

## KNOWLEDGE ASSET STRENGTHENING FOR SUSTAINABLE DEVELOPMENT & GROWTH

*Dr. Prafulla A. Pawar*

Department of Management Sciences (PUMBA),  
University of Pune, Pune (MS) India

### ABSTRACT

*Increased competition around the globe in today's competitive scenario is the outcome of process of globalization. The cost of capital and productivity has made organization to realize the significance of managing costs for business efficiency. Thus they required tailor-made solutions for specific issues like cycle time efficiency, market research and demand-based management, this demand for management of knowledge asset. Accountant defines an assets as a stock from which a number of future services are expected to flow. Accordingly, knowledge assets are defined as "stock of knowledge from which services are expected to flow for a period that may be hard to specify in advance." In contrast to physical assets that may have limited life because of depreciation, knowledge asset may in theory last forever.*

*Basic reason behind poor performance of the developing nation is unutilisation of skilled labour and availability of capital while develop nation in turn utilize their resources properly. The efficient utilization of the existing intangible, knowledge-related resources available in every sector of the economy would be responsible for enhancing the productivity of all factors of production. Thus today's corporate world in the developing countries needs to focus on the factors that systematically enable effective knowledge management. These enablers include transparency, political will, enhancement of educational institutions, a comprehensive database, and greater connections between the public and private sectors.*

*Knowledge is critical for development. In the current thinking on sustainable development, the importance of knowledge and information as an asset for development is perhaps insufficiently recognized. For making the most effective use of limited assets, access to knowledge and information is very crucial as it mitigate the risk. There has been growing concern that research and development efforts have failed to achieve their full potential because they have overlooked the need to work with and strengthen the Knowledge and Information Systems.*

**Keywords:** *Knowledge Asset, Globalization, Sustainable Development and productivity*

### Introduction:

For making the most effective use of limited assets, access to knowledge and information is very crucial. Improvement of living standards, quality of life, health and the environment all depend greatly on the advancement of knowledge and its applications thus knowledge supports sustainable development. Though this is the fact, research and development efforts have failed to achieve the full potential of assets because they have overlooked the need to work with and strengthen the Knowledge and Information Systems. Knowledge is critical for development (World Bank, 1998). In the current thinking on sustainable development, the importance of knowledge and information as an asset for development is perhaps insufficiently recognized.

In the New Economy, intangible capital like education and research and development has become as important as tangible capital such as buildings, transportation, roads, and machinery. As we have become richer, we have increasingly consumed services and goods with higher value-added content. This trend is demonstrated by the fact that the economic output of the U.S. economy, as measured in tons, is roughly the same as it was a century ago, yet its real economic value is 20 times greater. In other words, we have added intangible attributes to goods and services, the most important being knowledge. One example is anti-lock brakes, which are the product of a generation of research and development, and are loaded with electronics. They don't weigh any more than conventional brakes, but they certainly provide a great deal more value to drivers. Hence economies today and the well

being of citizens rely on the progress of knowledge and its transformation in new products, processes and services.

For ensuring social progress and environmental sustainability investing in knowledge is certainly the best, and may be the only, way to foster economic growth and create more and better jobs. It is the result of knowledge exploitation that, the developed economy experienced the versatile growth on all aspects of human life when it compare with the under developed & developing economy. This we can understand from Europe where development & growth is based on sheer exploitation of knowledge, which cannot compete on the basis of natural resources, and does not intend to compete on the basis of cheap labour.

### **Knowledge Driven Economy:**

It is fact that, technologically advanced countries in the vanguard of the world economy, has shifted the balance between knowledge and resources in fact for them knowledge has become perhaps the most important factor, determining the standard of living - more than land, than tools, than labour. Thus in industrial era advanced economies around the globe are truly knowledge base or knowledge driven.

For the last two hundred years, neo-classical economics has recognised only two factors of production: labour and capital. Knowledge, productivity, education, and intellectual capital were all regarded as exogenous factor that is, falling outside the system. Following from the work of economists such as Joseph Schumpeter, Robert Solow and others, new Growth Theory postulated by Stanford economist Paul Romer and others and according to them present economic system is based on technology and the knowledge, and hence today knowledge has become the third factor of production in leading economies. (Romer, 1986; 1990)

Knowledge leads to Innovation & creates technical platforms for further innovation. It is an established fact that technology can raise the return on investment and it strengthens & develops human potential. Thus, investment in knowledge can make technology more valuable and vice versa.

Knowledge is the basic form of capital and is beating heart of growth and development. As technological developments, can create technical platforms for innovations, and further this technical platform is a key driver of economic growth thus in the era where dynamic changes is occurring at every nook & corner Technology and knowledge are now the key factors of production & economic growth, which is driven by the accumulation of knowledge.

It is well describes fact that the developed countries can sustain growth with unlimited labour while developing economies cannot, even though they have ample capital this is because they have not much importantly understand the fact that, technology through the use of knowledge assets can raise the return on investment. In this regards traditional economics predicts that there are diminishing

returns on investment. New Growth theorists argue that knowledge is non-rivalrous in sense that there is a zero marginal cost from an additional individual enjoying the benefits of the knowledge. Even if one could exclude someone from enjoying the benefits of knowledge, it would be undesirable to do so because there is no marginal cost to sharing its benefits. Thus at zero price, only knowledge can be produced at zero cost. Hence the non-rivalry and technical platform effects of new technology can lead to increasing rather than diminishing returns on technological investment.

Focal factor consider for the sustained GDP growth is the Human capital. The investments in technology would turn to be fruitful only when human capital (Knowledge Worker) properly nurture, which can be possible by providing formal education, training and on-the-job learning embodied in the workforce. One can understand the success of advanced economies like US where More than 60% of workers are knowledge workers. They include architects and bank workers, fashion designers and pharmaceutical researchers, teachers and policy analysts.

Thus knowledge assets enhance external communications of countries, individuals, companies including marketing; promote internal communications within local businesses uncover and develop local intellectual assets, including help develop information products, and help technology to be more valuable.

### **What should be done for Sustainable Development?**

Still today, usual approaches to sustainable development are inadequate. Sustainability is everyone's business hence each of us require to think, plan, organize and act on the understanding that we are an integral part of our complex living world, this in turn possible through the widespread education and training. Achieving sustainability will require us to change existing development approaches, to set goals commensurate with the challenges and measures that progress comprehensively. Following are the some factor that required due attention to pay.

#### *Generating Intangible Resources*

Sustainable development depends upon the capacity of Nation to create value or wealth, which is possible through exploitation of five different assets or resources. These resources are physical, financial, employee and suppliers, customer, and organizational. Only the first two, physical and financial, include traditional assets. The last three are in intangible resource, which are the sources of knowledge and information assets. The basic challenge for every economy is to generate these intangible resources without which it will not be possible to confront the challenges. This is going to require further and significant infrastructure investments, skills development, scientific and technological research, development and expansion of the knowledge economy.

**Enhancing Human Capital:**

The prosperity of any nation is depending on competitive, sustainable, fast-growing economy. This in turn depends on a dynamic of multi-disciplinary knowledge base, capable of integrating technology, managed & skilled labour. The keys to building a competitive industrial base are knowledge, innovation and productivity. Thus, Sustainable development in itself, embodies a belief that people are the foremost, knowledgeable force and should be able to alter and improve their lives, in accordance with criteria that, take into accounts the needs of others and which protects the planet and future generations (Nath, 2000).

**Exchanging the Information:**

The essential component to sustainable development is Information exchange. It can improve the quality of people's lives. Information about nutritional values of food grains can mean better health, even with those with little to spend on food. In a broad sense, information access gives people greater control over their destinies. Further wider segments of society can communicate, collaborate and conduct their business & pave the way for an innovation & leads towards far-reaching development process through information exchange. It is possible because of decreasing cost of hardware and software elements associated with the technologies and their growing acceptance. The explosion of Internet and other interactive technologies have led to a paradigm shift in storage, retrieval, handling and dissemination of information. Thus information exchange becomes ingredient for the sustainable development.

**Life Long Learning by Organisations & Individuals:**

New Growth economics explain that a country's capacity to take advantage of the knowledge economy depends on how quickly it can become a "learning economy". Learning means not only using new technologies to access global knowledge, but also communicating them with other people. In the "learning economy" individuals, firms, and countries will be able to create wealth for sustainable development, in proportion to their capacity to learn and share innovation (Foray and Lundvall, 1996; Lundvall and Johnson, 1994).

It is absolute fact that un-integrative mindsets and organizational "silos" prevent transformation, hinder improvement and impede innovation and change. Learning brings permanent change in entire environment. Thus an integrative mindset and approach to planning and development is needed. This is because widespread transformative changes will be required to address the nature, scale and urgency of the challenges while improving in a sustainable way the lives that people have now.

**Knowledge- Networking for Sustainable Development:**

For enhancing the social and economic activities that comprise the development process information is critical.

Often pertinent information is available on issues concerning sustainable development but access to such conventional and non-conventional information is limited due to lack of organization of information services. As environmental issues are rapidly transforming into economic issues it is very essential to quickly locate relevant information in time. Here emerge the need of Knowledge-networking which enables millions of people to become better informed about decision-making processes in their countries, cities, villages and has helped local communities to improve their standard of living and the environment around them.

Knowledge networking has the potential to achieve unprecedented gains in economic and human development as it encompasses the challenge and attack the vexing problems of poverty, inequality, and environmental degradation. It gives a voice to the people transforming them from mere information recipients to information providers and decision-makers. Over a period, knowledge based networking strengthens community participation and acting as an inherent link between information access, democracy, human rights, environmental protection and sustainable development. It further intervenes and for improves the relationships between the various stakeholders in development. Thus Knowledge-Networking breaks the boundary, which confines the availability of information to a few by bringing together governmental and non-governmental organizations, researchers, business and industrial establishments in a network for information exchange.

**Knowledge Asset Networking: A Success Story in India:****Mallapuram:**

World's first fully networked rural district In an inspiring move, the Kerala government has commissioned a project in Malappuram, a rural district in the state, making it the world's most networked rural district. The 'ICT for Development' project, Akshaya, provides a range of e-services including education through a network of 617 information and communication technology (ICT) hubs. Set up in November 2002 with an investment Rs. 3.5 core (US\$ 801,000), the project ensured that at least one person per family in the district should train in computers. In the 560 Akshaya centers that have been set up, each center is equipped with five to ten computers, printers, scanners and other equipment and software. The Akshaya centers provide a range of e-services to the local community like universal ICT access, e-literacy, creation of micro ICT enterprises and service delivery points along with banking and financial services. Several other services, including the malappurampolice.com portal, e-governance services, e-kissan, and a community educational initiative, have also been launched. Thus Knowledge Asset Networking is not only the drivers of change but as tools for releasing the creative potential and knowledge embodied in people. It leads to transformations in society & create in innovative societies

**Conclusion:**

For sustainable development, knowledge-based economies to come into its own, comprehensive structural reforms are required. This, in turn, has to be seen in the context of the countries' broader transformation and modernization and in the context of the need for macroeconomic sustainability. The essential component to sustainable development is Information exchange, which in turn can improve the quality of people's lives. Knowledge networking has the potential to achieve unprecedented gains in economic and human development. Thus, strengthening knowledge assets is a way towards sustainable development and growth.

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