The Role of a Collaborative Research Network (CRN) in Improving the Arabian Gulf Countries’ Performance in Research and Innovation

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ABSTRACT

Research and development is considered a main source of knowledge and innovation in the Gulf countries and Arab region. Therefore, building a Collaborative Research Network (CRN) in the Gulf is necessary for high quality and sustainable research. In this paper, the authors examine the role of CRN in improving Gulf countries’ performance in research and innovation. Four objectives have been set: investigate the current situation regarding scientific research and CRN in the Gulf countries, identify factors that influence the building of a CRN, identify the impact and contribution of CRN in improving the Gulf countries’ performance, and develop a model. To achieve these objectives, a quantitative method was adopted. A questionnaire was developed and distributed to 100 participants. The current paper presents the first stage of research that investigates the role of building CRN in improving the Gulf countries’ performance in research and innovation. The next stage will examine the model of building CRN.

Keywords: Collaborative Research Network, CRN Model, Gulf Countries, Information and Communication Infrastructure, Innovation

INTRODUCTION

As a result of the knowledge-based global economy and globalization, knowledge and innovation have become the crucial factors in the development of successful economics (El-Baba, 2006; Bashshur, 2007). Research and development (R&D) is considered as the main source of knowledge and innovation in the Gulf countries and Arab region in general. Therefore, Gulf region’s chances for improving their market position and gain a sustainable competitive advantage will be impacted by the lack of research dedicated for their region (El-Baba, 2006). In fact, the current situation of the scientific research and R&D in the Gulf
countries is not stable and is experiencing many problems such as funding support, private sectors involvement, quality and quantity of the researches conducted and their compatibility for the Gulf region and alike. Moreover, with continues development in the information technology and communication and the emergent of knowledge economy, the traditional ways of conducting research are changing dramatically. As such, most of the researches nowadays are conducted through multidisciplinary collaborations among research centers, industry and educational institutions. Through such collaborative effort in which stakeholders work together to enhance their understanding of the affected communities, innovation, and knowhow exchanging, sharing and creation can be facilitated (Arab Knowledge Report, 2009; Al-Faham 2006). Consequently, building Collaborative Research Network (CRN) in the Gulf countries is an essential action for building high quality and sustainable research, enabling multidisciplinary research environment and improving the educational system in the Gulf countries (Al-Faham, 2006; Peters & McNeese, 2005).

The current research aims at investigating the role of building CRN in improving the Arabian Gulf Countries’ performance in research and innovation. Therefore, the research will be conducted into two stages. In the first stage factors that influence the building of CRN will be identified and the impact of building CRN will be recognized. In the second stage and based on the results of the first stage, a research model for building CRN in the Gulf countries will be developed and examined. The current paper presents the first stage of the research.

Four objectives have been set for this stage: investigate the current situation regarding the research and building a CRN in the Gulf countries such as the enablers and inhibitors of building such network, identify factors that influence the building of a CRN, identify the impact and contribution of building a CRN in improving the Gulf countries’ performance in research and innovation, and developing a model for building a CRN in the Gulf countries.

This paper consists of eight sections; each section will touch a significant component of this research. The following sections spot the light on the literature review on the current situation regarding the scientific research and R&D in the Gulf countries, the need for building a CRN, factors impacting the building of a CRN, and the impact of building CRN. The research methodology for this study is then illustrated. Description of data analysis is also presented. Finally, the findings of this study are discussed and a conclusion is presented and made ready for the research centers and institutions those intend to participate in building CRN.

**THE CURRENT STATUS OF SCIENTIFIC RESEARCH AND R&D IN THE GULF COUNTRIES**

Gulf countries are providing vital efforts in developing and improving the scientific research and innovation. However, the level of research and development in these countries is very low compared to some Arabic countries and most others regions of the world (Bashshur, 2007). In fact, the current research environment in the Gulf countries has had a negative impact on the research performance and innovation (Knowledge Report, 2009). R&D endeavors in the Gulf countries are fragmented (El-Baba, 2006). The Arab countries – including the gulf region – have a low ranking in R&D and technology innovation (Sasson, 2007). They actually account for just 0.7% of the total world researchers, although their population account for almost 5% of the total world population (El-Baba, 2006). Moreover, the fund spent by Gulf countries on research and development is very low. They spend less than 50 thousand United States dollars per researchers (El-Baba, 2006) and mostly all research in universities and centers in these countries are sponsored by government (Bashshur, 2007). In addition, in the Gulf countries, the main motivators for conducting a research are the publishing and the promotions which influence the productivity and the performance of the conducted researches.
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