ACHIEVEMENTS IN TERMS OF HUMAN DEVELOPMENT DIMENSIONS

Keywords
Human development index, Human development indicators, Human development dimensions, Human development components, Human development measurement, UAE

JEL Classification
O11, O15, O53

Abstract
This work aims to define the concept of human development measured according to United Nations Development Program (UNDP). The paper sheds light on the reality of human development in the United Arab Emirates (UAE) through the evolution of the human development dimensions, which reflects the achievements made in terms of human development by analyzing through nationally and internationally description. The study used comparison and descriptive method. The study found that UAE made a progressive improvement position at national level over time and at international level compared to most developing and developed countries. In term of Gross National Income (GNI) per capita income showed a decline through time series, and a gain in life acceptancy at birth and a mean rate in schooling years.
INTRODUCTION

It has been noticed in the last decade of the past century a growing awareness of the value of human resource as a goal and means in the system of comprehensive development. And, the path became positive integration in the system of developing economies subject to what can be achieved in the field of Human Development (HD) through education, health, and political rights, and before that, the increase in the average per capita share of Gross Domestic Product (GDP) (Todaro & Smith, 2015). Accordingly, there has been an increase in research studies and conferences held to determine the concept of human development and analysis of its components and dimensions of the satisfaction of basic human needs, social development, human capital formation, or raising the standard of living or improving the quality of life. Therefore, to achieve positive human development, it is required a given volume of expenditure which varies from state to state and needs to involve by State in the fields of particular social areas, social security, housing, clean water, and sanitation, because, the state’s government is still responsible for education, health, and public facilities. Thus, having realized the countries of the world, including (UAE), the importance of attention to the human factor as the main focus in the development process, because it is the mean and the purpose to development.

Significant efforts have been made in past decades in this area in the context of development programs which were applied by the UAE. Therefore, this paper questions the efforts achieved in the past 25 years according to the human development components. The process of study used two levels of analysis. It is an analysis an a national and international level. UAE made remarkable progress in education, healthcare, and standard living for population. Since adaptation of Human Development Index (HDI), UAE achieved a good position since measuring nations through HD components. The study is structured as follows: The concept of human development, the measurement of human development, and the reality of human development indicators in UAE.

LITERATURE REVIEW

The Concept of Human Development

The United Nations Development Program (UNDP) has been engaged in activity on the human aspects of development and is encouraging the emergence of a new vision of development, which has been clarified through the annual reports of the Human Development Report (HDR), that has been issued since 1990 (Todaro & Smith, 2015; Alkire, Human development: Definitions, critiques, and related concepts, 2010). And by the year 1993, it launched the program of this new vision of development under the title of “Sustainable Human Development”, which put human factor at the top of its priorities and all development steps are woven around the asset of human (i.e. that development does not become a reality only through the development of human beings) by emphasizing that the people are the true wealth of nations (Sen, 1985).

The idea was taken into account that people only are the means of development (Sen, Human rights and capabilities, 2005). According to the UNDP (1990), human development is defined as a process of expanding people's choices (UNDP, UNDP, 1990). In fact, the options are the finest expression of the concept, which reflects the fundamental right of human beings in these options (Sen, Well-Being, Agency and Freedom: The Dewey Lectures 1984, 1985). In principle, these choices can be infinite and change over time, but the three basic options are as follows: live a long and healthy life, acquire knowledge, and get the resources needed for a decent standard of living.

UNDP (1990) has pointed out that if these three basic options did not materialize many options are not available and many opportunities remain elusive. In addition to these options the concept of human development is included and many options estimated by the people in recognition of performance, and including the political freedoms, social, economic, cultural, also enjoy self-esteem, empowerment and a sense of belonging to the community, the opportunities for creativity and production, and to ensure the human rights and others (Sen, A decade of human development, 2000; Sen, Human rights and capabilities, 2005).

UNDP (1993) defined the Human Development (the development of people, for the people, by the people) which means investing in the capacities of human beings, whether in education, health or skills so that they can work productively and creatively. And development for the people means to ensure the distribution of the fruits of economic growth (Ramirez, Ranis, & Stewart, 1997; Ranis, 2004), which achieve wider and fair distribution. And development of the people means giving each person a chance to participate (Sen, Well-Being, Agency and Freedom: The Dewey Lectures 1984, 1985; Alkire, Dimensions of human development, 2002; Sen, Human rights and capabilities, 2005; Todaro & Smith, 2015). This means that human development emphasizes two aspects, one is the formation of human capabilities in the areas of health, education, knowledge, and the level of well-being, and the other is to empower people to invest their abilities both to enjoy at leisure or in production or to contribute to the political, social, cultural and other fields (Rioja, 1999; Robeyns, 2005).
With the promulgation report of the UNDP, it was generated the concept that enables all individuals to expand human capabilities as much as possible, and the recruitment of those capabilities in all areas. And it also protects the options for generations unborn and not drain the natural resource base needed to support development in the future (UNDP, Human Development Report 1993: People’s Participation, 1993). This concept of sustainable development, which gives the highest priority to the reduction of poverty, productive numeracy, social integration and for the rehabilitation of the environment, which makes the economic growth and translate it into improvements in the lives of human beings without destroying the capital needed to protect the opportunities of future generations (UNDP, Human Development Report 1994: New Dimensions of Human Security, 1994; UNDP, Human Development Report: 10 Years of Human Development Reports, 1990–1999, 2000b).

