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Yagoub Ali Gangi¹

Ahmed Bin Mohammad Military College, Qatar

The role of entrepreneurship education to achieve MDGs in Sudan

¹ **Dr. Yagoub Ali Gangi**, Associate professor of Economics
Ahmed Bin Mohammad Military College, P.O. Box 35393, Doha, Qatar.
Seconded from School of Management Studies
University of Khartoum, Sudan, Email: yagoubgangi@hotmail.com

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Abstract

Purpose There is a constant need to investigate the importance of entrepreneurship education for economic development. This paper aims for examining the potential role of entrepreneurship education in achieving Millennium Development Goals (MDGs).

Methodology The paper depends on literature review to investigate the importance of entrepreneurship education for achieving MDGs. For this purpose, some successful cases of entrepreneurship education and experience of some countries with entrepreneurship education are presented. In addition, overview of Sudanese economic performance and MDGs status for the period (-2000 2010) is introduced.

Findings It is found that the importance of entrepreneurship education is well documented in the literature and its possible role in achieving MDGs is well recognized. Moreover, it is found that good economic performance and some progress in MDGs status in Sudan was achieved during the period of study. Furthermore, it is found that entrepreneurship education does not exist at basic and secondary school levels in Sudan and is very limited at university level.

Original This paper links between two important issues entrepreneurship education and MDGs. By doing so, it links two different subjects economics and management. Therefore, it encourages multi-disciplinary studies.

Keywords entrepreneurship education, Sudan economic performance and economic development.

Introduction

Sudan is endowed with valuable natural resources. This includes valuable mineral resources such as petroleum, natural gas, gold, silver, chrome, asbestos, manganese, gypsum, mica, zinc, iron, lead, uranium, copper, kaolin, cobalt, granite, nickel and tin. In addition to this, Sudan is endowed with a wide cultivatable land suitable for agricultural production. The total arable land was estimated at around 200 million feddan in which only quarter of it is cultivated every year (Central Bureau of Statistics, 2010). In spite of these abundant and valuable resources, Sudan is among the poorest countries in the world with very low record in most of the human development indicators. It is clearly a state of government and society failure to properly utilize its abundant resources for the benefits of its people. Since its independence in 1956, many attempts have been undertaken to utilize these resources and improve the welfare state of Sudanese people. As in the case of many previous economic plans from 1960s to 2005.

In the year 2000, Sudan signed the Millennium Declaration together with 189 member states of the United Nations. The Millennium Declaration aimed at improving the status of the basic needs and conditions of human development in the member states. To this end, the governments of the member states declare their commitment to work together toward achieving eight time-bound development goals. These are: eradication of extreme poverty and hunger, achievement of universal primary education, promotion of gender equality and empowerment of women, reduction of child mortality, improvement of maternal health,

combating HIV/AIDS, malaria, TB and other diseases and ensuring environmental sustainability. For each goal a number of targets were specified and for each target a number of quantitative indicators were identified as well. The year 2015 was earmarked as the last year of a timeframe for achieving the specified targets from their initial values in the year 1990 (National Population Council, 2010).

Since 2000 Sudan has been endeavoring very hard to meet its commitment towards MDGs. In line with that, the government signed the Comprehensive Peace Agreement (CPA) in 2005 with Sudan People's Liberation Army (SPLA) ending the longest war in Africa. Following the CPA the Sudan Launched the Joint Assessment Mission (JAM) the Five-Year Development Plan (2007-2011) together with many development programs supported by the international community. The intention of the government was to attain some progress towards MDGs. In spite of all these efforts, the welfare of the Sudanese have not really been improved according to the evidence from reliable socio-economic data. In their assessment for the progress towards achieving MDGs the National Population Council (NPC) (2010) has found that Sudan was far from achieving the MDGs. Some progress have been achieved in some goals but still were not in line with the targeted plan. Although only two years are left for the declaration deadline, there is little hope that Sudan will meet its MDGs commitment.

