

### DIGITAL DIVIDE IN ASIA AND THE PACIFIC

#### ICT and Development Section ICT and Disaster Risk Reduction Division

IMPROVING REGIONAL BROADBAND CONNECTIVITY THROUGH THE ASIA-PACIFIC INFORMATION SUPERHIGHWAY



### Outline:

- 1. Broadband connectivity for sustainable development;
- 2. Digital divide (global/regional).



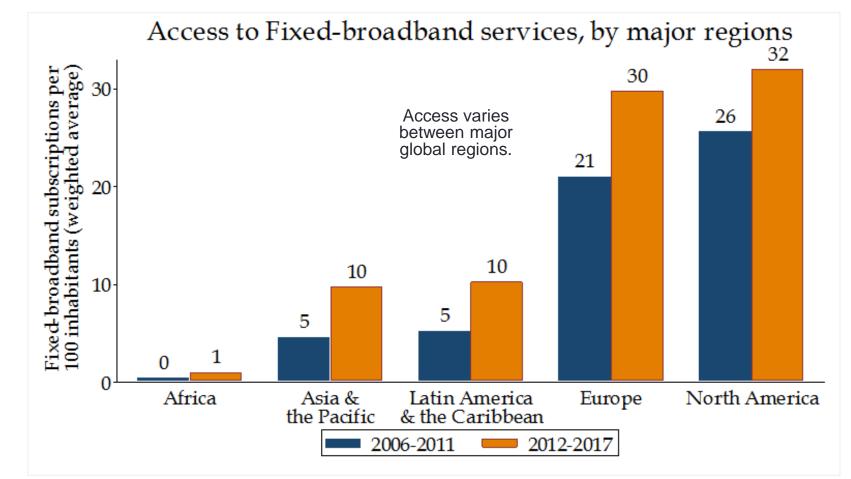
# Broadband connectivity for sustainable development:

Broadband connectivity continues to be a critical link between users and leveraging the opportunities of the information communication technologies. Broadband connectivity is important for:

- a) Industry sectors productivity (manufacturing, ecommerce, banking, transportation etc);
- b) E-government services (public services); among others...



### Global trends:



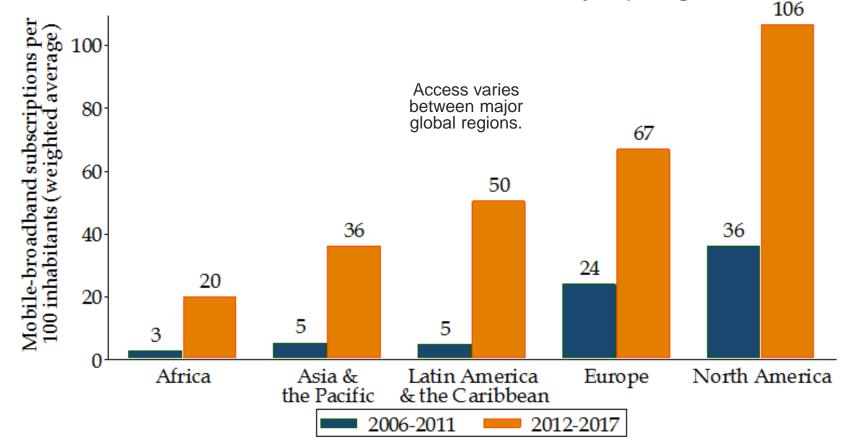
Source: Produced by ESCAP based on data from ITU, World Telecommunication/ICT Indicators database 2018 (22nd Edition/June 2017), 17 July 2018. Available from: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

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## Global trends:

