



Promoting Digital Inclusion of Vulnerable Groups for DRR and Building Resilience

Presentation IV in Session 3:
Inclusion of Vulnerable Groups in DRR Policy Design and Implementation to Build Resilience

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Multiply **Vulnerable Groups**

- The poor
- Persons with disabilities
- Older persons
- Migrants & refugees
- Children & youth
- Women
- ...

Physical factors

- Shelter, age etc.

Social factors

- discrimination, exclusion, status etc.

Economic factors

- poverty, rural setting etc.

Environmental factors

- climate change, poor service etc.



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Women, ICT and emergency telecommunications: opportunities and constraints

Access to information & communications technology (ICT) is essential for **disaster resilience**¹ but a crippling barrier for many is the **digital divide**: the gap in access to, and usage of, ICT by various populations².

The **digital divide is differentiated**. Estimates of the digital *gender gap*, for example are:

- For mobile: 45% in Pakistan³; 60% in Rwanda⁴
- For Internet: 12% overall in developing countries⁵, having increased by 7% over the period 2013 – 2019

The *fundamental* divide derives from the lack of access to **digital opportunities to live the life one values**⁶ so to narrow the gap we go beyond access and use, to **strategic aspects of self-actualization and agency**.



In partnership with:



<https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Documents/events/2020/Women-ICT-ET/Full-report.pdf>



¹ETC (2020) | ²OECD (2001) | ³GSMA (2018)

⁴Research ICT Africa (2019) | ⁵ITU (2019) | ⁶UNESCAP (2019)

How can digital tech empower vulnerable groups for disaster resilience?

1. Access information
2. Access cash
3. Engage & participate
4. Learn
5. Perceive vulnerable groups differently



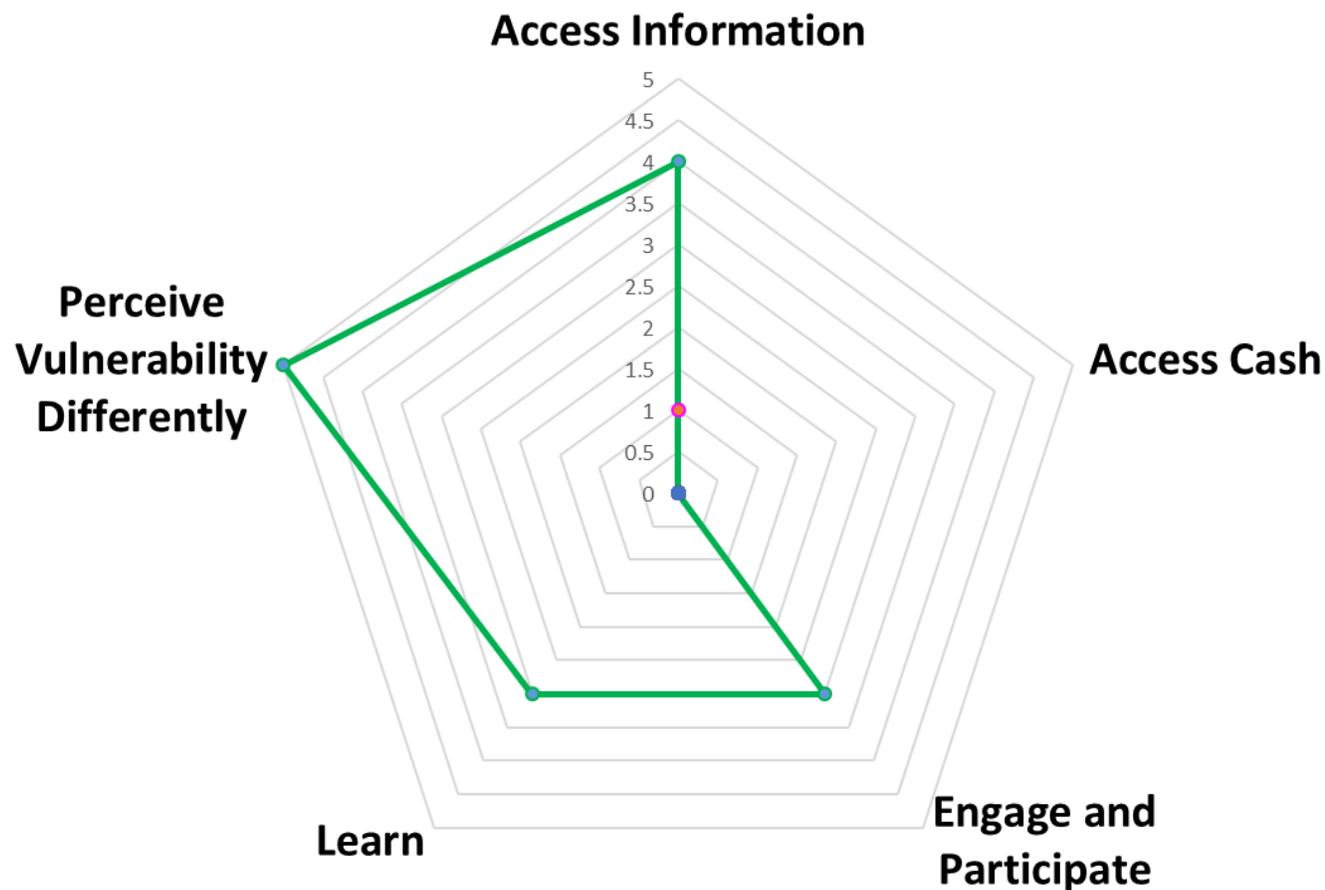
Which digital access technologies are suitable for the vulnerable?

