



Local Language Computing and Content *Policy Considerations*

Altaf Mahmud and Mumit Khan

BRAC University
Bangladesh

Questions

- What policies should be in place to encourage local language applications and content?
- How would national or local-level policies help?
- Do we really need policies in place, or should market take care of it?

Bangladesh context

- Low literacy, low accessibility.
- Little or no market demand for IT enabled services in local language
- Higher education is predominantly in English
- Renewed focus on English competence – *localization meets globalization*
- **Policy makers and technocrats are woefully unprepared for the digital age**

What policies

How would policies help

What about the market?

Bangladesh ICT Policy 2008 (Proposed)

- *“The constitution of the People’s Republic of Bangladesh has edified social equity and ICTs are the best means to propagate that ethos within a framework optimizing the effective utilization of the nation’s limited natural and abundant human resources.”*
- 10 broad objectives, 56 strategic themes, and 305 action items

Excerpts: Social Equity objective

- [*4] Provide incentives to create low-cost, affordable Bangla processing tools and software to develop searchable text and voice content from printed material with special attention to persons with disabilities and special needs
- [*15] Provide grants for local language and locally relevant content development. This may include digital content for educational purposes, capacity development, dissemination of vital information relating to life and livelihood, etc.

Excerpts: Integrity objective

- [51] Promote the use of standard Bangla keyboard and resolve related issues, if any.
- [52] Update Bangla encoding standard to align it with Unicode and ISO.
- [53] Digitally publish all govt. publications in Bangla using a standard encoding to guarantee document portability.
- [54] Join the Unicode Consortium as an Institutional Member.

Excerpts: Education and Research objective

[*105] Initiate ICT Professional Skill Assessment and Enhancement Programme (IPSAEP).

[*136] Create Bangla language platform for mobile applications.

[138] Ensure access to Public Library Services through ICT.

[*143] Develop Bangla speech processing tools – text to speech (TTS), automatic speech recognition (ASR) – for print disabled community.

Excerpts: Education and Research objective - continued

- [144] Develop Bangla script processing tools – optical character recognition (OCR), Braille reader - for the print disabled.
- [145] Integrate natural language processing tools in applications.
- [*152] Build electronic library in tertiary teaching institutions to make knowledge produced there easily available. Link to other similar institutions.

Excerpts: Education and Research objective - continued

[*153] Link all the electronic libraries to the global hierarchical research networks.

[157] Promote data collection through alternative channels like telecentres, for social and scientific research.

Excerpts: Strengthening Exports objective

[*209] Develop Centres of Excellence with participation of industry and academia for creation of intellectual property.

[212] Provide grants for ICT research.

[213] Establish High Speed Education Network all over the country for elearning and distance education. Also start a terrestrial TV channel for education.

Summary

- Significant interest in ICT at policy level in 2008, but mostly for globalization
- Localization policy items were much harder sell, especially those not dealing with social equity and universal access
- PanL10n played significant role in the 18 or so localization related action items
- *Waiting for policy impact ...*