Access to Mobile-broadband services, by major regions

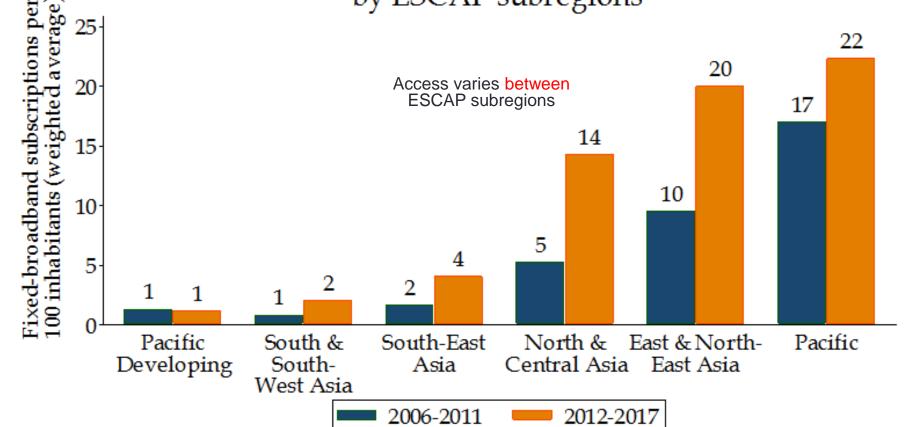


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#### Access to Fixed-broadband services, by ESCAP subregions

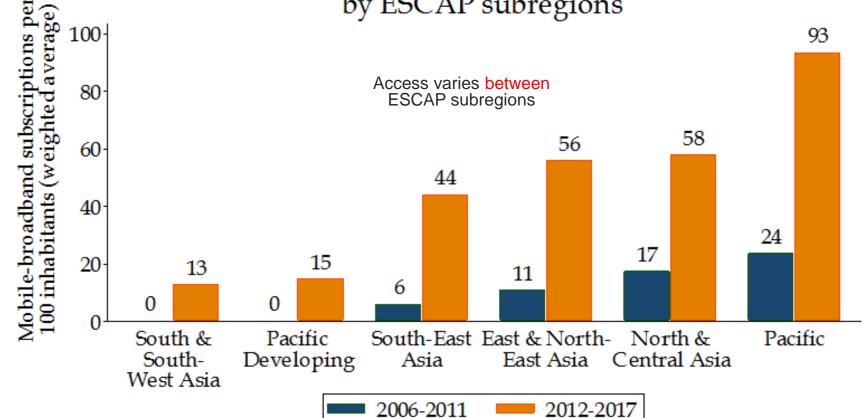


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Access to Mobile-broadband services, by ESCAP subregions

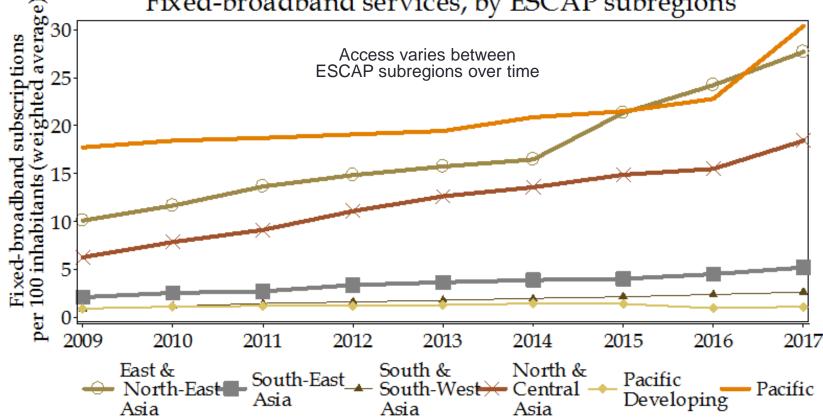


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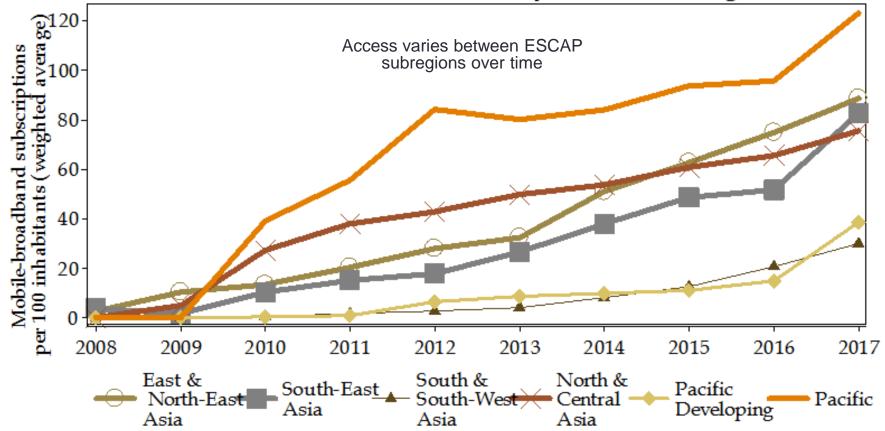