1. Familiar
2. Affordable
3. Accessible (to all)
4. Acceptable

Suitability of digital access technologies for disaster resilience for the vulnerable is context-specific:

1. Free to Air (FTA) radio & TV
2. Cellular voice with SMS
3. Mobile Internet
4. Distance learning

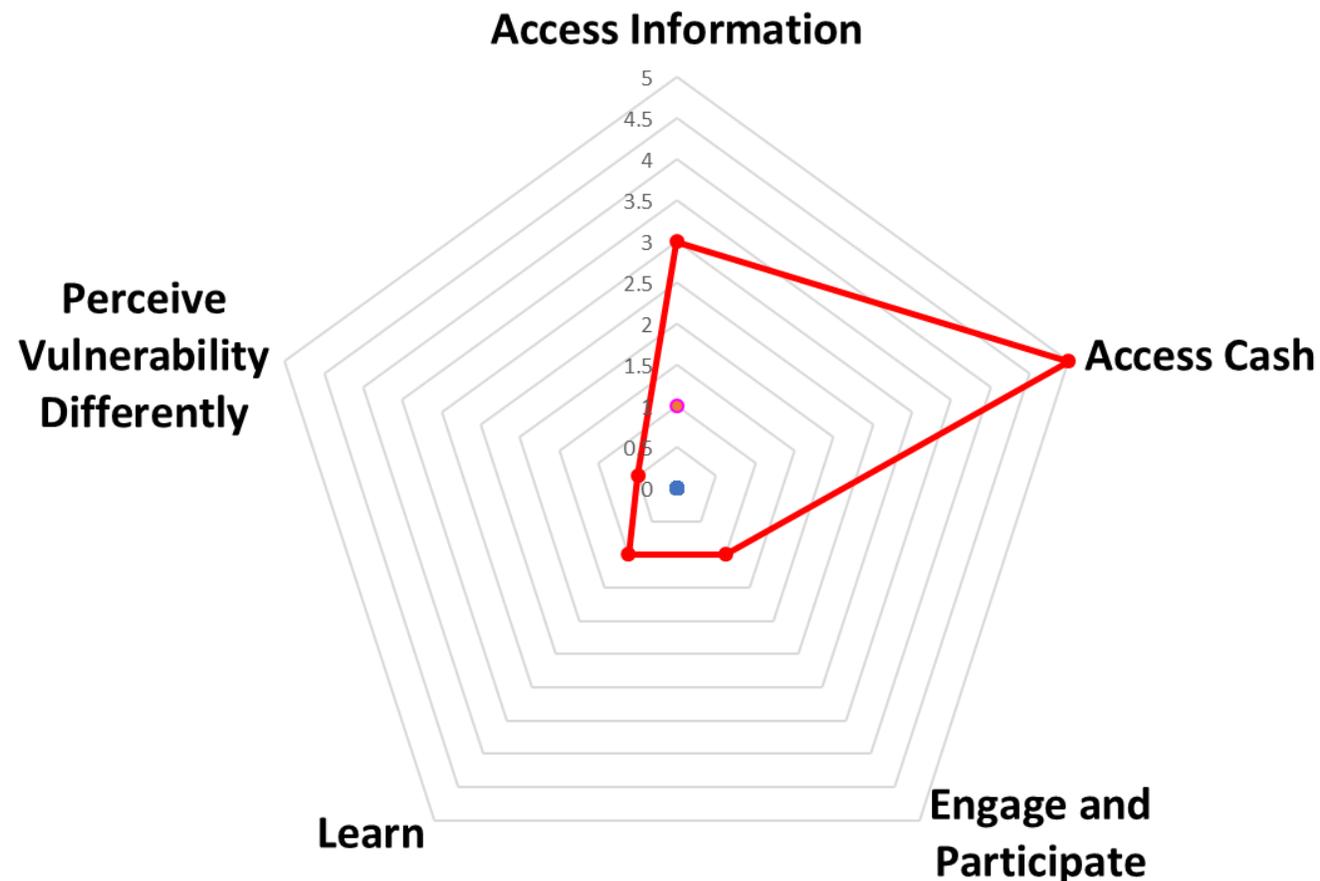
— FTA Broadcast (Radio & TV) — Cellular Voice (with SMS) — Mobile Internet — Distance Learning Platforms



