The Dynamics of Knowledge Society Transformation in Sustainable Economic Development Process

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**Abstract**

Ensuring the enhancement of well-being throughout the life of human beings is the most important within the objectives. Therefore, the primary objectives of economic development are to overcome the problems that may occur, in order to pursue a better life for humanity, housing, nutrition, education, health care, clean water, energy, working conditions etc. In the era, technologies of information and communication are quite rapidly developing. One of the most important impacts of information technologies is to make the countries mutually dependent on each other in the World in today's societies. For this reason, an important part of the country is in constant interaction with a portion or whole of the other countries in the economic, political, social, cultural, military, etc. areas. In this context, dynamics providing transformation to information society during sustainable economic development will be discussed more in detailed.

**Keywords:** sustainable economic development, knowledge society, information and communication technologies, economic development, economy

**Introduction**

At the beginning of the primary motivations for people's is economic prosperity and to achieve enhancement of well-being throughout his life according to changing environmental conditions. In the historical process, the increase in income for the welfare was thought to be sufficient, in which most economists were also agree with this concept until the Second World War years. However, the wealth-poverty decomposition in the aftermath of the industrial revolution caused a positive change and played a central role in the subsequent developments. As a reality separation of developed and undeveloped countries stands in front of us, which has been connected to the different reasons by many scientists. Before this divergence the monotony of life was present and there were basically sufficient revenue growth and prosperity in different regions of World geography. As a result of a positive change in the socio-economic development, the decomposition of the rich-poor income growth have become inevitable in the wellbeing and income began to no longer be sufficient. Within the priority objectives of development, humanity shelter, nutrition, education, health care, clean water, energy, and working conditions, and eliminate problems occuring on these fields to be economic development in order to pursue a better life in our era. The traditional areas are correcting the problems. Locomotive of economic activities is trade. If there is no trade in a country, wording on the stability of economic activity becomes difficult. An effective health care system and high-quality educational institutions cannot be found in a country having no prompting of trade. Therefore, strong and independent forms of government and good governance are not present. Since it has no such a strong army, which will inevitably be dependent on foreign powers. Due to the diversity of geography of the world with many different natural resources, climate, culture, religion, etc... to create a uniform economic development model means to escape reality.

To become a center of attraction depends on the specific location and conditions for local and foreign investors beside the development of country. The total infrastructural factors primarily constitute the dynamics of economic development of the country's. Today, natural infrastructure consisted of underground and surface resources perhaps constitute a starting point of development in the World. As understood from this statement the natural infrastructure can provide a great advantage for development of country. However, the effects of natural infrastructure might be limited on economic development. For that reason, natural infrastructure must be completed in accordance with institutional infrastructure, financial infrastructure, staff, infrastructure and IT infrastructure in particular and sustainable economic development process by the co-ordination in order to catch economic development. Population of social transformation IT infrastructure, superstructure and substructure of equipment provide awareness of information and interaction with the network. Moreover, it provides fitness and gives rise to the emergence and maintenance of positive change in society.

Transforming of society layers to whole new adorned society kneading with the traditional values of for thousands of years is very difficult in a very short period, as well as not healthy. Positive change must be realized by ingesting in order to be the transformation of economic development and social well-being in knowledge-based society. Otherwise, the technical, institutional innovation and technological developments, positive change based on the material and personnel infrastructure, large segments of society may be perceived as interference in social life, mainly will face with withstand and interventions due to the traditional culture. Mainly benefiting from the opportunities provided by the traditional culture of social life, especially state power and business communities would not like to give up their rants. Therefore, it should be noted that the best and most consistent positive changes occur in difficulty without enforcement, which are the socio-cultural and economic values ​​to protect based on fundamentals. Analysis of economic development should be based on life expectancy to humanity point of yesterday and today, but tomorrow might be a better comparison in the process of transition to knowledge society.

**Experiences on Knowledge Society Based on Economic Development in the Process of Transformation**

The desire of every human being is to maintain a comfortable lifestyle. Viability of this demand firstly depends on the resources of the society. Moreover, there is no an isolated human society living alone around the world and they dispersed to different parts of the World geography. World are shared by the two hundred formal or non-countries with different characteristics as underground and above natural resources, population, religion, language, culture, social, political and economic structures and historical background. Technological development and innovation mutually lead to becoming more dependent to each other and intensifying on relationships of countries. The traditional technological innovation constantly, in every sector in society, including in particular the economic activities carried out by integrating social transformation. Transformation into information society radically becomes innovation-based economic activities by a high added value. Trade in goods and trade in services covers knowledge-intensive goods and services with the transfer of information. Thus, mutual trade based on socio-cultural differences through the countries of the world primarily continues existing. In fact, the increase in international trade becomes closer to each country, in terms of infrastructure and socio-economic development.

The geography of World consists of less developed countries as a major part outside the remaining regions of Western Europe, North America, Oceania, and Japan. In this country, priority given to industrialization in their economic policies in order to recover budget gap within developed countries has been observed. On account of emerging of internal and external economies in the process of industrialization and technological innovations, they can find a media to show rapidly effect of spreading. However, economic development is a process having high back-and-forth connection, which has economic as well as social, cultural, political and historical aspects. Trade manifesting international economic and financial conjuncture are effective besides political and socio-cultural developments even the country's own internal dynamics of the globalized world. For this reason, economic growth providing only welfare on real *per* capita income is not enough in terms of economic growth. Environment faced by the countries of the Arabian Peninsula constitutes such an example. In the current era, only developing countries carrying out an integrated economic policy with the outside world can find the opportunity to development. Because the volume of foreign trade provides environment in these countries for expanding the market and enabling media creation on economies of scale and division of labor, innovation, new knowledge, dissemination of ideas, and methods, increasing competition and eliminating monopolies, developments obtaining domestic demand in the country (Karatas and Deviren, 2008a: 171- 204).

There could be many reasons for recession in stable economic development of developing countries. However, many noteworthy economic, social, cultural and political-borne factors leading, in particular, prohibiting on development take attention. In the process of economic development, "education" and "technology" factors are of importance due to their momentum effects. Because the engine of economic development is increasing of productivity. The most important elements of productivity are the educational level of community and of workforce. Another determination for developing countries was that they missed “the effect of industrialization revolution” and a move called "big breakthrough" realized by Far Eastern countries after the Second World War. Therefore, "globalization dynamics," equiped with today's technological innovations and advancements form the last segment in the process of the probability to close the gap between these countries and developed countries (Karatas 2003:9-38).

Knowledge of social change has been realized by technological innovations and values. However, the elements such as geographic factors, thoughts and ideologies, demographics, charismatic leaders, armies and revolutions, wars, discoveries, diversification of mass media, immigration, religion, and education have extremely effects on the rate and positive direction of change. For example, economic and military constraints mostly promote social change. These factors cause changes in the structure, social institutions and society can contribute to quickly development of the country. The changes in the following areas occur in the process of positive development and growth of a country (Karatas, 2003:169-186):

* Changes in economic structure,
* Changes in relations of production and consumption,
* Technological innovations in the area,
* Changes in educational institutions,
* Changes in customs and traditions,
* Arts and artistic activities, changes
* Changes in forms of child-rearing,
* Declines in population growth rate and changes in feelings of parents to ask children

Thus, socio-economic structure of the country changes and elevates to advanced level in process of development. The transformation into knowledge society can be realized with healthy transformation and prosperity growth. If a country more possess to the following items in the process of growth and development it has more the solid foundation and long-term sustainable economic development and political stability. These factors include:

* The amount of savings that of the country,
* The country's capacity to development technology and provide productivity
* The social capital of the country.

Change of social structure very closely affects the economic field at what happened in other areas. Because advances often occur together in the field of economic changes in economic and social life. The first serious and the most important problem living in structural change in the process of socio-economic development, a sine qua non, is to jump to perform transition to community-based structure of the country. As a result of a shift on available resources and factors of production from one sector to various sectors changes the contribution on GDP ratios. In the transformation into industrial society especially, labor productivity is important. At the beginning of factors are quality education that enables the workforce and gaining more experience and skills on high-tech knowledge (Karatas and Bekmez, 2007: 15-18).

**Transformation into Knowledge Society in the Process of Sustainable Economic Development**

Only addressing of developing countries is not sufficient to stable forecasting for the realization of sustainable economic growth. At the same developed countries of long period and regions in which changes with large-scale socio-economic and political issues should be included. Powerful states played a key role in economic development and change in the economic structure during historical process in the World. Today, advancements continue in this direction. Structure of the state, the state-economy connection, perform the change of industrial autonomy in developed countries, the strategy and the capacity of the differences shaping the relations between the countries form a media to transformation. This is why a sign of the capacity of state resources is whether used to transformation into knowledge society for the evolution of sustainable economic development and the constant differences between countries. Active role in providing social welfare increases the developed and industrialized countries, the economy, politics and relationships stranded fulfill the rights and freedoms of life (Karatas and Cevik, 2010: 24).

Non-economic, especially in the political institutions have the main determinant strength of establishing modern market economy, organization, continuity and their change. On the other hand, a strong synergy between the state organs, the potential sources of state capacity in developed and industrialized world today show to increase in well-being as it used to in the past. Yet it is very difficult make such a resolution for developing countries. Even today how much this real situation is the initiator dynamics of the emergence of the developing countries, it has also been important in the past with equally grade in terms of the developed countries peeling from the same position.

Strong economies today as in the past leads to powerful states to create a powerful army for their own safety. "A strong economy and strong state" phenomenon possessing of changing face in a globalized world state power gives rise to take action on markets by co-coordinating their capacity. In addition, the states that make up the powerful nature of power in every period of human history, and that period has a strong position in the state introduced as an element taking brings to the fore. This power emerges through, in today's world that makes up the knowledge society innovation, technology and socio-economic transformation. Country transformed into the knowledge society is a part of the dominant economy in the World.

Globalization prevents producing competitive products, innovations in these countries with high added value, and investment in technology. Since import economy is encouraged social life and society in the political sphere are directed to one side the dominant culture of the foreign products.

This inadequate situation cannot be obtained social capital, socio-cultural elements of primitive-based development. Since there is no opportunity for the knowledge society to realize positive change in a country, the society lives difficulties to create their own dynamics. Because, the structure of the world economy, the nature of change and progress in the developing countries' economic changes are mainly depending on the circumstances. Transformations into knowledge society in developing countries can be started through trade with the developed countries. Thus, the essences of identity and community values for centuries arise multi-faceted challenges since they could not be ready for this change. Community must be ready with elements such as cultural, political and religious, which should be supported by high-quality education and health sectors to economically-based response to the social transformation (Karatas and Deviren, 2005: 69-74).

Today, now largely integrated international markets consisting of national states, which are showing continuously changes, are available. Those will become a pioneer in the transformation of society in other countries, which have the capacity to influence industrial change in nation-states that can have the opportunity to penetrate. In this process, at the beginning of the elements coming firstly is to strengthen a country penetration to the domestic market and international market. However, creating a strong property rights within the country as well as outside the world the presence of the rule of law, social and stable in political life is given continuity opportunity. Transformation into knowledge society are not realized only meeting the necessary human and material resources opportunities of the country`s community but also it needs ability to penetrate the outsiders. Because economic activities, a continuous social activities and cultural values ​​are able to coordinate and control throughout human history (Gündoğdu and Karatas, 2007:3-13).

Sustainable economic growth and development should be ensured in order to achieve the transformation into knowledge society of societies without seamlessly realization. Knowledge society has more advanced level of civilization and modern features compared to traditional society. How sustainable economic growth and development program is regularly implemented, to the extent that; the information society is formed. A developed country has an active community with the level of advanced civilization. Social transformation is started directing to this goal. Then, the necessity of primarily acquisition of social welfare development in a country can be accepted to individuals in evey layer of community by targeting the development in every segment of society (Karatas and Bekmez, 2005:112-114). For example, it can make the city plan and realizes infrastructure projects. Then effective participation of citizens in the decisions of the socio-economic development can be achieved if necessary community awareness of well-being is created. Thus, transformation into knowledge society can be realized in the country. following include primarily needs to healthy and stable realization of knowledge society -transformation in a long-term:

* + Rising levels of education and social welfare of the individuals and the improvement of health status,
  + to increase purchasing power of Low-income people, reducing the proportion of the total population of this class of society,
  + Formation awareness of the human-environment-natural habitats, spreading to base in community and noticing that human is no single creature there in the World,
  + The observance of the needs of future generations in current use of natural resources.
  + To give emphasis on investments in human capital to effective sanctioning of labor force in all aspects of economic and social life.

To development of globally economic activities in production technologies the innovations in transportation, communication and rising and variations on human necessities make significant contributions. In fact, it also includes cultivable finding of new sources.

Industrialization is a measure of the transformation into knowledge society. Industrialization leads to the emergence of strong countries since it provides largely infrastructural competencies of states. Therefore, commercialization and industrialization have insurance function in the transformation into knowledge society. while socio-cultural activity is a necessary condition, the international variables are mandatory conditions in the process of transformation into knowledge society. Country must definitely be in formations of the institutions of international community, and of values. Because as a living being civil or Bedouin people roughly are of same habit and feelings (Karatas, 2001: 82-89).

**Conclusion**

Economic development in less developed countries, which makes it impossible conditions, eliminates opportunities to make savings of individuals. In economic development, there are vicious cycles of dynamic poverty obstructing the development of communities of which roots based on social and cultural backgrounds. Adverse climatic conditions of the country's political environment fed with a vicious cycle of dynamic poverty are the biggest obstacle to the transformation into knowledge society.

On the other hand, economic development has cultural, sociological, geographical and climate conditions. These necessary conditions play a role in the transformation of society to knowledge society since they are the fact of world geography for economic development. While off-economic structure, limited communication and transportation facilities, poor cultural and social activities, low productivity and high rates of self-consumption are making the transformation into knowledge society more difficult, whereas developed trade, the market economy, high efficiency, advanced exchange, advanced communications and transportation networks, high-level social facilitates, cultural activities make transformation more easily (Karatas and Tunca, 2010: 1-19).

In the era communication and information technology is evolving very fast. Each of the 200 countries around the world, which declared independence in the world are constant interaction a large majority of with other countries on economic, political, social, cultural and military fields. The most important impact of information technology in today's societies, is to make the countries of the world are mutually dependent on each other. Positive change resulting in reaching of societies to higher level of welfare is realized through information technology. Owned high rate of growth of human capital and economic development of the countries involved provides efficient use of natural resources by the amount of capital equipment, production equipment, technical knowledge and technological level factors. Therefore, how much a country has human capital, to the extent that a country may facilitate the passage of information society. There are priority activities needed to do in order to realize stable economic growth in developing countries. Providing that these priority actions result in true positive results, the conversion process into knowledge society can be commenced in the country. These are summarized as follows:

Artificial sources, such as printing of new money debt-based growth and intensive interventions should be left to perform,

* + Taxation and mindset on reform should be done in order to ensure a stable source of a strong financial sector,
  + reforming training programs according to the development in the world to increase the efficiency of investments,
  + adequate budget for public resources should be allocated to primarily increasing the share of technological initiatives

Investments should be encouraged in the field of innovation and technology-

* + Private sector initiatives should be carefully monitored and any kind of assistance should be supplied by the state.

A stable political environment is needed for the realization of all of them. In fact, human beings should avoid jeopardize developments to the future of the World while realizing the transformation of knowledge society. Because in ecosystem each species supporter of other species. Under these circumstances, industrialization has reached a significant level of environmental pollution in the World. Taking into no account climatic conditions in the selection of the established industrial areas lead to significant problems in life of surrounding human, plant and animal, waste releasing through atmosphere and water has a negative impact on soil chemistry. Even waste spreading through air current results in accumulation on plants in large areas found in nature, which directly affects the structure of flora that indirectly prevents normal development of fauna structure. Industrial chimney contaminants prevent the soil micro-organisms and their activities (Karatas and Tunca, 2010: 38-61). Developing countries are forced to make decisions under intense pressure both within the country as well as from outside the country. Founded and operated by the manufacturing industries in the advanced industrial countries confine to one country against another in view of economic, political and sociological for the sake of interests. Thus, they constitute uncontrolled and irresponsible production areas by having statutory provisions disregarding eco-system. In this process, achieving technological superiority come to the fore on the production of goods and services in a competitive environment of inevitably forced international efforts. The intensive R & D activities to be carried out to have High-tech. As a result, globally warming and arising of living species extinction are being confronted. In process of transformation into information society, these negative effects should also not be ignored.

**References**

Deviren Vatansever, N. ve Karataş, M., (2007). “Türkiye- Çin Halk Cumhuriyeti Arasında Endüstri-İçi Ticareti”, İktisat İşletme ve Finans Dergisi, Sayı:250, Ocak, 16-32.

Gündoğdu, H. ve Karataş, M., (2007). “Küreselleşmenin Ulus Devlet Üzerindeki Muhtemel Etkileri”, Akademik Araştırmalar Dergisi,Mayıs 2007-Temmuz, Sayı:33, 1-25 ss.

Karataş, M. ve Tunca M. Z., Ed., (2010). Sustainable Economic Development And The Influence Of Information Technologies: Dynamics Of Knowledge Society Transformation, Information Science Reference (an imprint of IGI Global), Hershey –New York, USA.

Karataş, M., ve Bekmez, S., (2007). “Information Technology And Economic Development In Developing Countries”, Information Technology and Economic Development, ed. [Yutaka Kurihara](http://www.amazon.com/s/ref=si3_rdr_bb_author/103-3943967-3337457?index=books&field%2dauthor%2dexact=Yutaka%20Kurihara), [Sadayoshi Takaya](http://www.amazon.com/s/ref=si3_rdr_bb_author/103-3943967-3337457?index=books&field%2dauthor%2dexact=Sadayoshi%20Takaya), [Hisashi Harui](http://www.amazon.com/s/ref=si3_rdr_bb_author/103-3943967-3337457?index=books&field%2dauthor%2dexact=Hisashi%20Harui) and [Hiroshi Kamae](http://www.amazon.com/s/ref=si3_rdr_bb_author/103-3943967-3337457?index=books&field%2dauthor%2dexact=Hiroshi%20Kamae), Information Science Reference (an imprint of IGI Global), Hershey –New York, USA, 14-30.

Karataş, M. ve Çankaya, E., (2010). “İktisadi Kalkınma Sürecinde Beşeri Sermayeye İlişkin Bir İnceleme”, Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Yıl:2, Sayı:3 Güz, 29-55.

Karataş, M. ve Bekmez, S., (2005). “Türkiye’nin İktisadi Gelişmesinin Dış Ticaret ve Teknolojik İlerleme Açısından Değerlendirilmesi”, Celal Bayar Üniversitesi İktisadi ve İdari Bilimler Fakültesi Yönetim ve Ekonomi Dergisi, Cilt: 12, Sayı: 2, 105-126.

Karataş, M., (2003). “Sosyo-Ekonomik Gelişmede Yapısal Değişim”, Stratejik Araştırmalar Dergisi, Sayı:1, Şubat, 169-190.

Karataş, M., (2001). “Bilgi Üretimi ve Eğitimin Sosyo-Ekonomik Gelişmedeki Rolü ve Önemi”, Celal Bayar Üniversitesi İktisadi ve İdari Bilimler Fakültesi Yönetim ve Ekonomi Dergisi, Cilt: 8, Sayı: 2, 81-90.

Karataş, M. ve Deviren Vatansever N., (2008). “Dünya Ekonomisine Yön Veren Yükselen Ekonomiler ve Yakın Gelecekte Türkiye’nin Konumu”, Akademik Araştırmalar Dergisi, Sayı:35, 164-207 ss.

Karataş, M. ve Deviren Vatansever N., (2005). “Türkiye’nin İktisadi Gelişmesinin Beşeri Sermaye İçerikli Solow Modeli Açısından Bir Değerlendirmesi”, 2005, İktisat İşletme ve Finans Dergisi, Ağustos Sayı:233, 68-87ss.

Karataş, M. ve Bekmez, S. (2003). “1990-2002 Arası Türkiye Ekonomisinin Performans Değerlendirmesi Sonuçları: Sermaye Birikimi ve Teknolojik İlerlemenin Büyüme Üzerindeki Rolü” EYS 2003 2.Ulusal Ekonomi Yaz Semineri, Pamukkale Üniversitesi.

Karataş, M. ve Deviren Vatansever N., (2008). “Muğla ve Yöresinin İktisadi Gelişmesinde Mermer Sektörünün Rolü”, Tunca, Mustafa Z.(Edit.), Türkiye’de Mermercilik Sektörünün Mevcut Durumu, Sorunlar ve Öneriler, Ankara: Asil Yayıncılık, 107-121.

Kozlu, Cem, (2003). Öfkeden Çözüme, Türkiye İş Bankası Kültür Yayınları, 2.b.,

Weiss Linda and John M. Hobson, (1995). States and Economic Development: A Comparative Historical Analysis, Cambridge: Polity Press.