

# Facebook Connectivity

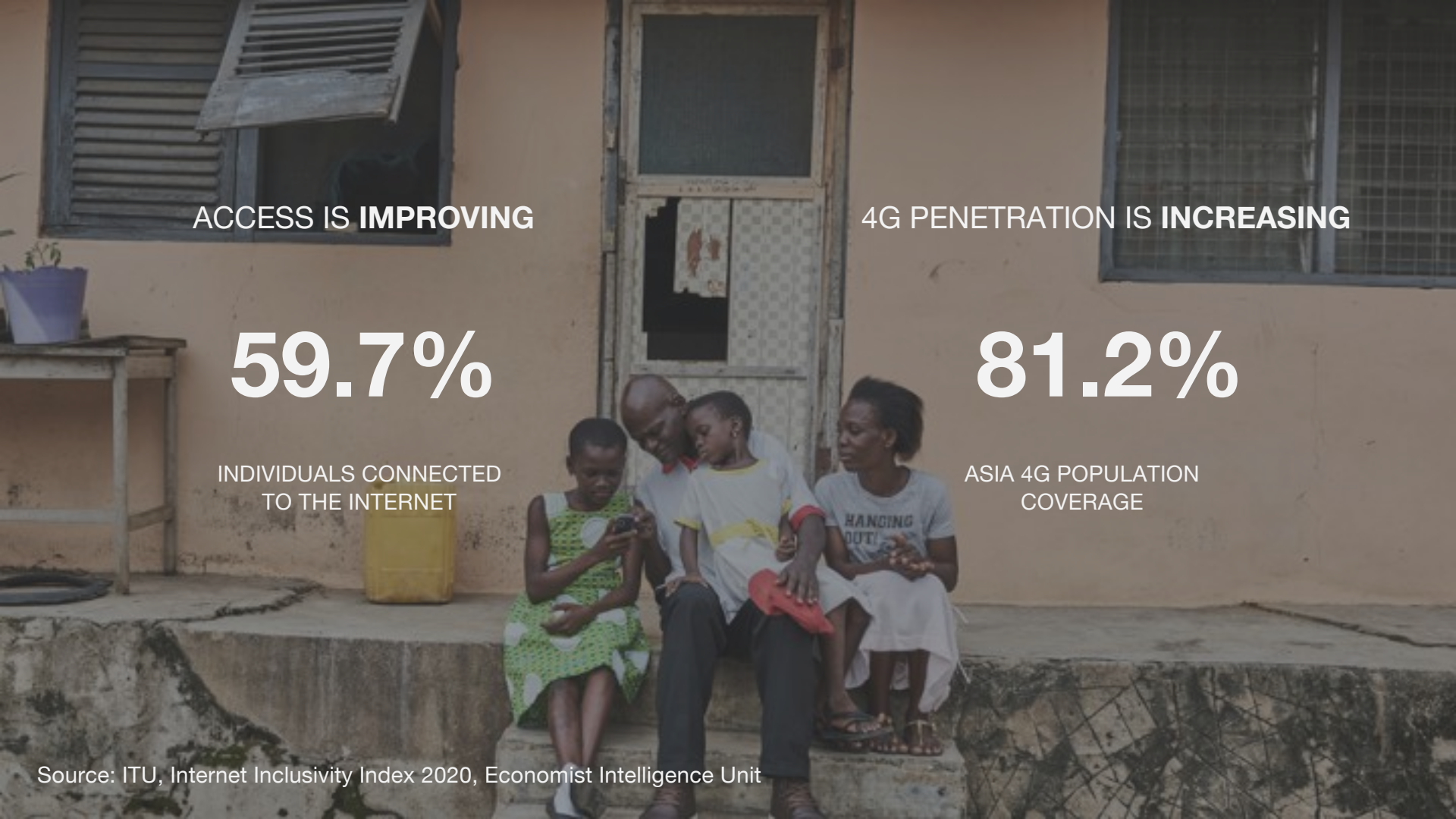
Bringing more people online to a faster internet