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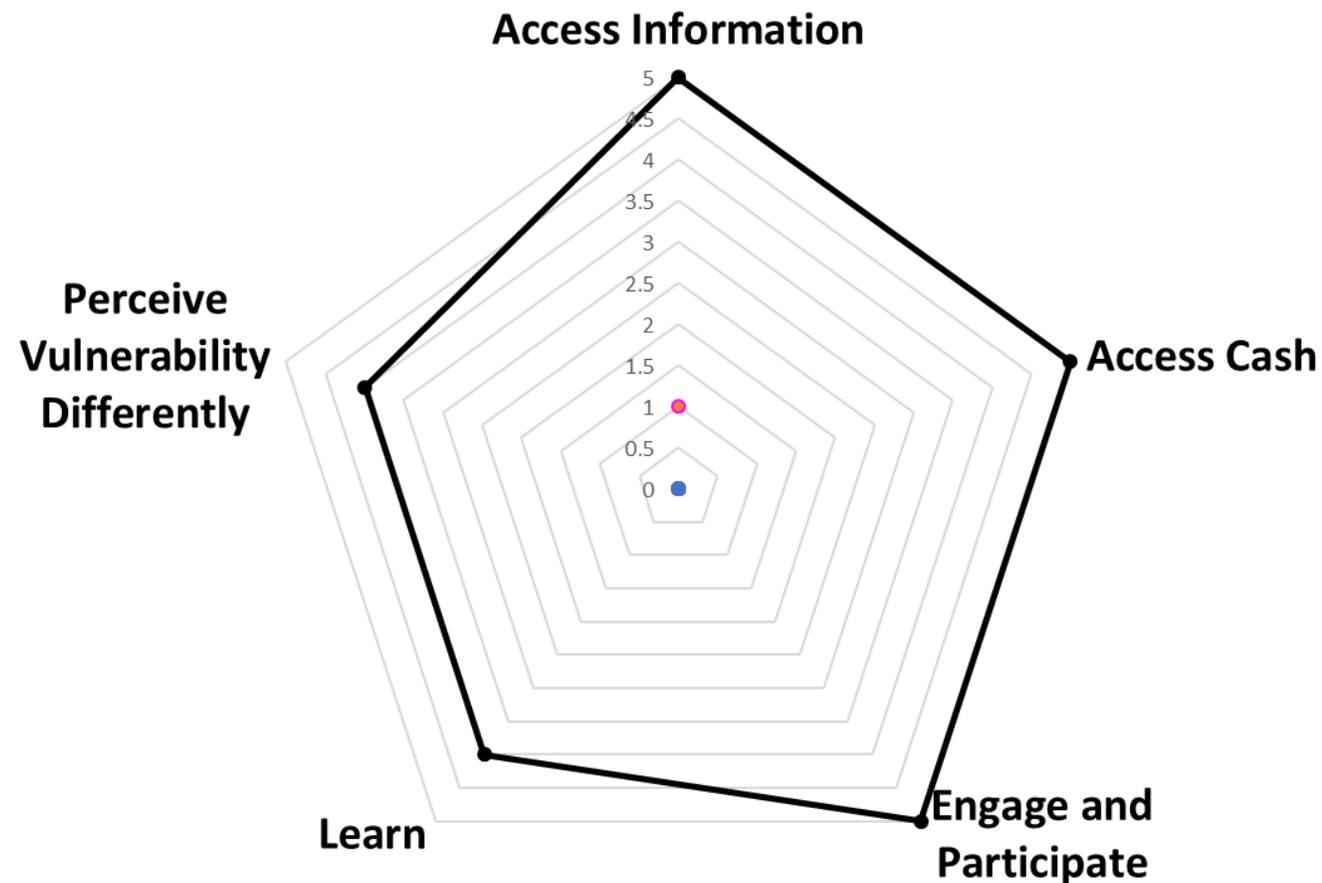
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