The present paper aims for examining the role of entrepreneurship education on achieving MDGs in Sudan. To do so,

the paper reviews the previous studies about the effect of entrepreneurship education on graduate's entrepreneurial skills and intentions to start-up their own business. It also reviews the studies that examined the state of entrepreneurship education on some Arab and African countries. In addition, the paper examines the current status of entrepreneurship education in Sudan at schools, universities and colleges levels. Moreover, it identifies the possible benefits for improving the status of entrepreneurship education.

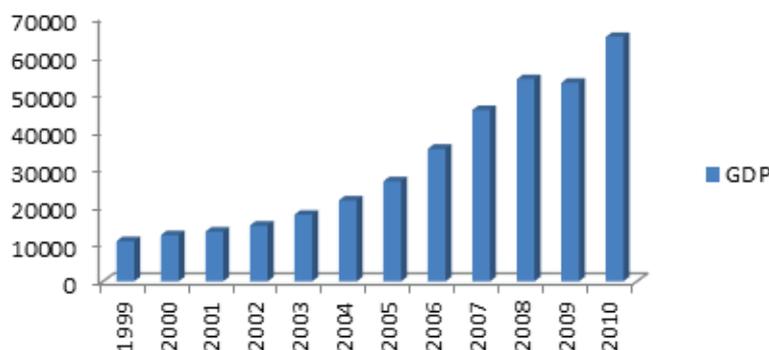
An Overview of Sudan's economic performance and MDGs Status

Sudan is a country of paradox, endowed with huge and valuable natural resources, yet suffer from severe economic problems. Its people have been suffering from poverty, high literacy rate, weak infrastructure and poor public services for more than half a century. Since the early 1970s to the late 1980s Sudan's economic performance has been very poor. GDP growth was

very low and even in some years negative. Per-capita income was less than 400 US \$ with a large proportion of population living in less than one dollar a day. This poor economic performance manifested itself into weak human development indicators. The poverty headcount ratio was more than 50 percent, Gross Enrolment Ratio (GER) was less than 50 percent, life expectancy at birth was less than 55 years, literacy rate was more than 70 percent and mortality rate was also noticeable (World Bank, 2013).

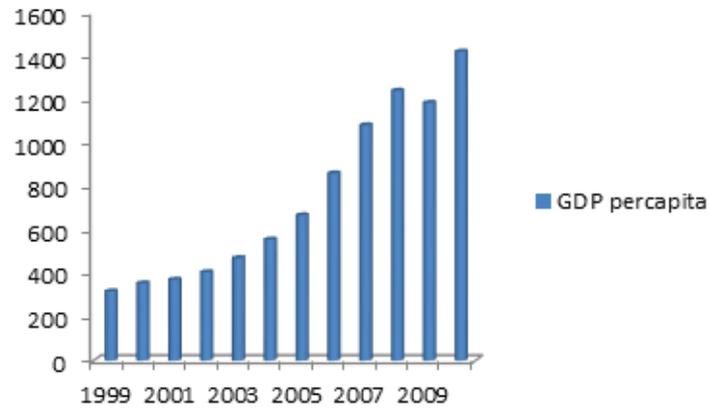
Sudan started the export of oil resources in 1999, since then a significant change to the Sudanese economy has occurred. GDP increased from 12.2 billion US dollars in 2000 to 64.7 billion US dollars in 2010 with an average annual growth rate of about 6 percent. Moreover, the per-capita income increased by five folds in ten years from about 350 US dollars in 2000 to about 1400 US dollars in 2010. The following figures summarize the main macroeconomic indicators for Sudan during the period (2000 -2010).

Figure 1. Sudan's GDP in Million US \$ (1999-2010)



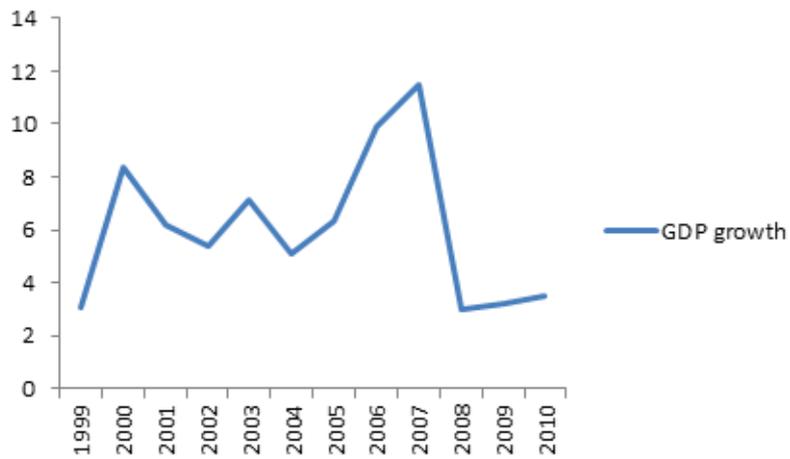
Source: World Bank, 2013.

Figure 2. Sudan's GDP percapita in US \$



Source: World Bank, 2013.

Figure 3. Sudan's GDP growth (1999-2010)



Source: World Bank, 2013.

The question to be asked: Did this good economic performance translate into a socio-economic development of Sudanese society? To answer this question two reports were prepared to assess progress attained toward MDGs. The first one was undertaken by the United Nations in 2004 and the second was carried out by the National Population Council (NPC) in 2010. The next section provides the main findings of these two reports. The findings of the first report are used to convey the status of MDGs for the period (2004 – 2010).

According to the 2004 report few MDGs have witnessed some progress. For example, with regard to goal 1, it was found that the percentage of the undernourished population fell from 31% in year 2000 to 26% in 2004, and over the same period the under-5 malnutrition rate declined from 33% to 18%. Based on this, it was argued that Sudan was on track for halving the proportion of population who suffer from hunger. With regard to Goal 2, it is found that the Gross Enrolment Ratio (GER) rose for both sexes, from 53% in 2000 to 59.6% in 2004. As to goal 3, the data shows that some progress has been achieved toward reducing gender disparity in education. The data shows that females constitute about 46.9% of the total number of students enrolled at the primary school level and the ratio of girls to boys is 88.3, while the ratio of girls to boys in secondary education is almost equal for the same years (48%).

In the progress report of 2010 it was revealed that the MDGs status had slightly improved. Out of the eight MDGs few goals witnessed noticeable improvement. The proportion of the population that live on less than one dollar per day fell from 64 percent in 2004 to 25 percent in 2009. However, this is lower than the targeted level. This means the situation in Sudan is approximately close to the situation

worldwide where the proportion of people living on less than \$1.25 a day was 47 per cent in 1990 and fell to 24 per cent in 2008. In addition, poverty incidence based on income/consumption was estimated in 2010 to be 46.5 percent for Northern Sudan compared to 90 percent in 1992. Although a considerable improvement in this goal was accomplished, still the situation was not satisfactory. Nearly half of the Northern Sudan's population live in severe poverty. One of the possible causes of such high poverty rate was the lack of employment opportunities. With regard to the MDG 2 gross enrolment in basic education increased from 65.1 percent in 2004 to 71.1 percent in 2009, but it is still lower than the average rate of Sub-Saharan Africa of 76 percent (UN 2012). In line with this the literacy rate of those between 15-24 year olds, women and men increased from 27.1 percent in 1990 to 69 percent in 2008 and further to 77.5 percent in 2009.

For MDG 3 and according to UN 2004 report, some improvement has been achieved with women's economic participation rate that rose from 18% in 1990s to 30% in 2000s, and the ratio of girls to boys in secondary education is almost equal for the same years (48%). In the NPC 2010 report the ratio of girls to boys in basic education was estimated to be 81 percent while the share of women in wage employment in the non-agricultural sectors was estimated at 51 percent.

For the rest of the goals the NPC 2010 reports shows that the infant mortality rate per(1000) live birth was increased from 81 percent in 2004 to 92 percent in 2008. While the proportion of births attended by skilled health personnel was estimated at 49 percent in 2006 and the antenatal care coverage (at least one visit and at most four visits) was found to be 69.6 percent. the HIV prevalence among population aged

15-24 years was estimated to be 0.5 percent for males and 1.24% for female.

It is worth mentioning that MDGs' achievements were unequally distributed across Sudanese regions. Most of the above mentioned results relate to the Northern Sudan and specifically to the Khartoum state and other neighboring states. Thus, the MDGs status in South Sudan and other marginal regions were most probably worse. Moreover, progress has slowed for most of MDGs after the separation of South Sudan in 2011 which was accompanied by a rapid fall in government revenue. Therefore, there is little chances for all MDGs to be fulfilled for the coming two years before its deadline of 2015. Nevertheless, in the years ahead, we have the opportunity to achieve more of MDGs by developing plans, issuing policies and launching initiatives for our future. One of the most important area that need to be considered in the future plan is entrepreneurship education.

It is noted that, poor education system and outcomes were among the main challenges that faced Sudan and encountered its commitment to meet MDGs during the previous years (UN, 2004 and NPC, 2010). In general the progress in MDGs Status could have been much better, had the Sudanese government adopted more suitable strategic plan that focused among other things on entrepreneurship education. Such policy could have help in improving the performance in most of the MDGs indicators. Specifically, problem related to unemployment, poverty, education gender inequality could have been solved through the integration of entrepreneurship education in schools and universities curricula at all levels.

One of the key areas of weakness on the current Sudanese education system at both schools and higher education

levels is its focus on social sciences and humanities. The result of this is a skills mismatch between school and university graduates and the labor market. With the fact that university graduates remain unemployed, while labour market continue to suffer from shortages of skilled labour. Sudan must focus on the policies and strategies that are key for economic development, such as entrepreneurship education for innovative entrepreneurs and entrepreneurship development. Entrepreneurship education has never been more important than it is today. Now more than ever, entrepreneurs are essential to recognize opportunities, innovate ideas, transfer them into useful products, create jobs eradicate poverty, and enhance economic growth and development.

Literature Review

The importance of entrepreneurship education is well recognized and repeatedly documented by many authors. It is important for both individuals and national economy to be at micro level and for national economy to be at macro level. At the micro level it can help students to understand business and its purposes, structure, and interrelationship with the different sectors of the economy and society (Cheung, 2012). It also encourages creative thinking and enhance the ability of students to recognize opportunities. In addition, it enriches their capability to pursue opportunities, by innovating new project ideas and raising the needed recourses. Moreover, it improves students managerial skills and enables them to create and operate new firms. Further, it equips them with the ability to think in a creative and critical manner (Raposo and Paço, 2011). For example, the study by Cheung and Ng (2010) clearly indicated that conducting entrepreneurship activity learning in business subjects created a

positive atmosphere, which enhanced students' motivation to learn and develop generic skills. Furthermore, the study by Cheung and Chan (2011) suggest that Entrepreneurship Education would have a positive impact on the strength of the students' entrepreneurial spirit in terms of starting-up a new business, and a high percentage of students acknowledged that the entrepreneurial knowledge they had acquired would be useful to them.

At macro level entrepreneur education generates employment opportunities, promotes economic growth, contribute in eradicating poverty, enhance economic and human development. By so doing it can contribute significantly in achieving MDGs. Along this line of thinking Irimie and Ionica (undated) stated that "there is a positive correlation between entrepreneurship and sustainable economic growth (that based on innovation and excellence and therefore requires an increasing number of start-ups, which in turn are likely to provide more and better jobs); Entrepreneurship can contribute to social cohesion for less-developed regions, to inclusion and employment of unemployed or disadvantaged people, and especially helps young people to be more creative and self-confident in whatever they undertake and to act in a socially responsible way" (p.1.).

