



Dr. John Garang Memorial University of Science and Technology: Transformation Process Since its Establishment in 2008



A brief overview and background information

The Institute of Science and Technology was established by order No. 3, 2008, During laying of the foundation stone, President Salva Kiir gave it the name of Dr. John Garang Memorial University of Science and Technology. The reason for renaming it was to honour and memory of late Dr. John Garang de Mabior, the founder and leader of Sudan People's Liberation Movement/Army (SPLM/A). Late Dr. John Garang pioneered the Comprehensive Peace Agreement (CPA), 2005 which embedded referendum article and with the referendum popular vote culminated in to the independence of the Republic of South Sudan on 9th July 2011. Fortunately, and prior to 2011, in March 2010, the Institute was nationalized and upgraded to university status by H.E. Omar Hassan Ahmed Al Bashir, President of the Republic of Sudan at that time.



Prof. Abraham Matoc Dhal
Vice Chancellor, Dr. John
Garang Memorial University,
South Sudan

The upgrading of the institute to the level of a university marks the first stage of transformation from private institute to a national university in Jonglei state. As an institute the collaboration agreement was signed by Jonglei state governor with the Rector of Free International University of Moldova (ULIM). This collaboration agreement led to the opening of the Institute on 1st February 2008. The Institute was to award degrees with accreditation from the Free International University of Moldova (ULIM), based on European Union Standards. It was to train about 100 students but currently in its status as the university, students' population has risen to over 2000.





Transforming University Infrastructure

Since its establishment the institute set up temporary or fabricated structures for administration offices, lecture halls, and library with students sleeping in the tents. Thereafter its upgrading to the level of the university, it built few students hostels in semi-permanent structures. There was no staff accommodation built. But the present staff mess for junior staff was built by the university contractor as a bakery. Instead, it is turned into an accommodation facility for the junior teaching staff.

Since then, the university has five existing colleges: college of Agriculture, college of Education, college of Environmental Studies, college of Management Sciences, college of Science and Technology. In addition, college of postgraduate Studies and Scientific Research was established recently in 2019 to present. Also, one Institute at Padak for fisheries was created. Important to point out there is no single college constructed in permanent facility.

However, construction of the new triple complex building marks major transformation of the university building infrastructure. This giant complex building consists of ten (10) lecture halls with seating capacity of 500, 450, 400, 350 and the smallest with 300 students respectively. There is a conference/examination hall with seating capacity ranging from 1,500 to 2,000. There is also a medium meeting hall for the university council. The complex building also includes twenty-three (23) beautiful offices to accommodate professors, lecturers and administrators with decent comfort since its inception.

Precisely, Dr. JG-. MUST Triple complex building/three-unit block building is constructed with permanent structures. The New Complex Building was constructed on the basis of world class universities standards. Also, Covid-19 protocols were also incorporated eg social distancing.

With commitment, our next strategy of infrastructural transformation is to construct four laboratories of computer, chemistry, biology and physics labs with world class standards.

More importantly, the lab equipment and furniture are also available and lacking space to keep and to utilize them effectively in the container labs. Fortunately, our physics lab is equipped with some drones for training of students. The Biology lab is also well equipped. We have modern microscopes connected with computers for efficient and accurate diagnostic analysis. Chemistry lab is further equipped with standards. Likewise, the computer lab is equipped with thirty brand new desktop computers and with a server. We acknowledge the support of STEM Power for this invaluable donations for our laboratories.

In addition, we have installed 54 solar panels and 34 solar batteries and therefore, our electricity work for 24 hours daily, all these were the donations from the same partner- the STEM Power.

Soon we are going to establish agricultural lab for soil analysis and for production of dairy products such as yogurt, cheese, fresh milk and others including production of bottle water.





Concurrently, with the construction of laboratories the entrance or the university gate will be constructed at the same time during the dry season.

Transforming Academic Programs

It is also necessary to give brief information about our academic program. **In short**, our academic program is transformed and well designed. It is a semester system. The system doesn't entertain the previous lousy carry-over system. Curricula were reviewed and updated. Our target is quality university education. To ensure this, relevant documentation of regulations, laws and examination rules and regulations plus procedures for staff recruitment and promotions have adequately been developed. University Calendar for 2021-2025 is developed consisting of all the statutes and it is in operation as the guide for efficient and effective administration of the university. For the first time in history of its establishment we graduated over 900 students in Dec.2019. And as an assurance, graduation ceremony will take place as scheduled in Dec.2022. Also we have developed Newsletter that informs the public about the university academic activities and others. Also, we have a website. All these adds to the status of the university to a greater extent.

Staff Development

For academic program to succeed, qualified teaching staff is basic. We have staff trained in all specialties as well as in laboratories techniques. About 14 TAs are doing their Master degrees in Juba university, one for Masters in Benin in west Africa, and 2 others doing their Ph.Ds. and Masters in Botswana. About 5 candidates for Ph.Ds. and Masters are waiting for their enrolment into Egyptian scholarships being processed by the Ministry of Higher Education, Science and Technology. More than 14 Ph.D. and Masters candidates are nominated for admission into RUFORUM member universities in Africa.

Plans to ensure progress in infrastructural transformation (medium term)

There are future plans to create new colleges that reflect true component of being a university of science and technology. These colleges will include college of medicine and health sciences, college of petroleum engineering, college of pharmacy, college of veterinary sciences, college of engineering, college of social and economic sciences, college of public health and institute to train middle level cadre in public administration, accountancy and various managerial skills. In our future plans in ten years to come, the students' population would have reached 15,000 to 20,000.

Of course, in the near future, the university in accordance with article 18(3) of higher education Act 2012 which reads – institutions of higher education may establish branches anywhere within South Sudan to realize their objectives subject to approval by the minister upon recommendation





of the council read together with article 18 (7) of the same higher education Act, 2012 which also asserts that `an institution of higher education may establish colleges, centres or institutes upon recommendation by council, approval of the minister` will likely expand and increase to extend establishment and creation of centres and institutes such as Awecrial agricultural centre in Eastern Lakes state, Yirol, child abduction reduction studies in Murle area, rice development centre in Pagrau, Mashar Mashas Centre for livestock Development in Greater Warap, forestry development centre in Western Equatoria, Lake Nyibor wildlife, hotel and tourist institute, institute of physical education and Olympics game development in Bor, centre for peace, environmental and technological development centre on campus.

Comprehensive Strategic Plan to transforming the university Infrastructure (long term)

Phase one

The phase one of the plans proposes construction of 15 colleges and 12 specialized centres. Each college with lecture halls, offices, laboratories, main library with seating capacity of 10,000 students, administration block consisting of 100 offices, 3 standard conference halls and workshop rooms, senate hall, academic secretariat block, deanship of students' Affairs block, Vice Chancellor's office block, deputy Vice Chancellor's offices block, university guest house (senior and junior), bank branches, green park spaces, university clinic with emergency ward capacity of (50) beds, (15) offices, (3) laboratories, and post mortem. Phase one and the whole university premises focus is to accommodate approximately 35,000 students' population in the next 10 to 15 years. About 100 block of hostels are envisaged, (12) big cafeteria for staff and students, (7) football fields, (5) volleyball courts, (5) basketball courts, and 3 tennis courts.

In the long run, we shall construct (1) Golf field, (1) standard football stadium, 4000 houses for senior and joiner staff, fire brigade offices, university security guard offices, car parks in each college plus the general administration car park, workshops and studios, fields and recreation places, swimming pool, gymnastic halls, fuel stations, university farm (poultry, dairy), fish ponds, crocodile farm inside the campus, (2) kindergarten, model schools (primary, secondary). It could be noted that some of staff houses and security guards' offices could selectively be constructed under phase one.

Conclusion

From the background information, Dr. John Garang Memorial University of Science and Technology is an independent dividend of the Republic of South Sudan. The university has gone under transformation from an institute to the university of science and technology. Moreover, its





academic programmes are transformed from a lousy carry over system to an effective semester system. Students must pass supplementaries and substitutes to go to the next class. The university has introduced effective examination regulations and rules governing both students and teaching staff to ensure academic and professional ethics and transparency. It has also introduced and adapted the university calendar containing all the statutes as the guide for efficient and effective university administration. Of course, the university admits all nationalities in the country and it will soon admit foreign students from IGAD region and the rest all over the world. Dr. JG – MUST is a pride of the independent South Sudan. Finally, the university has developed Comprehensive development strategy for the next 50 years. My message is that committing resources to build its infrastructure with standards is a decision in the right direction and it is a legacy of President Kiir Mayardit for centuries.

About the Author

Prof. Abraham Matoc Dhal is the 3rd Vice Chancellor of Dr. John Garang Memorial University of Science and Technology, Jonglei State, Bor, the Republic of South Sudan. Previously he has been Head of Economic Department, Coordinator of postgraduate Programmes, Deputy Dean, later Acting Dean, Principal of Rumbek university, Deputy Vice Chancellor for Administration and Finance, University of Bahr El Ghazal, a Non-Executive Member of the Board of Directors, Bank of South Sudan. He is the person who built the Triple Complex Building which consist of ten large lecture halls, one large conference and examination hall and twenty-three beautiful offices for the first time in permanent structures. He is an instrumental in transforming the academic programme to suit science and technology status of the university. He has taught both undergraduate and graduate students in economics for over three decades in Sudan universities and in the Republic of South Sudan, supervised undergraduates and postgraduate students, authored, co-authored and edited several books, published articles in referred journals, contributed books chapters in international publications. He has presented scientific papers in international and national fora. He holds a PhD and an MSc, both from University of Khartoum in Sudan, and a BSc in Economic from University of Juba in South Sudan.

This is our thirty-seventh issue in a series of articles we are releasing as part of the RUFORUM Seventh Africa Higher Education Week and RUFORUM Triennial Conference Digests. More information about the conference is available at <https://www.ruforum.org/Triennial2021/>. Join the Conversation on Social Media using our Official hashtag #AfricaHEWeek2021.