Source: Produced by ESCAP based on data from ITU, World Telecommunication/ICT Indicators database 2018 (22nd Edition/June 2017), 17 July 2018. Available from: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

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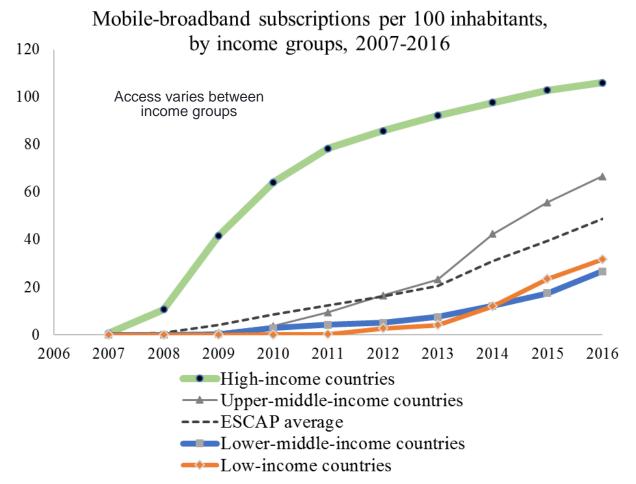
#### Mobile-broadband services, by ESCAP subregions



Source: Produced by ESCAP based on data from ITU, World Telecommunication/ICT Indicators database 2018 (22nd Edition/June 2017), 17 July 2018. Available from: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

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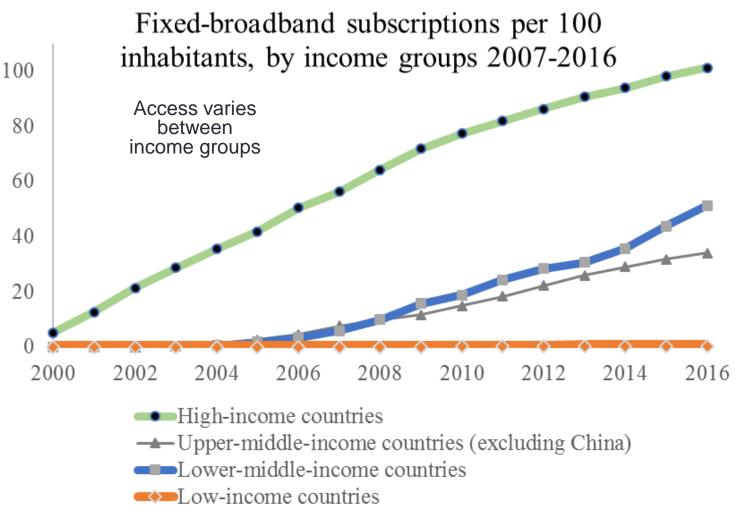




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Digital divide could be examined using a combination of factors:

- 1) Access (fixed & mobile-broadband services per 100 inhabitants);
- Speed (download speed for mobile-broadband service (Mbps);
- Network capacity (International Internet bandwidth per Internet user (bit/sec);
- Affordability (Mobile-cellular monthly sub-basket as % of GNI/capita); and
- 5) Coverage (Percentage of the population covered by at least a 3G mobile network).



