

# Fourth Session Committee on Information and Communications Technology, Science, Technology and Innovation

AGENDA ITEM 5
Assessment of information and communications technology capacity building needs in Asia and the Pacific



### **About the ICT Capacity Building Needs Assessment**

- The digital landscape at the national, regional and global levels has changed drastically since the Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT) was established in 2006.
- In 2020, an **external evaluation** of APCICT recommended that the Centre **reposition itself to support member States**, to effectively cope with fast evolving ICT landscape and fully leverage ICT technology for sustainable development.



### **About the ICT Capacity Building Needs Assessment**

The evaluation recommended to conduct an assessment of the ICT capacity-building needs in Asia and the Pacific to help the Centre to select thematic priority areas, create new flagship programmes, and identify opportunities for greater collaboration with various stakeholders.



### About the ICT Capacity Building Needs Assessment

- Conducted for 6 months from September 2021
- Focused on low and lower middle income countries
- 3 data collection approaches: 1) desk research, 2) survey and 3) key informant interviews
- Administered to representatives from government ministries/agencies of the target countries

# High level overview





### We focused on 29 countries

- 29 countries (focal countries) were selected from the list provided by APCICT
  - ESCAP special needs countries (small islands and landlock countries)
  - Low and lower middle income countries (25)
  - Upper middle income countries (4)
  - List of countries;

Low and	Low and lower middle income		Upper middle income			
Armeni	ia	Kiribati		Pakistan		Timor-Leste
Azerbaij	an	Kyrgyzstan		Papua New Guinea		Tonga
Banglad	esh	Lao People's Democratic Republic		Philippines		Uzbekistan
Bhutar	า	Maldives		Samoa		Vanuatu
Camboo	dia	Microneasia (Federated States of)		Solomon Islands		Viet Nam
Fiji		Mongolia		Sri Lanka		
India		Myanmar		Tajikisto	an	
Indones	sia	Nepal		Thailar	nd	

 Benchmark countries (high and upper middle-income) provided by APCICT. Also selected based on the 2020 UN E-Government Survey (Rep of Korea, Singapore, Australia, Japan, China, New Zealand)



### Carried out 3 workstreams to arrive at recommendations

- Desk review: of English language policy documents in focal countries (total of 144 reviewed)
  - Presence of national digital policies, strategies, roadmaps, frameworks, ministry circulations and ICT related laws (overall and by thematic area)
  - Identification of capacity building needs of government officials within policy documents
  - Capacity building frameworks of other int'l orgs + APCICT's current offerings
- Survey: of officials from APCICT/ESCAP member States (names provided by APCICT)
  - Existing ICT policies + related capacity building needs and priorities (by thematic area)
  - Assessment of existing capacity
  - Recent capacity building activities related to ICTs and partners delivering them
- Key informant interviews: of APCICT partners, member country focal point/contacts and LIRNEasia identified experts
  - ICT related strategies/priorities of the country/organisations
  - Capacity building needs and skilling
  - ICT related activities undertaken by the country/organisations
  - Emerging areas/priorities in ICT policy making/capacity building
  - General comments on government capacity building how decisions are made, what works

# Developed a framework that kept getting refined through out the engagement. Arriving at this:



		Focus area								
				Sectoral and thematic applications SA						
		Digital government DG	Digital infrastructure DI	Agriculture	Education	Healthcare	Climate change	Etc.	Emerging Technologies ET	Empowerment of target groups  EG
m of capacity building	Developing Policy level capacity		s not specific to a foc	us area – e	.g. Funding	digital initi	atives, Instit	utional arro	angements, intergover	nmental
		coordination								
	Developing Technical level capacity									
		Technical skills that aren't limited to a focus area – e.g. Project Management, Monitoring and Evaluation, Procurement, and other non-sector specific technical skills								

# We have used 4 types of analysis to identify priority topics for capacity building

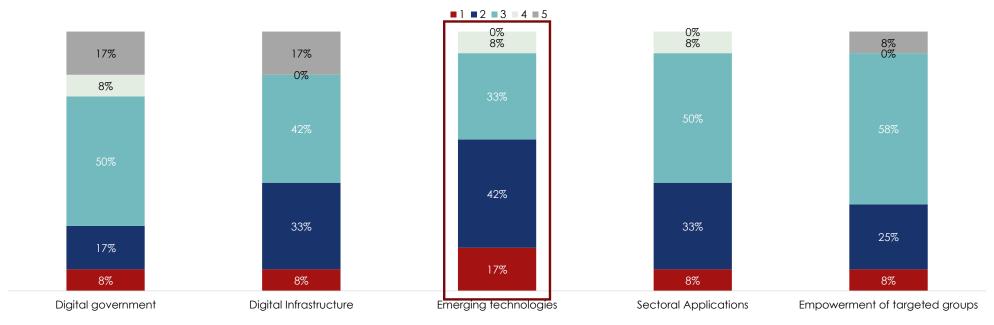


- Method 1: (Expressed <u>future</u> demand for capacity building, as per survey respondents)
  - Q. Within the focus area of <all sub categories>, what are your skilling priorities for the next 5 years? Select all applicable.
- Method 2: (Expressed <u>future</u> high priority policy areas, as per survey responses)
  - Q. does your country have one or more national documents (e.g. laws, policies, strategies, roadmaps or frameworks) or do you anticipate to have in the next 2-5 years that provides a path for development of following areas<all sub categories>? <Yes, No, Coming in the future>.
- Method 3: (Actual <u>existing</u> policy priority areas, as per Desk review)
  - % of countries which mentioned sub categories in 144 documents reviewed in 29 member States
- Method 4: (Actual and expressed <u>existing</u> capacity building needs, as per survey responses and Desk review)
  - Q.'... the document you mentioned or any other national/local government level human resource document address ICT capacity building? <Yes, No> (% of yes responses) and % of countries which mentioned capacity building needs in 144 documents reviewed.



## The lowest policy capacity is on Emerging Technology

#### Capacity level of middle and high level government policy makers



Q: In your opinion, how would you assess the capacity of middle and high level policy makers in your government, in the following key focus areas? You might think of the values as follows:

- 1= Very low awareness capacity
- 2= Low capacity. Capacity that exists is only among a handful of people or institutions
- 3= Some capacity exists. Capacity is reasonably spread across government institutions that need it. But updating policies or designing new policies requires external/new technical assistance
- 4= Sufficient capacity spread across relative high percentage of policy makers that need it. Updating or designing new policies require minor (outside) technical assistance, most policies can be designed and implemented by the institutions
- 5= Very High levels of capacity across the relevant institutions. Sufficient to meet the challenges of digital economy



# Priority topics based on expressed demand and implied demand, both for the present and the future

Category	Topic / Area				
I. Digital Government	National e-government policies related to the digital delivery of government services				
II. Digital Infrastructure	<ul> <li>Incentivizing and enabling infrastructure investment and rollout (e.g., 5G, national and international backhaul, spectrum)</li> </ul>				
	Public key infrastructure and other trust/security enabling infrastructure				
III. Emerging Technologies	Digital transactions and payments Cloud computing, IoT, open data policies				
IV. Empowerment of targeted groups	ICTs to empower women empowerment, increase women's labor force participation, women entrepreneurs				



# Priority topics based on expressed demand and implied demand, both for the present and the future

Category	Topic / Area
	ICTs and healthcare
	ICTs for climate change, green ICT, disaster management
V. Sectoral Applications	ICTs for e-trade and supply chains, logistic, maritime transport
	ICTs and agriculture, fishery, livestock
	ICTs and education

The recommendations of priority topics need to be reviewed through the lens of ESCAP's overall mandate, priorities and programme of work.

# Many opportunities for improving relevance and impact of APCICT



- APCICT seen as valuable partner and valuable resource by most countries
  - And best placed to provide regional best practice and data to countries
- COVID-19 related recovery
  - 75% of survey respondents said COVID-19 increased demand for ICT-related capacity
  - Need increased capacity in education, health, high quality internet (5G) & cyber security

#### Training partner for other funders

- Many bi-/multi-lateral funding for projects with significant ICT focus.
- They have project-specific capacity building requirement, but not national/systematic
- APCICT as capacity building partner to these funders (e.g. JICA project in Kyrgyzstan)
- Increase Academy content (regional approach but also country specific needs)
  - e.g. Bhutan: include FinTech, Agriculture. Also need for senior level content
- Feedback from academy partners to fine-tune content
  - Partners train large groups; obtain feedback; this is great ground-level input on relevance of content



# Opportunity for increased relevance of APCICT by systematically taking into account country-level priorities

- "Who should be trained and in which areas?"
  - Often, answer depends on who you ask and their own organization's needs
  - Or the level of digital connectivity in the region (e.g. Pacific Islands at different stage of digital connectivity)
- Few countries have assessment of ICT capacity building needs of civil service
  - Some countries even asked for such assessments.
- Opportunity for APCICT to introduce a systematic assessment
  - Work WITH the countries to assess capacity

#### Goal:

- a) Long term, systematic capacity building that is responsive to a country's needs
- b) Balance between regional training vs country-specific



### Issues for Consideration by the Committee

### Taking into account the <u>survey results</u> and <u>ESCAP's mandate/work</u>:

- Provide further guidance and identify existing and emerging capacitybuilding needs of policymakers and civil servants in the region with respect to leveraging digital technologies for sustainable development.
- Highlight good practices and lessons learned with regard to the effective application of digital technologies for sustainable development across the region that can be reflected in the Centre's work.
- Provide guidance on impactful and demand-driven ICT capacity-building programmes that should be developed by the Centre in the future.