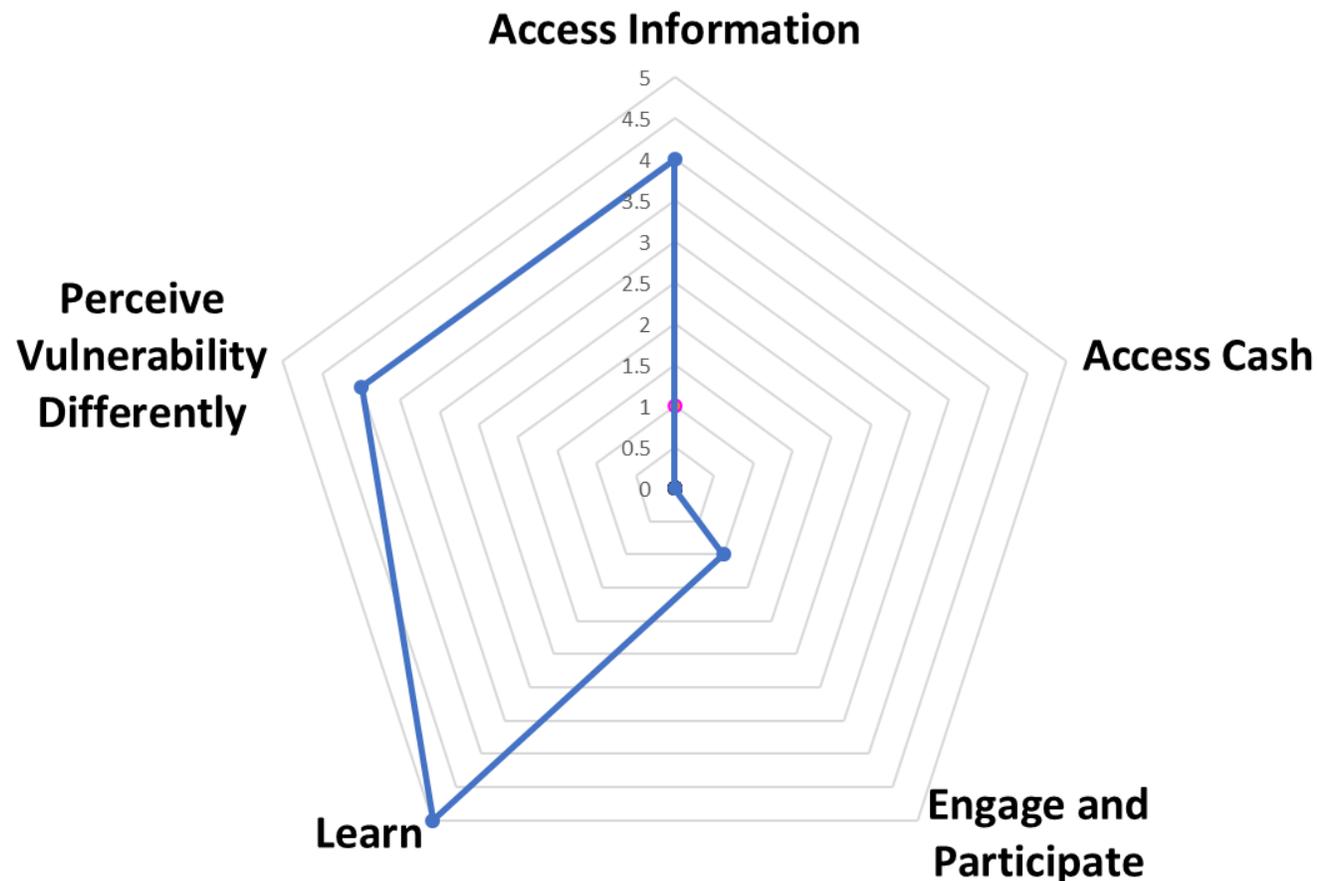
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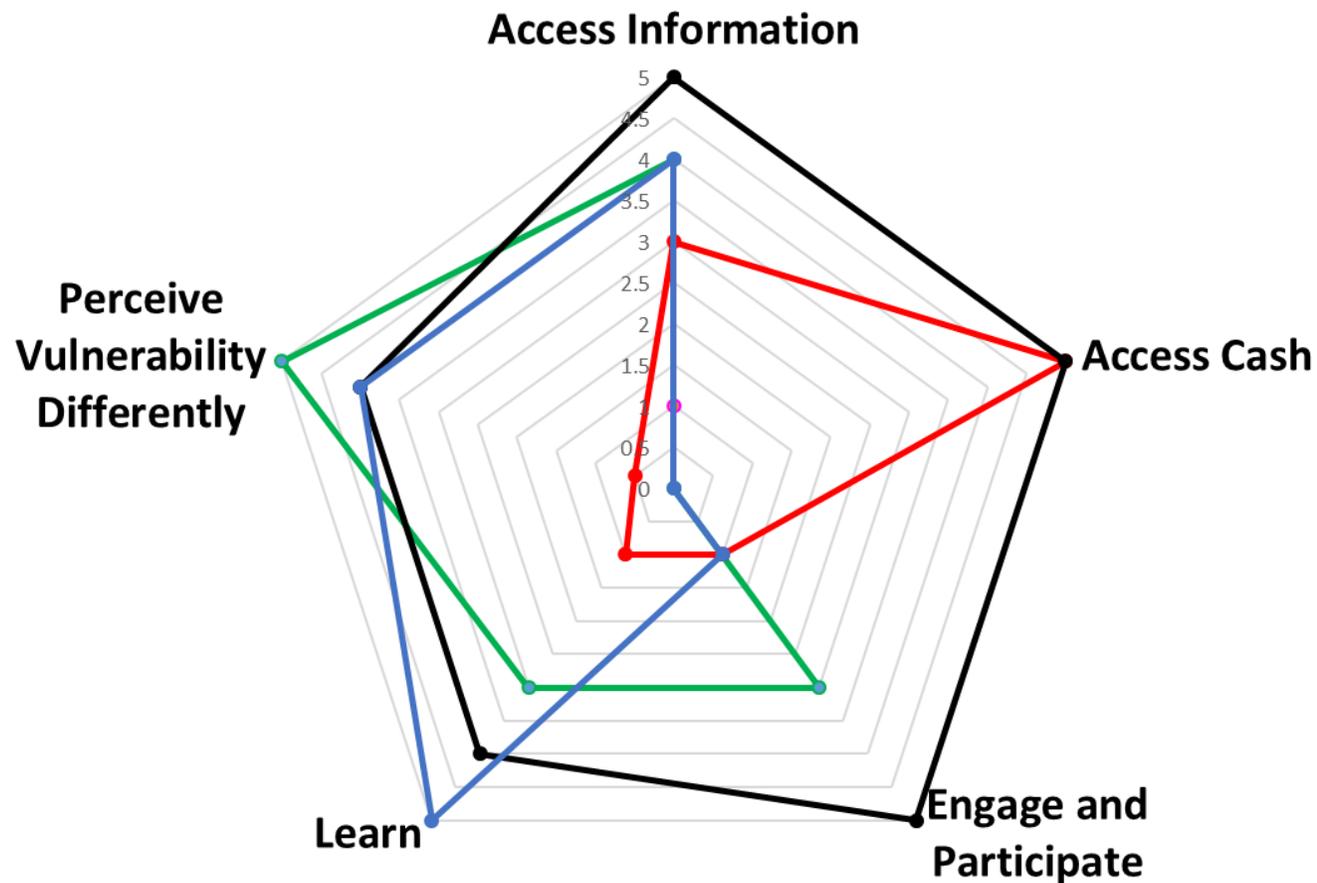
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ICT-enabled resilience for the vulnerable follows a personal growth path