In line with this Kuratko (2005) introduced some aspects of a perspective on entrepreneurship. He concluded that entrepreneurship firms have played an essential role in leading innovation and technological change that boost productivity and foster economic growth in the United States. He added that , it facilitate the access of millions of people (among them women and immigrants) to the pursuit of economic success. Many studies have been undertaken to empirically examine the impact of entrepreneurship on individuals and

national economies. Most of these studies have noted that entrepreneurship education has a positive impact on the individuals' characteristics, and their views toward entrepreneurship. Mohan-Neill (2001) found that students undertaken entrepreneurship education have more intention to be entrepreneurs than non-entrepreneurship graduates. Based on this results he concluded that entrepreneurship education has positively affected the students' views on entrepreneurship. Moreover, Danko (2005) argued that entrepreneurship education is a great enabler for student who study entrepreneurship at any education level. It can supply student with many skills such as self-empowerment, values clarification, role modeling, and systematic thinking. These skills are very important for all students who plan to become entrepreneurs.

Raposo and Paço(2011) after reviewing a large number of studies about the impact of entrepreneurship education on entrepreneurship activity argued that there is a clear evidence that a positive relationship exist between entrepreneurial education and subsequent entrepreneurial activity. This evidence justifies the support that governments give to entrepreneurship education. They added that for education and training to be more significant in affecting entrepreneurship activity it should be focused on changing personal attitudes rather than in knowledge delivery.

Based on theoretical background and the past experience of developed countries it has been argued that for developing countries to create growth and maintain sustainable development, there is a pressing need for integrating entrepreneurship education in their education system at all levels. Entrepreneurship must be made available for all students from basic education through

secondary education up to the university level. Such policy option would likely to help eradicate poverty incidence, solve unemployment problem, illiteracy, maternal mortality, infant mortality and reduce gender inequality (Akhue-monkhan et al., 2013). Because of this, entrepreneurship education has been receiving attention globally. In view of this the World Economic Forum's Global Education Initiative (GEI) (2010) organized roundtable meeting in Marrakech, Morocco in 2010, on entrepreneurship education. The meeting came up with a Manifesto for creating jobs and economic growth in MENA through entrepreneurship and 21st century skills. It stated that "the gap between skills and jobs is widening further in the MENA region, and many countries in the region lag behind other countries around the world in terms of competitiveness. The region must invest in developing entrepreneurial and innovative skills to build sustainable economic development, create jobs and generate renewed economic growth. The MENA region needs to equip future generations with the necessary skills for the 21st century" (p. 7).

Some countries of the region have recognized the benefit of an entrepreneurship education for their people and economies. Thus responded positively to this Manifesto by developing its education system to raise its capacity in the provision of skills required for enterprise development. In doing so, they have started developing policies to make entrepreneurship education available at all levels of education and make sure that all students receive some sort of entrepreneurship education during their formal schooling years.

For example Egypt, Jordan, Oman and Tunisia signed an agreement with the UNESCO and StratREAL Foundation of the United Kingdom in 2009 to launch a research project about the entrepre-

neurial components of their education system. According to this agreement the four countries will be case studies of research project that aims for supporting the integration of entrepreneurship education in the educational policies, systems, programmes and practices of the Arab State. This research project was carried out by a team of four experts led by Masri and published online in 2010 (Masri, et al., 2010).

The research indicated that Tunisia has supportive policies for entrepreneurship education and training. In addition, Tunisia is distinctive from other countries in the region for its focus on the promotion of entrepreneurial activities and the important skills in all elements of the education system. In Jordan the entrepreneurship education is catered for in its education system and outside the education system. Nevertheless, the study called the different stakeholder in Jordan to adopt a comprehensive strategy for entrepreneurship education and reflect it on the different components and mechanisms of the education and training system.

With regard to entrepreneurship education in Oman it was found that education system focused around entrepreneurial spirit, and that important initiatives have been launched to promote entrepreneurship in education. These initiatives have contributed in creating education system and environment conducive for entrepreneurship development. In addition, other initiatives have been undertaken in the vocational training and technical education to make it more business oriented and geared toward entrepreneurship. Moreover, colleges of technology have adopted many successful initiatives to improve the entrepreneurial components of its curricula and make it more capable in delivering entrepreneurial skills.

Finally, in Egypt the formal education curriculum at school level does not contain any subject related to entrepreneurship education. This does not mean that students in public schools do not receive entrepreneurial education, but they receive it according to ad hoc arrangements and agreements between the Ministry and other bodies such as the International Labour Organisation (ILO) and Canadian International Development Agency (CIDA).

Kaijage and Wheeler (2013) undertook detailed study for entrepreneurship education in three East African countries, Kenya, Tanzania and South Sudan. They found that entrepreneurship programs at undergraduate and graduate levels are delivered via twelve Higher Education Institutes (HEIs) in Kenya, and two HEIs in Tanzania and zero HEI in South Sudan. Thus in South Sudan there are no HEI deliver entrepreneurship education program neither at the undergraduate level nor at the graduate level. Based on this finding they concluded that Kenya has the best developed HEI infrastructure to support entrepreneurship education in their formal educational systems, with Tanzania in an intermediate position and South Sudan at a third position with poor capacity to deliver entrepreneurship education through their higher education institutes.

In Nigeria entrepreneurship education was introduced in 2006 and made compulsory for all higher education institutes. All universities, colleges and polytechnics were mandated by the Federal Ministry of education to incorporate entrepreneurship education into their curricula. It was estimated that during the period (2006-2010) around 50 thousand students would have gone through entrepreneurship education and got sufficient skills. Out of those graduates it was presumed that at least 10 thousand engaged into self-employ-

ment by establishing their own business (Akhuemonkhan et al., 2013).

In Angola the Ministry of Education decided to develop the "entrepreneurship curriculum in secondary schools" in a project in partnership with UNIDO and UNDP and other stakeholders in order to stimulate among the youth the positive attitude towards entrepreneurship. This project was launched to address the development of human resources as an entrepreneurial foundation for bottom up growth and private sector development (UNDP- Angola, 2010).

Akhuemonkhan et al. (2013) carried out an empirical study to examine the entrepreneurship education in Nigeria. He found that entrepreneurship development could be effective tools for poverty reduction, stimulating employment as well as fast-tracking realization of universal primary education and promoting gender equality.

The results of the previous studies strongly support the importance of entrepreneurship education for people and economies of different countries. As such it become one of the important components of policy changes in different developing countries. The question to be asked: Were the Sudanese leaders and decision makers aware of this and what role could entrepreneurship education play in achieving MDGs? The following section presents some information about the state of entrepreneurship education in Sudan.

Entrepreneurship education in Sudan

Unlike the case of some developing countries where the importance of entrepreneurship education has been recognized and entrepreneurship courses were introduced at all level of studies. In Sudan not enough attention has been paid to this issue. At the

basic and secondary school levels there is no course of entrepreneurial nature. The worrying thing is that there is no awareness of the importance of entrepreneurship education for people and economy among the decision-making circles. Thus, there is no intention to incorporate it in the school curricula in the near future. Notwithstanding that Sudan held a big conference in 2012 to revise its education system and recommend the required reforms. In that conference almost everything related to education system was discussed except entrepreneurship education. This clearly reflects the negligence of government officials to the essentiality of entrepreneurship education. In an interview with the state minister of education last year, the author tried to explain the importance of entrepreneurship education to Sudan economy. She mentioned that "the ministry is currently engaging with a team of experts to develop entrepreneurship courses for the vocational schools". When asking her about the possibility of integrating the entrepreneurship education into the basic and secondary school. She replied that "Let us first start with vocational training and see how it goes". Until that happens in the coming years, Sudan schooling system will remain without any courses of entrepreneurial nature.

The author carried out informal interviews with many top Sudanese government officials and academicians. The outcome of these interviews revealed that government officials are totally unaware about the nature of entrepreneurship education and the possibility of teaching it. Many of them have argued that, entrepreneurship is a talent and a list of skills entrepreneurs are born with and are developed through practices. Some of them confuse between business administration and entrepreneurship. Moreover, many of the government officials have ignored

the link between entrepreneurship and MDGs. Given that they do not believe that entrepreneurship education could be one of the options for improving the status of MDGs achievement in Sudan.

The outcome of interviews with academicians are somehow different. Most of them are aware about the nature and important of entrepreneurship education for people and economy. However, they do not believe that the students are aware of the importance of entrepreneurship education and there is not enough demand for it. According to Gangi and Timan (2013) "the Sudanese people prefers rent-seeking activities over entrepreneurs activities. This fact is reflected by family attitudes of sending their children to schools and universities to learn and earn certificates that would enable them to get jobs in public or private sector. Few families want their members to be engage into self-employment businesses. This mentality has led to widespread development of rent-seeking activities at the expense of entrepreneurs activities" (P. 175).

To further our understanding for entrepreneurship education in Sudan, a review for university curricula were carried out. The outcomes for this reviewing is as follows. At higher education level (universities and colleges) the curricula does not contain a complete education program of entrepreneurship leading to bachelor degree. But at postgraduate level there is one MBA program of entrepreneurship which was newly introduced in School of Management Studies of the university of Khartoum. Also the chances are open for students who want to write their Master or PhD. dissertation in entrepreneurship at Colleges of Business and Economics in most of the universities. However, some courses of entrepreneurial nature such as project management, feasibility study, small

business management, microfinance, risk management exist in business and economic programs of most of the universities and colleges. These courses are so important for entrepreneurs and would enrich their entrepreneurial mindset to help them in running their business in future , but it can't create an entrepreneur. The most important courses that Sudan and other developing countries really need are those help that in create entrepreneur i.e. courses that enhance the entrepreneurial skills like, innovation, opportunities recognition, risk-taking, determinism.

A survey carried out by Timan and Gangi (2014) has revealed that entrepreneurship education does not exist as a major or minor specialty in undergraduate level at any higher education institutes in Sudan. They further argued that entrepreneurship as a course is very rare and can hardly be found in any undergraduate curriculum of higher education institutes in Sudan. However, it can be found as a topic in some courses taught in business and economic programs. Also there are some courses of entrepreneurial spirit that can help in providing some of the skills needed by potential entrepreneurs.

The justification for this situation could have been due to the lack of a policy that addresses this issue. Government officials are not aware of the importance of entrepreneurship for individuals and economy. Sudanese society generally and the government more specifically are not aware of the role that entrepreneurship education could play in generating employment opportunities, fostering economic growth and enhancing economic development. Government expressed its intention to support small scale industries by launching different initiatives of managerial and financial aspects, but little attention has been paid to education and capacity building program. As an

example for government attempt to develop small scale industries, the productive student program was implemented during the period (2000 -2006), and recently the micro-finance has been widely introduced.

Conclusion and Recommendation

The main objective of this paper was to examine the importance of entrepreneurship education for MDGs achievement. To do so a review of the available literature on the effect of entrepreneurship education on MDGs indicators was carried out. Moreover, the status of the entrepreneurship education in Sudan and other neighboring countries was examined. It was found that entrepreneurship education could be effective policy tool to achieve most of the MDGs. In light of this finding, it is recommended that developing countries in general and Sudan as a case study for this paper need to integrate the entrepreneurship education in school and university curricula at all levels.