Therefore, sustainable human development can be defined as a comprehensive development strategy, seeking to empower and build human capacity and capabilities and expand his options in various areas of political, economic, social, environmental, health, education etc (Todaro & Smith, 2015). Also, with an emphasis on fairness and justice in the distribution of the wealth or benefits of both current and future generations alike (Anand & Sen, 2000). In order to make a qualified human and able to invest the benefits created by globalization and face or reduce the challenges (UNDP, Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development, 2010; UNDP, Human Development Report 2011: Sustainability and Equity: A Better Future for All, 2011).

To sum up, we can say that the subject of human development is to be determined under the following aspects (UNDP, Human Development Report: 10 Years of Human Development Reports, 1990–1999, 2000b):

- Human development is the core of concerns, and expansion of all human choices, and not income alone, thus focusing on the whole society, not only the economy.
- HD enhance human’s capabilities through investment in people.
- The economic growth is essential and stresses the need to give attention to the quality and distribution by linking to human beings, it also dealt with the options of sustainability from generation to generation.

It derives from the concept of human development and presents a development strategy that development begins and ends with people, namely that development is for the people and by them and for them. It is based on the four factors: productivity, justice, sustainability, and participation (Alkire, Dimensions of human development, 2002; Alkire, Why the capability approach?, 2005). Which has to be to increase the capacity of individuals through education, health, and training in order to increase productivity (Rioja, 1999), income, and increases the ability to satisfy peoples’ needs (Nafziger W. E., 2006). On the other hand, it must be available to all individuals to have equal opportunities to contribute in making the development and benefit of wealth, and ensuring equitable distribution (Ros, 2013). It must not only give equal opportunities among the current generation only, but the current and future generations, therefore ensures the continuity of development (Alkire, Dimensions of human development, 2002). That includes an element of continuity needed to preserve the environment for future generations, which should involve people in the decisions that shape their lives in order to be for them and their development (Sen, Human rights and capabilities, 2005).

There is no doubt that education at all stages is the agreed mechanism for capacity development and creating talent (Schultz T. W., 1961; Alkire, Why the capability approach?, 2005). Therefore, a society that increases literacy rate is different from the society that is still dominated by illiteracy and ignorance (Nafziger E., 2006). So, it is increasing the awareness of all the communities of the need to raise the level of science, and obliging governments to intervene with subsidies to poor families and bound to enforce enrolling their children in school and to increase learning level. Even education plays its role in human development and must provide the opportunity for everyone to develop the scientific abilities (Behrman & Wolfe, 1987; Psacharopoulos, 1994; Duflo, 2004).

Health services are also considered one of the important means in human resource development through the availability of health care and protection against diseases, which contribute to the longevity and reducing mortality (Mushkin, 1962; Schultz T. P., 2005). The enjoyment of human good health is a central goal of human development, and serves as means to accelerate because good health contributes to economic growth in several ways (Strauss, 1986; Anand & Ravallion, 1993):

- From the point of view of labor productivity: the good health that gives the individual the capacity to make more of an effort during the same time unit, and work for a longer time during the same day, which helps to increase production and productivity.
- To improve the use of natural resources: Allow good health for members of the community and optimize the use of natural resources, where access to natural resources can be difficult if human are in bad health or have a disease.
• Good health helps human to acquire knowledge and science. The World Bank has identified in its report “World Development Report 1993; investing in health”, that the developing countries need to take decisive developing policies in the field of health in order to achieve development were summarized as follows (Mundial, 1993):
  • Directing the largest investment resources for public health cost-effective higher costs, which can greatly improve the health of the poor, and varies this type of public health activities with the greatest payoff from one country to another.
  • Better allocation of health expenditure on curative services, where governments should invest in health infrastructure, and improve the health units and centers.
  • Increase the efficiency of government health programs, particularly in the pharmaceutical management.

The Measurement of Human Development

The Human Development Index (HDI): human development concept has gained a strong impetus by introducing a measure of HDI, which was released in the first report of year 1990, and the index was based on a new concept and simple at that time (Anand S. , Human Development Index: methodology and measurement, 1994; UNDP, Human Development Report: 10 Years of Human Development Reports, 1990–1999, 2000b). The report said that HD is not measured only by economic growth as was the practice, but measured by quantifiable accomplishments achieved by countries in health and education (Todaro & Smith, 2015; World Bank Group, 2012). The index measures the average of the country’s achievements in three basic dimensions of HD and these are:
  • Health (measured by life expectancy at birth as years).
  • Education, measured by the adult literacy rate, and the rate of the total enrollment in primary, secondary, and higher education.
  • Standard of living, measured by purchasing power based on the rate of real GDP per capita.

To measure HDI specified minimum value and maximum value globally for each criterion (UNDP, Human Development Report: 10 Years of Human Development Reports, 1990–1999, 2000b; Todaro & Smith, 2015). And based on the report of the United Nations (UN), it has adopted maximum, minimum values of its constituent indicators to guide the order:
  • Life expectancy at birth (25, 85 years).
  • Adult illiteracy rate (0%, 100%).
  • The average years of schooling (15 years, zero).

Then calculate what is called the level of achievement for each dimension as follows:

\[
\text{Dimension index} = \frac{\text{Actual value} - \text{Min value}}{\text{Max value} - \text{min value}} \tag{1}
\]

And HDI value ranging between the values of 0 and 1, and is used in the ranking of countries in terms of degrees based on the process of human development (Desai, 1991; UNDP, Human Development Report: 10 Years of Human Development Reports, 1990–1999, 2000b). Where the human development index approached high value when comes close to 1, and drop when it comes close to zero. Therefore, it is calculated at a descending rate, according to countries and benched to the directory as follows:
  • High human development countries by 0.80.
  • Medium human development countries between 0.5 and less than 0.8.
  • Low human development countries under 0.5.

This scale has several criticisms, notably severe simplicity, which does not lead to a more comprehensive understanding of human welfare and changes, and because it overlooked a number of indicators reflecting the different aspects of human welfare (Stanton, 2007; Todaro & Smith, 2015). Among the negatives that surround the three indicators, for example, it does not reflect the life expectancy at birth index necessarily about how safe the physical health of individuals. Second, it may not reflect the educational level of adult illiteracy rate, and its contribution to acquire knowledge and how develop their abilities. Third, with regard to per capita total income it is an indicator of questionable accuracy when taking into account the inequitable distribution of income (Hou, et al., 2015).

To remedy this deficiency, other standards for measuring human development were introduced and these are: The Gender Development Index (GDI), which indicates sex development ratio, the Gender Empowerment Measure (GEM), that indicates the sex participation, and the Human Poverty Index (HPI), which represents the development of poverty (UNDP, Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development, 2010). After over 20 years of use this guide had been the introduction of any changes and amendments to it by using the data and methodologies which were not available in most countries in 1990 to measure the dimensions of income, education, and health, according to the HDR (2010), which was issued under the title: The Real Wealth of Nations: Pathways to Human Development. Per capita gross national income replaced GDP per capita to
facilitate calculation of remittances from abroad for workers and official development assistance calculated for income per capita (Todaro & Smith, 2015; Hou, et al., 2015). And, the upper earnings limit has been removed to weigh the value guide to allow countries that exceed the threshold of $40,000 to better measure the real level of income. In education the indicator was replaced with an average expected year of schooling for children who are of school-age on the rate of enrolment, and average years of schooling for adults for the literacy rate. The aim is to provide a clearer picture of the state of education in each country (Hou, Walsh, & Zhang, 2015; Todaro & Smith, 2015). In the area of health, life expectancy at birth remains the main index.

The New Human Development Index (NHDI)’s method uses geometric mean to compute the new HDI for important reason, because using this way will ensure the reflection of any poor performance in overall index by any dimension. But on the other hand, the old method that used arithmetic mean through adding the three indices then divided them by 3, will not ensure to reflect any poor performance on overall index of HDI value. Thus, UNDP noted that using the new way it will capture the country’s performance through measuring the three dimensions of well-beings (Todaro & Smith, 2015). As conclusion, instead of adding the three variables health, education, and income index’ and then divided them by three, the new way computed in stand of geometric mean as shown in formula below:

$$\text{NHDI} = H^{1/3}E^{1/3}I^{1/3}$$  \hspace{1cm} (2)

Where $H$: stand for health index, $E$: noted for education index, and $I$: representing the income index. And combined these three dimensions give the composition of the final value of the HDI, which ranges between 0 and 1. The countries are classified according to their values in the ranking of the HDI in four categories:

- Very high for human development.
- High human development.
- Medium human development.
- Low human development.

And include any country in very high development category if the value of the human development index has more than 0.75, in the category of high human development if ranged between 0.75 and 0.51, in the medium category if between 0.50 and 0.26, and in the low if lower than 0.26 (UNDP, Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development, 2010).

The Gender Development Index (GDI): the gender development index uses the same variables used by the HDI, which measures gender equality, and the difference between them in the guide development associated with gender as amending the average completion of each country in terms of life expectancy, educational attainment, and income in accordance with the degree of achievement between men and women (Willis, 2011). GDI also modifies uses of the maximum value and the minimum age and is expected to take into account the fact that women usually live longer than men, and the maximum value for women is 87.5 years while the minimum value is 27.5 years, while for men are 82.5 years and 22.5 years. Calculating income evidence is somewhat more complicated, evaluated the GDP per capita (PPPS) for females and males share of earning income (Permanyer, 2011).

These, in turn, upon establishing the value of the ratio of female to male wage earners, and the percentage share of female and male share of the economically active population. Since no data is available on the wage rate it uses a value of 75% and per capita estimates are treated for females and males of income (PPPS), in the same way dealing with income in the HDI and then used in the calculation of income guide distributed equally.

Gender Empowerment Measure (GEM): uses human empowerment measure explicitly constructed two variables measuring the relative empowerment of men and women in political and economic fields, it is selected the first two sets of variables to express the economic participation and economic decision-making as a percentage power for a gender share of the professional and technical works (Permanyer, 2011). In view of the difference in the number of persons covered by each group, it is the expense of the detailed guide for each category and then combining both. The third variable is the percentage of each of the men and women of parliamentary seats who choose to express their political participation and making political declarations authority. With regard to all these three variables it is used methodology for determining the weighted average number of the population to reach a fair percentage ratio distributed equally to both genders together, then for each variable manual setting by dividing the percentage equation distributed evenly.

Human Poverty Index (HPI): HPI measures the overall progress in HD. It gives a picture of the distribution and accumulation of measures of the aspects of deprivation that still stand, it measures deprivations in terms of basic human development the same dimensions measured by the HDI, and this and this guide is Multidimensional measurement of poverty (Permanyer, 2011; Todaro & Smith, 2015). There are two guides of human poverty, one particular for developing countries and the other for the industrialized countries. The first focuses on aspects of deprivation through three basic dimensions: to stay alive (to die at a very early age), knowledge (excluded from a world of
reading and communication), and to the level of a decent standard of living in terms of overall economic provisioning, while the other focuses on aspects of deprivation of where the four dimensions of human life are: life expectancy, knowledge, standard of living, and social exclusion (Kovacevic, 2010).

**THE REALITY OF THE HD INDICATORS IN UAE**

Figures of human development value of any state reflect the level of economic stability, social, standard of living, and security, which without doubt promotes stability and progress and move forward the strengthening of national investment and at the same time encourage foreign investments, and encourage the use of people capabilities toward country’s prosperity (Azman-Saini, et al., 2010). Thus, nations are seeking to achieve the best within the levels of these indicators, which are reflected in the annual report of the UNDP. In HDR, there is the classification of countries in human development in accordance with the rates of development and reform in the sectors of education, health, public freedoms, freedom of opinion and expression, human rights, and economic development, as the right to work and wages well to suit the level of living in the country (Alkire, Human development: Definitions, critiques, and related concepts, 2010).

UAE was able to achieve concrete and real achievements and successes in the Human Development Index (HDI). The approach for analyzing this part depends on two levels, (a) nationally over time and (b) internationally comparing figures with countries, human development groups, and regions as well. The first level enables to explore the picture of human development in the UAE, and the other one enables to analyze the degree of human development compared with other parties (Shihab, 2001).

**UAE in the Order of the HDI’s Values.** Under the HD report’s title “Work for Human Development” published by the UN in 2015, notes that the UAE has made significant progress in all three levels of human development components, including health care outcomes, education achievement, and national income (GNI) per capita of advancing the HDI of 0.835 compared with last year’s value 0.833 placed in the ranked 41 among 188 nations (Table 1 and Figure 3). Also, the same report stated that the UAE was able to achieve growth in the index, where in 1990 the index was at 0.726, and in 2014 became 0.835, an increase of 15.1% and an average an annual increase of 0.59% between 1990 to 2014 (UNDP, Human Development Report 2015: Work for Human Development, 2015). In addition, the UAE’s value of 0.835 was below the average value of very high human development group countries which was 0.896, and above the average of Arab States which showed 0.686. Based on globally ranking for HDI by the same report stated that Qatar ranked 32 at the forefront of Arab States, which was 0.85, followed by Saudi Arabia ranked 39, Bahrain was 45, Kuwait 48. Also, countries came in the high of development category, like Oman (52), Lebanon (67), Jordan (80), Algeria (83), and Tunisia (96). Historically, the average annual HDI growth were 0.94, 0.39, and 0.21 from classified periods according to Table 2

On the other hand, the HDI value can be expressed as well (Figure 3). The UAE achieved forward progress in country’s development achievements with regards
to the three dimensions of HDI measurements by recording 0.726, 0.797, 0.828, 0.829, 0.831, 0.833, and 0.835 throughout the years 1990, 2000, 2010, 2011, 2012, 2013, and 2014 respectively. Therefore, it can be concluded that the country made a noticeable progress in HDI’s components.

**The Evolution of the HDI Dimensions.** As the evolution of the human development index in the rates for health, education and standard of living through expressing them an average life expectancy at birth, the expected years of schooling, the mean years of schooling, and the gross national income per capita. These indicators are illustrated in Figure 4. According to UNDP (2015) report, which was launched in Ethiopia on September 14, 2015 and is shown in Figure 4, the average life expectancy at birth in the UAE was raised from 67.6 years in 1980 to 77 years (an increase by 9.4 years), the mean years of schooling increased from 3.6 in year 1980 to 9.5 (an increase by about 5.9 years), and increased 4.7 years for expected years of schooling. On other hand, the income indicator decreased in GNI per capita about 42.0% from year 1990 to year 2014.

In comparison of HD dimensions with comparison’s groups from 2010 to 2014, it can be noted according to Figure 5 as follow:

- life expectancy at birth indicated that Singapore had the highest figure since 2013 and 2014, 82.3 and 83 years respectively.
- Norway had the highest figures related to expecting years of schooling (17.50) years and mean years of schooling (12.60) years based on comparison period among groups, knowing that this nation was using this measurement always ranked (1) among measuring nations.
- In Gross National Income (GNI) per capita, the UAE topping the comparison group, although that the GNI per capita trend-down since 2005.

**Gender Development Index (GDI).**

According to UNDP (2015) a new measurement approach was implemented related to sex-disaggregated, which is characterized as a proportion of the female to the male in HDI. Thus, GDI measures the gender inequalities in accomplishment in three fundamental measurements of human development as illustrated in Figure 6. GDI for the UAE between 2011 and 2014 noticed improvement around 72% in term of inequalities for male to female. According to the same report the value between female and male were 0.796 and 0.854 respectively, and the Female-Male ratio was 0.954, which if compared with 0.978 to very high HDI, it could be noticed close values to each other. This process shows national success in order to provide the same opportunities. In the same time the UAE is able to be in advance with countries to better practice toward inequality of gender as illustrated in Figure 6 below, Norway, Singapore, Arab States, and UAE have a value of 100%, 99%, 85%, and 95% respectively.

**Gender Inequality Index (GII).**

GII shows the vulnerability of national achievements reproductive of health, empowerment, and economic activity. The health dimension measured by adolescent birth rate and maternal mortality rate. The empowerment is measured by number of seats hold by female and attainment education by each gender. And the last is measured by participation rate of both sexes in labor force. Therefore, the disparities guide numbers will represent the weak performance related to inequality between gender. According to Figure 7, UAE’s value is indicating that the country needs more process in perspective of gender inequality. GII’s values were 7%, 9%, 20%, 54%, and 23%, for Norway, Singapore in very high human development group, Arab States, and UAE, respectively (UNDP, Human Development Report 2015: Work for Human Development, 2015). This index witnessed improvement for UAE from 46% in year 2008 to 24% in year 2013. Therefore, the movement of UAE’s GII still needs more process to move less percentage comparing to Norway, and Singapore, and comparing to Arab States considered better performance. Based on (UNDP, Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014), on UNDP (2014) the average difference between gender was .317 in Europe and Central Asia, and 0.575 in Sub-Saharan Africa, and between 0.197 in the group with very high HD, and 0.586 in the low HD group. According to UNDP (2014) women around the world face prejudice in the national political representation. The average share of the number of seats in national parliaments does not exceed 21%. The status of women in Latin America and the Caribbean is the best, where they occupy approximately 25% of the total number of seats, unlike the situation of women in the Arab world, where their share does not exceed 14% of the total number of seats in the National Arab Parliaments. Furthermore, the percentage of seats hold by women in the UAE was 17.5% according to UNDP (2014) and UNDP (2015) reports, which is considered better than the average in Arab States, while in Norway and Singapore these figures in 2014 were 39.6% and 25.3, respectively (Table 3).

