



www.pan10n.net

Impact of PAN Localization Project on Localization Policy in Partner Countries 2007 – 2010

Sana Shams



www.cle.org.pk

Center for Language Engineering (CLE)
Al-Khwarizimi Institute of Computer Science (KICS)
University of Engineering & Technology (UET)

Policy & Research Links

- ❑ Knowledge utilization is the prime focus of a research project through either its application in technology or in decision making and policy (Carden, 2004).
- ❑ Some research projects are conducted with the aim of very immediate impact, some are launched to those issues that are very significant but hidden.
- ❑ The impact of such type of research project may not be as visible as the former one while they significantly contribute to the development of the country.

Policy & Research Links

Three perspectives

- ❑ Caplan (1979) developed the theory of “*two communities*”
 - ❑ cultural gap between researchers and policy makers the cause of limited utilization of research in policy development
- ❑ Neilson (2001) does not believe this relationship is a direct one
- ❑ Weiss (1977) refers to this perspective as the “enlightenment” and asserts that research has mostly no direct relevance to policy decisions, but can make contribution in influencing policy
 - ❑ Through this approach, research contributes indirectly over time through the circulation and “percolation” of ideas and concepts in influencing policy (Lindquist, 2001).

Policy Influence through PANL10N

- ❑ **Project's Policy Objective:** "Advance policy for development and use of local language computing and content."

"The project will also look at the policy support to develop and promote local language technology, training and content, and evaluative techniques for such work" (<http://www.panl10n.net/english/phase2.htm>)

Policy Influence through PANL10N

- ❑ **The Evaluation Question:** “How far has the project been able to influence local language computing policy at local as well as regional levels?”

Specifically,

- ❑ To assess the project’s contribution (both direct or indirect) in affecting public policies, laws, regulations, programs and government structures
 - ❑ To assess the project’s contribution in the development of a network of technologists, social scientist and policy makers for collaborative work
 - ❑ To build capacity of the policy influencers on IPR (intellectual property rights) Issues
-
- ❑ **The Evaluation Objective**
 - ❑ Study the overall impact of the projects
 - ❑ Study the project impact per country component

Overall Impact of the project

- ❑ Discerning Policy Influence: Framework for a Strategic Evaluation of IDRC-Supported Research, developed by Evert A. Lindquist, 2001
- ❑ Three types of policy influence;
 - ❑ Expanding policy capacities,
 - ❑ Broadening policy horizons,
 - ❑ Affecting policy regimes

Expanding Policy Capacities

According to Lindquist (2001), the development of innovative ideas and its presentation as applicable solutions for the development of society are the primary objective of research. In developing such ideas, skills are required to make it reality. In this regard, development of new talent for doing issues-based research and analysis are needed. In other words, research can improve the institutional framework surrounding policymaking.

Broadening Policy Horizons

As Lindquist (2001) envisions “Research can introduce new ideas to the policy agenda”. It must be ensured that provided knowledge to the decision-makers is in a form of utilization. This knowledge has to nourish dialogues among researchers and decision-makers. To put it another way, research can improve the intellectual framework surrounding policymaking.

Affecting Policy Regimes

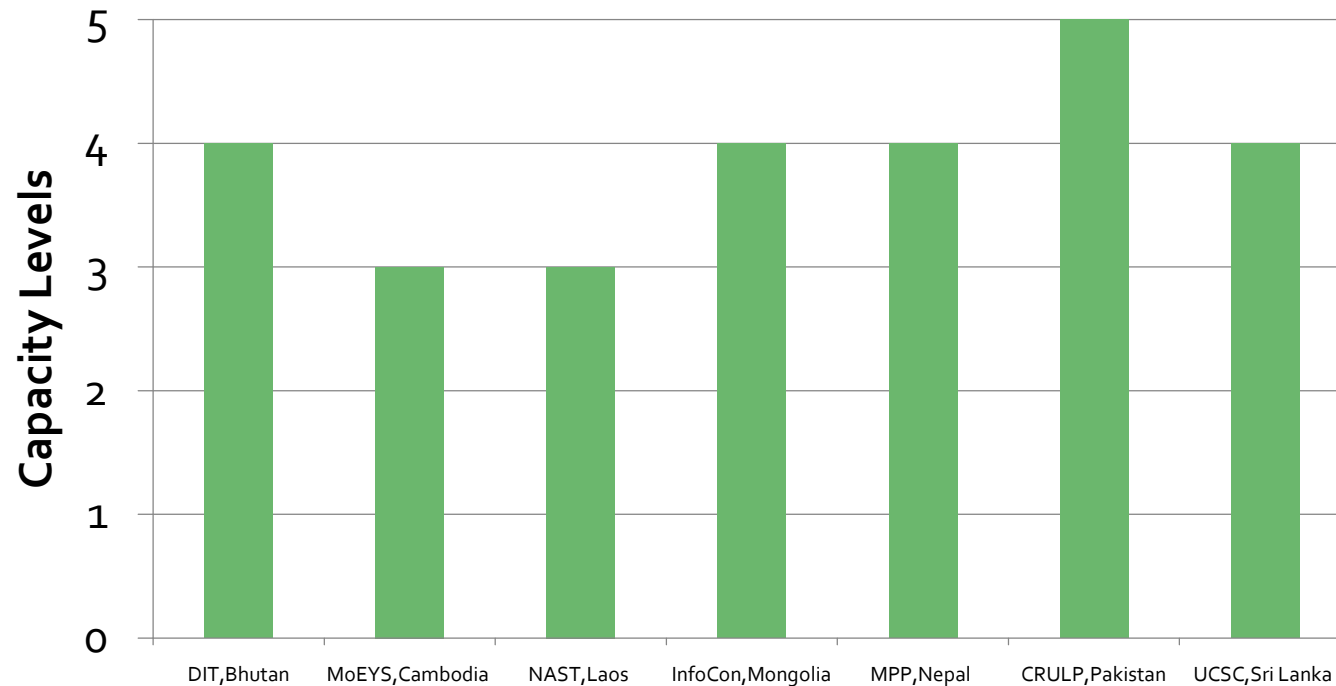
To Lindquist (2001), “Research can sometimes influence public policy in a direct way”. Research findings can be used in the development of laws, regulations, programs, or structures. However, such process is rare and normally circuitous, and it happens in fewer cases where change can be attributed, visibly and directly due to the inspiration of research alone.

Discerning Policy Influence through PANL10N

Expanding Policy Capacities	Improving the knowledge or data of certain actors
	Organization's capacity to conduct policy relevant research
Broadening Policy Horizons	Providing policy makers with opportunities for networking and learning
Affecting Policy Regimes	Initiation of any LLC projects nationally or internationally
	Any Implicit contributions in policy decisions/ decision making process
	Changes in policy development process (inclusion or exclusion of certain organization, criteria, membership and representation)
	Translation of project outputs into policy decisions/ laws/ regulation directly

Findings (Overall Influence of the PAN Localization Project)

- Expanding Policy Capacities: Self-assessment on “Capacity to deliver relevant policy recommendations”



Impact of Project on Expanding Policy Capacities
Scale: Very Limited Capacity “1” to Very High Capacity “5”

Salient Factors

- ❑ Sharing best practices with the policy makers
- ❑ Advocacy around technical needs for the development, implementation and monitoring of the policy
 - ❑ Bhutan: Seminars and workshops that their organization had conducted to raise awareness of the policy makers regarding the need, challenges and solutions for local language computing.
 - ❑ Mongolia: Nomination in the consultations for drafting the relevant policies.
 - ❑ Nepal: Advocacy in developing the capacities of senior and middle level government officials to the potential and impact of local language computing.

Overall Influence of the PAN Localization Project

- ❑ **Broadening Policy Horizons** (improving the knowledge or data of decision makers and providing opportunities for networking and learning)
 - ❑ Bhutan Meeting
 - ❑ Cambodia conducted training in Ministry of Interior and National Assembly on Khmer Unicode and applications
 - ❑ Two major Trainers' Trainings on NepaLinux, Orientation sessions with participants including government officials

Overall Influence of the PAN Localization Project

□ Affecting Policy Regimes

Affecting Policy Regimes	Bhutan (DIT)	Cambodia (PLC)	Laos (NAST)	Mongolia (InfoCon)	Nepal (MPP)	Pakistan (CRULP)	Sri Lanka (UCSC)
	No= X				Yes=√		
Initiation of any LLC projects nationally or internationally	√	√	√	X	√	√	√
Any Implicit contributions in policy decisions/ decision making process	√	X	X	X	√	√	√
Changes in policy development process (inclusion or exclusion of certain organization, criteria, membership and representation)	√	X	..	√	√	√	√
Translation of project outputs into policy decisions/ laws/ regulation directly	X	√	X	X	..	√	√

Impact of Project on Affecting Policy Regime

Methodology for Evaluation

- Analysis

- Surveys

- Questionnaire (Appendix A, *Working paper on Policy Influence by PANL10n*, <http://www.panl10n.net/english/Policy%20Woking%20paper%20o.3.pdf>)

- Content Analysis

- Progress Reports

- Country Reports

- Websites of Country Components

- Informal Discussion

- With the CPI leaders

Methodology for Evaluation

- ❑ Participant Organizations
 - ❑ Department of Information Technology (DIT), Bhutan
 - ❑ Ministry of Education, Youth and Sports (MoEYS), Cambodia
 - ❑ National Authority for Science and Technology (NAST), Laos
 - ❑ InfoCon Co. Ltd, Mongolia
 - ❑ Madan Puraskar Pustakalya (MPP), Nepal
 - ❑ University of Colombo School of Computing (UCSC), Sri Lanka
 - ❑ CLE previously known as CRULP , Pakistan

Findings (CPIs Case Study)

- This section presents the efforts done by each country partner institute (CPI) in influencing policy at local level.

Bhutan

- ❑ MoU between DIT and Thailand's National Electronics and Computer Technology Center (NECTEC) for promotion of R&D in the area of ICTs, specifically in language computing and included a plan to strengthen open source natural language processing, image and speech processing technology in Bhutan
- ❑ Work on terminology translation for Dzongkha Linux with the support of Dzongkha Development Commission has been standardized
- ❑ DIT collaboration with Country Code Top Level Domain codes (cc TLD) that operates .bt domain to create the test bed for deploying Dzongkha IDNs

Bhutan

- ❑ Dissemination and publicity of research work through media to affect policy change
- ❑ Development and distribution of 3000 copies of Dzongkha Linux 3.0 cds and key boards with Dzongkha Layout
- ❑ Presentation to the policy makers, private sector and public through formal release ceremonies
- ❑ Involvement of government officials in the trainings, seminars and other activities

Cambodia

- ❑ Project on the Informatics for Rural Empowerment and Community Health (i-REACH)
- ❑ Utilization of localized applications developed through the PAN Localization by National Election Committee (NEC), Ministry of Finance , National Institute of Language and Extraordinary Chambers in the Courts of Cambodia (ECCC)
- ❑ Training opportunities for the policy makers for learning localized ICTs

Cambodia

- ❑ Training of Ministry of Interior (MOI) and National Assembly (NA) on utilization of Khmer Unicode and applications package
- ❑ Acceptance of the Khmer Unicode and the applications by MOI and NA for its utilization within the departments

Cambodia

- ❑ The work done under the project directly contributed towards local language computing policy for ICT integration in Education within in the country
- ❑ Awareness campaign on the advantages of Khmer Unicode and Khmer based applications among the computers users and developers
- ❑ Seminars for academia and public sectors people on localized applications utilization
- ❑ Dissemination of Khmer Smart Typing, Encoding Conversion Utilities, Collation and Sorting Utilities, Word Wrapping Utilities and Spell Checker Utilities in shape of CDs

Cambodia

- ❑ Utilization of Khmer applications in iREACH project to teach students and the communities at their 20 hubs
- ❑ MoU between IT Representatives from 24 provinces and cities to use Khmer based applications in all districts of the country
- ❑ Usage of localized applications in NGO sector

Laos

- ❑ Collaboration between Microsoft and National Authority for Science and Technology (NAST) for the localization of Windows Vista and Office 2007 in Lao
- ❑ Raising the awareness of decision makers and other relevant stakeholders about the potential and impact of local language computing
- ❑ Organizing meetings with policy makers and IT people to show the work
- ❑ Awareness and dissemination workshop on March 19, 2009 at NAST Vientiane where Lao UNICODE set was adopted by government as Lao National character set

Laos

- ❑ Presentation of the project at the National ICT fair inaugurated by the prime minister of Laos
- ❑ Conducted a technical workshop for 80 government officials, students and journalists, where CD containing fonts, keyboard utilities and open office applications were distributed
- ❑ Awareness campaign among the policy makers about the work being done under the project during PAN Localization regional conference on “Localized ICT Development & Dissemination across Asia”

Mongolia

- ❑ Active involvement in providing recommendations on important policy matters to the government decision makers
- ❑ Approval of Research on IT terminology translation in Mongolian by the committee in Information and Communications Technology Authority (ICTA)
- ❑ Development of standards for Internationalized Domain Names (IDNs) and reviewed and released generic Top-Level Domain (TLD) and Country Code (CC) TLDs for Mongolian

Mongolia, Infocon Co. Ltd

- ❑ Adaptation of the local language software developed through the project by the government
- ❑ Creating awareness among government decision makers and other stakeholders about work being done under the project
- ❑ Regular interaction with Information and Communications Technology Authority (ICTA) through the meetings deliberated on open source software localization, standardization of terminology, IDNs and other related issues

Nepal

- ❑ Establishment of Language Technology Kendra (LTK) with the collaboration of Department of CS and Engineering, Kathmandu University, Tribhuvan University and Madan Puraskar Pustakalaya (MPP)
- ❑ Drawing government attention towards language issues in ICTs.
- ❑ Significant research work was undertaken on Nepali IDNs and language tables and lists of gTLDs and ccTLDs was released

Nepal

- ❑ Awareness campaign regarding the need and benefits of local language computing applications among the government decision makers and other stakeholders
- ❑ In September, 2007, the project team in a meeting with policy makers emphasized the development of standards and sound policies for the successful implementation of IT
- ❑ In February, 2008 standardization of keyboard layouts for Nepal was discussed with the policy makers.

Nepal

- ❑ In September 2008, computer curriculum in schools was discussed
- ❑ In March 2009, MPP team and policy makers deliberated on Internationalized Domain Names in Applications (IDNAs) for Nepali
- ❑ In September 2009, MPP team and policy makers deliberated on some proposed issues and MPP also highlighted the progress achieved by PAN Localization project in Nepal
- ❑ In addition, two major Trainers' Trainings on NepaLinux, the Nepal Country Component, MPP conducted about thirty orientation sessions within the period Jan 2006-September 2009 especially to government officials, media students among others.

Pakistan

- ❑ Participation in the consultative process initiated to finalize five year Information Technology Policy 2010 by the Planning Commission of the government of Pakistan
- ❑ Member of Broadband Stakeholders Group (BSG) formulated by Pakistan Telecommunication Authority (PTA), telecom regulatory body in Pakistan
- ❑ Contribution in Pakistan policy circles regarding the initiation of .pk (dot Pakistan) registry by Ministry of Information Technology

Pakistan

- ❑ Collaboration with Microsoft for the development of Language Interface Package (LIP) in Urdu for Microsoft Windows Vista and Microsoft Office
- ❑ Development of interface terminology translation of 300,000 English words into Urdu
- ❑ Endorsement of terminology translation by the National language Authority (NLA) of Pakistan and thus the translations developed by the project team have been standardized

Pakistan

- ❑ Inclusion and participation of public in the policy development process
- ❑ Involvement in developments taking place in research and standardization on global level for IDNs
- ❑ To define IDN standards for Pakistan, organization of a workshop in gathering participants representing various local languages spoken in Pakistan in 2008
- ❑ Workshop on IDNs later arranged on behalf of the Ministry of IT Pakistan in May 2009, to build on the earlier work for Pakistani languages

Pakistan

- ❑ Contribution in creating the realization that new IT policy draft must be open for comments from public and other stakeholders
- ❑ Some of the project outputs have also directly translated into policy actions
- ❑ In IT labs project of Punjab Govt., the government decided to include a phonetic keyboard layout and local language fonts (Nafees Nastaliq and Nafees Web Naskh) package within each of the computer installment through the project due to the persistent advocacy of the project team

Pakistan

- Meetings with policy making bodies such as Ministry of Information Technology and Telecommunications (MoITT), Ministry of Education, Pakistan Telecommunication authority (PTA), Universal Service Fund (USF), Pakistan Software Export Board (PSEB), National ICT R&D Fund, and Pakistan All Software Houses Association (PASHA)
- In regular contact with language academies and authorities, including National Language Authority (Muqtadra Qaumi Zaban), Urdu Science Board, Seraiki Academy, Pashto Academy, Sindhi Language Authority, Balochi Academy and Frontier Language Institute

Sri Lanka

- ❑ Frequent interaction with policy and standard making bodies to promote local language computing and bring sustainability to its work
- ❑ Member of IT Sectoral Committee of the Sri Lanka Standards Institution (SLSI) which is a member of ISO
- ❑ committee member of ICTA Local Language Working Group (LLWG)
- ❑ development of Language Interface Package (LIP) for Microsoft Windows Vista and Microsoft Office in Sinhala

Sri Lanka

- ❑ Attaining Microsoft support the project team to develop local language interface for Microsoft Vista operating system
- ❑ Standardization of developed interface terminology developed by ICTA
- ❑ Involvement in providing feedback to the government decision makers on important policy issues
- ❑ Project's research on defining the collation sequence has been incorporated into the SLSI 1134 standard

Sri Lanka

- ❑ Project influenced National policy necessitating a change to develop government websites in three official languages
- ❑ Project's work on IDNs resulted in the development of IDN ccTLD registry in Sri Lanka
- ❑ Contribution in the development of ICTA Local Language Working Group (LLWG)
- ❑ Significant progress towards localization of key software and government website standards through project