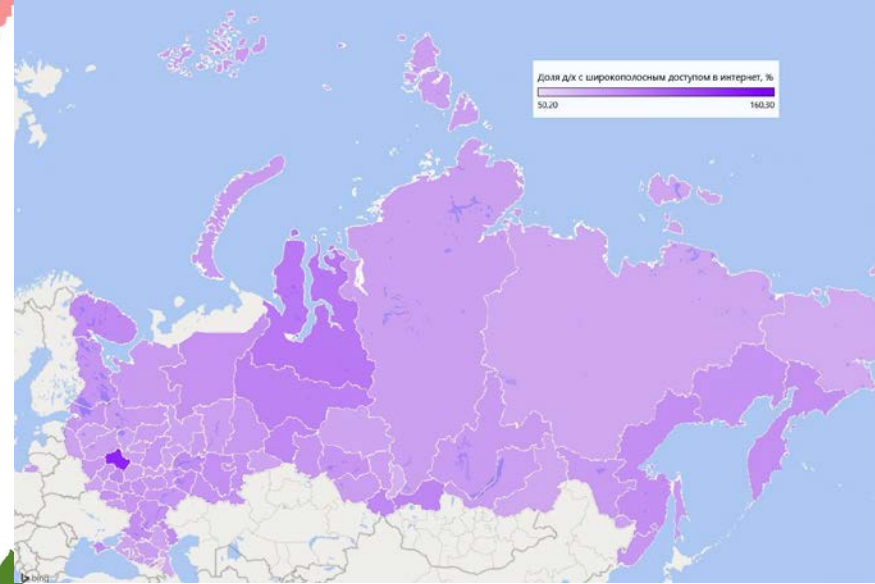
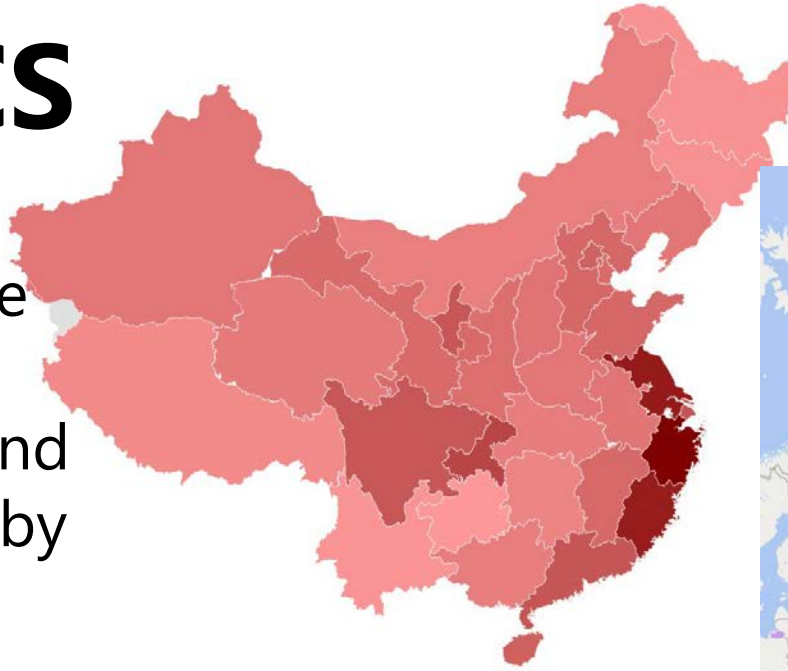


Differences in inequality levels

Russia and Brazil achieved considerable success in reduction of regional inequality

BRICS

Coverage
of
broadband
internet
by
regions



Digitalization of agriculture

	Urbal	Rural	Total
Brazil	80	59	70
India	76	16	37
China	75	35	53
Russia	82	71	82
South Africa	62	40	62

Different competencies – potential for cooperation

- ✓ Russia – coverage of rural areas
- ✓ Brazil – digital agriculture
- ✓ China – development of the system of big data on agriculture and digital support platform
- ✓ India – large number of programs supporting development of digital agriculture

SOLUTION



Mechanism for exchange of best practices on a regular basis

In digitalization and bridging digital gap spheres



Joint Projects

Development of database of BRICS projects aimed at reduction of regional inequality



Capacity building opportunities

In other cooperation spheres



**BRICS
Digital
Infrastructure
Hub**

BRICS Digital Infrastructure Hub

Network center for exchange of frontier technologies and best practices in development of digital infrastructure and increase of access to ICTs



National strategies

Aimed at bridging digital divide, digitalization of rural and remote areas and increase of digital literacy



Cases

Of best projects and effective technologies aimed at increase of broadband internet coverage



List of projects

Available for participation of foreign investors



Interactive part

«work room» for exchange of opinions, explanations and recommendations on cases and strategies