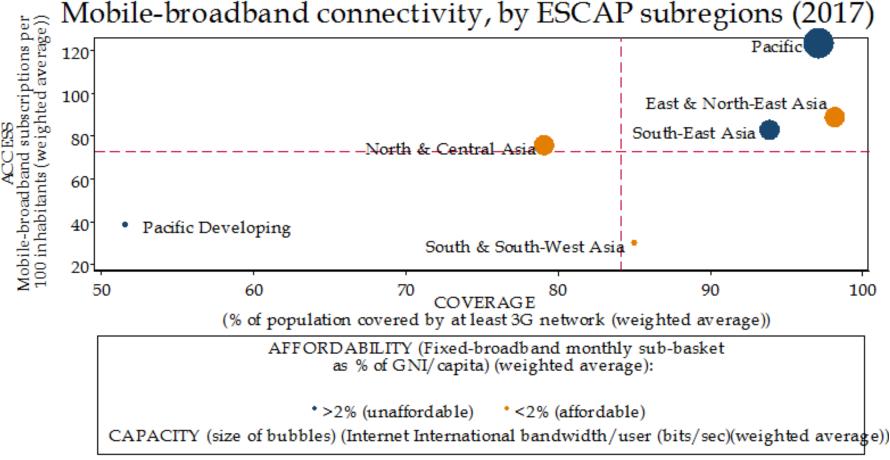
- Measuring ICT access:
- ITU ICT Infrastructure Development Index (IDI): Only global ICT dataset for most countries and years. Variables included access indicators (Int. Internet bandwidth/user etc); ICT use (% of individuals using the Internet etc) & ICT skills (mean years of schooling etc);
- Others (E-Government Index, World Bank's Little Data Book on ICT, the new Facebook/Economist Intelligence Unit '3i' index and the WEF's Global Information Technology index): use mostly sourced from the ITU statistics.



#### Internet speed

Selected ESCAP countries	Download speed for Mobile- broadband (July 2018) Mbps	Mobile- broadband subscriptions per 100 inhabitants	International Internet bandwidth per Internet user (bit/sec)	Percentage of the population covered by at least a 3G mobile network	Mobile- cellular monthly sub- basket as % of GNI/capita
Republic of Korea	42	113	53,308	100	1
New Zealand	43	102	94,581	98	0
Australia	51	135	88,660	99	0
Singapore	54	148	958,635	100	0
Simple average	45	116	78,850	99	1
Uzbekistan	9	59	5,437	75	3
Nepal	7	52	3,855	54	4
Afghanistan	6	16	11,302	24	9
Tajikistan	5	18	2,442	90	4
Simple average	7	37	5759	61	5
Source: Speed data from Ookla speedtest ( <u>http://www.speedtest.net/</u> ), other broadband variables sourced from ITU, World Telecommunication/ICT Indicators database 2018 (22nd Edition/June 2017), 17 July 2018. Available from: <u>https://www.itu.int/en/ITU-</u> D/Statistics/Pages/publications/wtid.aspy					
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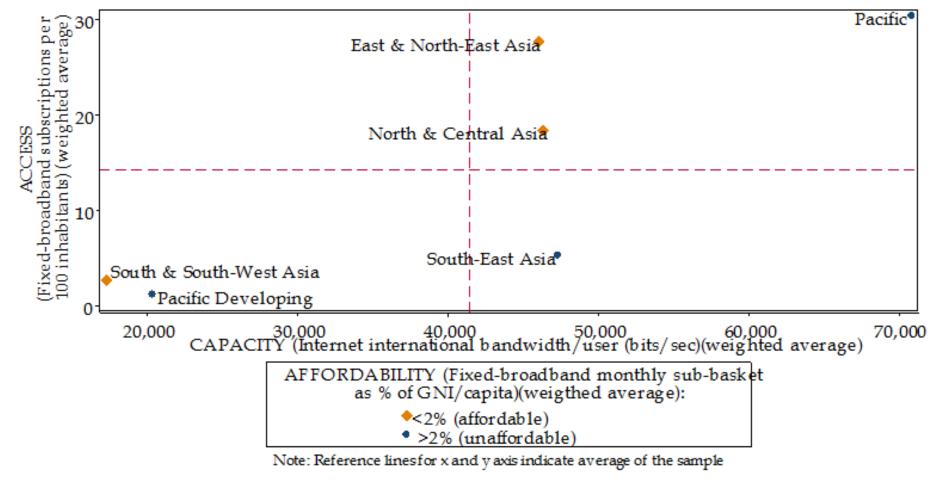