- +
1. Interactive websites
 2. Mobile applications
 3. Video conferencing
 4. Social media
 5. Distance learning
-
- Basic data life cycle
 - Basic ICT product life cycle
 - Full DRM cycle
 - Advocacy
 - Mentoring

- +
1. Mobile radio
 2. Amateur radio
 3. New & emerging technologies: drones, AI, big data, machine learning, block chain

- Advanced data life cycle
- Advanced ICT product life cycle
- Teaching & mentoring
- Advocacy
- Research
- Policy & regulation

3 Leadership

- Undertake advanced learning
- Profoundly modify perceptions of gender



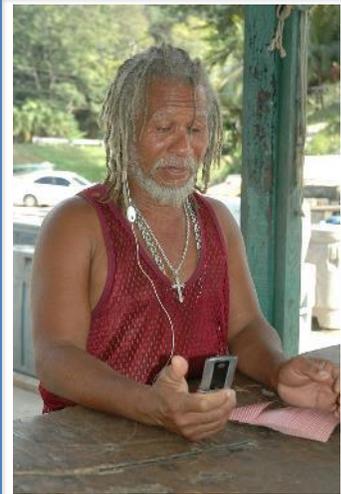
2 Contribution

1. Receive rich information
2. Engage
3. Undertake basic to intermediate learning
4. Modify perceptions of gender

1. FTA broadcast TV & radio, with and without call-in
2. Basic voice with SMS
3. Humanitarian hotlines
4. Interactive Voice Response
5. Mobile money
6. Biometric-enabled cash transfer