References

- Akhuemonkhan, I.A.; Raimi L. & Sofoluwe, A.O. (2013).** Entrepreneurship Education and Employment Stimulation in Nigeria, *Afro Asian Journal of Social Sciences*, 4(1), pp. 1-22.
- Central Bureau of Statistics (2010).** *Statistical Survey (1990-2009)*. Sudan: Central Bureau of Statistics.
- Cheung C.K. (2012).** Entrepreneurship Education at the Crossroad in Hong Kong, *Scientific Research: Creative Education*, 3(5), pp. 666-670. Retrieved from <http://www.SciRP.org/journal/ce>
- Cheung, C. K., & Chan, R. (2011).** The introduction of entrepreneurship education to school leavers in a vocational institute. *International Journal of Scientific Research in Education*, 4, pp. 8-16.
- Cheung, C.K. (2008).** Practicing entrepreneurship Education for Secondary Pupils Through the Operation of a new Year in Hong Kong. *The Asia-Pacific Education Research*, 17, pp.15-23.
- Cheung, C. K. & Ng, E. (2010).** The operation of the commerce festival as an activity approach to learning. *International Journal of Scientific Research in Education*, 3, pp.132-140.
- Danko, S. (2005).** *Crossing educational boundaries: Reframing entrepreneurship as a social change agent*. IntEnt, Guildford: University of Surrey, pp. 1-13.
- Gangi, Y. & Timan, E. (2013).** An empirical investigation of entrepreneurial environment in Sudan. *World Journal of Entrepreneurship, Management and Sustainable Development*, 9 (2/3), pp. 168-177.
- Gangi, Y. & Timan, E. (2013).** An empirical investigation of entrepreneurial environment in Sudan. *World Journal of Entrepreneurship, Management and Sustainable Development*, 9 (2/3), pp. 168-177.
- Kuratko, D.F. (2005).** The Emergence of Entrepreneurship Education: Development, Trends and Challenges. *Entrepreneurship Theory and Practice*, 29(5), pp. 577-598.
- Irimie, S. A.; B aleanu, V.; & Ionica, A.(undated).** *Entrepreneurship education: Meanings and needs*. Retrieved from <http://www.upm.ro/proiecte/EEE/Conferences/papers/S618.pdf>
- Kaijage, E. & Wheeler, D. (2013).** *Supporting Entrepreneurship Education in East Africa, Report for Presentation to Stakeholders*, University Nairobi School of Business Kenya and Plymouth Business School United Kingdom. Retrieved from https://profiles.uonbi.ac.ke/kaijage/files/entrepreneurship_education_in_east_africa._kaijage_and_wheeler_2013.pdf
- Masri, M.; Jemni, M.; Al-Ghassani, A.M. & Badawi, A.A. (2010).** *Entrepreneurship Education in the Arab States*. A joint Project between UNESCO and StratREAL Foundation. UNESCO and The SRATREAL Foundation.
- Mohan-Neill, S. (2001).** *The perceived needs, benefits and potential target markets for entrepreneurial education*. In R. H. Brockhaus, G. E. Hills, H. Klandt, & H. P. Welsch (Eds.), *Entrepreneurship education: A global view* (pp. 184-197). Aldershot: Ashgate Publishing.

National Population Council General Secretariat (2010). *Sudan Millennium Development Goals Progress Report*. Sudan: Ministry of Welfare & Social Security.

Raposo, M. & Paço, A.D. (2011). Entrepreneurship education: Relationship between education and entrepreneurial activity. *Psicothema*, 23(3), pp. 453-457.

Timan, E. & Gangi, Y. (2014). *The Context of Entrepreneurship Education in Sudan*. Working Paper, School of Management Studies, University of Khartoum, Sudan.

United Nations (2012). *The Millennium Development Goals Report*. New York: United Nations.

United Nations Development Program -Angola, (2010). *EEP - Project*. Retrieved on 15 January 2013 from <http://www.ao.undp.org/EEP-Project.html>

United Nations (2004). *Sudan's Millennium Development Goals: Interim Unified Report*. New York: United Nation.

World Economic Forum (2010). *Global Education Initiative MENA Roundtable on Entrepreneurship Education*. Marrakech, Morocco. Retrieved from http://www3.weforum.org/docs/WEF_GEI_MENAEntrepreneurshipEducation_Report_2010.pdf

World Bank (2013). *The World Development Indicators*. Retrieved on 13 December 2013 from <http://data.worldbank.org/country/sudan>

About the author

Dr. Yagoub Ali Gangi is an Associate Professor of Economics in Ahmed Bin Mohamed Military College, Doha, Qatar. He was an Associate Professor of economics in the School of Management Studies at the University of Khartoum, Khartoum, Sudan. He earned his PhD. in Macroeconomics Policies from Manchester Metropolitan University, United Kingdom in 1999. His research interest is FDI and entrepreneurship. He published many articles in this field of studies.