PKSIG 2020

Tom C. Varghese

Head of Connectivity and Access Policy, APAC





ACCESS IS **IMPROVING**

**59.7%**

INDIVIDUALS CONNECTED  
TO THE INTERNET

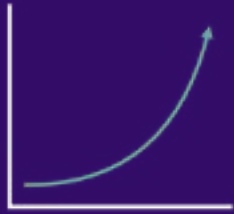
4G PENETRATION IS **INCREASING**

**81.2%**

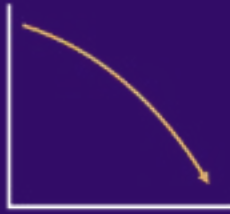
ASIA 4G POPULATION  
COVERAGE

# The Challenges Facing Global Operators Today

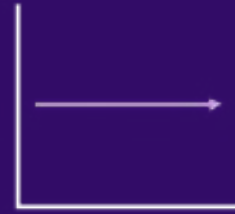
---



DATA CONSUMPTION



ARPU



OPEX

A group of people, including children and adults, are sitting on a paved surface. One person in the center is holding a white smartphone, and another person is pointing at the screen. The scene is overlaid with a semi-transparent grey filter.

Why Facebook And Connectivity?

**Our Business Depends On Good Connectivity**

FACEBOOK

# Inclusive Internet Index 2020: Pakistan Highlights and Insights

# Pakistan's Metrics

Indicator	Global	Asia	Pakistan	MENA	Europe	Latin America	North America	SSA
<b>Internet users</b> (% of households)	57.7	<b>59.7</b>	<b>22.1</b>	85.7	84.3	44.2	87.5	21.5
<b>Mobile subscribers</b> (per 100 inhabitants; %)	106.7	<b>110.6</b>	<b>72.6</b>	117.9	118.2	107.0	106.5	85.2
<b>Average mobile download speed</b> (Kbps)	29,725	<b>30,976</b>	<b>15,000</b>	42,209	41,704	21,023	53,430	13,996
<b>Average mobile upload speed</b> (Kbps)	12,310	<b>12,948</b>	<b>11,550</b>	15,945	13,980	11,174	13,270	8,925
<b>Average mobile latency</b> (ms)	42.1	<b>40.0</b>	<b>43.0</b>	35.7	33.2	49.3	41.5	52.1
<b>Network coverage</b> (min. 2G) (% of population)	96.3	<b>97.6</b>	<b>88.7</b>	99.6	99.4	94.6	99.7	91.0
<b>Network coverage</b> (min. 3G) (% of population)	89.5	<b>91.8</b>	<b>74.0</b>	98.9	98.2	89.8	99.7	72.9
<b>Network coverage</b> (min. 4G) (% of population)	75.1	<b>81.2</b>	<b>68.6</b>	90.2	96.6	66.0	99.4	43.1
<b>Gender gap ratio in Internet access</b> (male – female / male)	12.9	<b>13.8</b>	<b>70.6</b>	7.2	4.6	9.7	1.1	26.1



# Country Briefing: Pakistan



## Index Score and Ranking

Availability		Affordability		Relevance		Readiness	
Score	Rank	Score	Rank	Score	Rank	Score	Rank
42.3	86	63.9	57	64.0	71	61.9	64
Usage		Price		Local Content		Literacy	
12.4	100	75.7	78	80.0	=53	31.5	92
Quality		Competitive Environment		Relevant Content		Trust & Safety	
30.4	71	40.4	52	48.0	76	72.2	13
Infrastructure						Policy	
47.7	79					82.1	37
Electricity							
78.7	77						

## Largest YoY changes

Indicator	% change
+ Average fixed broadband upload speed	+53.8%
+ Average fixed broadband download speed	+50.1%

## Strengths

Sub-category	Global rank/100	Asia rank/26
(4.2) Trust & Safety	13	7
(4.3) Policy	37	12
(2.2) Competitive Environment	52	15

## Areas for improvement

Sub-category	Global rank/100	Asia rank/26
(1.1) Usage	100	26
(4.1) Literacy	92	26
(1.3) Infrastructure	79	24

## Gender gap

Indicator	Value
Gender gap ratio	70.6
+ % point change in gender gap ratio	-2.1



As the pandemic expands and more people practice physically distancing themselves from one another, this has also meant that many more people are using our apps.

