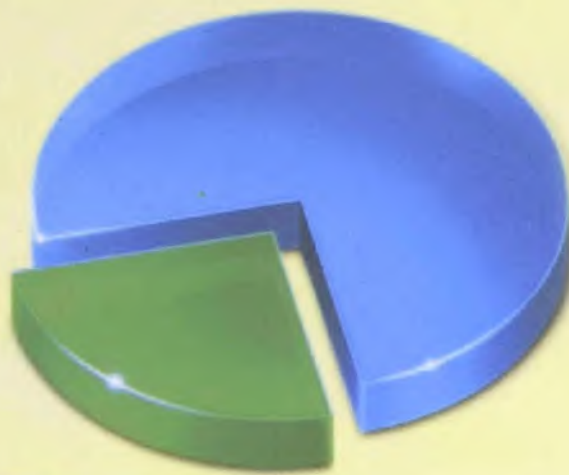# NACLIS 2011

Proceedings of the
8th National Conference on Library and Information Science
28th June 2011, Colombo.

Harnessing Information for Socio-economic Development

Sri Lanka Library Association

Proceedings of the
8th National Conference of Library and Information Science (NACLIS)

2011

Conference Theme

'Harnessing Information for Socio-economic Development'

Editors

Shivanthi Weerasinghe
Dr. Wathmanel Seneviratne

Organized by
The Sri Lanka Library Association
Colombo
Sri Lanka
28th June 2011

Proceedings of the 8th National Conference of Library and Information Science (NACLIS)

Held on the 28th June 2011 at the Galadari Hotel, Colombo

Review Panel:

Dr.Wathmanel Seneviratne
Dilmani Warnasuriya
Ramani Amarasekera
Shivanthi Weerasinghe

Organizing Committee:

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Dilmani Warnasuriya
Swarna Jayatillake
Dr.Ruwan Gamage
Pushpamala Perera
Anton Nallathamby
Chandrika Dabare

Preface

The Sri Lanka Library Association (SLLA) presents its 8th National Conference on Library and Information Science (NACLIS). The conference theme is "harnessing information for socio-economic development" which is an apt theme in the current development climate of Sri Lanka.

The objective of the conference is to create a forum for a dialogue among the users of information and practitioners and Library and Information Science. Papers that are presented and dialogues held on issues, are all related to research findings, policies, concepts and proposals or case studies on specific aspects of information needed for socio-economic development. The deliberations will help us realize that there is a growing need to grapple with the rapid information output and the evolving information technological tools, in a fast changing user/consumer landscape.

The papers cover a wide range of subjects within the information discipline that would help in the socio - economic development. Library and information profession has now changed from the traditional library mode to the information mode concentrating on its access and provision with value addition, the world over. So it is necessary to look into all aspects of information; - right acquisitions, organization, retrieval, management and information evaluation. Hence the necessity arises to discuss, brainstorm and learn continuously everything that relates in the information industry. So on behalf of the SLLA I thank the Chief Guest for accepting our invitation to grace this occasion, the panel of discussants and the paper presenters for sharing and exchanging their valuable knowledge at the conference.

Organizing a national conference of this nature cannot be completed by an individual and as such this event wouldn't have been a success, if not for the other players in the NACLIS team, guided by the SLLA President. I am ever so thankful to the NACLIS Committee, the paper review panel and those who provided publicity to this event. I also appreciate the assistance given to me by the SLLA staff, the Staff of the Library Bank of Ceylon, and Preethi Liyanage.

I take this opportunity to appreciate the sponsors especially the Bank of Ceylon and the Lake House for their magnanimous gesture in partnering the Association on this occasion.

Shivanth Weerasinghe
Convenor - NACLIS

June 2011

Message by the President of the Sri Lanka Library Association

I am pleased to issue this message to the National Conference of Library and Information Science (NACLIS) of the Sri Lanka Library Association (SLLA). The SLLA, besides its professional educational programmes and activities, holds this conference annually since 2003. As NACLIS was not held in 2010 on account of the SLLA organising an international conference to commemorate its golden jubilee last year, the present conference becomes the 8th NACLIS held since its inception.

Today information has become an important component of any sphere of activity. In fact it has virtually become a commodity since obtaining information leads to gaining a competitive edge today. There are times when a monetary value is attached to information. As such information needs to be relevant and of a timely nature. Its output is rapid and it comes in many formats. Therefore, it is necessary to evaluate information and extract only the accurate and relevant information required for a specific purpose. The information professional and the information user both will face challenges in searching and accessing the required information. With this in mid the NACLIS of 2011 is held to bring out new findings, issues and future action to be taken in the Library and Information Sector, through discussions and conceptual papers. Hence, this is an event that will serve the information users as well as the library and information professionals.

In Sri Lanka we are experiencing a new wave of economic development activity and a growth momentum. This trend is visible globally as well. Where does information fit in and how does it fit in? The theme "harnessing information for socio-economic development" encompasses many areas, including, education, knowledge management, cultural development, poverty alleviation, environment conservation, agriculture and industry, as well as providing information to all. As such we can confidently say that this year the NACLIS addresses an appropriate theme.

To address the above issues, this year too LIS professionals will present papers and an eminent discussant panel will bring out an exciting dialogue to enable

users and information specialists to be geared for the future. I am sure the deliberations of this conference will be of use to both the user and the provider.

I take this opportunity to thank Mr Ajith Nivard Cabraal, Governor, Central Bank of Sri Lanka, who agreed to be the Chief Guest at this event and also deliver the keynote address. I also thank all discussants and paper presenters and the Paper Review Committee. My thanks go out to the event and media sponsors for their generous support and contributions to make this event a success. I also thank the NACLIS Committee, ably chaired by Ms Shivanthi Weerasinghe for organising this event and the staff of SLLA for all the support extended.

Upali Amarasiri
President, Sri Lanka Library Association

Director, National Institute of Library and Information Science,
University of Colombo, Sri Lanka

Message by the Chief Guest, the Governor Central Bank of Sri Lanka

I am pleased to send this message to the Sri Lanka Library Association, on the occasion of its Annual National Conference on Library and Information Science.

The theme *Harnessing information for Socio-economic development* is of timely and national importance to us. Sri Lanka is poised towards a strategic way forward and is in the threshold of intense development from many fronts including socio, cultural and economic development. Librarians and information sector play a strategic role in information acquisition, its organization and dissemination in a user-centered perspective.

The Association through its annual conference will create a platform for a constructive dialogue among information science educators, researchers, practitioners, users and other professionals engaged in different functions of information.

Ajith Nivard Cabraal
Governor
Central Bank of Sri Lanka.

Dialogue on

Harnessing Information for Socio-economic Development

Panel of Discussants

Prof. S.S. Colombage

Prof. Uditha Liyanage

Dr.W.K.Hirimburegama

Chaired by

Mr.Upali Amarasiri

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Profiles

Access to socio-economic information
A synopsis

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Accurate and timely socioeconomic information is essential to improve the ability of researchers and policy makers to diagnose the development constraints and to formulate appropriate policies. Availability of such information has expanded significantly in Sri Lanka over the years partly as a result of the adoption of international data dissemination practices by information providing agencies, particularly the Central Bank and the Department of Census and Statistics. These data dissemination services have accelerated with the rapid development of information and communication technology. Most of the data are made available through the websites of the respective agencies in addition to their print material.

In assessing the current status of access to socio economic information, it is important to consider the wide ranging dimensions of the different data sets. First, the socioeconomic data cover different themes such as economic growth, development, education, health, poverty, hunger and governance. Second, the information includes different contents like the demographic profiles, economic statistics and socio-political information. Third, the information may have spatial specifications depending on the geographical areas covered. Fourth, we also need to consider the scale of the subjects covered by socioeconomic information that may have a focus on different units such as individuals, households, enterprises, country, region or world. Fifth, the distinction between micro and macro level data is important with regard to economic statistics.

The status of the currently available socioeconomic information should be analyzed in the context of the above wide ranging perspectives. Substantial variations of the access to information could be observed among these different

dimensions. For instance, there is greater access to most of the macroeconomic statistics provided by the Central Bank and the Department of Census and Statistics. The key social statistics such as poverty profiles and health and education indicators are also available in the publications and the websites of these two institutions. The detailed micro level statistics collected by them could be obtained in electronic form on request.

In spite of the greater access to the key data in recent times, certain gaps could be observed in the current socioeconomic information systems. A major gap that could be observed is the lack of an integrated approach towards building socioeconomic databases. The current information systems are mostly discipline-based, and there is hardly any coordination between such datasets. An integrated information system is crucial in the process of sustainable development which places a greater focus on the carrying capacity of the natural environment in the midst of growing social and economic activities. For example, the integrated water management approach, which is accepted worldwide, heavily demand interdisciplinary datasets. In this regard, the library services could be instrumental in initiating a linkage between the social scientists and natural scientists to build up an integrated information base targeting sustainable development. There is also a need to collate crucial socioeconomic information scattered in

different locations such as Grama Niladari Divisions, Divisional Secretariats and District Secretariats. Greater access to such information will facilitate to identify the pro-poor growth potentials in different geographical areas, and thereby to minimize regional disparities. It is expected that the library authorities will consider further facilitating access to socioeconomic information taking into consideration the above viewpoints.

The Sri Lankan post-modern consumer

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A synopsis

The seemingly opposing socio-cultural forces of traditionalization and modernization have to be closely recognized in our attempt to profile the emerging Sri Lanka-consumer. The force of traditionalization gathered momentum in the post-1956 period, while the impetus of modernization was felt particularly in the post-1977 period. Escaping the attention of many, the two forces of traditionalization and modernization have been converging, over the recent past, giving rise to the post-modern consumer.

The chief implication for marketers in this regard is to find focal areas of fusion, and avoid an attempt to either hark back to the past for its own sake, or become overly modernist, and thus address only a small and alienated group of consumers, at best.

Discerning the fine line of fusion between the traditional and the modern impulses of the consumer is the challenge that the Sri Lankan marketer encounters. He also needs to identify the disparate socio-cultural and urban-rural groups that are variously impacted by postmodernist tendencies, which the marketer can ignore at his peril. Indeed, postmodernism appears to be a megatrend that has begun to unfold across the Sri Lankan market place at varying levels of intensity.

Discerning emerging patterns in the Sri Lankan market place cannot, and indeed, should not be second-guessed. Quantitative as well as qualitative information gathered through a formal process should underpin the attempts of the marketer to profile the emerging postmodern consumer.

Harnessing Information for Socio-Economic Development

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Discussion points

- What is "Development" ? Definition should be agreed/ cleared (If not agreed, no foundation for arguments)
- Leadership political will & lifestyles of socially "elite" groups
- "Socio-Economic" always   Social/ Human & Physical - always included in the "Development"
  - Social/ Human component is forgotten & neglected - as the "Money" factor has the priority
- "Economic Development" alone has no meaning/ no sustainability to economist, everything has a financial value except for "Human & Human Development"
  - HDI is used but financial value is not attached. What is "Human Capital"/ "Human Resource"
  - "Economic theories"   Physical valuation methods from the West
- Finally, *Homo sapience/* man and Human Development/ Advancement is allocated "Zero monitory value".

- In the measurement of "Development", only "Economic" part is measured, the "Socio-" is not included with a value. Western indicators/ measuring units used for "Development" are not 100% applicable for Asian/ African Cultures. Why respect majority's view?   If majority cannot understand?, If majority is uneducated ?, If majority is foolish ? What is "Democracy"?

- Humans have forgotten their own value..! They themselves give Zero monitory value for their own value, trained by highly Western-biased education.

- Finally, we seriously underestimate our own "Human Development" and we tend to think Development is only "Economic/ Physical". To media personnel, the "Development" is only physical.

- We don't give a value for the "Nature" in the same manner,

  o We are forgetting our "Human Values" we as humans run behind the "Money" factor. What is "Rich"?

- Harnessing Knowledge/ Information only from the West while neglecting the "Oriental Knowledge-Base". Mathematics, Astronomy, Medicine originated in India ! Aryabhata was the first mathematician who introduced "Zero".

- Entire "Knowledge-Base" is available to us now through the "Information Communication Technology" through modern technology Traditional collection of "Books" is not a "Modern Library" It is "Virtual"

  o Entire "Knowledge-Base" is available as "Information" to us managed and harnessed only through ICT

  o What about the "Knowledge" of communities...cannot communicate in English ?

- Social development/ "Social Health" and "Spiritual Health"/ What is "Ethics/ Bioethics"? (should be clearly understood) HR Management vs HR Advancement ?

- What is Return of Investment (ROI) of Human Capital Advancement ? What is the ROI of producing Graduates, Postgraduates, Diploma holders, Certificate holders for the Educational Institute?

- Human Capital is given Zero monitory value in economics and Educational Institutes and Educationists get low level social treatment one recent example ???

  o What ??: Knowledge-Economy/ Knowledge-Society/ Knowledge-Management

  o Why ??: Information Society, 'Organized around 'Information' To be modified to Asian/ Afro/ Arabian cultures

- o   For what ?? To be used for the benefit of both humanity and nature

-      Nature [What is nature ? not only humans   human cannot control the nature   man is only a part/ nature gets its balanced status (man has forgotten that man is a small component and *Homo sapience* is an animal

- o   Human species thinks they are above the nature !) why spiritual health ?]

- Information flow   How to take only required & reliable information (information management)

- From high flow of new information from ICT pumping at a very high speed   Free flow/ unmanageable

- *Modern concept*: Development of society/ community is the basis of development of the country   by using relevant information   *"Community Informatics"* (Conceptualized by Prof Michael Gurstein in 2000 - Community Informatics: Enabling Communities with Information and Communications Technologies

  <http://www.communityinformatics.net>.

- Information flowing from West or East cannot be applied directly to the communities of Sri Lanka.

- Remember Sri Lankans have a culture   2000 - 3000 years   Father of Medicine is "Charaka" !

- Sri Lankans are a well mixed gene-pool evolved   (Refer to human evolution) in a particular natural environment   No monitory values for "Humans", "Nature", "Culture", "Sun-shine", "Clean-Water", "Clean-Air",

- Langusge : we say "කෘමිනාශක" for poisons used in agriculture !. "විදේශ-ණය" for foreign loans. Cannot type in our own "මවුබස". "Free-Education" to "Public-Paying Education" !

  - o   Most of us do not respect our own mother-tongue   as well as the other national language   while both languages use scripts of same origin !

  - o   Most of us do not aware that evolution of languages have a strong correlation with the evolution of "Communities".

  - o   Nationality - Majority cannot think that our nationality as "Sri Lankan"! Attitudes are changed with the acquiring "Knowledge".

  - o   Mother tongue is required to "express"/ "activate" our Sri Lankan Genes ! Basis for communication to harness the knowledge.

Harnessing Indigenous Knowledge System (Iks) for Socio-Economic Development in Sri Lanka : A Study With Special Reference To Irrigation, Agriculture & Paddy Cultivation During Early Periods

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Abstract

Knowledge (Including awareness, knowing, information, skills & experience) is an important factor that is gained through experience or education, even in this electronic age. Indigenous Knowledge System (IKS) is an extensive field of knowledge to be studied comprehensively. Having a national, cultural identity, IKS is invaluable that it must not to be degraded considering it as invalid & antiquated due to its oldness and obsolescence. It is the foundation of many fields and activities, such as Irrigation & Water Management, Agriculture, Crop farming & Livestock Husbandry, Fisheries & Fish Farming, Indigenous Medicine & Health Care, Transportation Methods, Food Technology, Folk-lore and Arts & Crafts. Our noble ancestors harnessed this knowledge for the benefit & gain of mankind. The Eastern concept of Indigenous Technology was a pattern of production methods (production with protection) using the great skills & techniques of production methods conserving environment sans debris & wastage. It is illustrious that these fields of knowledge are to be uplifted and should be taken steps to harness the IKS for socio- economic development in Sri Lanka. In this study my special reference was concentrated to the research fields of Irrigation & Water Management in Sri Lanka during early periods.The paper aims to search, acquire and bring up the IKS and spread out of its applicability to the present information age. Being a historical research, data was collected through a literature survey that a questionnaire was not required for this study. This is a historical research that the information is collected & gathered

via a literary survey. The basis for this research is the information regarding IKS gaining through secondary sources. In this research background and the nature of the IKS, its main characteristics and structure of the IKS is mainly studied. The findings of this study guide and lead to a study of research. IKS is scattered among villagers orally and not gathered together in one place accordingly.

ශ්‍රී ලංකාවේ සමාජ – ආර්ථික සංවර්ධනය උදෙසා දේශීය ඥාන පද්ධතිය භාවිතයට ගැනීම : පෞරාණික වාරි කර්මාන්තය, කෘෂිකර්මාන්තය හා වී ගොවිතැන ආශ්‍රයෙන් කරන ලද විශේෂ අධ්‍යයනයකි.

හැඳින්වීම

'දැනුම' හෙවත් 'ඥානය' යන වහවහාරය වර්තමානයේ පුළුල් වශයෙන් වහාප්ත වී පවතින්නකි. මෙහි අර්ථය, 'දැනීම' නොහොත් මානවයා විසින් විවිධ විෂයයන් හා කරුණු පිළිබඳින් රැස්කර ගත් දැනුම් සම්භාරයකි. සංක්ෂිප්ත ඔක්ස්ෆර්ඩ් ඉංග්‍රීසි ශබ්ද කෝෂයට අනුව දැනුම යනු 'අධ්‍යාපනය හෝ පළපුරුද්ද අනුසාරයෙන් උකහා ගත් තොරතුරු හා දක්ෂතාවන් ය'. දේශීය ඥාන ප්‍රණාලියක අන්තර්-ක්‍රියාකාරී උපාංග තුිවිධාකාරයක් දක්නට ලැබේ. (අ) ඥාන පරම්පරාව (Knowledge Generation), (ආ) ඥාන පරිවහනය (Transmission of knowledge) හා (ඇ) පද්ධතියේ ක්‍රියාකාරී පහසුව සලසන ආයතනික මිශ්‍රය (Institutional Mix) වශයෙනි. සමස්ත ඥාන උත්පාදන ක්‍රියාවලිය, ඥාන පරිවහනය සහ දේශීය දැනුම් පද්ධතිය ඇතුළත භාවිතයට ගැනීමට අවශ්‍ය පහසුකම් සලසනු ලබනුයේ ආයතනික මිශ්‍රය මගිනි. පොදුවේ සලකන කළ දේශීය දැනුම විවිධ මාත්‍රකා යටතේත් සාකච්ඡා කළ හැකි ය.

• **ස්වදේශීය දැනුම** (Indigenous knowledge)

කිසියම් රටකට ආවේණික වශයෙන් ප්‍රභවය වූ (ස්වයං-සිද්ධ) හෝ ස්වාභාවික ව නිෂ්පාදිත දැනුම

• **සාම්ප්‍රදායික දැනුම** (Conventional knowledge)

පරම්පරාගත උපදේශය හෝ ඉගැන්වීම හා පරම්පරාගත අත්දැකීමෙන් ඉදිරියට ගෙන යන දැනුම

- **පාරම්පරික දැනුම** (Traditional knowledge)

පරම්පරානුයාත දැනුම හෙවත් පරපුරෙන් පරපුරට ලබා දෙන දැනුම මේ යටතේ හැඳින්විය හැකි ය. පාරම්පරික ඥානය හෙවත් දැනුම අපේ ජනශ්‍රැතියෙහි ආරක්ෂා වී ඇත්තේ පහත දක්වෙන ක්ෂේත්‍ර තුනක් යටතේ ය.

- ජනශ්‍රැතියට අයත් ශිෂ්ට වහරෙහි දැනුම

පුරාණෝක්ති, ආඛ්‍යාත, ජනකතා, කවි කතා, ජන කවි, ප්‍රස්තා පිරුළු හා තේරවිලි ආදියට පිවිසි දැනුම.

- ඇදහිලි සහ විශ්වාසයන්හි අන්තර්ගත දැනුම

ශාන්ති කර්ම, අභිචාර විධි, කෘෂිකර්මය වැනි ජන කර්මාන්තවලට අයත් සිරිත් විරිත්, පූජෝත්සව හා ජන නාට්‍ය ආදියෙහි එන දැනුම.

- ශිෂ්ට වහරට අයත් නොවන දැනුම

කලා ශිල්ප, ඇඳුම් විලාසිතා, කෑම බීම, ගෘහ නිර්මාණ ශිල්පය වැනි විවිධ සංස්කෘතික උපාංගවලින් පිවිසි පාරම්පරික දැනුම.

මේ ආකාරයෙන් පැරැන්නන්ගෙන් ලැබෙන දැනුම යාවත්කාලීන කර ගනිමින් ශ්‍රී ලංකාවේ මානව, සමාජ හා ආර්ථික සංවර්ධනය උදෙසා භාවිතා කළ හැකි ය.

- **අපේ දේශීය දැනුම හා තාක්ෂණය මිමුත්තන් විසින් භාවිතා කරන ලද ආකාරය,**

අපට උචිත තාක්ෂණය දේශීය තාක්ෂණය බවත්, එය අවශ්‍ය තන්හි කාලෝචිත පරිදි වැඩි දියුණු කළ යුතු බවත් දැන් පැහැදිලි ය. එය අතීත මුතුන් මිත්තන් සමාජ, ආර්ථික දියුණුව පිණිස යොදා ගත් ආකාරය මාත්‍යකාවට අදාළ පහත සඳහන් ක්ෂේත්‍ර ඇසුරෙන් විමර්ශනයට ලක් කළ හැකි ය.

- **වාරි කර්මාන්තය**

ජල පාලනය හා ජල යාන්ත්‍රණය, (සැතපුම් 54ක් දිග ඇළක් නිර්මාණය කර අඩි 600කට අධික බැම්ම) වැව් අමුණු පද්ධතිය හා බිසෝ කොටු, වාරි මාර්ග සංවර්ධනය මේ යටතේ අධ්‍යයනය කළ හැකි ය. වී ගොවිතැන, බෙත්ම ක්‍රමය, කැකුලන් ඉසීම, හේන් ගොවි තැන යන කරුණු මෙම මාත්‍යකාව යටතේ පොදුවේ විස්තර කෙරේ.

කෘෂිකර්මාන්තය ප්‍රධාන ජීවනෝපාය කර ගත් ආර්ය සමාජයක ජීවනාලිය වූයේ වාරි කර්මාන්තය හෙවත් ජල සම්පාදන ව්‍යාපාරයයි. සෘග් වේදයෙහි පවා ඇළවල් කපා ජලය සැපයීම ගැන සඳහන් විමෙන් පෙනෙන්නේ වෛදික යුගයේ සිට ම ආර්යයන් ජල සම්පාදන ව්‍යාපාරයේ යෙදුණු බවයි. ඔවුන් ලංකාවට පැමිණීමට පෙර ගංගා නම් ගඟෙන් ඇළවල් මඟින් ජලය ලබා ගෙන ගොවිතැන් කරන්නට ඇත. මෝර්ය, ආන්ද්‍ර,

ගුප්ත ආදී රාජ්‍ය යුගයන්හි ඉන්දියාවේ වාරි කර්මාන්තය දියුණු වී ගිය නමුත් ශ්‍රී ලංකාවේ තරම් වර්ධනය වූ ද, සංස්කෘතික ශ්‍රේෂ්ඨත්වය විදහාපාන්නා වූ ද වැව් සෑදීම මුල් කරගත් ජල සම්පාදන ක්‍රමයක් එකල වෙන කිනම් රටකවත් නොතිබීණි.

'ලංකාවේ වාරි මාර්ග' නම් අගනා ග්‍රන්ථය සම්පාදනය කළ ආර්. ඇල්. බ්‍රෝහියර් මහතා එම ග්‍රන්ථය ආරම්භ කරන්නේ බෙල් මහතාගේ පහත දැක්වෙන ප්‍රකාශයෙනි. 'පෙර කල කරන ලද අති විශාල වැව් කර්මාන්ත සමහර විට ලක්දිව තරම් ලොව අන්කිසි රටක දැක්නට නො ලැබෙන්තේ ය යනු මාගේ විශ්වාසයයි. තවද මෙරට ඒ ඒ සීමා ඇතුලත දැක්නට ලැබෙන තරම් වැව් අමුණු කර්මාන්ත අන් රටක ඒ ඒ තරාතිරමේ සීමා ඇතුලත දැකීමට දුෂ්කර ය. මෙතරම් කුඩා වූ අන් රටක මේ සා පැරණි වූ ද, විශාල වූ ද, සංඛ්‍යාවෙන් උසස් වූ ද වැව් අමුණු තවත් ඇතැයි සිතිය නොහැකිය.' මේ මතය 'බ්‍රෝහියර් මහතා' අනුමත කර ඇත.

මෙරට වැව්වල බිසෝ කොටුව හා ජල සම්පාදන ක්‍රම පරීක්ෂා කර බැලූ 'පාකර් මහතා, පැරණි සිංහල ශිල්පියාගේ කෞශල්‍යය ගැන විස්මයට පත්වෙමින් මෙසේ සඳහන් කරයි.' ලෝකයේ කිසිම රටක විද්‍යාමාන නොවත්තා වූ විස්මිත ජල සම්පාදන ක්‍රමයක් නිපදවීමට පැරණි සිංහලයාට හැකි වූයේ බිසෝ කොටුව සාදා ගැනීම නිසා ය. එකල වැව්වල රැස් වූ ජලස්කන්ධය පිටවීම පාලනය කිරීමේ ක්‍රමයක් ඔවුන් නොදැන සිටියේ නම් පැරණි සිංහලයාට කුඩා ගම්වැව්වලට වඩා යමක් තැනීමට කිසිසේත් නොහැකි වන්නේ ය. මෙම සොරොව්වල වතුර ඇතුළ වන මුඛයට වඩා පිටවන මුඛය ප්‍රමාණයෙන් විශාල ය. කාණුවලට ඇතුළ වූ ගලා යන ජලය පැතිවල ගැටීමෙන් වේගය සිහින් වත බව දැනගත් පැරණි ශිල්පියා වතුර ගැලීමට බාධා නොවී පැවතීම සඳහා එසේ පිටකරන මුඛය ලොකු කළේ ය. එම පැරණි ශිල්පියාගේ දක්ෂකම වර්තමාන සෑම ඉංජිනේරුවකුගේ ම විස්මයට හේතු වන බව පාකර් මහතා වැඩිදුරටත් සඳහන් කරයි.

• **කෘෂි කර්මාන්තය හා වී ගොවිතැන**

ඈත අතීතයේ සිට ම ලක්වැසියන්ගේ ප්‍රමුඛ ජීවිකා වෘත්තිය වූයේ ගොවිතැනයි. ගොඩ ගොවිතැන හා මඩ ගොවිතැත හෙවත් හේන් ගොවිතැත සහ වී ගොවිතැත එහි ප්‍රධාන අංශ දෙක වේ. ලක්දිව ජනයාගේ කෘෂිකාර්මික ජීවිතය පිළිබඳ කියවෙන ජනකවි රාශියක් සිංහල ජනශ්‍රැතියෙහි ඇතුළත් වේ. එබඳු ජනකවි විශාල සංඛ්‍යාවක්, ගොයම් කවි සරණිය, සිංහල ජනසම්මත කාව්‍ය, සිංහල ජනකවි සංග්‍රහය, ගොවි ගෙදර ජනකවි, ආදී කාව්‍ය සංග්‍රහවල සංගෘහිත ය. ගොවිතැත විෂය කොට ගත් මේ ජනකවිවලින් ගොවිත්ගේ සාම්ප්‍රදායික දැනුම, වත් පිළිවෙත්, කෙම් පහත්, ගොවිතැත් ක්‍රම, මෙකත්, කමත්, අටුවේ, බිස්සේ, සිරිත් විරිත්, ගොවි දිවියේ දුක සැප ආදී විවිධ තොරතුරු හෙළිවේ.

• **දේශීය තාක්ෂණික දැනුම හා ශිල්ප ඥානය මානව යහපත උදෙසා යෙදවීම**

විද්‍යාවේ උන්නතිය හෝ අවනතිය පිළිබිඹු වන්නේ තාක්ෂණය යහපතට හෝ

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අයහපතට යොදා ගැනීම අනුසාරයෙති. තාක්ෂණික (කාර්මික) දැනුම වර්තමානයේ ව්‍යසනකාරී තත්ත්වයක් පෙන්නුම් කළ ද, අපේ දේශීය දැනුම යොදා ගනු ලැබුයේ මහජන හිතසුව පිණිස ම ය. සමාජ හා මානව විද්‍යාඥයන් 'උචිත තාක්ෂණය' (Appropriate Technology), 'දේශීය තාක්ෂණය' (Indigenous Technology) හා 'තාක්ෂණයේ ආදීනව' (Impact of Technology) ආදී විෂයයන් කෙරෙහි අවධානය යොමු කර ඇත්තේ එය මානව හිතවාදය පිණිස යොදා ගැනීමේ වැදගත්කම නිසාවෙනි.

අපේ ජාතික උරුමය වූ අපට ආවේණික තාක්ෂණික දැනුම් සම්භාරයක් මේ රටට පැවති අතර අපේ දේශීය තාක්ෂණය ගොඩ නැඟීමේ දී මූලික වූ ලක්ෂණ කීපයක් දක්නට ලැබේ. එනම් :

▶ උපයෝගීතාව හෙවත් යෝග්‍යතාවය/දේශීය අවශ්‍යතා හඳුනා ගැනීම. මිනිස් ශ්‍රමයේ සහායකයෙකු විම හෙවත් මිනිසාගේ උපකාරක මිතුරෙකු විම.

▶ දේශීය සම්පත්වලින් ප්‍රයෝජන ගැනීම.

▶ නිර්මාණ කුසලතා වැඩි දියුණු කිරීම. (කලාත්මක, සෞන්දර්යාත්මක බව ඔප මට්ටම් කිරීම)

▶ පිරිමැසුම් දායක හා ලාභ දායක විම.

▶ ස්වභාව ධර්මය සමඟ මානව සැසඳීම (පරිසර සංරක්ෂණය)

▶ එක් අංශයකට හෝ විෂයයකට සීමා නොවී සමාජයේ සියලු ක්ෂේත්‍ර ආවරණය කිරීම.

බුදුරජාණන් වහන්සේගේ සම්භාවනාවට පවා ලක් වූ පරිසර සංරක්ෂණය ක්‍රමවේදය දේශීය දැනුම් පද්ධතිය තුළ විද්‍යමාන විය. මෙකී දේශීය තාක්ෂණික දැනුම සමාජ ආර්ථික දියුණුව පිණිස යොදා ගත හැකි ය.

දේශීය දැනුම වාරිමාර්ග, කෘෂිකර්මාන්තය හා වී ගොවිතැනෙහි සංවර්ධනය පිණිස භාවිතා කිරීම.

දේශීය ඥාන පද්ධතිය වූ කලී, ශ්‍රී ලංකාවාසීන්ගේ ජාතික උරුමය බවට පත් ව තිබූ සුවිශේෂී බුද්ධිමය සම්පතකි. මෙකී දැනුම් සම්භාරය මෙරට ට ආවේණික, අද්විතීය හා විශිෂ්ට, සාම්ප්‍රදායික හා පාරම්පරික ඥාන මහිමයක් වශයෙන් ද සැලකිය හැකි ය. බුදුදහමින් හික්මවනු ලැබූ ජාතියක් සතු වූ සංස්කෘතික අංගයක් වූ මෙම දැනුම පරම්පරානුයාත උපදේශ, අත්දැකීම් හා තොරතුරු ඔස්සේ ඉදිරියට ගෙන යමින් මතු පරපුර වෙත උරුම කර දෙනු ලබන්නකි.

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මෙම දැනුම පරම්පරා ගණනාවක් තිස්සේ ප්‍රයෝජනයට යොදා ගෙන, අත්හදා බලන ලද්දක් වූ අතර එහි ජේවන අයිතියෙහි උරුමක්කරුවන් වූයේ අපේ මුතුන් මිත්තන් ය. අත්හදා බැලීම හා භාවිතය මගින් වැඩි දියුණු කරන ලදුව දන පුරුද්ද, දුක පුරුද්ද, කළ පුරුද්ද හා පළපුරුද්ද අනුව මුඛ පරම්පරාගතව දැනුම හා තොරතුරු පරිවහනය වූ ආකාරය අපගේ නිරීක්ෂණයට භාජනය කළ යුතු ය. ඒ නිසා දැනුමත් සමඟ ම තොරතුරු ද පරිවහනය වන අතර අපගේ මුතුන් මිත්තන් එකී දැනුම හා තොරතුරු මානව හා සමාජ-ආර්ථික දියුණුව උදෙසා ප්‍රයෝජනයට යොදා ගත් ආකාරයෙන් ම නුතන යුගයේ ද එයින් ලබා ගත හැකි පූර්වාදර්ශය අතිමහත් ය, අතිවිශිෂ්ට ය.

දැනුම පෝෂණය වන්නේ තොරතුරුවලිනි. එහෙයින් දැනුම පරිවහනය කරන වාහකයා තොරතුරු වන්නේ ය. ඔක්ස්ෆර්ඩ් ඉංග්‍රීසි ශබ්දකෝෂයට අනුව 'තොරතුරු' යන්න අර්ථ නිරූපණය කර ඇත්තේ "යම්කිසි පුද්ගලයෙකු පිළිබඳ ව හෝ කිසියම් දෙයක් ගැන හෝ සපයන ලද්දා වූ හෝ අසන්නට (දැන ගන්නට) ලැබෙන හෝ පතුරුවා හරින කරුණු නොහොත් තතු" වශයෙනි. මේ පසුබිම අනුව දේශීය දැනුම හා තොරතුරු භාවිතයට යොදා ගත් ආකාරය අධ්‍යයනය කිරීම සඳහා නිරීක්ෂණ චාරිකාවක් විලසින් ග්‍රන්ථගත තොරතුරු ඔස්සේ අතීතයට යමු. පැරැන්නන් අනුගමනය කළ සිරිත් විරිත් හා ප්‍රතිපත්ති ක්‍රියාත්මක කිරීමෙන් වර්තමානයේ අප නිරන්තරයෙන් මුහුණ දෙන ගැටලුවලට විසඳුම් සපයා ගත හැකි ය. උදාහරණ වශයෙන් පහත සඳහන් කරුණු දැක්විය හැකි ය.

1. වර්තමාන ජල ප්‍රශ්නය විසඳා ගැනීම හා ගංවතුර වළක්වා ගැනීම පිණිස පැරැන්නන්ගේ උපාය මාර්ග ප්‍රයෝජනයට ගැනීම.

2. ජල සංරක්ෂණය, ජල පෝෂක ප්‍රදේශ ආරක්ෂා කිරීම හා ජලයට රසායනික ද්‍රව්‍ය, කෘමි නාශක හා පොහොර මිශ්‍ර නොකිරීම.

3. කෘෂිකාර්මික කටයුතුවල දී රසායනික පොහොර හා කෘමි නාශක භාවිතය වෙනුවට පැරණි ආරක්ෂණ ක්‍රම හා උපක්‍රම භාවිතා කිරීම.

4. කෘමි හානි වළක්වා ගැනීම පිණිස පූජා විධි, කෙම් ක්‍රම හා ඖෂධීය කෙම් ක්‍රම, යන්ත්‍ර මන්ත්‍ර විධි, මැතිරීම් ක්‍රම නැවත භාවිතයට ගැනීම.

5. ජෛව පාලන උපක්‍රම, පඔයන්, සතුන් එළවන උපකරණ, උගුල් හා ශාක කොටස් භාවිතය පිණිස යොදා ගැනීම.

පැරැණියැ'යි ඉවත දැමීමත්, නො දන්නා තිසා නො සලකා හැරීමත්, යල්පිනූ, නො වටනා දැනුමකැ'යි සලකා අත්හැරීමත් නො-කළ යුතු දේශීය දැනුම වූ කලි කිසියම් සංස්කෘතියකට අනන්‍ය වූ ඥාත පද්ධතියකි. එය කෘෂිකර්මය, සෞඛ්‍ය ආරක්ෂාව, ආහාර

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පිළියෙළැවීම, අධ්‍යාපනය, පරිසර සංරක්‍ෂණය හා වෙනත් ක්‍රියාකාරකම් සමූහයක පදනම වශයෙන් සැලකිය යුතු ය. මානවයාගේ මූලික අවශ්‍යතා ඉටුකර දීම පිණිස මෙකී දේශීය දැනුම උපයෝගී කර ගත් ආකාරය අතීත ශ්‍රී සමෘද්ධිය මැනවින් අධ්‍යයනය කිරීම මගින් පැහැදිලි වෙයි.

අපි නැවතත් බටහිර ගැති මානසිකත්වයෙන් මිදී ස්වාධීන චින්තනයකින් යුක්තව දේශීයත්වය අගය කිරීමට පුරුදු පුහුණු විය යුත්තෙමු. සංස්කෘතිය, දැනුම, අධ්‍යාපනය හා ශිල්ප ඥානය දෙස බටහිර ඇසින් නොබලා අපේ ම ඇසින් නිරීක්‍ෂණය කළ යුත්තෙමු. අතීතයේ ඇති වූ දැනුම වර්තමානයේ පිරිසිදු කොට අනාගතයට යොමු කිරීම යුගයේ අවශ්‍යතාවකි. අපගේ පෞරාණික දැනුම පර්යේෂණයට ලක්කොට පුළුල් ව අධ්‍යයනය කොට මනුෂ්‍ය වර්ගයාගේ යහපත ('බහුජන හිතාය, බහුජන සුඛාය') පිණිස ලබා දිය යුතු ය. අතීතයෙන් පාඩම් ඉගෙන වර්තමානය නිසි පරිදි සකස්කර ගෙන අනාගත සංවර්ධනය පිණිස සැලසුම් සකස් කළ යුතු ය. අධ්‍යාපනය යනු සංස්කෘතිය ඉදිරි පරපුරට පැවරීමක් වන හෙයින් බාල පරපුර දැනුම්වත් කිරීම හා ශිෂ්‍ය පරපුර නව දැනුමෙන් පෝෂණය කිරීම මගින් සමාජ ආර්ථික දියුණුව පිණිස දේශීය දැනුම යොදා ගත හැකි ය.

වර්තමාන සමාජය තුළ මේ අතීත දැනුම, තාක්‍ෂණය ප්‍රයෝජනයට නොගෙන කටයුතු කරන තත්ත්වයක් දක්නට ලැබේ. නූතන තාක්‍ෂණයේ මහිමයෙන් දියුණු යැයි උදම් අනමින් කටයුතු කරන සෑම සමාජයකම, රටකම ඒ තත්ත්වයන් තාවකාලික බව විවිධ ව්‍යසනයන් මගින් යළි යළිත් තහවුරු කර ඇත. මේ තත්ත්වයන්ට ප්‍රධාන හේතු වන්නේ අතීත තාක්‍ෂණය බැහැර කර තීරණ ගැනීම හා කටයුතු කිරීම බව විශේෂයෙන් සඳහන් කළ යුතු ය. 2011 මාර්තු මාසයේ 11 වන සිකුරාදා දින ජපානය මුහුණ දුන් අවාසනාවන්ත තත්ත්වය මෑත කාලීන ආසන්නතම නිදසුනකි. ඒ අනුව සමාජ ආර්ථික සංවර්ධනය යථාර්ථයක් බවට පත්කර ගැනීම උදෙසා දේශීය ඥාන පද්ධතියෙන් ඉගෙන ගත යුතු පාඩම් බොහෝමයකි.

සමාලෝචනය

පැරණි දැනුම යනු පැරැත්තන් විසින් ගතානුගතිකව පාරම්පරිකව උරුම කෙරෙන දැනුමකි. අපරදිග නවීන විද්‍යා දැනුම හා තාක්‍ෂණය අගය කරන ප්‍රාඥයින්ට පෙරදිග පාරම්පරික ඥාන මහිමයේ අගය අවබෝධ වූ අවස්ථා කොතෙකුත් ඇත. ඒ නිසා පැරණි දැනුම පිළිබඳ අගය වටහා ගෙන මෙහි හරය අවබෝධ කර ගෙන විද්‍යාත්මක දැනුම අපේ දේශීය දැනුමට පිවිසිය යුතු ආකාරය ගැන පර්යේෂණ කළ යුතු ය. එමෙන් ම නවීන විද්‍යා දියුණුව ඉදිරියේ සෑහුව පෙනී සිටීමින් අපේ උරුමය රැක ගැනීම කෙරෙහි උනන්දු විය යුතු ය.

දේශීය ඥානය ආරක්‍ෂා කිරීමට ජනශ්‍රැති රැක ගත යුතු ය. මෙම දැනුම

අනාගත පරපුරට ප්‍රගුණ කළ යුතු ය. දේශීය දැනුම වර්තමාන සමාජ හා ආර්ථික අවශ්‍යතා සම්පූර්ණ කර ගැනීම පිණිස ද, ඒ හා සමඟ පැන නැගෙන ගැටලු විසඳා ගැනීම පිණිස ද භාවිතා කළ හැකි ය. දේශීය දැනුමේ විශිෂ්ටත්වය, අද්විතීයත්වය, ප්‍රායෝගිකත්වය හා එහි භාවිතයෙහි ඇති අදාළත්වය මේ කරුණු අනුව පැහැදිලි වෙයි.

යෝජනා

+ අධ්‍යාපන හා උසස් අධ්‍යාපන විෂය නිර්දේශයන්ට හා විෂයමාලාවලට දේශීය දැනුම ඇතුළත් කිරීම හා අධ්‍යයනය කිරීමට අවස්ථා සැලසීම.

+ දේශීය ඥානය විද්‍යාත්මක දෘෂ්ටියෙන් නිරීක්ෂණය කොට දේශීය අවශ්‍යතා හා චින්තනය මත පදනම් වූ අධ්‍යාපන ක්‍රමයක් සැලසුම් කොට ක්‍රියාත්මක කිරීම.

+ දේශීය දැනුම පිළිබඳ කෝෂ ග්‍රන්ථ (ශබ්දකෝෂ, විශ්වකෝෂ, පාරිභාෂික ශබ්ද මාලා) ප්‍රකාශයට පත්කිරීම.

+ දේශීය ඥානය හා තාක්ෂණික අධ්‍යයන, අධ්‍යාපන හා පර්යේෂණ කටයුතු සංවර්ධනය පිණිස විද්වත් වෘත්තික විද්‍යායතනයක් හා පර්යේෂණ පුස්තකාලයක් ආරම්භ කිරීම.

+ වැඩිහිටි හා වෘද්ධ පරපුර සතු මෙම දැනුම හා පළපුරුද්ද බාල පරපුරට විධිමත්ව ලබා දීම, ප්‍රගුණ කරවීම.

+ දේශීය දැනුම සංවිධානය කිරීම, ආරක්ෂණය හා සංරක්ෂණය සඳහා සුදුසු පියවර ගැනීම.

සඳේ මෙත් පතළ පැරකුම් දුටු ගැමුණු - උදේ සවස මුනිදුට පසු සිහි කරනු

විදේශීන්ගෙ දුසිරිත් පිළිකුල් කරනු - මෙදේ කරන තුරු වත්තේ නැත දියුණු

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Knowledge Audit in a university library environment: a case study.

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Abstract

The purposes of conducting this knowledge audit was to identify all knowledge required to perform the tasks related to acquisitions; to provide evidence of all knowledge which have not been documented so far but currently available in the acquisitions department; to ascertain the gaps between the currently available knowledge and the knowledge actually required for the efficient functioning of the department and to provide empirical evidence to the management for future development activities. The methodology employed for the research consists of six stages; 1) Orientation and background study of the department 2) diagrammatising all the functions, processes and decision making instances related to the department. 3) Analysing each function, process and decision making instance to elaborate the sequential individual tasks performed to accomplish a given job. 4) Listing all tacit and explicit knowledge sources currently available in the department. 5) Visualisation of tacit departmental knowledge indicating the strengths and weaknesses and 6) Making recommendations to the management based on the findings. Participative observations, group discussions, in-depth interviews, and focus group meetings with the senior executive staff were employed as well as review of related documentation to collect the necessary data. The knowledge audit led to six significant and original explicit outcomes; 1) the Process Map 2) the Task Analysis 3) Inventories of current tacit and explicit departmental knowledge 4) Knowledge Need Analysis (KNA) 5) the Knowledge Map and 6) Formal job descriptions and person specifications for all posts in the acquisitions department which were not available before.

Keywords : Documentation/Tacit Knowledge/ Task Analysis

Introduction

The following section will introduce the concept knowledge audit together with its significance in an organisational environment. It will be followed by an introduction to the university library, the methodology used for the research and as brief review of related literature.

Knowledge Audit

A knowledge audit is a planning document which provides a structural overview of designated section of an organisation's knowledge as well as details of the qualitative and quantitative characteristics of the individual chunks of knowledge within that designated section. The document also identifies the knowledge repositories in which those chunks reside.

"The knowledge audit (K-Audit) is a systematic and scientific examination and evaluation of the explicit and tacit knowledge resources in the company. The K-Audit investigates and analyses the current knowledge environment and culminates, in a diagnostic and prognostic report on the current corporate 'knowledge health'. The report provides evidence as to whether corporate knowledge value potential is being maximised. In this respect the K-Audit measures the risk and opportunities faced by the organisation with respect to corporate knowledge" (Hylton 2002, p.1).

Many other authors (Cheung et.al 2007, Debenham and Clark 1994)as well agree that Knowledge Audit is a systematic analysis of an organisation's tacit and explicit knowledge and the end product is a document which indicates the current status of the organisational knowledge with respect to its creators, owners and locations. Gaps and overlaps are also revealed so that the organisation can use it for future developments.

Within the context of this paper knowledge audit is defined as a systematic study of the tacit and explicit knowledge available in the Acquisitions Department of the Main Library of the University of case study. The final product was expected to be a series of documents which provide the evidence of the current knowledge owners, specific types of tacit and explicit knowledge currently available in the department and the future requirements of knowledge. Finally it was expected to use the Knowledge Audit to identify the gaps in the departmental knowledge so that the specific needs can be addressed through management decisions.

Significance of Knowledge Audit

While several authors (Liebowitz 2000, Wexler 2001, Sharma and Chowdhury

2007) have discussed the benefits of knowledge audits Hylton (2002) has elaborated its tangible benefits extensively. In the research related to the acquisitions department the expected benefits of the knowledge audit were:

+ To identify all the tacit and explicit knowledge required to perform the tasks related to acquisitions.
+ To provide evidence of all the tacit and explicit knowledge which have not been documented so far but currently available in the acquisitions department.
+ To ascertain the gaps between the currently available knowledge and the knowledge actually required for the efficient functioning of the department.
+ To provide empirical evidence to the management for future development activities.

K-Audit process

Many authors (Cheung et.al 2005, Choy, Lee and Cheung 2004, Hylton 2002, Hylton 2002) have identified a variable number of stages in conducting a knowledge audit, but close scrutiny of all these stages indicate that there are four key stages; 1) background study 2) in-depth investigation 3) building knowledge inventory and 4) drawing the knowledge map. The researcher identified six stages for this particular knowledge audit, which will be discussed in the methodology section.

The Acquisitions Department

The Acquisitions Department of the case study university is responsible for acquiring all the non-journal material for the Faculties of Arts, Education, Graduate Studies, Law, Management and Science as well as for the general collection. Three Library Assistants and a minor staff member handle the work under the supervision of a Senior Assistant Librarian.

It was observed that the performance quality of the acquisitions department has declined during the recent past. Mistakes in the work were frequent and the attitudes towards the work were less positive. It was also observed that there has been a rapid loss of staff experienced in acquisition related work due to retirement and less experienced new staff has been assigned to the department. The new staff taking over the responsibilities had to depend on themselves to learn as clearly codified work procedures or job descriptions were absent. There are no written down instruction manuals to support the new staff. As the staff was learning through work, many trials and errors has occurred. At the same time some of the long established work procedures have been lost without the

notice of the staff.

The situation has been further aggravated by frequent changes of supervisory staff. Several senior staff members have taken long term leave and the workload was shared by the remaining senior staff, reducing the time available for close supervision of the activities. Although the library has automated the catalogue process, it has not been extended to the acquisitions department. The manual work process, with the increased demand for better fund management from the academic departments has become extremely time consuming and less effective.

On one hand, the acquisitions department as the heart of all the other functions of the library with the strength of the collection depending upon the annual additions to the collection, could not afford to have a low quality of service. On the other hand the academic departments are pressurising the department for speedy acquisition of material and better utilizations of departmental funds. There is no way that the acquisitions department could lag behind due to internal inefficiencies. It was necessary to identify the critical issues affecting the department and address them immediately. In order to study the departmental issue in a systematic manner, the researcher decided to exploit the concept of Knowledge Audit from the Knowledge Management domain.

Methodology

The methodology employed for the research consists of six stages;
+ Orientation and background study to identify the main functions, staff and resources in the acquisitions department
+ Drawing the Process Map – depicting diagrammatically all the functions, processes and decision making instances related to the department.
+ Task analysis– analysing each function, process and decision making instance to elaborate the sequential individual tasks performed to accomplish a given job.
+ Compilation of the Knowledge Inventory – listing all tacit and explicit knowledge sources currently available in the department.
+ Drawing the Knowledge Map – visualisation of tacit departmental knowledge indicating the strengths and weaknesses.
+ Finally making recommendations to the management based on the findings.

In order to collect the data for this study, participative observations, group

discussions, in-depth interviews, and focus group meetings with the senior executive staff were employed as well as review of related documentation.

However, there were some limitations: knowledge management is yet to gather momentum in the Sri Lankan library context, so does the knowledge audit. Therefore the necessary environment which facilitates the knowledge audit was absent. Any audit instruments or protocols built up in the library context were not available for the researcher. Hence the specific instruments had to be created with the support of the similar instruments developed in other countries. This was rather time consuming because exploratory tests had to be carried out at each stage. A second constraint was the absence of awareness of knowledge concept among the staff. This research was the first of its kind within the Sri Lankan context and also the first time the staff reflected on their own knowledge. Articulation of their knowledge was difficult due to lack of practice and the in-depth questionnaires used in other case studies to capture organisational knowledge could not be utilised in this context. Therefore capturing the tacit knowledge was a slow and tedious process with a considerable involvement of the researcher in eliciting information from them.

It needs to be mentioned here that due to the limited scope of the knowledge audit it did not cover several key areas covered by other knowledge audits. For instance knowledge flow and knowledge sharing practices, career development or other rewards for knowledge sharing, relationship between the executive and the non executive staff and employee job satisfactions were not studied extensively due to the straightforwardness of the work practices in the acquisitions department and also because some of these concepts could not be studied without analysing the entire library as a whole.

Review of related literature

Knowledge audits have been implemented successfully within several organisations. For instance in an airline company (Choy, Lee and Cheung 2004), in a railway company (Cheung et.al 2007), a motor manufacturing company (Cheung et.al 2005 and Kang, Park and Kim 2003), a steel manufacturing company (Kim, Suh and Hwang 2003) and in a cooking oil manufacturing company (Heng 2001). However the application of knowledge audit is rare in the academic context but Hellstrom and Husted (2004) argues that it can be fruitful in the academic environment also. An instance of applying knowledge audit in a Dutch public library to make use of the hidden knowledge potential of the staff is recorded by Selhorst (2008) while Sharma and Chowdhury (2007) reports that a knowledge audit diagnostic tool was tested in a

library. However knowledge audits in the libraries or in any other institutions in Sri Lanka have not been reported yet. Although this was a hindrance to this study carried out in the acquisitions department, the case studies mentioned above underpinned the study, to a considerable extent.

The Findings
This section will present the findings of the knowledge audit with regard to its four key stages; drawing the process map, task analysis, compiling the tacit and explicit knowledge inventories and drawing the knowledge map.

Process Map
Through participatory observations and group discussions it was identified that six main functions are performed by the acquisitions department;

✦ Processing orders sent by the academic departments.
✦ Purchasing from authors directly and publishers' catalogues
✦ Accepting gifts.
✦ Binding of cumulative journal issues
✦ Withdrawal of the weeded books
✦ Cost calculation of the lost books

Each main function was further analysed to identify the sequential work processes and decision making instances associated with each function and these were depicted in a Process Map (which is not provided here due to space limitations). Each process was then numbered in the map from P1 to P19 for the ease of future reference.

Task Analysis
Task analysis consisted of an in-depth study of each process and decision making instance. This was performed by the researcher together with the staff of the department by cautiously going through the individual tasks that requires to be performed to complete each function. The outcome of the exercise was an extensive document which enlisted 155 individual tasks performed under each process and decision making instance. Not only the tasks but also the person responsible for each task, the specific tacit knowledge required to perform the task, explicit knowledge sources (Registers, policies software etc) used by the staff to perform each task were also identified at this stage. A fraction of the task analysis document is shown in Appendix 1.

Knowledge Inventory

Knowledge Inventory is the stocktaking of knowledge involving the counting, indexing and categorising of corporate knowledge (Hylton 2002) and the third stage of the knowledge audit of the acquisitions department was to prepare an inventory of the tacit and explicit knowledge available in the acquisitions department.

All the articulated knowledge in the form of registers, guidelines, policies, regulations, software packages etc required by the staff to carry out their work were identified as explicit knowledge and an Explicit Knowledge Inventory was compiled containing all the names of specific knowledge sources, physical quantity available from each item, format (paper-based or online) location (whether it is within or outside the acquisitions department), ease of access by the staff of the department, exact purpose of the knowledge sources, its relevance to the department, frequency of use and special remarks of each sources of knowledge. The outcome was another extensive document which spelt out the significant characteristics of all explicit knowledge sources used in the department. While Table 1 summarises the list of 43 explicit knowledge sources used in the department, Appendix 2 depicts a section of the Explicit Knowledge Inventory.

Table 1 - Explicit knowledge Inventory

Knowledge Item	Knowledge Item
1. Accession Number Register	23. Foreign payment settlement copies
2. Accession Register (Current)	24. Government Procurement guidelines
3. Accession Registers (Closed)	25. Indents Register
4. Advanced payment file	26. Internet
5. Annual dept allocation documents	27. Invoice file
6. Annual general allocation document	28. Lists of recommended titles
7. Bar code generation software	29. Lost book Register (closed)
8. Bill Register	30. Lost book Register (current)
9. Card catalogue	31.Lost books communication file
10.Catalogue database (As a tool for searching)	32.Online Authority file
11.Catalogue database (for data entering)	33.Online currency converter
12.Cost Recovery Policy	34.Original Pro Form invoices
13.Custom clearance file	35.Pamphlet Number Register
14.Delivery notes file	36.Pamphlet Register

15.Departmental address/ Telephone Directory	37.Petty cash file
16.Departmental order files (current year)	38.Petty cash register
17.Donation Number Register	39.Telephone Directory
18.Donation policy	40.Transliteration guidelines
19.Excel Files	41.University Financial Regulations
20.Faculty order files (Previous years)	42.Vendor details
21. Faculty/Dept based communication files	43.Yellow Pages
22. Folders of withdrawn titles pages	

In order to compile the Tacit Knowledge Inventory of the department, an in-depth interview schedule which contained 15 areas regarding the education, training, professional experience, knowledge and skills of the five staff members was used. The findings were codified to build up the Tacit Knowledge Inventory. The staff members listed that they have seven skills and three types of knowledge among themselves while they stated that they would like further training in five areas. However, the question arose whether the staff has a clear idea of the knowledge and skills *they possess at present* or *they are expected to possess* in order to perform the functions successfully.

To answer this question the researcher made a further study of the knowledge and skills required by the staff of the acquisitions department in general. Using two previous studies on staff skills (Rehman 1997 and McNeil and Giesecke 2001), a list of knowledge and skills required for the acquisitions staff of the university library was prepared and refined after extensive discussions with the Librarian. The outcome was a Knowledge Need Analysis (KNA) of the department. The KNA identified the following six categories of knowledge and skills as needed by the staff of the acquisitions department.

+ 11 types of generic knowledge.
+ 21 types of general skills
+ 22 types of acquisition-specific knowledge.
+ 47 types of acquisition-specific skills
+ 3 types of knowledge in bibliographic database manipulation and
+ 4 types of skills in bibliographic database manipulation

Compiling the Tacit Knowledge Inventory and the KNA were somewhat

complicated tasks when compared with the compilation of the Explicit Knowledge Inventory, as the former required in-depth analysis of the unarticulated capabilities of the workers.

Knowledge Map

Knowledge map which is a visual representation of the corporate knowledge network (Hylton 2002) is the final output of the knowledge audit and it helps the management to grasp the status of knowledge and plan knowledge development strategies (Kang, Park and Kim 2003). However it is never the solution but it directs us towards information. This information, when reliable and relevant, empowers us (Wexler 2001). To visualise the corporate knowledge meaningfully five perspectives must be considered which answer five questions; *what type* of knowledge is visualised, *why* that knowledge should be visualised, *for whom* is the knowledge visualised, in *which context* should it be visualised and the *how* can the knowledge be represented (Eppler 2007). Five types of knowledge maps have been identified by Eppler (2001): knowledge source maps, knowledge asset maps, knowledge structure maps, knowledge application maps and knowledge development maps.

In this research it was decided to visualise the knowledge assets owned by the individual staff members for the purpose of codifying and assessing the existing levels of knowledge and skills for the use of the management and the employees of the library. The report was to be utilised as a management tool in planning human resource development. The exact visual format of the knowledge map was a structured colour coded matrix as identified by Eppler (2007) as the most suitable format to visualise knowledge assets.

To draw the knowledge map, all the items of knowledge and skills identified at the Knowledge Need Analysis were listed in a table. Using a continuum of six levels varying from 'Very High' to 'Not Applicable to the post' the level of each knowledge / skill possessed by the individual members of the staff was assessed and recorded in the table using a particular colour corresponding to each level.

This assessment was initially carried out by the researcher and later reviewed and validated by the Librarian, the senior executive staff of the library and the staff of the acquisitions department. The final outcome was a colour coded structured matrix which clearly visualises the levels of tacit knowledge assets available in the acquisitions department.

Findings

The knowledge audit presented six significant and original explicit outcomes; 1) the Process Map 2) the Task Analysis 3) Inventories of current tacit and explicit departmental knowledge 4) Knowledge Need Analysis (KNA) and 5) the Knowledge Map. These documents provided a good opportunity for the staff and the researcher to evaluate the work processes and tools used within the department with respect to their relevance. Many duplications, gaps, irrelevances as well as significances hitherto unseen were brought in to light. Most significantly, as was expected by the researcher, the knowledge audit helped solving many of the issues identified at the beginning. Especially the Process Map and the Task Analysis addressed the absence of codified work procedures. These two documents could be used by the new Library Assistants assigned to the department as well the supervising executives as guidelines to avoid mistakes in the work procedures. These codifications could be used in future not only by the departmental staff but also by the library management and the Library Science students who come for in-service-training. The Knowledge Inventory recognized the strengths and weaknesses of the staff as far as the knowledge and skills are concerned and the KNA could be used in future to provide more appropriate staff training. It also helped the management to decide on the types of education and training programmes that should be provided for the staff.

The sixth outcome is the formal job descriptions and person specifications for all posts in the acquisitions department which were not available before. These could be drawn up with the assistance of the Process Map, Task Analysis and the KNA.

Other than the tangible outcomes carrying out the knowledge audit was a unique encounter because the exercise was new to the researcher as well as the other staff. It enabled a self-evaluation opportunity which is a novel experience. A considerable amount of enthusiasm was generated by the frequent discussions between the researcher and the rest of the acquisitions staff. They were enthusiastic not only about the wide range of skills and knowledge they discovered that they possessed but also about the codified functions, processes and tasks of the acquisitions department which would help the new staff members in future. It also identified many new knowledge and skills that they require to perform their jobs and the necessity to develop the areas in which they are not so competent.

Although conducting the knowledge audit was a constructive experience, the researcher had to be careful of several human related aspects. It could have easily generated suspicion among the staff that there work is being monitored to be reported to the management resulting in fears. The researcher had to take care that the knowledge audit did not generate high expectations that it will be the answer for all if not for most problems in the department immediately after the completion of the project. Care also had to be taken not to generate negative attitudes that nothing will change after the study. The researcher had to be aware of the danger that knowledge audit becomes the end itself rather than becoming an empowering tool for the management. These issues required the researcher to communicate effectively with the staff and the management about the strengths of the knowledge audit and the opportunities it will provide. Finally it needs to be stressed here that it was a fruitful exercise which provided a series of activities to be implemented to solve the critical issues in the acquisitions department, but it is not a permanent solution to human resource development. As soon as a change occurs in the staff or the work procedures, a gap will arise in the existing and required departmental knowledge which will lead to the inevitable knowledge re-audit. It is expected that this paper would provide guidance to the other librarians who want to use knowledge audit to study systematically the departments in their libraries.

Harnessing knowledge Audit for the development of libraries

Knowledge is considered as one of the most vital factors for the competitiveness of any organisation hence organisations are showing an increasing interest in the organisational knowledge. Those organisations successful in controlling knowledge experience increased efficiencies in operation, high rates of successful innovations, increased levels of certain services and an ability to have foresight on trends and patterns emerging in the market place and the libraries are no different. Irrespective of the size or type of the library, the success depends on how well they manage their knowledge.

Several salient factors can be identified why llibraries need to pay attention to managing knowledge by auditing; 1) Libraries increasingly have to do more with less resources hence leveraging the in-house knowledge is crutial. 2) Seldom do libraries can recruit the best staff hence they need to depend highly on training. Librarians not only have to use their knowldeg to provide the best service but also must be able to transfer that knowledge to the employees. 3) Libraries are often judged by the external world on the quality of their services based on knowledge. Hence they have to show depth of their expertise and their capabilities in leveraging the in-house know-how in order to survive in a challenging environment. 4) Libraries are subjected to knowledge erosion casued by staff turn-overs and especially when the senior experienced staff leaves. Therefore knowledeg in libraries especially the tacit knowledge, must be appropriately audited, recorded, gaps identified and initiatives taken to avoid knowledge erosion as much as possible within the library. These factors amply justyfy auditing knowledge within the library so that such in-house knowledge can be harnessed to increase the significance of the libraries in the global knowledge economy.

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Appendix 1 – Sample from the Task Analysis

F1 Initiating requests from the academic departments				
Procedure	**Sequential tasks**	**Responsibility**	**Tacit Knowledge**	**Explicit Kn. sources**
P1. Accept departmental recommendations	1.1 Write to the Deans/Heads requesting recommendations	SAL	◻ Knowledge of the availability of funds for the given year	◻ Annual allocation document
	1.2 Accept the postal mail from the office 1.3 Direct to SAL for necessary action	L	Ability to identify ◻ book lists ◻ communication relevant to Acq. from what is delivered by the office ◻ publishers catalogues ◻ mail which needs urgent attention ◻ Liaise with others	◻ Lists of recommended titles
	1.4 Identifying mail relevant to acquisition and return irrelevant to office 1.5 Scan lists of requests / e-mail attachments 1.6 Evaluate and categorise into Fac / depts. 1.7 Distribute among staff for processing	SAL	Knowledge of ◻ subjects taught in the university ◻ different department /unit affiliations ◻ acquisitions policy for each department/unit ◻ mailing ◻ Liaising with others	
P2. Check availability of requested titles	2.1 Check appropriate database 2.2 Check on order / in process files 2.3 Inform SAL if title available 2.4 If title not available proceed to P3	LA	◻ Database searching skills ◻ Identify material by Title/Author ◻ Searching in the appropriate Dept/Faculty files	◻ Catalogue database maintained in Alice for Windows ◻ Card catalogue ◻ Order files
	2.5 Check accuracy of information supplied by staff and proceed to P4	SAL	◻ Overall familiarity with previous orders	
P3. Fund Availability	3.1 Check availability of funds for the appropriate department 3.2 Inform status to SAL	LA	Knowledge of ◻ total allocation for each department ◻ the amount spent of departmental allocations ◻ the amount committed from the departmental allocations ◻ ◻ major foreign currencies. ◻ current exchange rates ◻ Currency conversion	◻ Annual Faculty/dept allocation documents ◻ Online currency converter
	3.3 Check accuracy of information supplied by staff 3.4 Instruct staff to proceed to P4	SAL	Thorough knowledge of fund availability for each department	4 Annual general allocation document

Appendix 2 – Sample from Explicit Knowledge Inventory

Source	No. of items	Location	Access by Acq. staff	Format	Purpose	Relevance[4]	Frequency of uses	Remarks
1. Lists of recommended titles	Many	Various academic depts.	Easy	Paper /online	To generate orders for a given year	VR	F	□ When lists are e-mailed they are printed for calling for Pro Forma.
2. Catalogue database (As a tool for searching)	03 (Main Library, Science & Medical)	Via Intranet and Internet	Fair.	Online database.	To locate availability of titles To add new records after processing (P12)	R	F	□ Access depends on speed and sometimes it is slow. □ Three databases (Main Library, Medical & Science have to be accessed separately). □ Adding new records to the db occur external to the Acq. Process therefore it is irrelevant
3. Card catalogue	04 (Author, Subject, Sinhala & Law)	Reader Services	Fair.	Catalogue cards	To locate availability of titles. To count pages to calculate the cost according to the Lost Book Policy when a book is lost.	R	O	□ Access is time consuming because the catalogues are located in a different section. Staff has to visit the section physically to search. □ If a price is not mentioned in the Acc. Reg. the number of pages is considered to calculate the cost of a book lost.
4. Annual general allocation document	01	Acq	Easy	Paper	To check allocations for books and periodicals and for each Faculty	VR	F	□ This indicates the allocation for each faculty for a given year
5. Annual dept allocation documents	01	Acq	Easy	Paper	To check allocations for book purchasing for each department	VR	F	□ This indicates the allocation for each department for a given year
6. Online currency converter	-	Internet	Easy	Online	To convert foreign currency	VR	F	□ Used to convert the prices in foreign currencies given by the foreign suppliers

[4] VR- Very Relevant, R-Relevant, IR - Irrelevant s F- Frequently, O – Occasionally, R- rarely

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Use of a knowledge base on nature conservation for information and knowledge dissemination: IUCN Sri Lanka library

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Abstract

International Union for Conservation of Nature (IUCN) is a conservation-based organisation generating knowledge on conservation related matters. Its knowledge products are diverse and include policy briefs, best practice guidelines, lessons from the field, particularly on biodiversity and ecosystems. IUCN Sri Lanka country office library user community is diverse ranging from school children who seek information for their school projects, assignments and presentations to researches who seek information for their researches. Analysis of library enquiries reveal that most information sought relate to endangered species, with follow-up inquiries necessitating to provide additional knowledge links to species groups. These needs are best served by having a Knowledge Base (KB) that grows and improves regularly to enhance professionals' knowledge. IUCNSL library KB will bring together professionals and library users and can be accessed and shared widely in the community of IUCNSL library users.

Keywords: Knowledge Base/Knowledge Management/Environment Protection

Introduction

With the rapid and constant changes taking place in information technology, traditional knowledge sharing methods are changing. Using a KB for knowledge sharing may be new to library users but employ same practices of internet searching and browsing. Knowledge is contextual and depends on the experiences, values and beliefs of individuals and organizations. A knowledge base (KB) is a central repository of knowledge which develops continuously with knowledge addition that stores knowledge as information. A Knowledge

Base allows for complete local control over the information and data that is being disseminated that can be audited for accuracy and content would be edited for timeliness. Timeliness of information is a major requirement for IUCN SL library knowledge dissemination.

A study was conducted at the IUCN library during last four years through a questionnaire survey among library users on their information requirements and the fulfillment of those requirements through the services provided by the library. Findings related to information requirements of the users were summarized in the table below (table 1).

Category	Percentage
Agriculture	2
Biodiversity	52
Climate change	4
Disaster management	3
Ecology	9
Environmental Economics	2
Invasive Species	14
Natural resources	6
Protected areas	8

Table 1.Information requests by the category

From information requests 52% was on endangered and endemic species which is categorised into biodiversity. Users were trying to find relevant information from books. Species related information is constantly changing as new species are added to the group whenever scientists discovered and described a new species. Most requested information was on how to identify the species, diversity, distribution, threats and what can be done to conserve. Provision of information according to users' needs was a problem. Over the past years library was looking for a solution for such issues and planned to open a wiki page. But it was decided that a KB would be an appropriate alternative for the above information requirements.

After considering advantages and disadvantages of a KB over a Wiki, it was decided that IUCNSL library needs a knowledge base that grows and improves constantly, and which will continuously enhance with professionals' knowledge. The proposed KB will bring together professionals and library users and can be accessed and shared widely in the IUCNSL library user community. It is planned to study best practices and obtain the knowledge that professionals have gained through experience from field work for a Library KB that will

function as a source and a tool for knowledge innovation on the subject area.

IUCN SL Library KB is a five year project and it is planned to complete the biodiversity section during the first year in phase 1 of the project. Information input and implementation of the system is planned simultaneously. Facilities are provided to use in-house in information processing and information addition to the KB.

This paper is organized into two sections where the first section is devoted to a description of knowledge, knowledge management and general information on IUCNSL Library KB, and the second section describes the structure and the technology.

IUCN

International Union for Conservation of Nature and Natural Resources (IUCN), helps the world find pragmatic solutions to most pressing environment and development challenges. It supports scientific research, manages field projects all over the world and brings governments, non-government organizations, United Nations agencies, companies and local communities together to develop and implement policy, laws and best practices. IUCN develops and supports cutting-edge conservation science, particularly on biodiversity and ecosystems and how they link to human wellbeing. For 63 years from its inception on 1948, IUCN has led the development of conservation science and knowledge, and brought together governments, Non Government Organisations (NGOs), scientists, companies and community organizations to help the world make better conservation and development decisions. Biodiversity conservation is central to the mission of IUCN. IUCN demonstrates how biodiversity is fundamental to addressing some of our greatest challenges: tackling climate change, achieving sustainable energy, improving human well-being and building a green economy. Harnessing such information for dissemination to address issues relating to environment and its protection will be a major contribution towards the development of socio economic aspects of Sri Lanka and the world. This is especially so with the current concerns of climate changes, carbon trading and gas emissions.

IUCN Sri Lanka Library

IUCN has offices in more than 45 countries. In accordance with the Union's global mission, the Sri Lanka Programme facilitates conservation action by offering technical, institutional and policy support to government agencies and NGOs. IUCN Sri Lanka Library user community varies from school children who seek information for their school projects, assignments and presentations to

researches and scientists who are seeking information for their research projects. IUCNSL Library has a comprehensive and unique collection of Environmental Science books, CDs, journals and a photograph library as well. Most information enquires are related to endangered species. There are repeated enquiries to which the library provides additional information with updated or new information.

The IUCNSL KB

IUCNSL library knowledge base is a web-based dynamic knowledge base system designed to assist library users in their information needs in environmental science related queries with contextual quality articles, photographs and a facility to have a written communication with IUCN experts or an external subject expert. First, key features were outlined to identify the requirements. By reviewing frequently asked questions from the library, contents of the databases were decided. This KB offers answers and explanations for user enquiries by consulting subject professionals or will be answered by the professionals themselves by direct communication using chat facility if they have been logged into the system. Answers provided by the professionals are open for discussion and comments All comments are stored in a database and manually checked for accuracy that will be added to the KB.

For this KB, materials (articles) are collected and attached to the KB if permission is granted by the author and if not include the references regarding the material with a note on the locations of its availability.
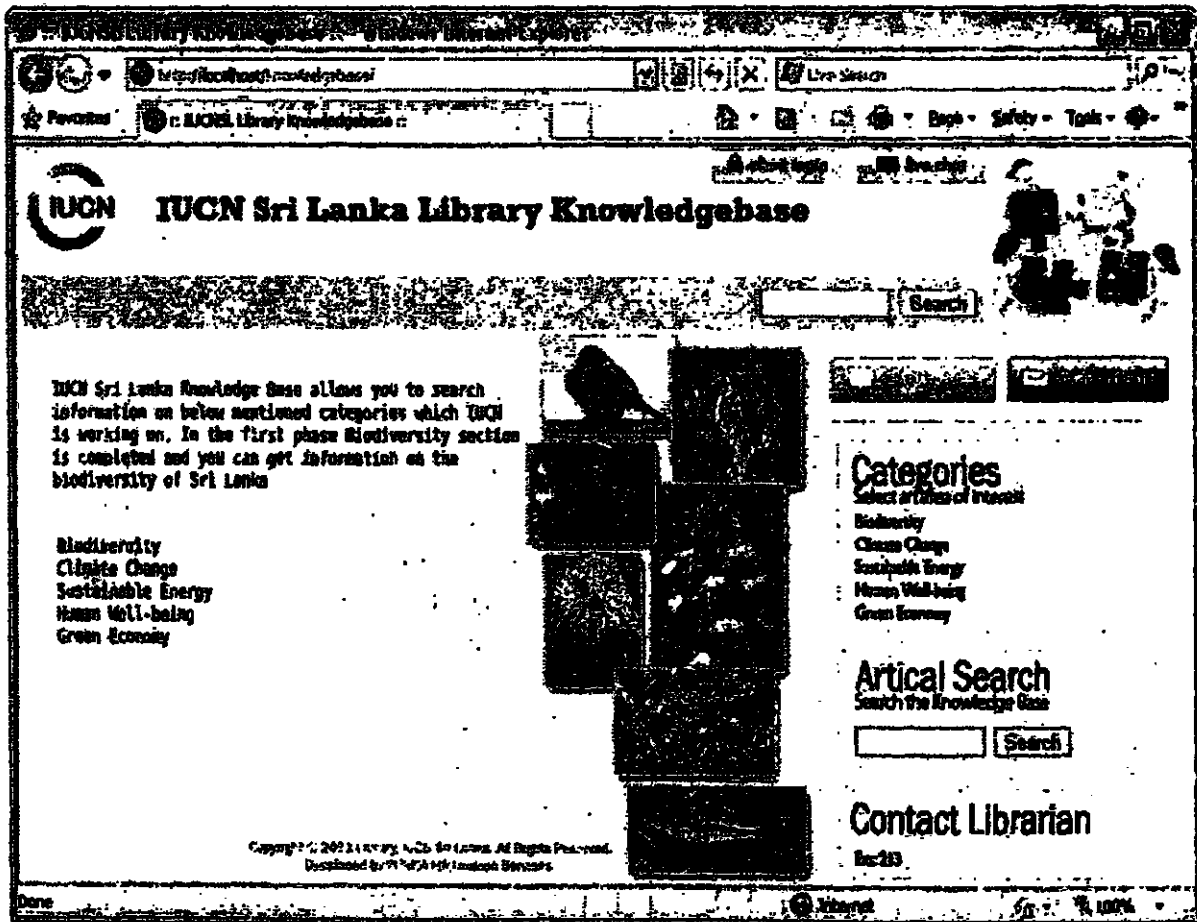
Figuire 1 Home Page

Structure of the KB
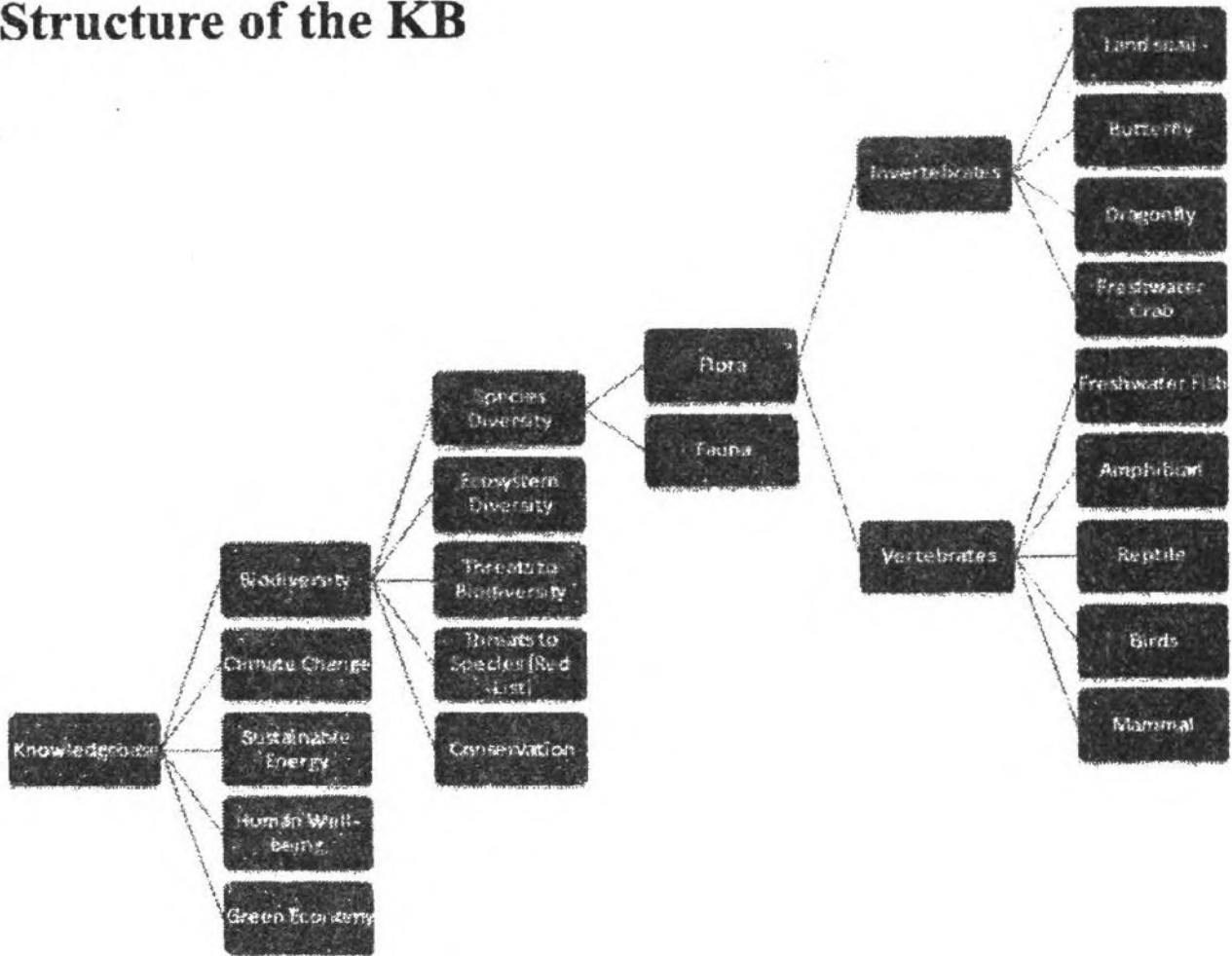
Figuire 2 Information Hierarchy

Contents or articles are organized under main subject areas which IUCN is working on: biodiversity, climate change, sustainable energy, human well-being, green economy (figure 2). In the first phase, completion of the biodiversity section is considered. Information under biodiversity is divided into six main sections: Definition, species diversity, ecosystem diversity, threats to biodiversity, threats to species and conservation (Figure 2). Again each section is divided into main areas of the topic. For example species diversity is divided into flora and fauna. Fauna is divided into invertebrates and vertebrates. Invertebrates divided into land snail, butterfly, dragon fly and freshwater crab.
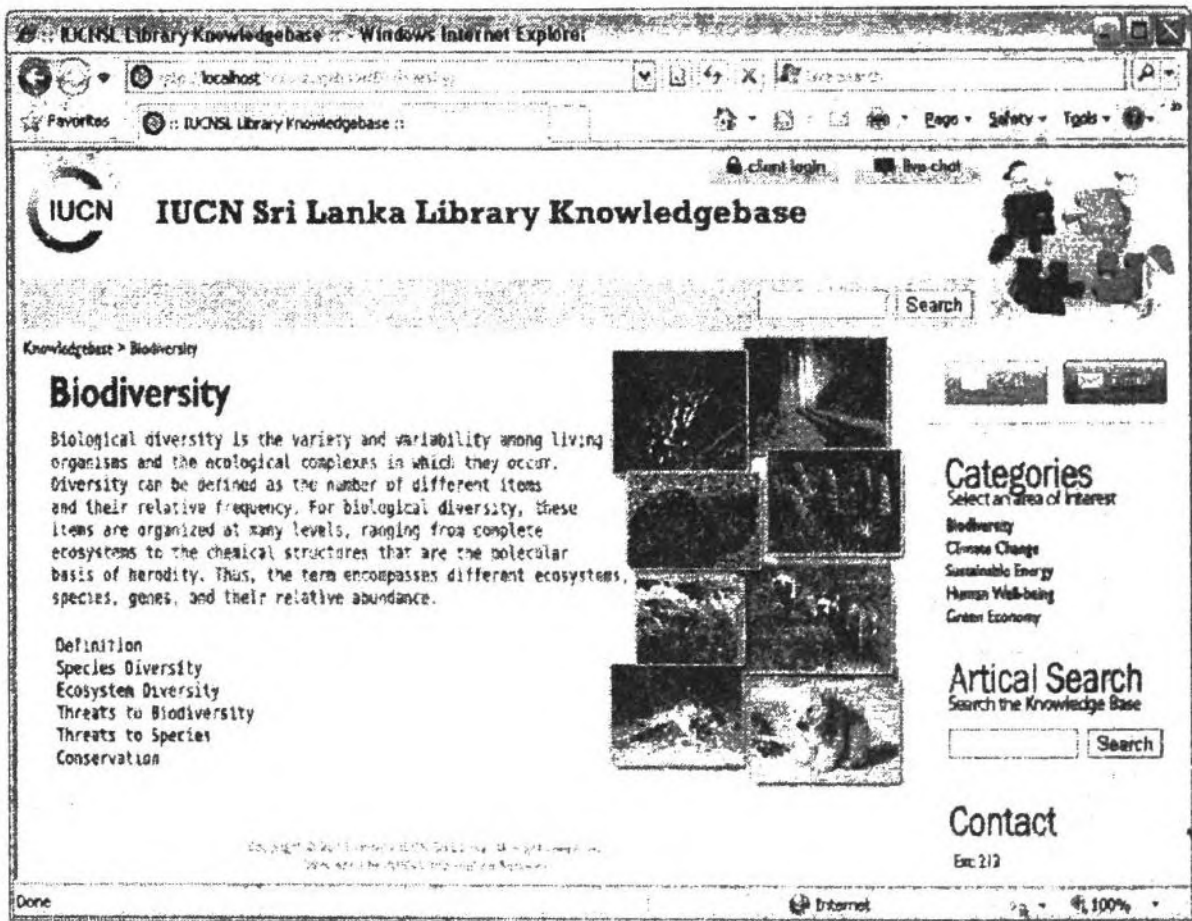
Figure 3: Biodiversity

Article on each species group following information is provided. Characteristic features: How to identify the species or group, Diversity in Sri Lanka, distribution within the island, threats and conservation. Under diversity, no of species, no of endemic species, no of endangered species, etc. are included. A map of Sri Lanka is provided under the diversity where user can view diversity and spreading within the country.

Likewise each section is divided into subsections of the topic and at the end of each article a page titled "How to collect more information" included. In this page user will find information on books (bibliography), institution and experts they can obtain more information.

IUCN KB Architecture

The system design draws on a variety of domains including knowledge management, information retrieval and machine learning. IUCNSL library KB has a two part structure made up of the Knowledge Database itself, an Administrator's Database. The knowledge information itself resides in the KB Database while the other databases act as "behind the scene" repository of important information (figure 4). The Administrator's Database, contains a record of all queries. Every time a KB user types in a query and runs it against the database, a copy of that user's query is recorded in a record in this database. Thus the Administrator's Database contains a complete record of what the users of the KB are looking for.

Presentation Layer

Client User Interface

Business Layer

| Application Logic | KB Objects | KB Rules |

Data Access Layer

KB DB   Admin DB

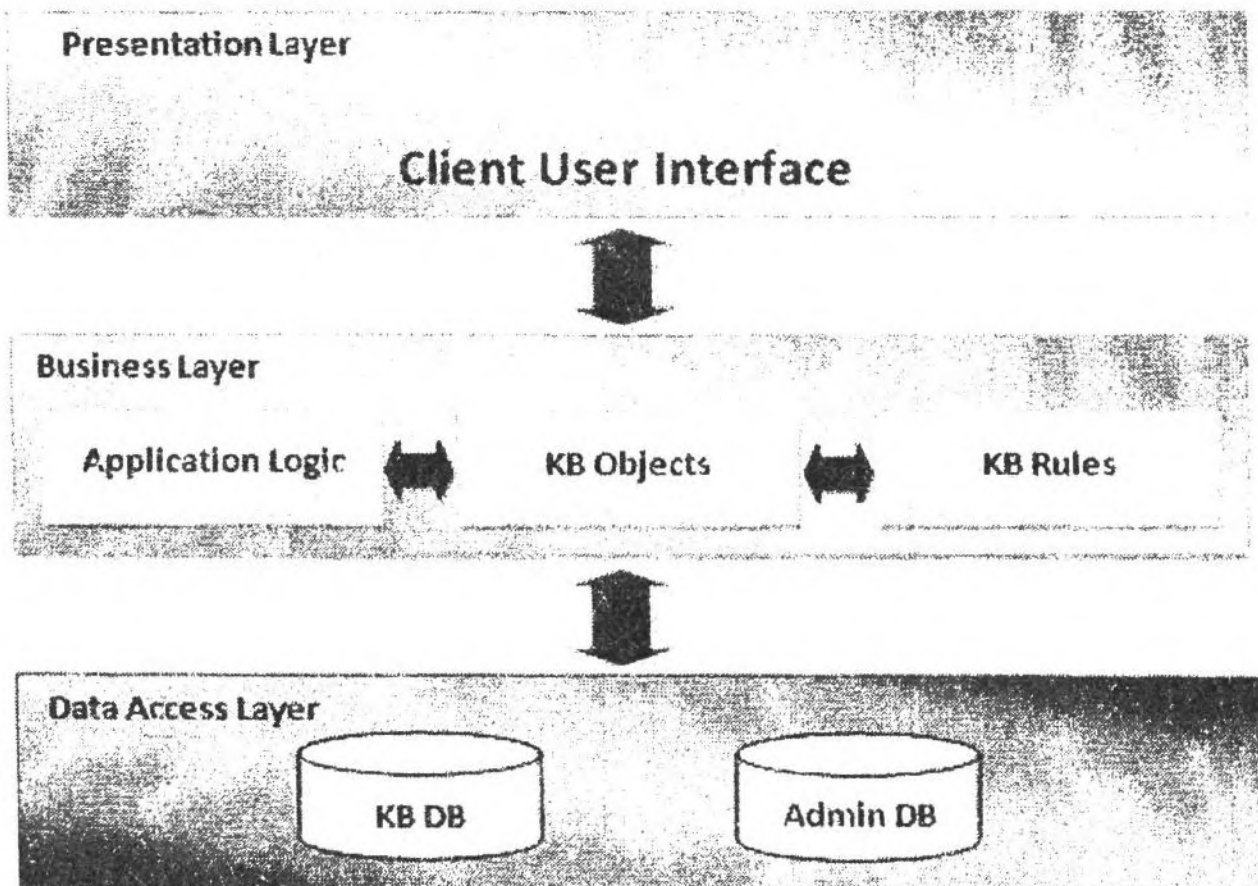Figure 4: Knowledge base Architecture

A Question and Answer format is used to intuitively display Knowledge Base Articles. Each Article may have any number of files attached assigning, rich text formatting, and hyperlinks to other web pages or supporting Knowledge Base Articles. When a user requests information, librarian will get an email alert and librarian can follow up until the user needs are met

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(figure 5). Answers provided by the subject experts will be automatically saved in the database and can be retrieved if the same question arises again and if new knowledge has been added to the subject, user will be able to acquire that knowledge from the same professional or another professional.
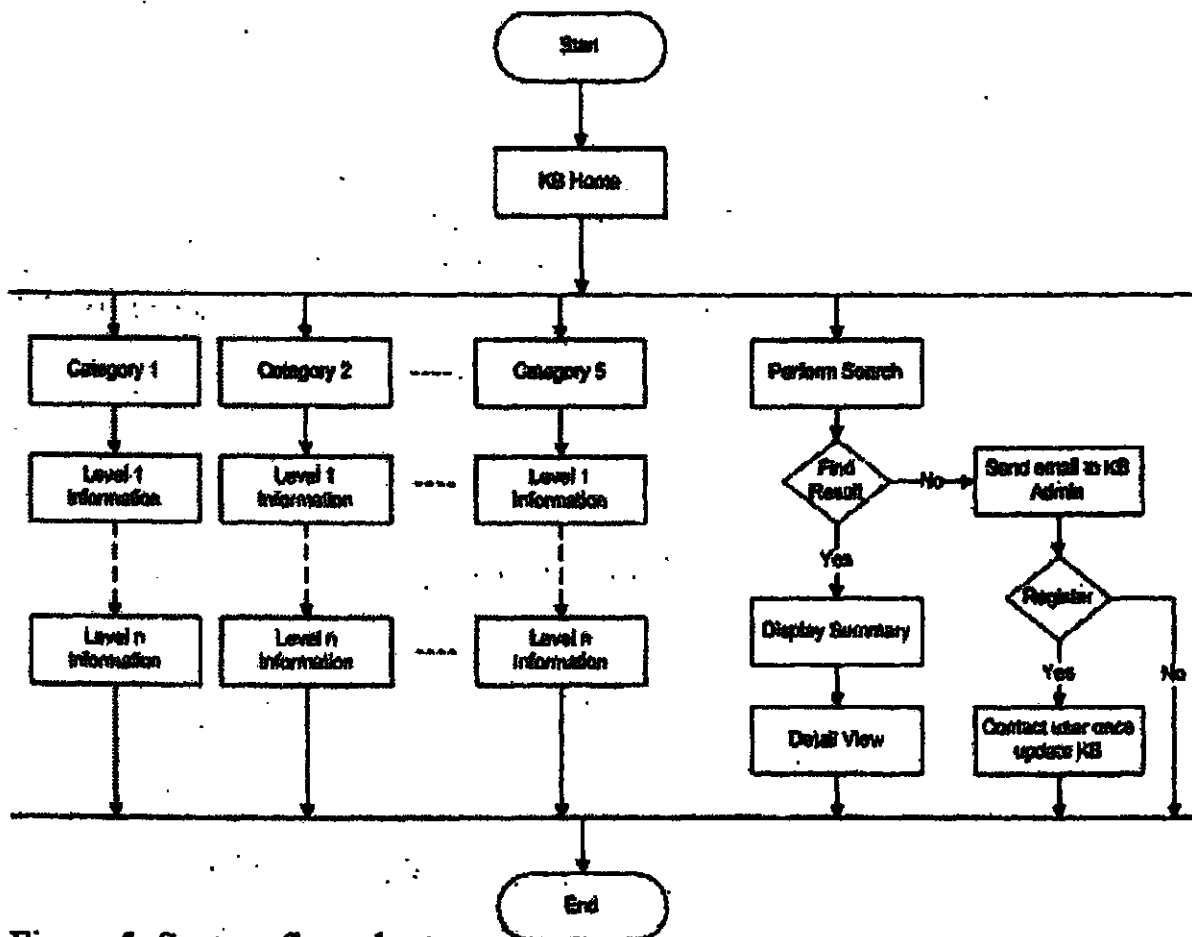
Figure 5: System flow chart

Conclusion

IUCNSL KB can be used for information sharing among library users. This is a work-in-progress paper. In the first phase we have completed software development and collection of articles for biodiversity section. Information seekers will find this a very helpful tool to obtain information and knowledge and structured articles will save their time.

The Knowledge Base of the IUCNSL library will be an efficient and helpful E-resource for the library users who seek information on environmental science in Sri Lanka and help in the dissemination of knowledge for further research to protect natural habitats and the environment. Information so acquired, organized and provided for the user community will be a major boost for those

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stakeholders of the socio-economic development process of the country.

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A Case Study
Improvement of literacy in primary school children in selected provinces of Sri Lanka

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Abstract

Literacy in its broadest sense is the ability to read and write. UNESCO defines the term thus: The ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy includes a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, to participate fully in the community and wider society. Improving literacy means both the development of the ability to read and write to a greater degree in each child; and more children being able to read and write. The languages here are the native language of the child - Sinhala or Tamil - and English. The INGO Room to Read is considered with a pilot project it initiated to improve literacy among primary school children.

Keywords : Language Literacy/ Continuum of Learning/Primary School Children

Introduction

Room to Read (RtR) is an international non-governmental organization started by John Wood in 2000 to help a library in Kathmandu acquire more books after a holiday he spent in Nepal. He left his executive post at Microsoft in the US and worked full time as Chairman of the organization which now has spread to nine countries in Africa and South and South East Asia directly benefitting over four million children. Vision of the RtR seeks to transform the lives of millions of children in developing countries by focusing on literacy and gender equality in education. "We envision a world in which all children can pursue a quality education that enables them to reach their full potential and contribute to their community and the world."

.Mission of the RtR reads as working in collaboration with local communities, partner organizations and governments, RtR develops literacy skills and a habit of reading among primary school children; and supports girls to complete secondary school with the relevant life skills to succeed in school and beyond.

Established in 2005 soon after the tsunami, the INGO and has now spread to the districts of Galle, Matara, Moneragala, Nuwara Eliya, Matale, Anuradhapura, Puttalam and Trincomalee. Headquartered at 38, Dr E A Cooray Mavata, Colombo 6, it employs outstation facilitators and includes parents in its various programmes. The Country Director since 2007 is Glenfrey de Mel who works with a staff of 61 based in Colombo, increased from 11 when he joined RtR. Those
co-opted and working alongside RtR in the outstations too have increased in number and the work they do. The budget allocation increased five-fold since 2007, from USD 1 million to USD 5 million.

Following are the achievements RtR to date:
- 650 reading rooms established with books, furniture and library trained teachers
- 222 primary schools, early childhood schools opened
- 600 primary school students supported in promotion of literacy
- 1,200 marginalized girls provided with long term scholarships
- approx 1 million books donated to school libraries
- 47 children's books and 35 educational posters produced - of children's work

Literacy Programme

Although libraries, pre-schools and primary schoolrooms were built and equipped by RtR in the districts mentioned above, it was felt that literacy and the improvement of the rate of literacy among school children was not fast enough, nor widespread. Also gaps in literacy were noticed among schools and even among children of the same primary class. No special programme had been undertaken to measure literacy rates and improve them. Thus a pilot project was initiated in 2010 in a small hamlet in the Matale District Wilgamuwa. Phase I of the project is over and statistics are being compiled. Also plans to extend the programme to primary schools in other districts in which RtR works.

Wilgamuwa Pilot project:

Goal of the project is to ensure that more primary school children become

independent readers. Methodology adopted for the project is 'Advanced Approach' to gaining literacy through phonics, vocabulary enhancement and simple comprehension.

Established in 2009, the Pilot Literacy Programme includes 21 schools in Wilgamuwa Zone. After signing an MOU with the Provincial Ministry of Education, Central Province, 633 children from primary grades who scored less than 65 marks in a base line test were selected.

The children attended classes for basic literacy for three months from 12.00 noon to 2.00 pm in their schools. A teacher from each of the 21 schools was trained in the methodology of encouraging basic literacy. The students were graded thus:

Grades 2 to 5 33 days in basic ability to read and write

Grades 3 to 5 16 days, reading, writing and simple comprehension

Grades 4 to 5 11 days, more difficult comprehension with reading; ability to write

A structured Reading Programme was instituted for two months: September to November as a prelude to Phase 2 started in 2010. Parent meetings of the students within the programme were held monthly to review each child's progress. Monitoring was by a committee of the Wilgamuwa Zonal Education Office.

Findings of the pilot project:

Findings of the project were analysed in two mark levels; baseline test and the end line test.

In base line test   : only 2.79 % children scored over 50 marks

In end line test (after three months): 66.98% scored over 50 marks

Apart from the above progress in the literacy of the test group, additional benefits from the initial stages of the project were:

- Methods were found to remove gaps in reading abilities in primary grades
- Methods to improve grade specific learning competencies in language aligned with textbooks
- Improvement of learning environment during language periods
- Building of capacity of teachers
- Improvement of classroom environment to a 'print rich' one
- Creation of awareness among parents on importance of literacy and participation in improving activities.

Additional Programmes of RtR to Enhance Literacy and the Reading Habit

1. Reading Room Programme

Aim: "To promote reading as the first step towards literacy; make young learners independent readers." Reading rooms (RR) were/are set up by RtR with furniture and books being donated. The school needs to make available a room. Teachers were trained as librarians.

913 RRs have been established reaching approximately 80,000 children; capacity of 2010 teachers were built to take charge of the RRs. In 2011, 250 reading rooms will be started thus increasing the total to 1163. Each reading room is supported for three years, after which the school or community it belongs to is expected to sustain and hopefully further develop it

2. Local Language Publishing Programme

An annual event when children are invited to submit illustrated children's stories written by them in any of the three languages. A panel of judges including well know children's story writers, illustrators and Early Childhood Care and Development (EECD) experts select the best which are published by RtR and distributed to its sponsored libraries.

Creative Writers and Illustrators Workshop in 2009 was held for eleven days for a selected group of 20 child-authors and 10 illustrators, in three phases. More than 200 manuscripts were produced of which ten stories and four non-fiction manuscripts were selected for publication.

A quarterly **Wall Newspaper** in each of the schools assisted by RtR was started in 2009. Children post their creative work on this newspaper and every quarter six children are each gifted a pack of books to start their own home libraries.

International Literacy Day has been commemorated in various schools in districts in which RtR works. In 2009, a programme was worked out in Wilgamuwa centered around 633 primary school children who were exposed to literary intervention. The event was held at the Kekalathenna Kanishta Vidyalaya on 8th September; in collaboration with the Zonal Education Office at Wilgamuwa and the American Embassy. A literacy seminar was conducted in which 100 children participated with story telling and dramatization. Later, these children drew pictures and narrated stories. The day came to an end with a prize giving in the presence of parents, school children and visitors from the American Embassy and RtR.

Relevance of the case study to the conference theme

Quoting the objective of Room to Read makes clear the relevance of this case study to the theme of NACLIS this year. Here what is envisaged is that greater access and ability to use information will improve the condition of the people of a country not only socially and economically but in other ways as well like culturally, ethically and morally.

The stated objective of Room to Read is: "We partner with local communities throughout the developing world to provide quality educational opportunities by establishing libraries, creating local language children's literature, constructing schools and providing education to girls. We seek to intervene early in the lives of children in the belief that education empowers people to improve socio-economic conditions for their families, communities, countries that only education can provide. We strive to break the cycle of poverty, one child at a time."

The relevance between the case study and the theme or subject area of NACLIS 2011 needs no elaboration. The connection is obvious. As stated very clearly by Room to Read, the INGO and its activities and intervention aim at improving social-economic conditions of the less privileged in the countries they work in, Sri Lanka in this case. They tackle the problem early in the life of the child and they attempt breaking the cycle of poverty that grips communities, child by child.

The child is the future citizen of a country. Educating a child is said to be equal to making his or her country and the world at large, better. A child with literacy skills, a child able to read and understand what s/he reads, and communicate through writing is a major component of the

education of a child. Thus such educated children will make for a better world in the future. The knowledge they have, information they can access and training they get to know how to get more information will definitely improve their lives professionally and socially and ensure a higher standard of living. Thus there definitely will be a reduction in poverty which prevents development.

Readiness in academic libraries to serve the differently-abled patrons

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Abstract

Purpose of this paper is to present the findings of a survey that was conducted among the libraries of the national universities of Sri Lanka. The aim of the study is to measure the readiness in libraries to serve the people with special needs in terms of provision for physical access; availability of appropriate facilities, resources and services; and provision for web access. In other words, this paper reveals the strengths and weaknesses of the Sri Lankan university library system in serving the people with various disabilities namely blindness, low vision, hearing difficulties, mobility problems etc.

Keywords: Library Services/ Special Needs/University Libraries/Web Access

Introduction

Removing barriers and creating opportunities to access all services and resources within a community are essential for people with disabilities *(Aisan Development Bank, 2005)*. Libraries and information agencies were among organizations striving to become accessible, enabling environments for their differently-abled patrons and implementing suitable information retrieval systems (Copeland, 2009). It is early 1970s, that the library profession taken an interest in library services for people with disabilities (Murray, 1996). Since then library services have been vastly extended with the introduction of various special media formats such as talking books, video books with subtitles and/or sign language, tactile and the invent of assistive devices such as screen readers, Braille devices, screen magnifiers, special key boards etc.

Rationale of the Study

It was 1980's "Decade of the disabled", that brought the support of the governments and the attention of the society towards the people with disabilities. By now, rights of differently-abled people for better access to education, employment, and information is a well accepted factor. Sri Lanka is one of the countries that actively engage in promoting and protecting the rights of people with disability for quite some time. Advent of the 'Protection of the Rights of Persons with Disabilities Act (1996)', establishment of the 'National Secretariat for Persons with Disabilities' in the same year and introduction of the 'National Policy on Disability for Sri Lanka (2003)' are good evidences for the government's support for differently-abled citizens. In addition, every child of Sri Lanka is entitled to free education up to the graduation and the Government accepts the policy of United Nations "Education for all" (Gunasinghe, 2004). Consequently, several steps have been taken to accommodate people with disabilities within the mainstream of education. However, as shown in the National Policy on Disability for Sri Lanka (2003), only a very few individuals who have disabilities have had higher education. Census of Population and Housing Sri Lanka conducted in 2001 also pointed out that there were only 783 disabled persons with degree and above level of education out of the 274,711 disabled population of Sri Lanka. Environmental and transportation barriers, poor availability of assistive devices and absence of a strong platform to access information are the main reasons that limit educational opportunities for people with disabilities in Sri Lanka. Within the university setup library plays a very crucial role in providing information for academic success. Therefore, it is essential to create a barrier-free environment in the libraries to provide equitable access to library facilities and services. However, at the time, the survey was being conducted, the circumstantial evidence seemed to indicate that majority of university libraries in Sri Lanka are not properly designed or suitably equipped to serve their differently-abled users. In addition, in spite of, the declaration of the necessity of disability-related research in the National Policy on Disability for Sri Lanka (2003) there are only a very few evidences of such studies in Sri Lanka particularly in the perspective of library services. Therefore, this type of a research is a timely need to enhance the quality and quantity of library and information services available to differently-abled Sri Lankans in order to intensify the opportunities in higher education for them.

Literature Review

Over the years, librarians and their professional bodies have taken numerous measures to upgrade the services for disabled users by creating barrier-free

environments, developing collections and strengthening infrastructure facilities. 'Access to Libraries for Persons with Disabilities: Checklist' prepared by the International Federation of Library Associations (IFLA) and 'Library Services for People with Disabilities Policy' formulated by American Library Association (ALA) are very good tools for libraries to assess existing level of accessibility and to enhance accessibility where needed. IFLA section on 'Libraries Serving Persons with Print Disabilities', 'Disabilities Interest Group' of Australian Library and Information Association and the 'Roundtable on reading materials for people with print disabilities' are some of the key professional activities that work towards expanding services, increasing awareness and training library staff in order to minimize the difficulties faced by the differently-able patrons.

However, as declared by Copeland (2009) in recent years, there are only a few research studies that had investigated how library physical and virtual accessibility might be improved. Researchers (Copeland, 2009; Craddock, 1986) who had carried out studies to understand library services and accessibility to libraries from the differently-abled patron's perspective had agreed that handicapped people are not always well provided for by libraries. Besides, professionals (Wojahn, 2006; *Owen, 2004;* Murray, 2001; Murray, 2000; Murray, 1996; Wilhelmus, 1996; Fitzpatric, 1990; Luccock, 1986) who had written position papers or review papers based on their proficiency, experience or observations had described numerous resources, services and assistive devices that can make a positive contribution to the patrons with special needs and emphasize the value of raising awareness and training the staff. They have also discussed about the ethical and moral obligations of librarians towards this sector of the patrons. Another point that been highlighted in the literature is the importance of eliminating barriers to access to the library for people with disabilities in order to comply with the legal requirements.

Web accessibility evaluation studies of library websites are another important component of the literature that assesses the level of virtual accessibility to library services. Axel Schmetzke Librarian/Assistant Professor at the University of Wisconsin has contributed immensely in this aspect. He has conducted accessibility evaluation studies from 1999 to 2005 at the University of Wisconsin campuses, USA (details of these studies can be accessed from the Schmetzke's "Web accessibility survey" site at http://library.uwsp.edu/aschmetz/Accessible/websurveys.htm). In addition to Schmetzke's studies several researchers (Lilly and Van Fleet, 1999; Craven, 2002; Wijayaratne 2008) had carried out accessibility evaluation studies of library websites of different types of libraries in different environments. There

are several common features of these studies.

Most of them have relied on automatic tools predominant by 'Bobby web accessibility evaluation tool' while only a few of them have performed manual inspection. The overall results revealed that website accessibility percentages have increased over the years, but the number of barrier-free websites is still far below the satisfactory level.

Although, as discussed above, there are strong evidences in the literature to believe that libraries are a long way behind in the path of delivering library services effectively to this special group, it is also mentioned in the literature that administrators are aware of the need to eliminate barriers to access to the library while librarians are willing to be of assistance.

Methodology

A questionnaire was designed through the process of self-evaluation and peer comments. The questionnaire was sent to the Reader-Service Librarians of the national university libraries in Sri Lanka as an e-mail attachment with a covering e-mail. The list of universities was obtained from the website of the University Grant Commission (UGC) at www.ugc.ac.lk.

A list of URLs of library websites was prepared browsing the web. This was carried out during the third week of April 2011. WAVE web accessibility evaluation tool version 4.0 (http://wave.webaim.org) was used to measure the level of web accessibility of the homepages of library websites listed. WAVE was selected for this study since it is capable of checking the web pages for conformity with several established web accessibility standards such as Web Content Accessibility Guidelines (WCAG) (http://www.w3.org/TR/WCAG20/) and Section 508 of the Rehabilitation Act of 1973 of USA (http://www.section508.gov/index.cfm? FuseAction= content&ID=12). Besides, it is an easy to use tool which is efficient and inexpensive. The evaluation process was carried out on 30th April 2011.

Key Findings

Out of the 15 questionnaires sent, 10 of them returned. Eight libraries declared that they have students with disabilities - at least one type. Out of them (8) majority of libraries (88%) had users with mobility problems while 63% of libraries had blind or low vision users.

Provision for physical access

Results indicate that 60% of libraries (*out of the 10 responded libraries*) are inaccessible for people with disabilities particularly for wheelchair users. Only two libraries mentioned that they have separate wheelchair access to their library buildings. It is also reported that librarians paid only a very little attention towards making the surroundings of the library accessible and clearing paths of travel to and throughout the library sections.

Availability of appropriate facilities, resources and services

Libraries should ensure that they acquire resources and offer services to meet the needs of all people without discriminating against individuals with disabilities. However, the findings indicate that a very few Sri Lankan university libraries possess necessary facilities, resources and services to serve their disabled patrons.

Appropriate furniture and lighting systems were available only in two libraries while there was not a single library with lavatory facilities. Besides, out of the 10 libraries responded only four libraries had library materials in disability-friendly formats. Results were shown in the Table 1

Table 1: Availability different types of specialized library materials

Type of material	% of Libraries
Brail books	40%
Talking books	10%
Large print books	10%
Video productions with voice scripts	10%
Audio cassettes with recorded texts	10%

Similarly, as given in the Table 2 only three libraries had at least one type of adaptive devices or assistive technology.

Table 2 : Level of availability different types adaptive devices

Type of adaptive device	% of Libraries
Screen readers	10%
Braille devices	20%
Special Key boards	10%
Magnifying glasses	10%

The current situation seems to be more critical when considering the level of availability of special services for differently-abled patrons. Apart from the specialized staff support service offered by the two libraries, none of the libraries were reported to be having services that were recommended by IFLA guidelines and ALA policy such as extended loan periods, waived late fines, extended reserve periods, books by mail, home delivery service, volunteer readers and technology assistants.

Provision for web access

One of the good signs is that, out of the 15 university libraries, 14 of them had a separate library website with at least two pages. The Table 3 shows the results generated by the WAVE web accessibility evaluation tool (version 4.0). The tested websites (14) have been categorized into four groups according to the number of accessibility errors reported.

Table 3 WAVE results of university library homepages of Sri Lanka

	No. of instances zero errors	No. of instances 1 - 5 errors	No. of instances 5 - 10 errors	No. of instances more than 10 errors
No. of library sites	1	5	4	4

More than 10 errors were identified only in 4 websites out of the 14 sites tested. This indicates that the accessibility of university library websites was in a somewhat satisfactory level. Another positive point is that the frequent accessibility errors identified (i.e. absence of alternative text <alt> tags for images, server-side images, and absence of headers for tables) can be easily corrected even with the basic knowledge on web designing. However, systematic manual inspection is needed to confirm the results.

Expectations of Users

In response to the question regarding the measures that are going to be taken in order to facilitate people with disabilities, 50% of libraries declared that there are no such plans in the agenda as yet. Future plans mentioned by the respondents are: expand multimedia facilities for blind students (10%); multiply talking books and CDs and introduce lending facilities for these materials (10%); purchase a CD platter to select CDs (10%); construct a new library building with facilities for people with special needs (10%); develop a

special collection (10%); construct a separate wheelchair access (10%).

Discussion and recommendation for future research

Overall findings of this study reveal that provision for physical access; availability of facilities, resources and services; and provision for web access are far below the satisfactory level. It is understandable that the lack of interest form the part of librarians is mainly due to the small number of differently-abled students get into the universities. Hence, it is obvious that individuals who have disabilities are being discriminated against the abled in higher education in our society despite of disability policy statements. It is also obvious that in spite of the government's, semi government institutions' and non-governmental organizations' efforts to build barrier-free environment for persons with disabilities, most of the public buildings and transportation systems are inaccessible for people with disabilities in Sri Lanka. This is a critical situation that should be discussed in highest levels of authorities in order to remove barriers and create opportunities to access all services and resources for people with disabilities.

Besides, any of our patrons, at one point of time (*due to diseases or accidents*) might find it difficult to access the library and its services if they had been designed without accessibility concerns. Hence, no librarian can escape the duty of preparing their libraries to serve the people with special needs. It is true that libraries are under pressure in order to provide good services in an environment where funding is continually decreasing in a face of an overwhelming range of resources available and in demand (Murray, 1996). Nevertheless, it is librarians' legal and moral responsibility to assign a proper place in their agenda for people with disabilities.

The scope of study is very limited. In addition to limiting the survey to the 15 national universities of Sri Lanka, this study did not measure the awareness, attitudes and willingness of librarians towards serving the people with special needs. It is a timely need to carry out studies (including all the key parameters) in other types of libraries particularly in schools and public libraries to understand the overall status of library facilities available for differently-abled users in Sri Lanka.

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Knowledge Ecology : A Literature Survey on Harnessing Information for Knowledge Identification and Knowledge Promotion in an Organization

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Abstract

This paper aims to discuss how knowledge ecology paradigm can be used to identify and promote knowledge of a university library to harness information. DICE model of knowledge ecology employed because a model depicts the strong relationship of knowledge, communities, organizational resources, and external environment to identify an organization's knowledge. Study vigorously shows that a university library is an eco-system. The knowledge management of the library is very complex and knowledge is growing organism and then it cannot be managed. Therefore, knowledge ecology has tremendous potentials to encounter the greatest challenges in knowledge identification and promotion of a library for socio-economic development while harnessing information.

Keywords: Knowledge Management/ Knowledge Ecology/ Knowledge Economy/ Knowledge Evolution/ Knowledge Transfer/ Organizational Learning

Introduction

Ecology is a science use to analyze the relationship between members or species of a community and their interaction with the environment. Ecological study has been conducted at the species, the population, the community, and the ecosystem levels. Species are the basic element in ecology. A group of organisms of the same species occupying a particular space at a particular time form a population. Several populations gather together to become a community. A community forms a specialized network and becomes an ecosystem. For

example a university library is one of a specialized network. In this network all the elements: knowledge, communities, organizational resources and external environment, has equal values. Ill functions of a one element directly effects to the entire knowledge ecology. Therefore if we are unable to identify and promote a university library knowledge ecology it will lead to collapse or unsteady socio-economic development as we unexpected from the library.

Given the scenario, this paper discusses how to identify and promote knowledge of a university library way in which to harness information for socio-economic development while introducing a new model in knowledge ecological way. So this paper has mainly divided into three sections. The first section discusses what knowledge management is. In section two discusses knowledge ecology and how it uses to identify and promote the knowledge of a university library. The last section sums up the main ideas of the paper and challenges may face by a university library when and where going to use knowledge ecology.

Knowledge Management

Knowledge management is used to describe the management of information based knowledge assets within an organization. There are many definitions of knowledge management. Duffy (2000) defines knowledge management as a discipline that encourages a mutually supported method to create, capture, arrange and use information. While, the nature of knowledge Schultze and Leidner (2002) describe as metaphors and knowledge views as an object, an asset, and as situated practice. These differentiations are based on how knowledge operationalized.

Polanyi (1966), Nonaka and Takeuchi (1995) differentiate knowledge into explicit and tacit knowledge. Explicit knowledge is factual knowledge that can be easily transferred like in documents. Tacit knowledge is intuitive knowledge that is generally gained through personal experience, for examples crafting a violin, riding a bike or interpreting a complex seismic printout of an oil reservoir.

Recently the concept of community of practice becomes a one way of knowledge management. Community of practice is a place that in acculturation, fascination, and real learning take place. Wenger and Synder (2000) note community of practice by nature organic, unstructured, informal and ecological while it has been emerging as a very effective form within business organizations today.

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An ecological approach to knowledge management was introduced by Davenport and Prusak in 1997 with concept of information ecology. They focus on humans centered information management model in the information environment, the organizational environment that surrounds it, and the external environment of the market place. The complete information environment addresses "all of the firms values and believes about information (culture), how people actually use information and what they do with it (behavior and work processes), the fit falls that can interfere with information sharing (politics), and what information systems are already in place (technology).

However, the Community Intelligence Lab (2000) urges that the ecology metaphor has been previously used to describe the use of knowledge within organizations. In particular the term knowledge ecology has been used to illustrate how ideas are exchanged, innovation blossom, values is add to information, and new knowledge is tested and applied through accrued expertise and learning and within the rich perspective of the eco-system. Therefore, knowledge ecology, in general, is different form knowledge management. Knowledge ecology, in particular, does not claim to institutionalize new ideas nor knowledge itself be managed. It is seen as an organic and evolving solution that exists over time. Knowledge ecology has been used as a framework to show how the goals and objectives of an organization can be cultivated of that the individual. The ecological framework expands on traditional concept of knowledge management and wide range of disciplines such as organizational learning (Senge 1997) intellectual capital (Sveiby 1997) information ecology (Davenport and Prusak 1997) communities of practice (Brown 1999; Wenger and Snyder 2000). An ecological framework, however, moves beyond the learning community to engage outside forces and influences beyond its own boundaries and expertise for inspiration, challenge and validation. As Brown (2000) emphasis knowledge ecology stretches beyond communities of practice to include an external environment that is dissimilar from itself, which add an intrinsic dimension to the knowledge and learning that occurs within the community as a whole.

Knowledge Ecology

Knowledge ecology is an inter-disciplinary discipline including knowledge management, communities of practice, organizational learning and hypertext organization, while using best models to create, sustain, and foster organizational learning and development. Knowledge ecology, Por (2000) defines as a field of theory and practice that focuses on discovering better social, organizational, behavioral, and technical conditions for knowledge creation and utilization.

Bownder and Miyake (2000) demonstrate three basic concepts of knowledge ecology: evolutionary theory of technology, knowledge based technology of firms, and eco-system theory. The evolutionary theory of technology explains the accumulations of experiences, survival of advanced products, technology perishing, and annihilation and the importance of an organizational adaptation. Knowledge based technology of firm means that knowledge based industry, regarded as population and community in eco-system, is forced to compete with other population; species under its community must process ability to cope with competitors and interaction. While, eco-system theory is organizational ecology and information ecology included. Liang and Chen (2003) emphasis that the relationship of diversity and stability of an organization, key knowledge as key species, co-evolution and ecological niche as knowledge ecology. The relationship of diversity and stability of organization presume that diverse knowledge in organization stabilizes organizational performance. An organization survives in economy or industry talk in the second element that is key knowledge as key species. Co-evolution and ecological niche means the interaction of knowledge to enforce knowledge creation and performance.

It is understood that, however, knowledge ecology revolves mainly in knowledge, communities, organizational resources and external environment. Different types of knowledge view as different knowledge populations and groups into knowledge communities that build on organizational resources including staff, process, structure and culture and then compete with external environment for survival and development. These evolutions graphically presented in the following figure one and that model named DICE model (distribution, interaction, competition, evolution) was introduced by Chen and his colleagues.

The distribution of knowledge plays a vital role. A success or failure depends on the quality of knowledge and the types of knowledge you distribute. Distribution, however, is a challenging issue because choosing and configuring of knowledge is not easy. As Chen et al note distribution is two types: knowledge intensity and knowledge diversity. Knowledge intensity is the relative strength of a particular knowledge population while they have more competitive advantages than their competitors and also able to perform well.
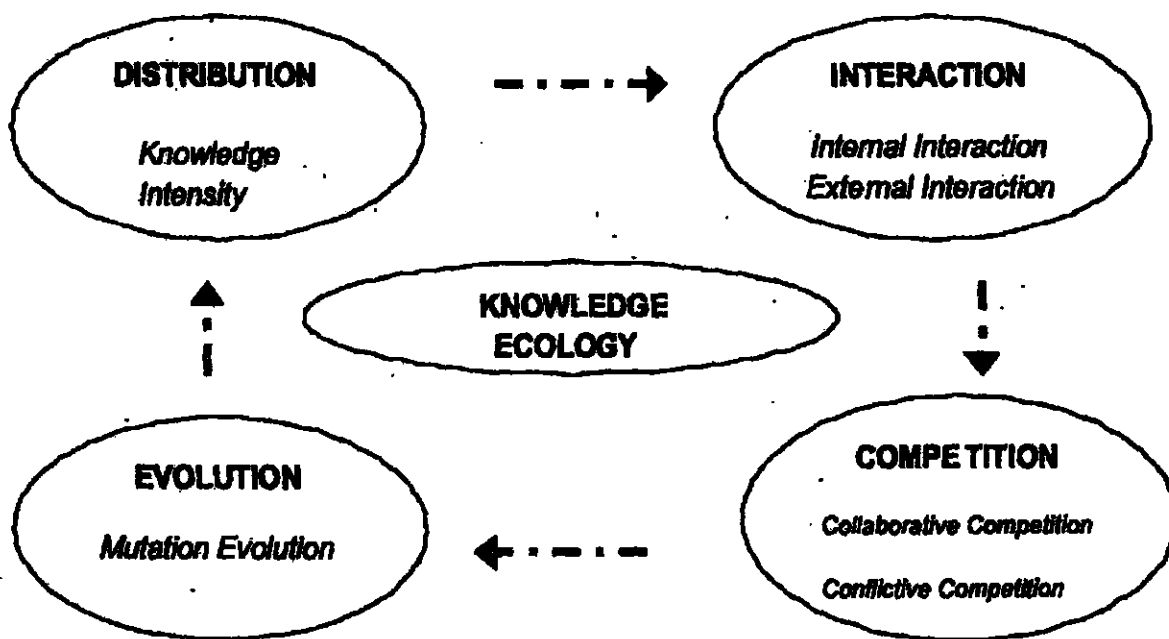
Figure 1: DICE model and its main components
adopted from Chen et al. (2010) p 11-22

For example, a university library has more potentials than other departments or centers of a university, why? Because it is a centre that knows well the usability of knowledge of the whole communities of the university. The library maintains direct and indirect communication and also interacts beyond its limitations. Therefore, we can identify a university library as a hub of the knowledge ecology of the university. Just think of a newly launch a communication portal of your library for example "Asks a Librarian" service. In contrast, knowledge diversity reflects the equitable measure of the species in the knowledge community. Their knowledge is assorted so not like in knowledge intensity situations they have more potential to configure diverse knowledge to compete with competitors for survival. For example, a university library can go for unrestricting the Internet services and facilities for its reader community! Because, if you go for subscribe those services or resources it is costly and also have accessibility restrictions. And then we cannot distribute intensity and diversity knowledge as we wish. And do not forget that implicit knowledge is more valuable and not that easy to transfer. Therefore a distribution component is vital for a university library where knowledge creation and sharing is concerned.

Knowledge distribution, however, does not bring any sense until species interact with one another either internally or externally. Hence, knowledge

interaction is an important as knowledge distribution in knowledge ecology. Internal interaction means that sharing knowledge within a community. For example: library staff. While, external interaction means knowledge populations communicate with outside knowledge populations. For example: as you well aware a social network site such as "Help a Librarian (HAL)". It is an external knowledge communication system with outside knowledge populations. Not only that, it is understood that at the same time knowledge interactions generate opportunities to use communication technologies.

Distribution becomes complex, naturally, interaction becomes more clutter then competition is obvious. For example: among humans and environments and also humans and technologies. Therefore, we can say knowledge competition has two approaches that collaborative and conflict. Collaborative competition, as we do, share certain common resources or values between communities. In contrary, if the competition leads to direct confrontation for common resources or values between communities, it will lead to a conflictive competition. For example: a competition in between Wikipedia, "the free encyclopedia that anyone can edit" and Google Knol, "share what you know and write a Knol." As we outsiders we cannot see the competition but if you involve in knowledge creation and sharing process using those service tools you can feel it. A conflict competition occurs; it increases the fear, no mutual understanding and a win-win resolution. From this view, the knowledge populations that rely on the same resources for survival or the niche overlap, is critical in determining the degree of competition. Of that this is same in a university library environment too that's why we are still subscribing lots of e-resources individually instead of going for a collaborative efforts.

In the series of knowledge ecological interaction the last attribute is knowledge evolution. Knowledge evolution is a tactics that a population uses to cope with the pressure of environmental variability. It is the dynamic capability, to which every organization should strive to integrate, build and reconfigure their competences under a rapidly changing environment. For example: printed and non-printed resources for the library. So knowledge evolution is two types: knowledge mutation and knowledge crossover. Knowledge mutation is derived from genetic mutation, which stands for the random change of the occurrence of a particular gene in a species. Genetic mutation can be recognized as an internal force to change the population. For example: information politics and information culture of a university library. Knowledge crossover is also gene and one of the most important facts for genetic variation. Gene crossover is the interchange of sections among pairing homologous chromosomes during the prophase of meiosis. In knowledge ecology, knowledge crossover is identified

as changes or enhancements of knowledge started by forces outside a knowledge community, such as acquiring a patent license or hiring a new researcher from a competitive organization.

However, DICE model's elements are similar to any organization that makes effort to use knowledge for betterment of the society. Therefore in particular elements of knowledge distribution and knowledge interaction are shown ways in which to knowledge identification of a university library. Whereas a university library prospers of knowledge promotion indicates in elements of knowledge competition and knowledge evolution. Given the circumstances, in the figure two that propose model by the author shows ways in which to use it for identify and promote of a university library knowledge in knowledge ecological way.
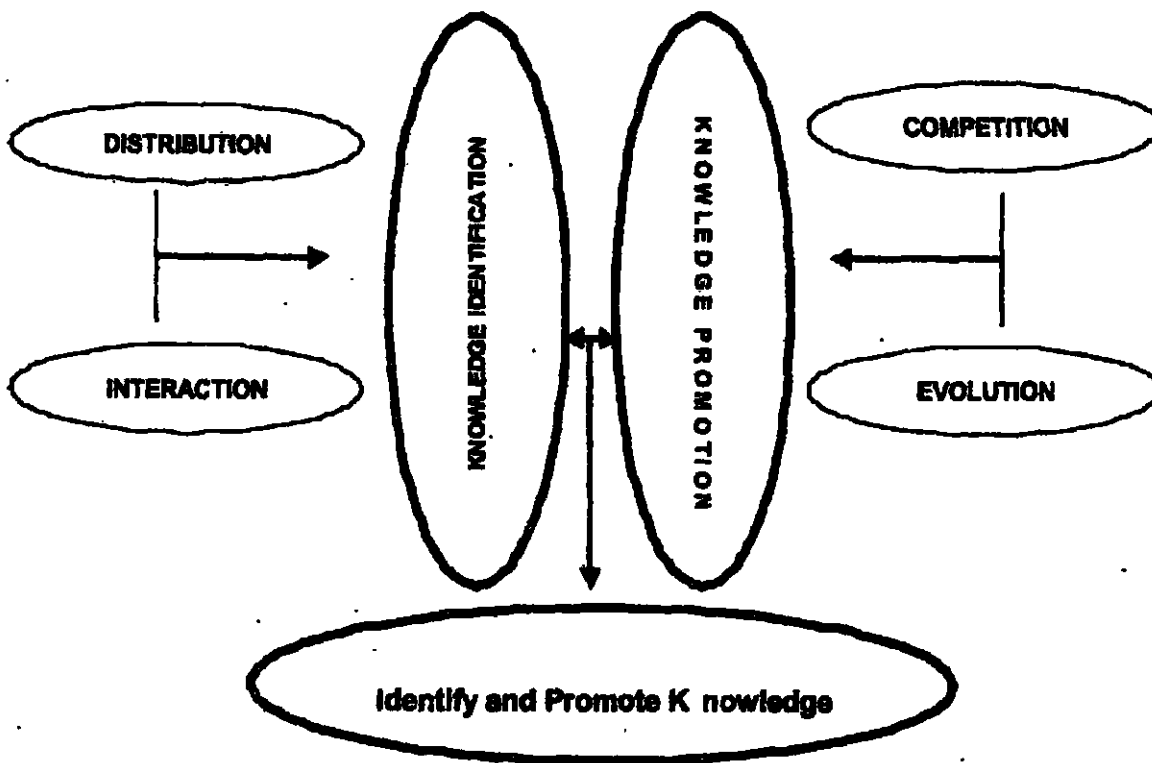
Figure 2: a propose model for identify and promote of organization's knowledge

Above model indicates that all the components of an organization is inter-kinked and no room to function in isolation manner. Therefore it is better to identify and promote the ways in which harness the knowledge of an organization through the attributes of distribution, interaction, competition and evolution. While it is crystal clear that distribution and interaction will prosper knowledge identification of an organization whilst competition and evolution strengthen knowledge promotion.

The component of the distribution is not anything else but to indentify intensity and diversity knowledge of an organization. Of that for knowledge identification of a university library, initially, must properly understand existing: knowledge, communities, organizational resources and external environment. Because doing that, we are able to identify "what to distribute" and "how to distribute", and same time, it creates more opportunities to interact with knowledge populations. So for initial process of the distribution it is suitable to use a knowledge map because it helps to identify an existing intensity and diversity knowledge of a library. As Chen et al (2010) refer a knowledge map is "a tool for capturing and representing organizational knowledge in an organization from abstract concept to reality."

The interaction component represents the way we involve either internally or externally to explore and share the knowledge while it also can distinguish which approach is suitable for compete with. For example, as someone said die alone or enjoy together in the computer based environment because who knows what information and knowledge bring the return on investment on our knowledge that we have already produced or is holding. This is an equal even for a university library! Therefore going only for digital resources/services instead of traditional resources/services have to be questioned now if it is not applicable and accountable for knowledge interaction of an organization. In fact, for the knowledge identification while both internal and external approaches are integrating it is better to look for proper knowledge distribution.

In competitive advantages, elements of knowledge competition and knowledge evolution are very much important. Because for survival while compete with other knowledge agents without tarnish the image is representing the component of the competition. The completion is two ways: collaborative and conflictive. Due to this scenario there is not completion among/between knowledge agents then cannot explore new knowledge not only that at the same time there is not survival too. Therefore in information economy we live today a university library is also has to play a vital role to compete with other knowledge agents for survival.

The knowledge evolution component is indicating that ways in which how to cope with the knowledge agents. This component may very much important than other components due to self-motivated capacity of the component. For example internal and external environment may create opportunities as well as tarnish the image because of dynamic effectiveness of this component. Further this component sometime bridges the gap of the knowledge agents and environment showing how to compete with drastically changing species of the

knowledge ecology. For that evolution can happen in two ways that mutation and cross over.

Hence, it is shown that components of distribution and interaction fully engage in knowledge identification of a university library while completion and evolution work towards knowledge promotion of an organization. And then all components work towards identification and promote knowledge as a whole. Therefore, four key elements of the knowledge will prosper of an organization to indentify and promote knowledge and then all these combination effort will help to a university library to bring the expected socio-economic development while harnessing information.

Conclusion

This conceptual model shows that in knowledge competitive advantages, existing concepts on knowledge management have been drastically changing. Knowledge is growing organism and cannot be managed. Therefore, knowledge ecology, knowledge, communities, organizational resources and external environment, has potentials to encounter the greatest challenges in knowledge creation, distribution, transfer, diffusion and management. And also this study offers preliminary yet valuable theoretical and practicable ideas for socio-economic development in knowledge ecology angle.

Practical point of view, an implementation of knowledge ecology may face humans, social and institutional, and also technological challenges. Human's convince, dealing with emotional responses to artificial knowledge agents, is the most challenged because humans fear that knowledge ecology come dangerously close to replacing humans in knowledge work. The social and institutional challenge effects to the whole organization's functions, tasks, and performance while it changes career prospects and earning potential of members. New structures and systems, and also installation of new equipments come under technologies.

Above problems compound by the lack of comprehension of what knowledge ecologies represent. In some senses, knowledge ecology is an extended virtual brain of the organization. It falls outside the collective cognitive map of the organization.

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Enhancing the usage of English medium reading materials of the undergraduates of Bachelor of Labour Education (BLE): Initiatives taken by the Institute of Human Resource Advancement (IHRA), University of Colombo

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Abstract

Literacy in English Language is a key to success in life for everybody in Sri Lanka, especially for employed people. The undergraduates of the IHRA, though they are considered as normal full time students, are employed adults who have responsibilities in their working places as well as in the family. These responsibilities become barriers when it comes to both studying and reading materials. Since the people who were exposed to the Education system in Sri Lanka after 1956 are mainly mono-lingual, the employed students also have to put extra effort to learn English. The library of the IHRA has taken several steps to motivate its students to borrow books in English from 1992 to 2010. But the statistics did not show whether there was an improvement of their borrowing books in English. Therefore a study is being carried out through a questionnaire survey and a sub sample will be selected to be interviewed. The main purpose of the survey was to find out new ways to enhance the literacy of English Language of the undergraduates of IHRA. A suggestion that could be made after analysing the data from the questionnaire is to maintain a CD/DVD collection in the library.

Keywords : Literacy of English Language/ Reading development.

Introduction

'Employed people engaged in higher studies' is a part of the widely known

process of human resource development. Literacy in English language is a key to success in life for every body in Sri Lanka. It provides better job opportunities and promotions to employed people as well as new paths for seeking information. Most specifically persons in employment seek to improve on their skills and better their career prospects through engaging in higher studies related to their employment. Literacy in English language fulfills this need to a great extent and it directly effects the socio- economic development of the country.

The undergraduates of the IHRA, though they are studying while working are considered as normal full time students. In the University, employed students doing their first degree are very much different from other full time undergraduates who are without formal work affiliations and responsibilities of the family. But the undergraduates who are also employed have to perform designated roles in the working places as well as in the family.

These responsibilities sometimes turn to be barriers to employed students to do their studies as well as to find time for reading various materials such as books, journals and newspapers. Those exposed to the education system after 1956 are mainly monolingual - having learned only in the mother tongue. Therefore the employed students doing their first degree are not very much interested in reading various materials made available in the English language.

Steps taken to enhance the knowledge of English of BLE students from 1992 to 2010 in the library context.

• **Printing all the information of the official documents used by the library in English language.**

Printing the library tickets, membership forms, spine labels, warning notices and book pockets in English was started in 1992. Earlier the official documents used by the library such as the library tickets, membership forms, spine labels etc. were printed in Sinhala language. The purpose of printing these documents in English was to make the BLE students, who read these material, learn at least a few words in English.

• **Purchasing books related to English Language, Literature and various other subjects in   English Language suitable for all age groups and all knowledge levels.**

The students of the IHRA belong to a very broad age group ranging from 20 to 60. Unlike the undergraduates of a University, the students of IHRA belong to various age groups from teenagers to youth and adults. When building up a book collection for such a group to improve their knowledge of English language the library has to provide books suitable for various age groups and different knowledge levels. Considering this, the library has planned to develop the English collection in three aspects.

Books related to English Grammar suitable for beginners who start learning English language, who know English up to a certain level and those who know the language quite well, were added.

When selecting books related to English Literature too, the library has considered that the English knowledge of these students are of various levels. The readings for elementary level, middle level and high level were added to the collection. A few classic novels were also added.
When adding various additional readings in English language also, the different levels of knowledge in English was considered. For the same subject there are books belonging to various knowledge levels.
- **Purchasing books in English related to various popular subjects such as cookery, photography, sports etc.**

When building up the English collection the library has identified that as adults, the students of IHRA are interested in various subjects other than fiction. So, from the 1990 s it has gradually developed the collection with books belonging to various other subjects not related to their syllabus that are of interest.

- **Purchasing books relevant to small children.**
Since most of the students of IHRA are parents, the library has developed a collection for children hoping that the adult students will borrow books for their children too.

- **Purchasing popular titles related to English Fiction such as Hardy Boys series, Sweet Valley series, Harry Potter series etc.**

In 2000 the recruitment policy of the students was changed. Earlier, the

employed students who had passed their O/L s and A/L s had to enroll to a five year degree program. After 2000, the employed students who had passed their GCE O/L could enroll for a four year degree program and the employed students who had passed their GCE A/L could enroll for a three year degree program. This meant that more young students within the age group of 18 25 were keen to join as students of IHRA. Earlier the age group of 35 60 were keen to follow the BLE degree.

To suit the teenage and youth age groups, the library also was keen to adjust its English collection by adding more fiction suited for teenagers and youth. First the Sweet Valley series and the Hardy Boys series were added, with some other popular novels. Gradually the novels of popular authors such as Dan Brown, Danielle Steel, Meg Cabot, Judy Blume, Sandra Brown, Paulo Coelho, Stephanie Meyer, Nicholas Sparks were added. Before 1992, only simplified versions of classic novels of Shakespeare, Charles Dickens, Jane Austen, Charlotte Bronte were in the collection and the students were not very much interested in reading them unless they were instructed by the lecturers.

The statistics of borrowing books were maintained from 1996.

Year	Books borrowed in English		Books borrowed in Sinhala	
	Total	%	Total	%
1996	43	5	1981	95
1997	432	25	1272	75
1998	70	28	177	72
1999	783	16	4146	84
2000	1214	20	4798	80
2001	634	18	2814	82
2002	646	16	3106	84
2003	601	16	3125	84
2004	416	6	6325	94
2005	260	10	2543	90
2006	208	6	3624	94
2007	481	9	4909	91
2008	468	18	2136	82
2009	329	15	1856	85
2010	386	16	2094	84

Table 1: Books borrowed from1996-2010

When considering the statistics, there is no regular trend in increasing or decreasing behaviour in borrowing books in English.

According to statistics maintained from 1996, the number of books in English that the students borrowed were fluctuating. In 1996, the number of books in English borrowed by the students were 93. It was 5% of all the library books borrowed by the students. In 1997 it was increased by 20%. In 1998 it was increased by 3%. In 1999 it was decreased by 8%.

Though 2000 was recorded as the year that the highest number of books (1214) in English that were borrowed by the students, it was 20% of all the books borrowed from the library. In 2006, only 6% of the borrowed books were in English, in 2007 it was 9% and in 2008 it increases up to 18%. In 2009 it reduces by 3% and then again increases by 1%. In 1998, the number of books borrowed from the library was relatively very low. But it was the highest percentage of books borrowed in English. That was 28%.

Since the statistics do not provide a clear picture of whether the steps taken to encourage the readers borrow English books had an effect, the librarian has decided to use other techniques to encourage the students to borrow more books from the English collection.

Steps taken to enhance the knowledge of English of BLE students in 2010 in the library context.

• **Moving the Special English collection to a place that is more prominent to the readers.**

The library services are provided using a lecture hall which is not suitable as a library building at all. Till 2010, the English collection was kept in a corner of the library because of the limited space. In 2010, the book shelves were rearranged and the English collection was kept in a place where it was more visible to everybody.

• **Display new books.**

Before new books were added to the collection, the books were displayed in a rack for about two weeks. The purpose of displaying new books was to introduce the new books to the students before shelving them.

- **Label popular titles and authors.**

In 2010 the library started labeling popular titles such as Harry Potter, Twilight, Vampire Diaries, Da Vinci Code, Lord of the Rings etc and popular authors such as Enid Blyton, Danielle Steel, Dan Brown, Stephenie Meyer and Nicholas Sparks etc.

- **Conduct a survey.**

Since the statistical records maintained by the library from 1996, do not provide a clear picture whether the steps taken to encourage the students to borrow English books had an effect, the researcher decided to conduct a survey.

Common techniques used of reader development.

The Libraries use various techniques and conduct various programs to motivate their readers to borrow books. Issuing certificates, giving prizes, organizing book fairs, setting up class libraries and arranging reading rooms attractively and comfortably are some of the common techniques.

In United Kingdom, a library in Southend started a program named **'Book Crawl'** (http:// www.southend.gov.uk/info.) It was designed to encourage babies and toddlers to join the library and to make regular visits to borrow books. The parents and their young children were supposed to enjoy sharing books together. Since the program was for 0-5 year olds, they should be members and the membership was free of charge. They were given a special book crawl card to take home. The library staff gave the child a sticker to put on the book crawl card each time the child visit to borrow books. After five visits the child was sent a personalized certificate by post. There were 12 different certificates to be collected. One can wonder how can some one motivate to read a baby who cannot even read words. But the libraries try to motivate their readers, sometimes the children of the readers to read.

Once, more than 4000 public libraries in England, Wales and Northern Ireland got together and started a program for their library members to borrow a book

from any of these libraries. When the people go to other cities on vacation or for other purposes, they could borrow books from those city libraries. (BBC News)

When considering the techniques that the libraries have used to motivate their readers, the task seems easier with the children than with the adults. Motivating to read the adults who are not used to reading is a very difficult and complicated task.

Reader Development and Literary fiction.

A survey was done by Karl Hemsley to examine the attitudes of a selection of public librarians towards the Man Booker Prize for fiction.(Hemsley,2003). In order to set the role of the Booker in context librarians were asked to discuss the parts played by reader development and literary fiction in public libraries. Reader development was accepted as the main role of libraries and to have contributed to the moving of books and reading to the heart of what libraries are about. It was recognized that book promotions were effective and that it was part of the task of library staff to promote all areas of stock.

The librarians interviewed for this study agreed that there should be a place for literary fiction in public libraries. But some believed strongly that library stock provision should be primarily demand led. The others thought that especial attention should be paid to material less popular.

Methodology of the study.

The main purpose of the study is to find out new ways to enhance the literacy in English language of the undergraduates of IHRA. To achieve this objective, a sample of students of IHRA engaged in higher studies while being employed was selected. Out of 600 students, 10% were selected randomly and a **questionnaire** was distributed among the sample to collect their demographic information, the nature and extent of their use of books in English Language and attitude towards electronic media engaging in enhancing literacy in English Language.

In the second stage, a sub sample (10% of the sample) will be selected and be interviewed. From the **interview**, the data about the existing techniques used to

motivate the readers to borrow books will be collected and finally the data will be analyzed.

Primary Analysis

From the sample 100% responded the questionnaire. Among them (40%) of the students were below 30. The rest of the respondents were between 30 and 50.

- **The nature and extent of the use of books in English**

From the respondents, only 3.3% have selected English books as their 1ˢᵗ preference, when borrowing books from the library. 5% have selected English books as their 2ⁿᵈ preference. Only 10% of the respondents like to borrow English books from the library. The respondents who borrow more English books than Sinhala books were 3.3%. When they select books in English, 41.6% prefer to choose the books relevant to their syllabus and various other subjects. 58.4% have mentioned that their preferences were fiction, children's stories and short stories.

Though only few respondents borrow books in English, 88.3% of the respondents say that they like to read books and magazines in simple English.

- **Learning English through Electronic Media**

When they were asked whether they like or not to learn English through radio, television etc. 78.3% said 'yes'. According to the students usage of audio visual media to teach English, only 25% have said 'yes'.

93.3% of the respondents think that the conventional methods of teaching English Language in the classroom should not be continued. 91.7% of the respondents said that they have the facility of using audio visual materials at home if they were given the material.

Limitations of the study

There are no statistics maintained by the library from 1975 to 1996. If the researcher had statistics from 1975 then the statistics before 1992 and after 1992 could be compared.

The sample was selected from the students who come to the library. Then the students who do not come to the library were ignored. There may be students who do not come to the library of the institute but read books in English.

There is no way to find whether the readers have read the books or not. From the statistical records maintained, the information about the number of books borrowed can be obtained. Even with the questionnaire, the researcher has to believe the information that the respondents give. There is no other way to find out whether the readers have read the books or not.

Conclusions and suggestions.

Since the second stage of the data collection is to be completed yet, it is not wise to give conclusions or suggestions.

But the results of the data collection of the questionnaire shows that the respondents have a positive attitude towards using electronic media in learning English. The researcher would like to suggest adding a CD or DVD collection to the library assuming that it will help to enhance the Literacy in English language of the students.

Since 88.3% of the respondents say that they like to read materials in simple English, it can be suggested that to add more books in simple English to the collection in the future.

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Discussants

Professor Sirimath Sirimevan Colombage is the Senior professor and chair Economics at the Open University of Sri Lanka. He has earned his PhD and the M.A. in Economics from the University of Manchester, UK and the B.A. (Hons) from the University of Ceylon.

His research and professional interests include Econometrics, Statistics, Domestic and International Finance and Banking. Prof.Colombage has held many Academic posts starting at the Dept., of Economics, University of Ceylon as an Assistant Lecturer in 1960 and moving on to be the Director of Statistics and the Acting Director of Economic Research in the Central Bank of Sri Lanka from 1994 to 2000. He has served in many capacities as Director, Deputy Director and Additional Director in the Central Bank of Sri Lanka and the Ministry of Finance and Planning from 1970 to 1993.

Before taking up the positions of Professor and Senior Professor of the Open University where he is currently serving, he was a researcher at the University of Manchester/DFID UK South Asian Network of Economic Research Institutes. The institutes where he has received his professional training includes Studieszentrum Garsensee in Switzerland and International Monetary Fund in Washington DC, USA.

The Professor holds membership in many academic and professional Institutes and has served in key positions in them. Whilst he has authored many books, and contributed with writing chapters, and Research papers he currently is the Editor-in Chief of the Journal of Humanities and Social Sciences published by the Open University of Sri Lanka. He has also served in the Editorial Boards of Journals published by the Central Bank.

Professor Colombage has received many international accolades by way of research grants and awards.

Prof. Uditha Liyanage is Professor of Management of the Postgraduate Institute of Management (PIM), University of Sri Jayewardenepura and Adjunct Professor of Management of University of Canberra, Australia. He counts over 15 years experience in industry, having held senior marketing management positions in three leading companies in Sri Lanka. He, thereafter, joined the academia and read for the doctoral program at the PIM, of the University of Sri Jayewardenepura, Sri Lanka, where he has been the senior faculty member for Marketing over the past 18 years. He is now the Director of PIM and the Chairman of the Institute's Board of Management. He has published many articles on Branding and Strategic Marketing in leading journals, both here and abroad, and addressed numerous local and international conferences. He also holds an MBA and is a Chartered Marketer, a Fellow of the Chartered Institute of Marketing (CIM), and the only Sri Lankan Honorary Fellow of the Sri Lanka Institute of Marketing (SLIM).

Prof. Liyanage, is a Marketing Consultant to a number of leading local companies and international agencies and a developer of senior managers. He is on the boards of directors of a number of leading companies in Sri Lanka, and a member of the Boards of Study of the Institute of Chartered Accountants Sri Lanka, Sri Lanka Institute of Marketing and a member of the Governing Council of the National Institute of Business Management (NIBM). He is a member of the Standing Committees on Staff Development, Management Studies, and Postgraduate Studies and Research of the University Grants Commission (UGC). He is also a member of the Advisory Council of the Ceylon Chamber of Commerce, member of the Presidential Task Force on National Productivity Improvement in Sri Lanka, and a member of the Governing Council of the Academy of Financial Studies, Ministry of Finance and Planning. He is the Editor of PIM's *Sri Lankan Journal of Management*, and a member of the Editorial Board of the *Journal of Multidisciplinary Studies*, the journal of the Centre for Banking Studies, Central Bank of Sri Lanka.

He was the Chairman of the CIM Sri Lanka region, and a member of the international Board of CIM (U.K.). Prof. Uditha Liyanage, over the past four years in particular has been the Chairman of the panels of judges of a number of key events and competitions conducted by the country's chambers of commerce and leading professional associations.

Dr.W.K.Hirimburegama the Director, Institute of Human Resource Advancement (IHRA) University of Colombo obtained his PhD from the University of Peradeniya, Sri Lanka and the International Atomic Energy Agency (IAEA) of the United Nations Organization, Vienna, Austria. B Sc - 1976 (Biological Sciences) University of Peradeniya, Sri Lanka. His Major areas of specialization are Microbial-and Agro Biotechnology, Soil Microbiology & fertility, Soil Biology, Nuclear techniques in Agriculture & Biology, Agro-Biotechnology, Plant Virology, Industrial Biotechnology, Academic Management, Human Resource Development/ Advancement Participatory research and Extension, Bioethics, Human behavior, Human Resource Advancement, Institute development, Rural/ National development.

He has served in many capacities in Major Institutions such as Director (and Chairman of the Board of Management, ie. Academic Syndicate) of the Institute of Human Resource Advancement, University of Colombo, Senior Academic – University of Colombo, Dept of Plant Sciences, Member – Information Communication Technology Standing Committee of the University Grants Commission (UGC), Advisory Board Member – National Institute of Labor studies, Ministry of Labor Relations, Member – Senate and relevant statutory Committees of the University of Colombo, Coordinator – Information Technology Unit (ITU) – Faculty of Science, Univ of Colombo, Advisor – Agrotechnology and Community Services Center- Weligatta, Hambantota.

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He is a supervisor and examiner of Ph D and other postgraduate research Under Human Resource Advancement Programs, initiated many important programs at diploma and postgraduate level under a new vision for HR development. Initiated Research Projects in Sri Lanka and abroad as co-researcher and as team leader. Under Planning and Development work he has taken initiatives to introduce ICT laboratories, geoinformatic laboratories and other biotechnology laboratories for the faculty of science.

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Darshani Wijesinghe is currently working as the Librarian, IUCN- International Union for conservation of Nature Sri Lanka office. She graduated from University of Sri Jayewardenepura in Physical Science stream with the subjects of Mathematics, Statistics and Physics. She has obtained her Master's degree from Sri Lanka Institute of Information Technology (SLIIT) in Information Systems with a one year research project. Currently she is reading for Masters in Library Science from University of Colombo. Darshani has experience over five years as the Librarian of IUCN Sri Lanka and has been working for United Nations Information Center as a temporary assistant Librarian.

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She was Documentalist, National Science Council; Head Librarian, Overseas Children's School; Education Counselor, British Council, Colombo; and Information Officer, Centre for the Study of Human Right, Law Faculty, University of Colombo. She is a free the lance journalist and was selected Columnist of the Year – English Journalism Awards for e\Excellence 2008 by the SL Press Institute and Editors' Guild. She has seven published books – fiction, folk tales and a researched study o noteworthy Kandy women of the 20th century. Two of her books and updated editions were/are poublished by Marshall Cavendish Singapore.

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