Note: Reference lines for x and y axis indicate weighted average of the sample

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### Fixed-broadband connectivity, by ESCAP subregions (2017)

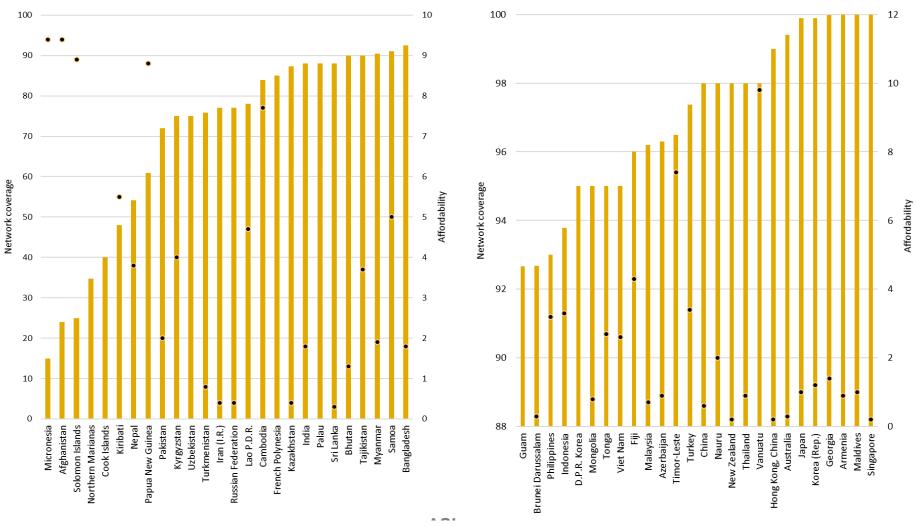


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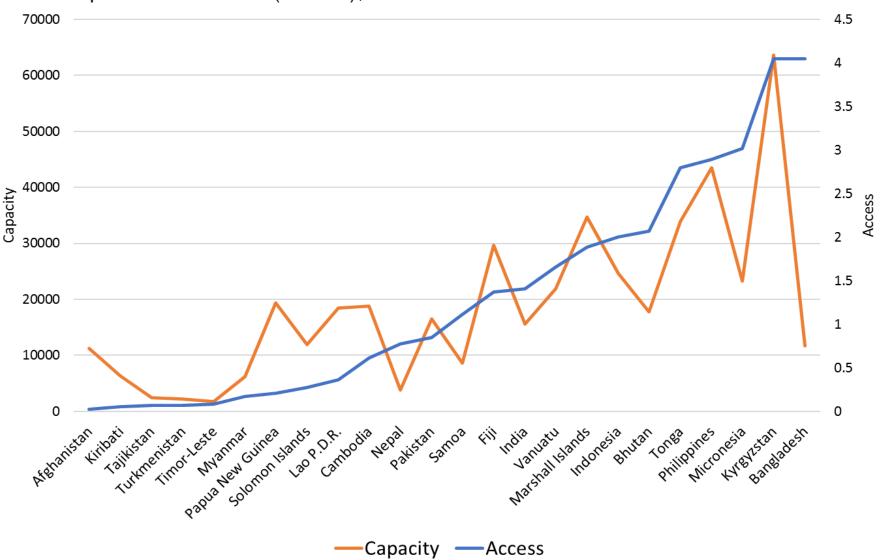


NETWORK COVERAGE (% of population covered by at least a 3G mobile network) & AFFORDABILITY (Mobile-cellular monthly sub-basket as % of GNI/capita), 2017