1 Protection

1. Receive basic information
2. Get and spend cash

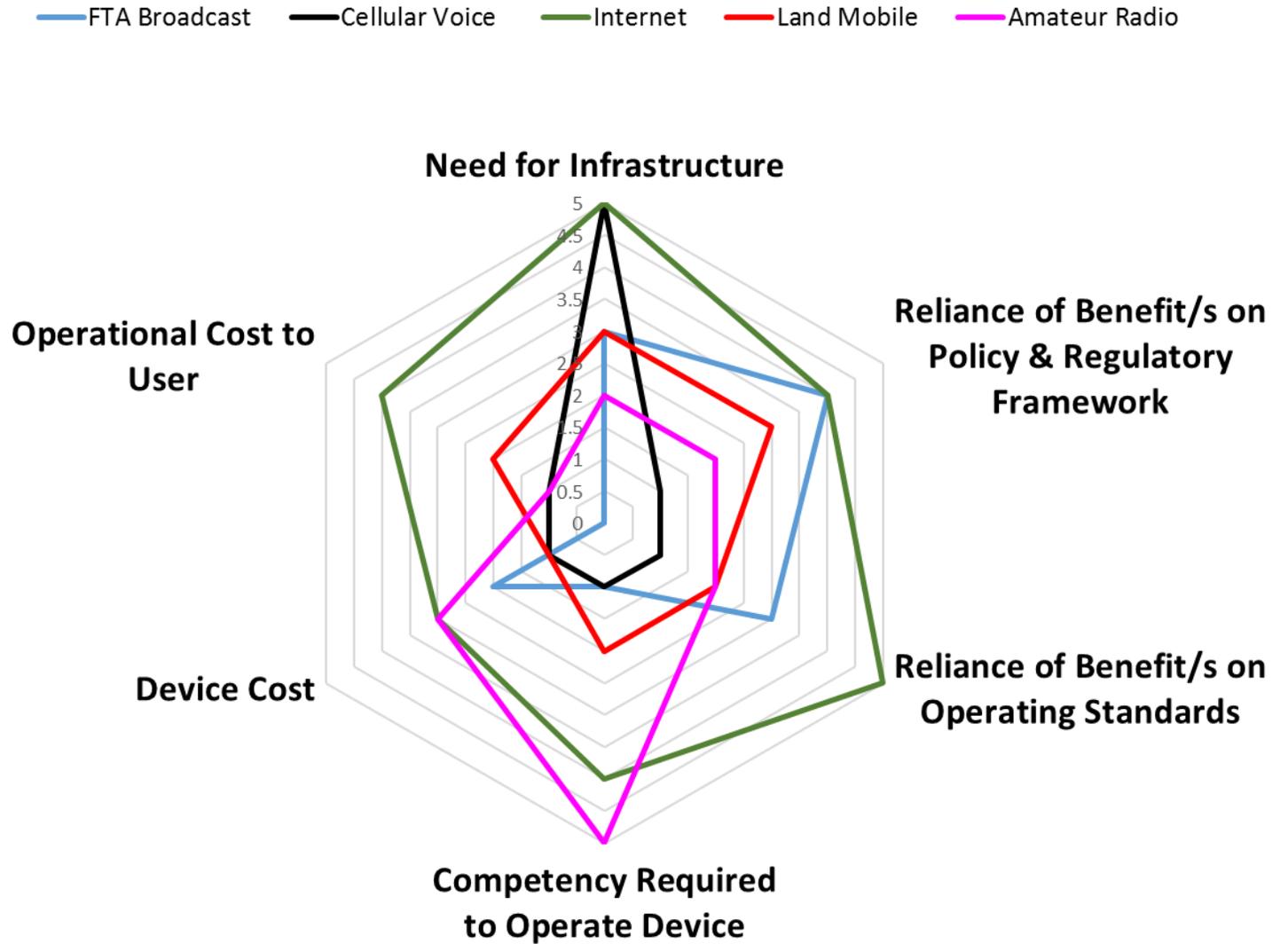


Levers to promote digital inclusion for the vulnerable address:

- Device cost
- Operational cost
- Competence
- Infrastructure

and entail, inter alia:

- Policy & Regulation
- Operating standards



Sample
policy-driven strategies to promote digital inclusion of vulnerable groups for DRR and to build resilience

Governments should ...

- Exert international pressure on **digital platform operators** to protect users' rights
- Ensure that **national emergency telecommunication plans** require:
 - **multimodal messaging** (in text, audio, video & if possible haptics) during **all phases** of DRM cycle
 - emergency messaging on **multiple channels** e.g. FTA TV & radio, SMS & Internet at no-cost
- Require that, and incentivize service providers to:
 - **offer accessible ICT devices**, services and support and accessible financial services through **mobile money** and biometrics
 - *meet universal service obligations* to ensure FTA, cellular & WiFi coverage
 - *introduce ICT market innovations* to enable affordable service for the vulnerable
- Incentivize **community radio** stations
- Establish **community Wi-Fi** hotspots with training and mentorship
- Encourage the vulnerable to **tell their stories** through a variety of ICT channels
- Encourage the inclusion of the vulnerable in the **co-design** of ICTs; & recognize contributions
- Support **community innovation** through maker spaces in schools and community centres
- Promote ICT for DRR **use, study, design and leadership** by all vulnerable groups
- **Integrate** ICTs seamlessly into DRR campaigns, public awareness & capacity building
- **Collaborate!**
Recall Principle 3 of Effective Governance for SDG Implementation: “... *institutions at all levels of government and in all sectors should work together and jointly with non-State actors ...*”

360° strategy to promote Digital Inclusion of Vulnerable Groups for DRR and to build resilience:

- **longitudinally** through DRM cycle
- **instrumentally** with context appropriate technologies
- **laterally** across technology, policy, regulation, advocacy, research, innovation, DRR & ICT ecosystems, projects and communities
- **stratified** across all tiers of the growth path
- **temporally** in, and for, the short, medium and long term
- **methodologically**: systematic, ad hoc; institutionalized, informal
- **sensitively** recognizing multiple vulnerabilities



Thank You

Sources

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