

# HIGHER EDUCATION IN THE AGRICULTURAL AND ENVIRONMENTAL SCIENCES IN SOUTHERN SUDAN.

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By

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## **Introduction.**

Let me take this opportunity to thank Professor Fr. Michael Schultheis, Acting Vice Chancellor of the Catholic University of the Sudan for inviting me to attend and participate in this Consultation/Seminar for the development of Catholic University of the Sudan in Juba today on the 17<sup>th</sup> Nov.2008.

The establishment of the Catholic University in the Sudan early plan was heard during the period of war when the nation was engaged and endured a sustained conflict that destroyed almost everything.

My appreciation to the Congressional Appropriations Sub-Committee for Africa and Consortium of US Universities (Virginia Tech., Cornell Univ. and Washington State Univ.) for their role and determination they take to discuss and support the development of Catholic University of the Sudan (and thereafter proposed establishment of the Faculty of Agricultural and Environmental Sciences).

**Higher Education/Sudan:** The expansion in Higher Education brought about by the establishment of more public, private universities, institutions and colleges in the SUDAN has opened more opportunities at the tertiary level of education. The act has been welcome and appreciated nationwide, but has shortcomings. This has shown that the issue of equity in access to higher education is one case in point and affordability is another potential hurdle which has to be noted in this Seminar.

The Catholic University of the Sudan to the believe is a Community of scholars, both faculties and students, set apart to discover, preserve and impart the truth in all its forms, with the specific reference to the needs and opportunities of the nation. As a university it is essentially a free and autonomous centre of higher learning/study and an agency serving the needs of human society like the other sisters' Catholic Universities in the world. Grateful to be here today to attend with the collaboration of other scholars of good will who, through will of process of study and reflection, contribute to the vision/mission and values of this noble university in an atmosphere of academic competence.

## **Proposed College of Agricultural and Environmental Sciences.**

**Justification:** Agriculture and Forestry are the backbone of South Sudan economy (of the total area of 684,051 Km<sup>2</sup>, 485,000 Km<sup>2</sup> of South Sudan is fertile for crop production and for natural growth of pastures for livestock and wildlife). The Sudd covered with water is about 8,000 Km<sup>2</sup> while 154,251 Km<sup>2</sup> is covered by dense forests and about 2m hectares of water surface. This land classification shows 75% of Southern Sudan's land is capable of, and fertile for crop, animal and wood production under good management conditions. The natural forests contain the varieties of useful trees species with high quality timber.

Over 90% of people (8-9 million) of the South live in the rural areas depending primarily on subsistence crop and livestock production and exploiting a great deal of natural forest products for survival at household level. Agriculture, Forestry and Animal production will therefore, remain the main source of employment and for the generation of income for the majority of the people in the South Sudan.

There need to establish food security and eliminate hunger and reduce poverty in the South Sudan so that economic development in other sectors can begin the training of skilled manpower in agriculture, forestry and animal production with the most technical know-how in these fields.

The major role of study of Environmental Science is a multidisciplinary field that draws from all the sciences in addition to other fields. Upon completion of this field, the graduates inculcate environmental awareness in the people and to participate in the development of the rural people throughout-reach programs. Graduates will be able to describe human interaction and its impact on the environment and the relationships between all organisms within an ecosystem. Graduates will be able to explain the concept of biome as a region characterized by a specific climate, plant life and animal life community. Identify the properties of populations and how they affect and respond to their environment and to recognize the diversity of life on earth-biodiversity. Understand the value of water and its influence on the environment. Identify the environmental impact of pollution and how humans are working to combat it. Identify the agricultural methods used to feed the worlds' population and describe the related difficulties in providing food to the world. Can describe the various types of energy resources and how they are used by humans, including the new types of energy technologies. Describe the ways that individuals can influence the environment through their actions and can explain how human health is affected by environmental conditions.

The shortcoming of the graduates from colleges and faculties of Agriculture and Forestry in the Sudan is over-specialized in one discipline. There is lack of inter-disciplinary knowledge in crop production, livestock production and forest management. They also lack the knowledge about the management of natural resources at the community and household levels. The sustainable use of land for crop, animal and forest production requires an

integration and management of these three components in addition to Environmental Studies. This requires the supply of quality well-trained, multidisciplinary sector or graduate to contribute to the development of the country if the college is to takeoff.

The suggestions for the establishment of College of Agriculture and Environmental Sciences will be as follows:

- The content of curriculum will be basic, integrated, practical and systematic with special emphasis on the improvement of traditional system of crop, animal production and forest management.
- The focus will be placed on graduates to train farmers to play more active role in managing forestland in combination with other resources (crops and livestock) to improve their economic conditions.
- Whereas training has been subject-specific, there is need to build an inter-disciplinary capacity of agriculturalists, foresters, environmentalists and animal production graduates, encouraging and understanding of social principles and processes among rural communities in the South so that antagonism between crop producers and animal producers, and between crop producers and foresters and amongst animal producers themselves for pasture and water is minimized or completely eliminated by adopting modern and scientific methods of crop, livestock and forest management.
- The high demand for skilled human resources is due to education in Southern Sudan that has lagged behind for several years. This sheer demand is to undertake transformation of the resources in Southern Sudan for utility in the society that has therefore promoted the development of the Catholic University of the Sudan.
- Economic development in the South Sudan depends heavily on the development of agricultural and forestry resources. Food production in sustainable environment is often a path out of poverty in South Sudan. Hence research and training of manpower in agriculture, forestry, environmental studies and animal production in Catholic University in the Sudan is of paramount importance for the needed development of the country.
- In the light of these universal experiences, the College of Agricultural and Environmental Sciences be afforded a top priority for establishment.
- The curriculum and the course outline of the College of Agricultural and Environmental Science requires the professionals of the subjects therein to panel all the theoretical, practical credit hours.

**Thank you for listening please.**