(HD report 2015 and 2014)

Education that is measured by education in secondary school from age 25 and older. In the UAE, the female’s education proportion is higher than male, which was 73.1% to 61.2 for male. This
difference in percentage indicates that females in the UAE achieved the right to be educated. With comparing to year 2010, showed 76.9 and 77.3 for female and male respectively. In addition to that, in Norway, this figure was close to 97% for both sexes (UNDP, Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development, 2010; UNDP, Human Development Report 2015: Work for Human Development, 2015).

Health care services in form of maternal mortality rate are one of the most important factors contributing to the lack of care between the sexes, especially in developing countries. The rate of maternal mortality is up to 474 per 100,000 live births in Sub-Saharan Africa. Of course, leave and maternal mortality cause serious implications for infants and older brothers, who come from the parent without care (UNDP, Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014). In comparison with very high HD groups and developed countries the rate were 4, 6, 18, and 155 in Norway, Singapore, and Arab states, respectively. Adolescent birth may in turn leave dire consequences on the situation of young mothers and their babies. For example, Sub-Saharan Africa is witnessing major 110 births per 1,000 young mothers in the age group 15-19 years (UNDP, Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014).

Based on Table 3, the rate of adolescent birth was 27.5 in every 1,000. In comparing to period between 1990-2008 the rate was 16.0, which presents improvement processes toward this measurement. Comparing to Norway, Singapore, and Arab States with very high HD with 7.8, 6, 19, 45.4, respectively.

On the other side it is related to economic activity. In term of labor force participation rate for the year 2014, it can be noted that the rate for female was 46.5 and male 92 for the UAE. The rate for female witnessed improvement from 2010 which was 42.5 (UNDP, Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development, 2010). In conclusion, the UAE have made improvement and forwarded process related to GII (UNDP, Human Development Report 2015: Work for Human Development, 2015).

**Multidimensional Poverty Index (MPI).**

Conventional measures of poverty is based on income and consumption. There are multiple aspects of poverty measured by multi-dimensional poverty. For example: exposed people from the deterioration of the health situation and malnutrition, low level of education and skills, lack of livelihoods, the deterioration of family home state, and social exclusion (World Bank Group, 2012). Thus, from these perspectives the concept of multidimensional poverty stemmed, where the use of this index for first time was in year 2010. UNDP reported that 1.2 billion people live on $1.25 a day in 104 developing countries. But the number of people who suffer from multiple dimensions of poverty in 91 developing countries is close to 1.5 billion based on the MPI (UNDP, Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014).

In conclusion, multidimensional poverty index (MPI) reports do not include the UAE because data are unavailable.

**Education Achievements.**

There is a positive relationship between education and economic growth as well (Savvides & Stengos, 2008). There is no doubt that education and training is considered as one of major determents of increasing productivity (Shihab, 2001), and is considered as a key factor to the growth and modernization as well. In the UAE, education is free for citizens and Arabic speaking foreigners employed in public sector (UAE, 2013). Thus, from the point of educational statistics in the UAE (UNDP, Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014) indicate that literacy rates from 2005 to 2014 between the age of 15-24 were 90% and 97% for female and male respectively. In comparison with Singapore for the same period the same rates were 96.4 and 99.8 for female and male respectively. According to the UAE (2013) the education sector was awarded with a budget of 8.2 billion Dirham in 2012 and 9.9 billion Dirham was allocated for the education sector in the UAE in 2013 (Yearbook 2013).

The education system in UAE consists of public and private institutions which were established in early of 1970s. The system consists of four-tier system that covers 14 years of education, which is compulsory for all UAE’s citizen students. On the other side, the higher education including colleges and universities consists of undergraduate and graduate programs. The higher governmental body provides scholarships for UAE’s citizens including the choice to study inboard or outboard. The education sector in the UAE remains a source of attention by the government with full care. According to Table 4, the growth for the total number of schools, classes, teachers, and students
in both public and private were 4%, 72%, 98%, and 69%, respectively from the year 2000 to 2014. As mentioned in UNDP (2015) the dropout rate in primary school in the UAE for the period 2008-2014 was 8% from total students in this stage, which is close to the rate of 8.8% in other Arab States. Thus, this indicator needs more attention because in countries such as Norway and Singapore, the rate was 1.5 and 1.3% for the same period respectively. The number of pupils per teacher in the UAE was 16 students for one teacher which in a very high HD was 14 students (Table 5) (UNDP, Human Development Report 2015: Work for Human Development, 2015).