**In many of the countries hit hardest by the virus, total messaging has increased more than 50% over the last month. Similarly, in places hit hardest by the virus, voice and video calling have more than doubled on Messenger and WhatsApp.**

During this emergency, we're doing everything we can to keep our apps fast, stable, and reliable. We're monitoring usage patterns carefully, making our systems more efficient, and adding capacity as required.

Read more: <https://about.fb.com/news/2020/03/keeping-our-apps-stable-during-covid-19/>

Group Call Time (minutes) in Italy



**Keeping our services  
stable and reliable**





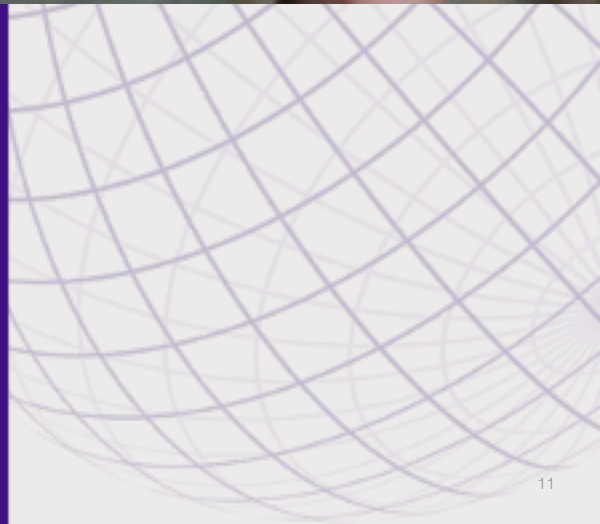
Help people discover the relevance and benefits of connectivity with free access to basic online services

**Free Basics** offers access to basic online services without data charges

**Facebook Flex** helps people stay connected and have access to the internet when they run out of data

**Discover** helps people stay connected more consistently by enabling them to browse the internet using free daily data

Read more: <https://connectivity.fb.com/discover/>





The lack of fiber remains a key bottleneck in many countries.

**We invest in infrastructure to drive down the costs of internet bandwidth. We expect our investments to reduce the costs of delivering data and improve network reliability and speeds, and encouraging infrastructure sharing.**

In Indonesia, our partner Alita will deploy 3,000 km of metro fiber to connect more than 1,000 cell sites in Bali, Java, Kalimantan and Sulawesi

Read more: <https://connectivity.fb.com/network-investments/>



**OPEN TRANSPORT  
NETWORKS**



Dense cities with complicated infrastructure make it very difficult to run fiber to every street.

**Terragraph is a gigabit wireless technology using the 60GHz band designed to meet the growing demand for reliable, high-speed internet access in urban and suburban environments.**

The technology provides a fast, affordable and easy to deploy alternative to fiber optic cables, and can support use cases such as fixed wireless access, public wifi and provide the underlying connectivity for Smart City services.

Read more: <https://connectivity.fb.com/terragraph/>





It is difficult for MNOs to meet increased demand for internet access and data-intensive content, particularly in rural areas

**Express WiFi is a platform that enables service providers and mobile network operators to build, operate, grow and monetize their Wi-Fi business in a sustainable and scalable way**

Read more: <https://connectivity.fb.com/wi-fi/>





# Keeping People Safe and Informed About COVID-19

1. Making sure people have accurate information
2. Limiting misinformation and harmful content
3. Supporting local and global health authorities
4. Supporting local businesses and communities

Thank you!

