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Understanding Community-Centered Connectivity Initiatives in Asia and the Pacific

A mapping and landscape analysis

Adrian Wan, Senior Policy and Advocacy Manager, Internet Society



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Community Networks Mapping in Asia and the Pacific - Adrian Wan, Senior Policy and Advocacy Manager, Internet Society

APFSD12 - Empowering Communities: Connectivity Initiatives for Sustainable Development in the Asia-Pacific – 24 February 2025

1. The Digital Divide:

- As of late 2024, 2.6 billion people remain offline.
- 5G coverage is limited to 40% of the world, and in low-income countries, only 39% have 4G access.
- The lack of connectivity creates a widening gap, leaving low-income countries behind in digital access.

2. Understanding CCCIs:

- Unlike traditional profit-driven Internet Service Providers (ISPs), CCCIs offer an alternative model that focuses on community empowerment.
- These initiatives help connect underserved rural and remote areas where commercial ISPs find investment unviable.

3. Research and Findings:

- The study titled "*Understanding Community-Centered Connectivity Initiatives in Asia and the Pacific*" was conducted with APC, ISEA, and the Internet Society.
- It identified 1,417 CCCIs in the region, with the highest concentration in South and Southwest Asia.

- 23 countries in the region have no CCCIs, often because they already have extensive 3G/4G/5G coverage.
4. **Types and Models of CCCIs:**
- **Self-Provision Networks:** Community-run networks with small-scale operations.
 - **Social Business Models:** Aimed at economic sustainability while providing connectivity.
 - **Entrepreneurial and Non-Profit Models:** Focus on generating income through services like digital literacy training, local content creation, and printing services.
 - **Public/Municipal Models:** Government-run connectivity programs.
5. **Key Motivations for CCCIs:**
- Affordable and stable Internet access.
 - Digital literacy and technical training.
 - Support for local economic activities (e.g., online business, agriculture).
 - Enhancement of community well-being, including access to education, healthcare, and government services.
6. **Funding and Sustainability Challenges:**
- CCCIs largely rely on external funding from grants and NGOs.
 - There are challenges in financial sustainability, with revenue generation being limited.
 - Regulatory barriers, including complex licensing and lack of dedicated spectrum, hinder their growth.
 - Infrastructure issues like unreliable power supply and lack of skilled personnel further limit their effectiveness.
7. **Benefits of CCCIs:**
- **Social:** Digital inclusion, cultural preservation, and improved government service access.
 - **Economic:** Increased market access, job creation, and business opportunities.
 - **Environmental:** Some CCCIs use technology for disaster response and climate resilience.
8. **Recommendations for Improvement:**
- Governments should streamline regulations and include CCCIs in broadband policies.
 - Financial sustainability should be a priority, with hybrid funding models (grants + revenue generation).
 - Technical training and knowledge-sharing platforms should be enhanced.
 - Infrastructure should be climate-resilient.

- Gender inclusion efforts should be strengthened through women-focused training and entrepreneurship support.

9. Future Outlook:

- CCCIs have evolved from purely community-run models to hybrid models involving businesses, governments, and social enterprises.
- The key challenge remains balancing social impact with financial sustainability while navigating complex regulatory environments.
- Continued innovation in technology and business models is necessary to ensure long-term success.

The presentation concluded with a call to recognize CCCIs as a crucial solution for inclusive connectivity, emphasizing that community empowerment should always remain at their core.