**Health Outcomes.**

Health services are at the forefront of the comprehensive national action by the UAE where these services play a positive impact in the process of development, construction, and social stability (MoH, 2016). The Ministry of Health provides to all citizens and residents a comprehensive health care, which can be reached through preventive and therapeutic programs with a service network at all levels such primary health care, secondary care, and clinical health care. The health care at all levels is free of charge for all citizens.

During the past two decades modern hospitals were set up that are no less efficient in performance than many of the world's hospitals, whether in Europe or America (UAE, 2013). The country has developed the old institutions providing them with superior expertise, modern tools, and technical and administrative personnel. The UAE has established laboratories that rely on integrated capabilities to contribute to the proper and accurate diagnosis of the disease. Furthermore, centers for nuclear medicine, physiotherapy and psychiatry were also established for the first time (UAE, 2013).

As described in Table 6 the number of hospitals has increased by 29%, the number of beds has increased by 64%, the number of physicians has increased by 303%, and the number of nurses has increased by 225% from year 2000 to 2014. The country made a significant progress in term of health care (UNDP, Human Development Report 2015: Work for Human Development, 2015).

As we concluded from the beginning the concept of human development, as drafted by UNDP can be summed up as “development of humans by humans and for humans”, and that the process of development is an expanding option which is available to the human being as the core of the development process itself, and provides the same opportunity to both sexes. Thus it can be said that the human development has two dimensions. The first is concerned with the level of human development in the various stages of life to the development of human capacities, physical energies, mental, psychological, social, technical skills, ... etc. The second is the process of HD related to the investment of resources and inputs that generate wealth and production for the development of human’s capabilities such enhancing the productivity.

Then in int second phase of this study, we discussed the reality of the HD in the UAE, and found that the achievements made reflect a significant standard of improvement in living standards, healthcare, and education. The reports of the UN recorded the achievements of the UAE, according to the HDI and can be summarized as follows. First, it is part of very high human development category. Second, GNI per capita was high compared with developed countries, but its record declined since year 2005. Third, we noticed a progress achieved in terms of HDI growth rate, life acceptancy at birth, and excepting years of schooling. Fourthly, it's the vanguard of states at the Arab world level.

**BIOGRAPHY**

Yahya Alshehhi is a PhD researcher, where his research interesting as the story of growth and its determinants in United Arab Emirates (UAE) by sectoral approach. He is Emirati and his email: yahya.alshehi@gmail.com.

**REFERENCES**


ANNEXES

Tables

**Table 1.** UAE's progress in HDI for year 2014.

<table>
<thead>
<tr>
<th>Country</th>
<th>Life expectancy at birth (year)</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2011 PPP$)</th>
<th>HDI value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAE</td>
<td>77</td>
<td>13.3</td>
<td>9.5</td>
<td>60,868</td>
<td>0.835</td>
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<tr>
<td>KSA</td>
<td>74.3</td>
<td>16.3</td>
<td>8.7</td>
<td>52,821</td>
<td>0.837</td>
</tr>
<tr>
<td>BHN</td>
<td>76.6</td>
<td>14.4</td>
<td>9.4</td>
<td>38,599</td>
<td>0.824</td>
</tr>
<tr>
<td>QAR</td>
<td>78</td>
<td>13.8</td>
<td>9.1</td>
<td>123,124</td>
<td>0.85</td>
</tr>
<tr>
<td>KWT</td>
<td>74.4</td>
<td>14.7</td>
<td>7.2</td>
<td>83,961</td>
<td>0.816</td>
</tr>
<tr>
<td>OMN</td>
<td>76.8</td>
<td>13.6</td>
<td>8</td>
<td>34,858</td>
<td>0.793</td>
</tr>
<tr>
<td>Arab States</td>
<td>70.6</td>
<td>12</td>
<td>6.4</td>
<td>15,722</td>
<td>0.686</td>
</tr>
<tr>
<td>Very high HDI</td>
<td>80.5</td>
<td>16.4</td>
<td>11.8</td>
<td>41,584</td>
<td>0.896</td>
</tr>
<tr>
<td>Word</td>
<td>71.5</td>
<td>12.2</td>
<td>7.9</td>
<td>14,301</td>
<td>0.711</td>
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</table>


**Table 2.** Average annual HDI growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value (%)</td>
<td>0.94</td>
<td>0.39</td>
<td>0.21</td>
<td>0.59</td>
</tr>
</tbody>
</table>


**Table 3.** Gender Inequality Index (GII)'s Dimensions for 2014.

<table>
<thead>
<tr>
<th></th>
<th>Maternal mortality ratio (%)</th>
<th>Adolescent birth rate (%)</th>
<th>Female seats in parliament (%)</th>
<th>Population with at least some secondary education (%)</th>
<th>Labor force participation rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>UAE</td>
<td>8</td>
<td>27.6</td>
<td>17.5</td>
<td>73.1</td>
<td>61.2</td>
</tr>
<tr>
<td>Norway</td>
<td>4</td>
<td>7.8</td>
<td>39.6</td>
<td>97.4</td>
<td>96.7</td>
</tr>
<tr>
<td>Singapore</td>
<td>6</td>
<td>6</td>
<td>25.3</td>
<td>74.1</td>
<td>81</td>
</tr>
<tr>
<td>Very high HDI</td>
<td>18</td>
<td>19</td>
<td>26.5</td>
<td>86.2</td>
<td>87.9</td>
</tr>
<tr>
<td>Arab States</td>
<td>155</td>
<td>45.4</td>
<td>14</td>
<td>34.7</td>
<td>47.6</td>
</tr>
</tbody>
</table>

Table 4. UAE's Public and private educational services indicators.

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of schools</th>
<th>No. of classes</th>
<th>No. of teachers</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,167</td>
<td>24,114</td>
<td>45,442</td>
<td>568,791</td>
</tr>
<tr>
<td>2014</td>
<td>1,215</td>
<td>41,406</td>
<td>89,772</td>
<td>961,606</td>
</tr>
<tr>
<td>Change (%)</td>
<td>4</td>
<td>72</td>
<td>98</td>
<td>69</td>
</tr>
</tbody>
</table>


Table 5. Education achievements (2008-2014)

<table>
<thead>
<tr>
<th>Education achievements</th>
<th>Norway</th>
<th>Singapore</th>
<th>Very high HD</th>
<th>Arab States</th>
<th>UAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary schooling dropout rate (%)</td>
<td>1.5</td>
<td>1.3</td>
<td>2</td>
<td>8.8</td>
<td>8</td>
</tr>
<tr>
<td>Pupil-teacher ratio (%)</td>
<td>-</td>
<td>17</td>
<td>14</td>
<td>23</td>
<td>16</td>
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</tbody>
</table>


Table 6. UAE's healthcare Infrastructure.

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of Hospitals</th>
<th>No. of Beds</th>
<th>No. of Physicians</th>
<th>No. of Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>28</td>
<td>4,568</td>
<td>1,604</td>
<td>5,097</td>
</tr>
<tr>
<td>2014</td>
<td>36</td>
<td>7,493</td>
<td>6,504</td>
<td>16,547</td>
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<tr>
<td>Change (%)</td>
<td>29</td>
<td>64</td>
<td>305</td>
<td>225</td>
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</table>


Table 7. Health Outcomes HDR 2015.

<table>
<thead>
<tr>
<th>Country</th>
<th>Mortality rates (per 1,000 live births)</th>
<th>Adult mortality rate (per 1,000 people)</th>
<th>Physicians (per 10,000 people)</th>
<th>Public health expenditure (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>2.3</td>
<td>2.8</td>
<td>47</td>
<td>73</td>
</tr>
</tbody>
</table>
### Figures

**Figure 1.** UAE’s HDI ranking history  
*Source: UNDP reports from year 1990 to 2015, and selected data by author.*

**Figure 2.** GCC’s HDI Ranking.  
*Source: UNDP reports from year 2010 to 2015, and selected countries by author.*

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<tbody>
<tr>
<td>Singapore</td>
<td>2.2</td>
<td>2.8</td>
<td>38</td>
<td>69</td>
<td>19.2</td>
<td>4.6</td>
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<tr>
<td>UAE</td>
<td>7</td>
<td>8.2</td>
<td>59</td>
<td>84</td>
<td>19.3</td>
<td>3.2</td>
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</tr>
<tr>
<td>Very high HD</td>
<td>5.1</td>
<td>6</td>
<td>57</td>
<td>106</td>
<td>27.9</td>
<td>12.2</td>
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</tr>
<tr>
<td>Arab States</td>
<td>28.6</td>
<td>37.6</td>
<td>124</td>
<td>172</td>
<td>13.8</td>
<td>4.1</td>
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</tbody>
</table>

**Figure 3.** United Arab Emirates’ HDI value.  
*Source: UNDP reports from year 1990 to 2015.*

**Figure 4.** UAE HD’s Dimensions Trend (1980 - 2014)  
*Source: UNDP reports from year 1980 to 2015, and data selected by author.*
Figure 5. A comparison of HD components from (2010 - 2014)
Source: UNDP reports, and selected data by author.

Figure 6. Value rate (%) of Gender Development Index (GDI).
Source: UNDP reports. Data selected by author.
Figure 7. Gender Inequality Index (GII) Values.
Source: UNDP reports from year 2008 to 2015. Data selected by author.