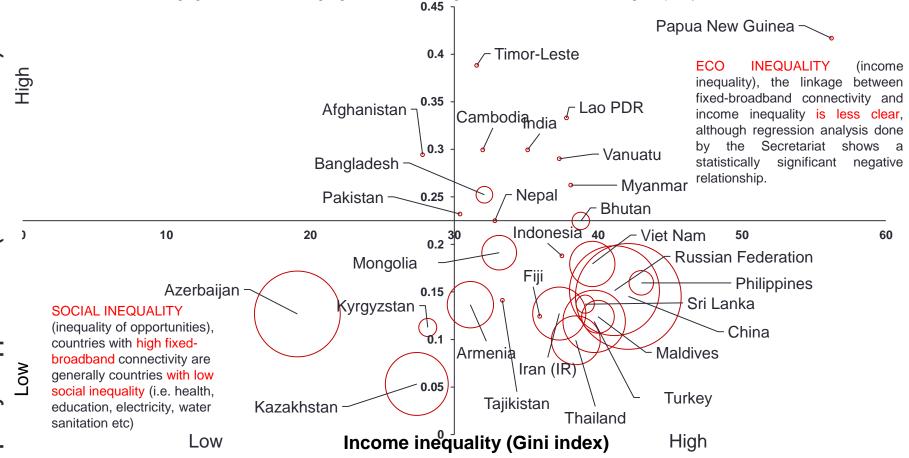


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ACCESS Fixed-broadband subs./100 inhabitant) & CAPACITY(International Internet bandwidth per Internet user (bit/sec), 2016



### **ESCAP** trends: Inequality and Fixed-broadband connectivity in selected Asia-Pacific countries Bridging the current widening digital divide in the region will contribute to narrowing inequality as well.



Source: ESCAP (2018), "Inequality in Asia and the Pacific in the era of the 2030 Agenda for Sustainable Development", ESCAP

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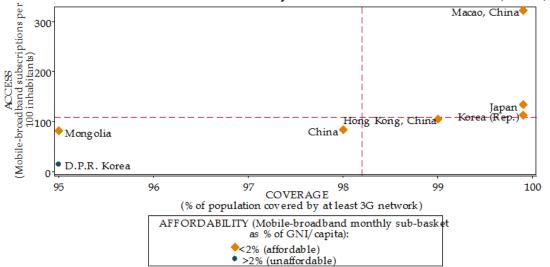
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# Thank you

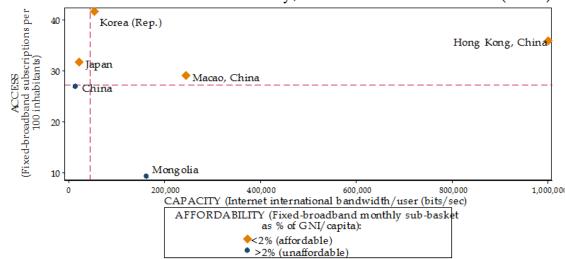
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Mobile-broadband connectivity, East & North-East Asia (2017)



#### ESCAP ENEA

Note: Reference lines for x and y axis indicate weighted average of the sample; Based on 2017 or earliest data available



#### Fixed-broadband connectivity, East & North-East Asia (2017)

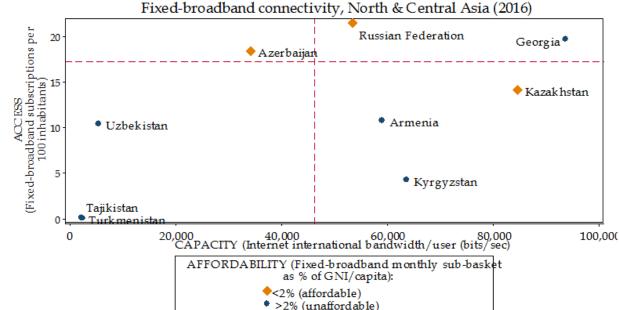
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Note: Reference lines for x and y axis indicate weighted averages of the sample; Based on 2017 or earliest data available; Hong Kong, China's international Internet bandwidth has been scaled back for the graph, actual value is 5,936,926 per user

Mobile-broadband connectivity, North and Central Asia (2017) NICOLIC ad 80 suojid using purper subjective Series production Ser Russian Federation Kazakhstan🔶 Georgia Armenia Azerb aijan 🔶 Turkmenistan Tajik istan \* 75 80 95 85 90 100 COVERAGE (% of population covered by at least 3G network) AFFORDABILITY (Mobile-broadband monthly sub-basket as % of GNI/capita): 2% (affordable) >2% (unaffordable)

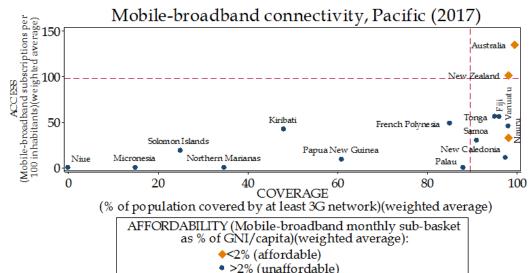
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ESCAP NCA

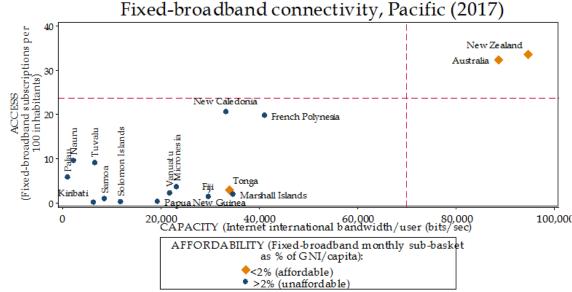


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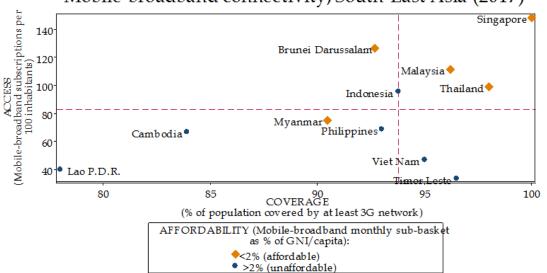


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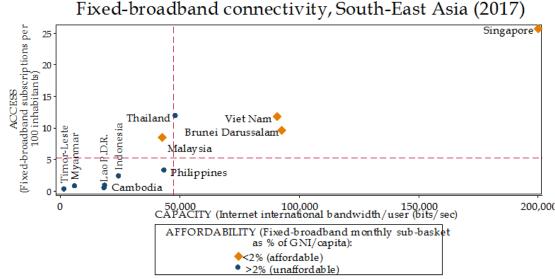
ESCAP Pacific



Mobile-broadband connectivity, South-East Asia (2017)

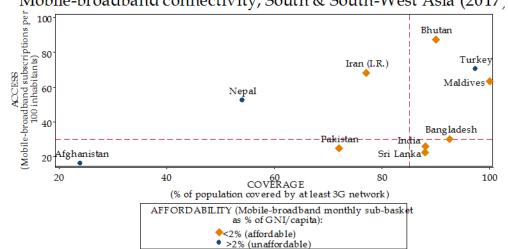
ESCAP SEA

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Note: Reference lines for x and y axis indicate weighted average of the sample; Based on 2017 or earliest data available; Singapore's international Internet bandwidth has been scaled back for the graph, actual value is 958,635 per user

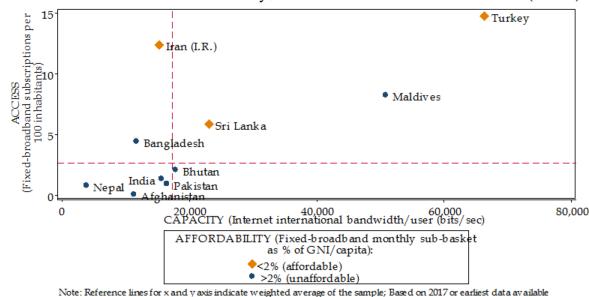


Note: Reference lines for x and y axis indicate weighted average of the sample; Based on 2017 or earliest data available

Mobile-broadband connectivity, South & South-West Asia (2017)

ESCAP SSWA

Fixed-broadband connectivity, South and South-West Asia (2017)



Source: Produced by ESCAP based on data from ITU, World Telecommunication/ICT Indicators database 2018 (22nd Edition/June 2017), 17 July 2018. Available from: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx