SUSTAINABLE DEVELOPMENT IN KNOWLEDGE ERA: ROLE OF LIBRARY AND INFORMATION CENTRES

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The paper throws light on Ex- President Dr. A.P. J. Abdul Kalam's dream project PURA (Provision of Urban Amenities in Rural Areas). It concentrates on the how knowledge connectivity can be used as driven force in achieving sustainable growth. The role of library and information centres in smoothening the knowledge process and act catalyst in the social transformation process by helping to create societies based on knowledge and skills. It briefly explains how educating society can be the driving force in the journey of achieving developmental sustainability. The roles expected of libraries/ librarians in building knowledge societies for sustainable development.

KEYWORDS: *Knowledge Society, Sustainable Development, PURA, Social Transformation, Information Society.*

1. INTRODUCTION

Rapid advances in the areas of ICT's have enhanced our living, working and communication. Many new pathways have transformed social and economic benefits to people across the globe. The global society particularly developing and emerging nations are more concerned about sustainable development in terms of prosperity, developmental equity, pollution free industrialization and quick access to knowledge.

We often see that there is a divide between rural and urban areas of the world which is manifested by the income levels of individuals and

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society and the quality of human facilities. Today, in most part of the world including underdeveloped, developing and developed nations more than half the people live in villages and they are often in a condition of underutilization of talent, resources. These half populations are also most important from the point of view of global policy making, national government.

This knowledge age is leaping towards a pace of transformation which has been enabled by integrated connectivity of environment, people (society), economy and ideas (knowledge). The world is experiencing the global phenomenal changes leading to globalisation of skills and talents that can seamlessly from one nation to another. Similarly the ideas and innovations are no longer geographically or politically confined, they flow within this global village. The advancements in ICT and convergence of various new technologies have led a strong knowledge platform where the problems in any part of the world can be solved by experts sitting at faraway places. This seamless flow of information has helped to gain global prominence and it's a challenge for library and information officers to keep pace with technology and act as knowledge managers.

If we take India as focal example, it has 600000 villages, where people often depend on ancient technologies, untapped resources, underdeveloped skills and assistance for their livelihood. The challenges and opportunities for the 3 billion of the world are a matter of urgent concern to the global community at large. Here usually ancestral knowledge has been passed from generation to generation by the lack of technologies and capabilities. In an increasingly knowledge oriented society, where science governs our area of life, knowledge is prerequisite to prosperity. The system or society will run efficiently only if adequate avenues are generated by exchanging goods and services between rural and urban areas. If knowledge/skills and markets are accessible and well-connected, and then would lead to better income is better understood development.. The quest for better life would lead to economic empowerment and which in turn takes a new path towards societal

transformation. Thus final focal area of creation of facilities and amenities that are accessible for the needy will lead us to attain Sustainable development.

On the other side ICT has brought exponential growth of information as well as changes in the information and knowledge handling processes. This ICTs era, also called as Information Society era which was expected to bring solution to the information availability problem being experienced in the past societal era also brought about its own problems that are creating enormous challenges for humanity. The socio- economic conditions in many developing nations had continued to grow worse as a result of the problem of digital divide brought about by the presence of ICTs. It has equally paved way for the rich to be getting richer. The need to have a democratic society which will bridge this gap created by the information society through encouraging and providing unhindered access to information and knowledge for all irrespective of status and under the same condition, brought about the advocacy of 'knowledge Societies' in the summit report of UNESCO, 2005.

2. SUSTAINABLE DEVELOPMENT

Sustainable development is thinking about a future in which environmental, societal, and economic considerations are balanced in the pursuit of development and improved quality of life.

"*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". (World Commission on Environment and Development, 1987, p 43).

Sustainable development is dependent on four components according to Dr A. P. J. Abdul Kalam, they are environment, society, economy and idea. The well-being of these four areas is knotted to be one. For example, a healthy, prosperous society relies on a healthy environment to provide food and resources, safe drinking water, and clean air for its citizens. The sustainability paradigm rejects the contention that casualties

in the environmental and social realms are inevitable and acceptable consequences of economic development. These are only possible if knowledge or awareness about right things is inculcated.

3. INTEGRATED ACTION FOR A DEVELOPED INDIA

Rural India is where the majority of the population lives. The majority of these rural people are non-literate, semi-literate or unaware. The Rural Development in India is one of the most important factors for the growth of the Society. People in rural areas should have the same quality of life as is enjoyed by people living in sub urban and urban areas. Further there are cascading effects of poverty, unemployment, poor and inadequate infrastructure in rural areas on urban centres causing slums and consequential social and economic tensions manifesting in economic deprivation and urban poverty.

3.1 Target 3 Billion:

Dr. A. P. J Abdul Kalam in his book "Target 3 billion" mentioned about mission of transforming India into a developed nation by integrating five major core competencies viz. Agriculture and food processing, Education and Health Care, ICT, Good quality infrastructure and self-reliance in critical technologies. Coordination of these competencies will lead to food sufficiency and economic national security. This can be achieved only if there is a phenomenal growth rate which comes from continuous economic innovation and a balanced growth of all sectors of economy. This will require capacity building missions and the infusion of technology in everyday life which can be only achieved by knowledge empowerment of the citizens of nation.

There is a wide gap between rural and urban areas in each and every sector. It is seen that rural region people migrate to urban areas in search of opportunities, better living conditions and higher income levels. This again leads to disparity within urban region societies. As the

population increases, city planning comes under tremendous pressure for expansion of facilities leading to costly living conditions. In order to maintain a staggering growth the alternative way out of providing civic basic amenities to rural population is possible in this globally competitive industry. With approximately 5 lakhs villages in India, global exchange of information is made easy, fast, reliable and fast by giving basic facilities like electricity, telecommunication and IT infrastructure. There is also possibility of connecting many villages using clusters and this will enable relocation of various service and knowledge industries which will increase income level of rural community, job market and also quality life.

3.2. Providing Urban Amenities in Rural Areas (PURA):

It is socio economic system for sustainable growth. PURA proposes that urban infrastructure and services be provided in rural hubs to create economic opportunities outside of cities. Physical connectivity by providing roads, electronic connectivity by providing communication network, and knowledge connectivity by establishing professional and Technical institutions will have to be done in an integrated way so that economic connectivity will emanate. The Indian central government has been running pilot PURA programs in several states since 2004.

The vision of transformation to a 'developed' India can only be realised if we launch a mega mission for empowering the rural people. Creation of Physical, electronic and knowledge connectivity leading to economic connectivity in villages. Such a model of establishing a circular connectivity among the rural village complexes will accelerate rural development process by empowerment.

Empowerment can be achieved only through proper training, orientation. In this knowledge society it is the responsibility of library and information centres to properly guide an individual or the society as a large.

4. KNOWLEDGE CONNECTIVITY AND SUSTAINABLE GROWTH

In the book Indomitable Spirit Dr.A.P.J. Abdul Kalam states that when learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit. When knowledge is lit, economy flourishes. He says that creative learning is directly proportional to sustainable economy.

In this era of emerging knowledge, native intelligence has to be preserved and enhanced with the latest tools and technology, training, research. Assuming that the physical and electronic connectivity's are enabled knowledge connectivity has to be setup in order to facilitate creation of knowledge networks, enhance educational initiatives, connect hospitals with remote locations and open up market access in a faster and more transparent manner. This knowledge connectivity will essentially be a value adder to either local strength or the capacity of human resource. Knowledge connectivity will allow creation of knowledge enabled enterprises by providing value addition to the lives of local people.

Today's Knowledge Societies are characterised by equal universal access to knowledge and are in the pace of sharing them as a source of human and sustainable development. They concentrate on using the various information and knowledge made available by ICTs to impact the lives of the general public towards achieving sustainable development

There is closer link between Knowledge and Sustainable development as the saying of Francois-Henri Pinault as "Sustainable development is a fundamental break that's going to reshuffle the entire deck. There are companies today that are going to dominate in the future simply because they understand that." If the society is aware about reasons for sustainable development, then it can rule the future. By knowing this significant role of awareness and knowledge in social empowerment, it is the responsibility of library and information centre which are popularly known as information centre to bring awareness among the society.

5. ROLE OF LIBRARY AND INFORMATION CENTERS IN THE DRIVE TOWARDS SUSTAINABLE DEVELOPMENT

While talking about knowledge connectivity Dr. A.P.J. Abdul Kalam states that "Learning gives creativity; Creativity leads to thinking; Thinking provides knowledge; Knowledge makes you great." He emphasises on the knowledge factor in today's global era. Now the question is if knowledge societies aim at positively influencing the achievement of sustainable development, what is the role of Library and Information Centres and Knowledge Hubs? How can they help the society to keep face with the deep transformations that come with the advancements in ICT? How information centres can help in experiencing sustainable development?

Knowledge makes an individual great; the focus of libraries is the best delivery of educational information and knowledge to the students, teachers and public in order to bridge the digital gap in education at regional level. Libraries can inculcate some awareness programmes by coupling applications of Information technology with computers. This innovative planning and execution i.e. by creating awareness using video conferencing, digital technologies can be wonderful tool in transferring knowledge to the masses. Applications like Facebook, Twitter, WhatsApp have reached millions of users, so we can use same philosophy in reaching large rural audience with education and knowledge.

5.1 Statement on Libraries and Sustainable Development

International Federation of Library Associations and Institutions (IFLA) on its Meeting in Glasgow on the occasion of the 75th anniversary of its formation,

1. Declares that all human beings have the fundamental right to an environment adequate for their health and well-being.

2. Acknowledges the importance of a commitment to sustainable development to meet the needs of the present without compromising the ability of the future.
3. Asserts that library and information services promote sustainable development by ensuring freedom of access to information.

Further it asserts that :

- The international library and information community forms a network that connects developing and developed countries, supports the development of library and information services worldwide, and ensures these services respect equity, the general quality of life for all people and the natural environment.
- Library and information professionals acknowledge the importance of education in various forms for all. Library and information services act as gateways to knowledge and culture. They provide access to information, ideas and works of imagination in various formats, supporting personal development of all age groups and active participation in society and decision-making processes.
- Library and information services provide essential support for lifelong learning, independent decision-making and cultural development for all. Through their vast collections and variety of media, they offer guidance and learning opportunities. Library and information services help people improve educational and social skills, indispensable in an information society and for sustained participation in democracy. Libraries further reading habits, information literacy and promote education, public awareness and training.
- Library and information services contribute to the development and maintenance of intellectual freedom and help safeguard basic democratic values and universal civil rights. They respect the identity, independent choice, decision-making and privacy of their users without discrimination.

- To this end, library and information services acquire, preserve and make available to all users without discrimination the widest variety of materials, reflecting the plurality and cultural diversity of society and the richness of our environments.
- Library and information services are helping to tackle information inequality demonstrated in the growing information gap and the digital divide. Through their network of services, information on research and innovation is made available to advance sustainable development and the welfare of peoples worldwide.

IFLA therefore calls upon library and information services and their staff to uphold and promote the principles of sustainable development. This Declaration was approved by the Governing Board of IFLA meeting on 24 August 2002 in Glasgow, Scotland, United Kingdom.

Another initiative of the American Library Association (ALA) as Libraries Transforming Communities (LTC) seeks to strengthen librarians' roles as core community leaders and change-agents. The initiative addresses a critical need within the library field by developing and distributing new tools, resources and support for librarians to engage with their communities in new ways.

Library and Information Centre can play a proactive role in overall development of society by providing knowledge and awareness to every citizen of the society as it is our responsibility to build bridge between awareness and social sustainability.

In the developing country like India where there is problem of unawareness and lack of education, the knowledge about and knowledge for sustainable development is unknown, there arises the role and responsibility of library and information center. This can only happen if they are aware of social, economic, political problems and if their energies are properly utilized.

5.2 Role of Different types of Libraries in attaining sustainable development

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	Public Libraries	**Academic Libraries**	**Special Libraries**
Stakeholders	General public – children to aged people, uneducated, semi-literate or illiterate	Students, Teachers and the people associated with the academic institution.	Depends on the type of special library Corporate library/ Industrial Library- Administrative staff, corporate professionals, Industrialists, research oriented people, semi-professionals etc. Research & Development Library – Scientists, technical staff, researchers
Goal towards sustainable development	Creating awareness and educating peoplehealthy societal development.	Creating awareness among the students, making them concern towards social, political and economic issues and inspiring them to fight for sustainable development	Motivate the stakeholders in achieving social and economic sustainability through research.
Librarians role in imparting awareness about sustainability issue	Librarian can initiate few activities to create general awareness about various issues and opportunities in development by motivating, making them aware about social issues, conducting talks, discussions, lectures, plays and others activities to educate the stakeholders. Libraries can conduct few seminars, talks, and lecture series to impart the knowledge.	In academic library we can bring a qualitative change in the thoughts of the students and which will be source of motivation to younger generation to shape their carrier and work towards the development of the society.	A library in research institution play very important role in the success of research by providing right information at right time. With its general responsibility there is a need to perform some special responsibility on special libraries to motivate the research towards social and economic relevance.
Impact	In Public library people can enjoy the benefits of the developmental programmes and can try to come out from problems with awareness and there will be qualitative improvement in the life of people.	A seed sown in early age can give fruitful results during developmental stage. Thus we can see that the students can play a very important role in the regeneration of their nation.	With above mentioned practices in special/research library we can motivate research towards social relevance instead of only economic relevance. Research and development move together which can increase competency level of research in achieving goal.

The potential role of library comes in to picture when library and information centers actively involve themselves in Promoting Education, Public Awareness, and Training in order to achieve goal towards sustainable development.

5.3 Education and Sustainability:

Education is an essential tool for achieving sustainability. People around the world recognize that current economic development trends are not sustainable and that public awareness, education, and training are key to moving society toward sustainability. It is in the hands of librarian to create awareness or educate society for sustainable development rather than educating about sustainability. It gives people knowledge and skills for lifelong learning to help them find new solutions to their environmental, economic, and social issues.

An intelligent combination of higher education, research, and life-long learning is necessary for a nation to shift to an information or knowledge-based economy, which is fuelled less by imported technology and more by local innovation and creativity (UNESCO-ACEID, 1997).

Education directly affects sustainability plans in the following three areas:

- **Implementation**: An educated community is vital to implementing informed and sustainable development. A national sustainability plan can be enhanced or limited by the level of education attained by the nation's citizens.
- **Decision making:** Good community based decisions will affect social, economic, and environmental wellbeing depends on educated citizens.
- **Quality of life:** Education is also central to improving quality of life. Education raises the economic status of families; it improves life conditions.

Educating for sustainability is knowledge base related to environment, economy, and society. It also involves studying local and, when appropriate, global issues.

Educating the society with sustainability is not enough, but libraries have to take some innovative initiations to inculcate reading habits, to bring awareness about various potential development programmes, to encourage people to take active participation in all the developmental activities, to bring the rural educated youth in the main stream of development and to throw the light towards various opportunities available for youth.

6. CREATING A VALUE BASED SOCIETY: NEED FOR SOCIETAL FOCUS FOR SOCIAL TRANSFORMATION

The aim of sustainable development is not confined only to generating higher income and better economic growth. The evolution of such development is complete only when the monetary benefits can translate directly into human development which is reflected in health care and literacy. This will result in reduction of poverty and eliminates conflicts of the society. Such a planned system with integration between incremental income and capacity building will result in happy and prosperous society.

We are witnessing new situation throughout the world. We dream at living in a happy, prosperous and safe nation for which we need our world of sustainable development with value based citizenship. To achieve this Dr. APJ Abdul Kalam, proposed a trio system with education with value system, religion transforming into spirituality and economic development for societal transformation.

7. CONCLUSION

Sustainable development education enables pupils to develop the knowledge, skills, understanding and values to make responsible decisions, at both local and global scales, about the environment. It asks young people to consider how quality of life can be improved without damaging our planet for future generations, and it encourages them to take personal actions, however small, to improve and sustain their environment.

The application of knowledge is now recognized to be one of the key sources of growth in the Society. The term Knowledge Society has been coined to reflect this increased importance of knowledge. A knowledge Society is one where various organizations and people acquire, create, disseminate, and use knowledge more effectively for greater economic and social development.

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