

11th Global Experts Meeting on

CHEMISTRY AND COMPUTATIONAL CATALYSIS

May 18-19, 2018 Singapore

Agricultural residues, sustainable development and environment**Abdeen Mustafa Omer**
Energy Research Institute, UK

Sudan's climatic conditions (mainly the rainy seasons) enable double annual harvests (in July and November) in the southern parts of the country. Most of the agricultural activities are concentrated near the Nile River. The El Gezira irrigation system that is located between the White and the Blue Nile Rivers (both rivers merge to form the Nile River) is the most important agriculture project and, according to some statistics, is also the largest artificially irrigated region in the world. As the irrigation system has been put in place, sorghum, wheat, and groundnuts have been planted instead of cotton in an effort to make Sudan self-sufficient in foodstuffs. The agricultural sector is the most important economic sector in Sudan. It created 39 percent of the Gross Domestic Production (GDP), employed about 80 percent of population, and contributed 80 percent of the country's exports in the late 1990s. Cotton is the main agriculture export item, although its export volumes have been decreasing recently. The lack of any marketing or developed market policy is evident. The government has suggested the end of export taxes in order to promote more agriculture products in the future. Other agricultural products include sesame seeds, sorghum, and gum Arabic. Animal husbandry represents a very important part of the national economy, as well. Its production increased during recent years as a result of better veterinary treatment, better credit policy, and higher prices in the market. Fishing is another important sector of the national economy. The average yearly production averages around 33,000 tons, from which sea fish represent about 1,500 tons. Perch is the most important fresh-water fish, which is caught mostly in the Nile River. About one-third of the total area of Africa's largest country is suitable for agricultural development. Abundant rainfall in the south permits both agriculture and grazing grounds for the large herds owned by nomadic tribes. In the north, along the banks of the Nile and other rivers, irrigation farming prevails. Of an estimated 16.9 million hectares (41.8 million acres) of arable land in 1998, about 1.9 million hectares (4.7 million acres) were irrigated. Principal cash crops are cotton, sesame, peanuts, sugarcane, dates, citrus fruits, mangoes, coffee, and tobacco; the principal subsistence crops are sorghum, millet, wheat, beans, cowpeas, pulses, corn, and barley. Cotton is the principal export crop and an integral part of the country's economy. In 2001, agricultural products accounted for 21.9% of imports and 19.2% of exports; there was an agricultural trade deficit of \$24.5 million.

Biography

Abdeen Mustafa Omer pursued BSc, MSc and PhD and is an Associate Researcher at Energy Research Institute (ERI). He obtained both his PhD degree in the Built Environment and Master of Philosophy degree in Renewable Energy Technologies from the University of Nottingham. He is qualified Mechanical Engineer with a proven track record within the water industry and renewable energy technologies. He has been graduated from University of El Menoufia, Egypt. His previous experience involved being a Member of the Research Team at the National Council for Research/Energy Research Institute in Sudan and working director of Research and Development for National Water Equipment Manufacturing Co. Ltd., Sudan. He has been listed in the book WHO'S WHO in the World 2005, 2006, 2007 and 2010. He has published over 300 papers in peer-reviewed journals, 200 review articles, 7 books and 150 chapters in books.

abdeenomer2@yahoo.co.uk

Notes: