Rural Community Information: Needs, Behaviour and Provision in Rural Sri Lanka

A-LIEP Conference – Doctoral Seminar
4th – 6th April 2006

Presented by:
Wathmanel Seneviratne
Open University of Sri Lanka

Research Supervisors:
Professor Chandra Gunawardene
Professor K.A.P. Siddhisena

Affiliation of the study:
Faculty of Graduate Studies, University of Colombo 2002 - 2006


Presented at the Asia-Pacific Conference on Library & Information Education & Practice 2006 (A-LIEP 2006), Singapore, 3-6 April 2006, Nanyang Technological University.
Covers;

- Introduction
- Scope of the study
- Rationale for the study
- Objectives of the study
- Literature reviewed
- Theoretical and Conceptual Frameworks
- Population and Sample Selection Criteria
- Analysis of data and Research findings
- Conclusion and Recommendations

Introduction

- People regardless their diversities are in need of variety of information. Rural Dwellers are equally enthusiastic in obtaining information as are urbanites.

- In Sri Lanka 78.5% live in rural areas and are treated as disadvantaged in various social aspects.

- Rural sector is often overlooked or not properly placed in the development processes.
Scope of the Study

- Within the boundaries of information flow embedded within rural areas, embracing people, social and org. structures and information.

- Have limited access to public/government Services and Information.

- This Information Flow and Behavior within the rural communities are mostly traditional, unplanned, ineffective and sometimes primitive.

Significance and Problem of the Study

- Nevertheless, in the development plans, the ‘information component’ is often overlooked, missed it’s correct link or missed the significance due, as a factor of production.

- In Sri Lanka, development efforts exercised for rural upgrading, importance of Information Component was not emphasized...disregarded or due accommodation was not given in socio-economic development planning for rural communities.

- Thus proper provision of information access system, and citizen centered information delivery to rural communities is not systematically planned in Sri Lanka even though there are some specific approaches.

- and no integrated approach relating to Information issues relating to the rural people was conducted in context of Sri Lankan rural communities.
Significance of the Study (contd.)

- Research on the above aspects is essential in planning many society based services such as:
  - Community Information Services
  - Public library services
  - E-governance strategies
  - Health Services
  - Agriculture, Industrial & Technology Extension services
  - Counseling services
  - Rural Banking services etc.

Literature Review

A literature survey is done under following headings.

Theoretical approaches
  - Research methodology
  - Information users- a conceptual approach
  - Information needs and needs models- a conceptual approach
  - Information behavior models

Empirical studies
  - Sectoral studies of rural information needs
  - Information provision and information flow
Research Objectives

• Main Objectives:
  – Explore the information needs of rural communities in Sri Lanka and their behaviour
  – Investigate the information provision status among rural communities in Sri Lanka.

Specific Objectives of the study are;

- To identify information need types relating to community categories
- To investigate channels consulted for obtaining information and level of fulfillment achieved
- To investigate existing information flow
- To identify barriers for information access
Research Questions

1. What are the types of information needs of rural communities?
2. Is there any relationship between information needs and socio-economic characteristics of the respondents?
3. Are these needs location and community specific?
4. How do the rural people behave when an information need arises?
5. What are the channels they consult in obtaining these information?
6. What is the level of fulfillment in each need category?
7. What are the barriers they encounter?
8. Are these needs adequately provided/supplied?
9. What are the faltered links in information flow in the rural areas?

Research Methodology (contd.,)

• Research method selected; Survey Research

• Two populations were considered.
  Population 1- Rural population – Traditional, Estate, Settlement and Fisheries

  Population 2- Information providers operated in rural areas.

• Theoretical framework selected was Wilson's(1999) Information flow model
Information Needs of Rural Communities

Status of Information Provision

Information Access Methods

Difficulties for Information Access

Gathering data on:

Rural Community Information Needs Frame

Analysis of:

Information Needs and Information Provision

Access Methods & Barriers

Identification of:

- Nature of Community Information
- Existing Information Flow and Barriers

- Ideal Information Flow Model
- A Strategy for Ideal Information Delivery

Recommnedation of:

Conceptual Framework of the study

Sampling method selected:

Multi-stage Cluster Sampling

- Sampling Process 1 – Deciding the topology- selecting intended population Clusters

- Sampling Process 2 – Sampling intended Population
Scattering of the Sample

Sample Topology Selection Criteria

Prov 09

Random

Dis. 1 2 3 4 5 6 7 8 9 10
D.S. 1 2 3 4 5 6 7 8 9 10
G.N. 1 2 3 4 5 6 7 8 9 10
Vil.s 1 2 3 4 5 6 7 8 9 10

Pop. 1

Pop. 2
Data Collection Methodology

1. Approach:
   i. **User-genera** approach (Citizen oriented) not system oriented
   ii. The approach was **inductive** on both aspects studied (Information Need and Provision)
   iii. Method similar to ‘Listening Survey’ (Pradervand, 1980)

2. Tools used:
   i. Structured Interview with few open questions.
   ii. Focus Group Discussion

Two Interview schedules were used:

1. Community ➔ Information demand
2. Providers ➔ Information Supply
Approaching the Respondents on aspects inquired.

Method similar to ‘Listening Survey’ (Pradervand, 1980)

Analysis of data

- Bivariate and Multivariate analysis were performed.
  
  - Community categories – rural, estate, settlement, special
  - Occupational categories – Agro-workers, MS Industrialists, traditional occupations etc.
  - Educational status - School Attendance, Qualifications obtained
  - Personal Characteristics - Age group, civil status, gender, religion, ethnicity, status of having children etc.
  - Gender

Methods used – Percentages on MR and Chi-Square test to measure significance of the relationship of two variables.
2. Analysis of Information Seeking Pattern

- Relationship and the significance between
  - Community categories
  - Occupational categories
  - Educational status
  - Social status
  - Gender
  - Age groups etc.

Data analysis techniques:
Descriptive statistics/ Chi-square analysis

3. Assessing the Information Provision

- **Types of information provided**— availability and the overlapping in provision.

- **Channels of information supplied** and Channels consulted by the communities.

- **Level of satisfaction**— Ranking and scaling the,
  - Info. Provided Vs. Info. Requested

Data analysis techniques: Descriptive methods/ Likert’s scale/ Weighted Averages
Research Findings

1. Two main Community Information Need categories were identified using MR received using 50% markline.

1.1 Information needs Common to All- Above 50% markline
- Were needed regardless the community type, Occupation, Education, Employment, Socio-Cultural factors etc.
  = SURVIVAL

1.2 Specific Information needs – Below 50% markline
- Tend to change upon the community type, Occupation, Education, Employment, Socio-cultural factors etc.
  = SPECIFIC (Community specific, Location specific)

Community Information Needs- Research Findings (contd..)

Multiple Response Rates received for need categories

- Needs Common to All = Survival
- Specific Need Categories = Specific

Need Categories

Multiple Response Rates

0% 20% 40% 60% 80% 100% 120%
Community Information Need Frame was drawn

• 15 main categories were identified.

• Under each main category number of sub categories were identified through the pilot survey. E.g. Government Information: Registration of Persons; Citizenship/B/D/M, Taxes, Licenses, Crown Lands, Poverty Alle. Progs. Etc.

• To maintain the flexibility, a sub field called ‘Other categories’ were included under each main category.

Community Information Needs (CIN)- Demand for Information

According to the analysis (Bivariate and Multivariate) with characteristics of the communities; Demand for CIN determines upon three factors identified;

• Nature of information (survival or Specific)=Ni
• Factors Internal to a person (Age, Gender, Edu. etc.)= Ip
• Factors External to a person (Community/ Location/ Infrastructure etc.)= Ep

These factors affect the demand for Information

$$D_i = f(Ni) + f(Ip) + f(Ep)$$
2.0 Channels Consulted to obtain information

**Channel Dependency Rate (CDR)** was calculated against each need category upon MRR.

**Observations:**

- Level of Information Literacy is seen Low (not measured)
- Different needs were sought through different channels by rural communities
- **Priority Channels** for each need category was identified

Even though a contradictory issue had emerged;

**High value set for CDR does not indicate appropriateness of the channel (an important problem identified at the origin of the need, remedial action needed.)**

---

3.0 Levels of Satisfaction derived of Scaling the Fulfillment Levels obtained

<table>
<thead>
<tr>
<th>Scale</th>
<th>Fulfillment Level</th>
<th>Satisfaction derived</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Highly Fulfilled</td>
<td>Highly Satisfied</td>
</tr>
<tr>
<td>4</td>
<td>Fulfilled</td>
<td>Satisfied</td>
</tr>
<tr>
<td>3</td>
<td>Neither FF Nor not FF</td>
<td>Uncertain</td>
</tr>
<tr>
<td>2</td>
<td>Less Fulfilled</td>
<td>Not Satisfied</td>
</tr>
<tr>
<td>1</td>
<td>Not Fulfilled</td>
<td>Frustrated or Exhausted</td>
</tr>
</tbody>
</table>
Research findings-(contd.): Level of Fulfillment (FFL)

- **Likert Scale with Weighted Averages** were used to measure the FFL
  - Fulfilled
  - Less Fulfilled: Educational, Market, Legal, Occupational Training, Recreational, Industry, Employment
  - Not Fulfilled
  - Neither FF Nor not FF: Industry, Legal, Occ. Training, Educational, Market, Employment

**Observations:**
Level of satisfaction with some important need categories were recorded as less / not fulfilled. Have unfavourable effect on rural development.

4.0 Research findings- Information Provision Status

Measuring the Status:

1. Providing parties
2. Nature of Information
3. Content Strength and Provision
4. Collection and Organization of information
5. Delivery methods
6. Medium of delivery
7. Frequency of delivery
Research findings - Information Provision

4.1 Providers operated at 2 levels:
- Institutional Level
- Village/ Community Level

4.2 Nature:
Community focused (Originated for & Used by)
Found that the community information is;
• Service oriented
• Non-bibliographic
• Not indexed / abstracted using formal documentation tools

Research findings - Information Provision

4.3. Content
- Changes upon the task of the organization
- Changes upon the knowledge level of the providing person

Observations:
Often distorted due to intervention of Intermediaries

3.1 Provision
- Considerable ‘overlap’ among institutions in provision (eg: DS_AO, MOH PHI, DS MOH, DS PHI, AO NGO, DS RDBs, SI NGOs)

Observations:
Some important information blocks were seen as ‘dead blocks’ (not flowing) MRR= 0.8%
- Environmental - Irrigation information at DS, - Emp. Opportunities, - Counseling services, Income generation project information etc.
Research findings - Information Provision

4.4 Information Collection policy:
- Govt. & Organizations - 92.5% by official channels
- Individuals: Govt./Org. - 90% official channels
- Persons - 3.7% collected

4.6 Method used to Organize information:
- File system* - by task, by year - 100%
- Record rooms - by task, by year - 62%
- Indexing sys. followed* - 10%
- Computer data bases
  - Govt./Org. 51.0%
  - Individuals - 0.0%
* Excluding the Public Library, separately indicated.
Research findings …… Information Provision

Therefore Information Provision depend upon;

Information providers = Pi
Nature of Information = Ni
Content of Provided = Cp
Organization of Info. = Oi
Method and Medium of provision = MMp
Frequency of provision = Fp

\[ IP = f(Pi) + f(Ni) + f(Cp) + f(Oi) + f(MMp) + f(Fp) \]

Strength of Information Provision

5.0 Research findings …… Barriers to Access Information

Identification of barriers - categorised through Semi-Structured Questions included in the Interview Schedule

1. Geographical Barriers – Geo-physical/ Weather & Environmental conditions

2. Structural Barriers - Infrastructure, (Roads, Electricity, Info. Infra., and distance to facilities like telephone, GOs, LGO, PL, PO etc.), Institutional, Cultural and Economical

3. Personal Barriers – Personal (confidence, awareness, social distance, difficulty to go out) Attitudinal (nature, usage of info./ICTs, awareness, effectiveness of usage)

\[ IA_b = f(Gb) + f(Sb) + f(Pb) \]
Conclusions

Demand for information exists - but was not properly focused to tap what ever the sources available (no productive outcome due to Information Illiteracy).

Information provision exists – Supply was not strongly tailored for the needs of community/citizens, much system oriented (no productive usage).

Therefore an Information Gap exists.
Conclusions....

The Information Gap between DI and SI exists due to;

- Not identifying the types of CI - **SURVIVAL & SPECIFIC**
- Not identifying the nature of CI – **SERVICE ORIENTED & NON-BIBLIOGRAPHIC**
- Despite the higher Language Literacy in Sri Lanka, Low level of **Information Illiteracy** is seen.
- Lack of providers in all categories- **Provision is not uniform in every area**
- Dependency on Channels - **Strong but not Appropriate**
- Immobility - There are ‘dead blocks’ of information – **Important blocks of information are ‘Pooled’ in offices rather than ‘Flowing’**.

Conclusions....

- The rural citizen / communities are **locked in barriers** of different nature and strategic approaches are less to unlock the traps.
- Lack of **Community Outreach** methods and Information Literacy campaigns

Due to this situation;

- The gap between **IN** and **IS keep widening**
- leads to low satisfaction level
- productivity expected by providing information is at low level
- Available information resources are wasted

As a consequent **General Life Management** and **Living Standard** of rural people was seen not being improved
Recommendations....

- The citizens are to be taken out of the traps they caught in by:
  - Recognizing the **Community Information Needs**
  - Bridging the gap by identifying barriers and by using **Community Outreach Programs/ Community Awareness Programmes using flexible mediums/media**
  - Using prevailing information infrastructure information access and provision shall be strengthen by:
    - Developing the public library structure in the country,
    - Converting the PLs into **Community Information Centres (CIC)** at village level initially,
    - In the absence of PLs available social institutions can be used to house CIC (later to establish and develop by using community radi, ICTs, networking portal strategies, etc.)

**Ideal Information Flow Model is drawn**
Limitations of the Study

• Difficulty in taking a larger sample:
  Due to a high cost involved and the time factor

• Measurement Criteria for Information Illiteracy is to be coined

• Due to the time and cost constraints some micro level analyses were not being able to performed
  – trustworthiness of the information sources and channels
  – Reliability of information obtained
  – Usage of information on feedback analysis

Acknowledgement

• Organizing Committee A-LIEP

• National Science Foundation of Sri Lanka for funding the larger part of the study and Travel grant to attend A-LIEP

• Faculty of Graduate Studies, University of Colombo

• Prof. Mrs. G. I. C. Gunawardena, Dean, Education, Open University of Sri Lanka

• Prof. K.A.P. Siddhisena, Senior Professor, Dept. of Demography, University of Colombo
Thank you