Message from the Director General

Dear readers,

I am very excited to share with you about some of the new directions being taken at the Tanzania Commission for Science and Technology (COSTECH). The COSTECH, as always, is positioning itself as a prime driver of science, technology and innovation in creating knowledge-based economy to excel in promotion, coordination and evaluation of, and advice on, scientific research, innovation and technology development and transfer for sustainable socio-economic development of Tanzania.

This month was marked with different events taking place at the Commission. I would like to take this opportunity to congratulate Revolutionary Government of Zanzibar for celebrating the 50th year anniversary. Among other achievements, the celebration marks the avenue where researches on science, technology, and innovation activities have been conducted in a peaceful manner.

I am also grateful to the President of Zanzibar and Chairman of the Revolutionary Government His Excellency Dr. Ali Mohamed Shein for establishing departments for policy, planning and research in every ministry. This gives the Commission the courage to support this initiative so that the Zanzibar government could rely on solid evidence-based decisions to inform policies.

This month also, the Commission was luck to be visited by the members of Parliamentary Standing Committee on Infrastructure who not only were able to learn about what is currently doing but also proposed various means for it to excel. I am also thankful to the committee to have noticed that whatever we do, sufficient fund is needed to make sure the mission of promoting and coordinating research is realized, which triggered them to promise to remind the government to fulfill its commitment of allocating 1% of its GDP to research and development activities in the country.

Other events that took place at the COSTECH this month include: the presentation of the draft of Zanzibar Research Agenda to government officials, Finland’s Minister for International Development visit to TANZICT and COSTECH, and the Horizon 2020 workshop.

As we do each month, we share with you this month an excerpt from progress on research that has been approved at the Commission. You will note from the selected research COSTECH that goes far beyond basic and applied sciences ensuring to social sciences.

With these few words, let me take this opportunity to thank you for continuing to be part of the COSTECH community, and welcome you to contribute to our e-newsletter in the future issues.

Kind regards,

Dr. Hassan Mshinda
DIRECTOR GENERAL.
COSTECH celebrates the 50th year anniversary of Zanzibar revolution

By Dr. Joseph Maziku

As part of commemorating the Golden Jubilee of the Revolution of Zanzibar, the Tanzania Commission for Science and Technology (COSTECH), participated at the exhibition to mark 50th years of Zanzibar Revolution, an event that took place at the Beit El Ras, Unguja from January 2nd – 5th, 2014.

The exhibition attracted thousands of people from all walks of life whereby COSTECH was among organizations that took part in the exhibition to showcase its research coordination activities and disseminate information on how the Commission is promoting STI in the country.

More than 120 government and private institutions participated at the events whereby 60 institutions were from Zanzibar and 49 were from the mainland, including COSTECH while the rest were private institutions.

The exhibition was organized by the Revolutionary Government of Zanzibar through the Second Vice President’s Office whereby different government and non-governmental organizations had opportunities to showcase different services and products they offer to the general public.

The exhibition was officially opened by the President of Zanzibar and Chairman of the Revolutionary Government His Excellency Dr. Ali Mohamed Shein on 2nd January 2014 and went on till 5th January 2014.

Addressing the public, Dr. Shein emphasized the importance of observing peace and tranquility noting that the cost of breaking is higher than that of keeping it.

"As we mark the 50 years of the Revolution, it is clear that we are celebrating peace and unity. We must therefore honor and maintain our unity and solidarity which are the secret of our peace and stability. In the 50 years period we have been able to fulfill and develop the objective of our Revolution," Dr. Shein said, adding that it is obvious that in the 50 years period, the Zanzibar government has done a lot of development compared to those done by the colonialists in their 132 years of rule.

On the importance of using research in formulating policies, the president promised that the government will continue to supporting research; asking policy makers and planners to use research findings instead of shelving them. He called on researchers to improve research in various areas, noting that research findings play an important role in the country’s development.

He instructed researchers and government officials to collect, store, disseminate and apply research findings done in Zanzibar so far for the development of the country.

He also reminded them that Zanzibar government introduced Research Directorate in all sectoral ministries in order to use research approaches to evaluate achievement over time and solve people’s problems.

During the exhibition many people had an opportunity to visit COSTECH pavilion and were provided with information on roles and functions of COSTECH in promotion and coordination of STI in Tanzania.

Among the guests that visited COSTECH pavilion was the Second Vice President of Zanzibar, Ambassador Seif Ali Iddi who commended the work done by the Commission on the isles.
By Merchades M. Rutechura


Giving the introductory remarks, the COSTECH Zanzibar Coordinator, Prof. Mohammed Sheikh noted that the workshop intended to register the ownership of the document among Zanzibar government officials and researchers.

He called the participants to be objective in deciding what is needed and what is not so that the final draft of the document could represent the views of all Zanzibaris.

Delivering the message from the COSTECH Headquarters, the Director General Dr. Hassan Mshinda pointed out that the workshop intended to register the ownership of the document among Zanzibar government officials and researchers.

Dr. Mshinda also thanked the Zanzibar Planning Commission for supporting COSTECH’s cause to make sure Zanzibar Research Priorities are identified. He also made a promise that COSTECH will continue to support various research projects that aim at bringing about socio-economic transformation in Zanzibar.

Delivering the opening remarks, the Executive Secretary of the Zanzibar Planning Commission, Ms. Amina Shaban said that Zanzibar had long been dreaming of having her own Research Agenda that could suit her research needs and that she is grateful for COSTECH to facilitate the process.

She pointed out that the Planning Commission trusts that the identified research priorities will contribute in transforming the Zanzibar economy.

“Since these research priorities are based on MKUZA II and the Development Vision 2020, it is my hope that these priorities will contribute in the transforming the Zanzibar economy and create the culture of using research evidence in formulating various policies,” she added.

Ms. Shaban also revealed that this year’s budget circle will incorporate research activities in all the directorates of research, policy and planning that were established by the President of the Revolutionary Government of Zanzibar, H.E Dr. Mohammed Shein in all 16 ministries.

The first draft of the Zanzibar Research Priorities was presented to the Presidential Research Committee on 28th November 2013 at the Zanzibar Ocean View Hotel.

The draft of the Zanzibar Research Agenda contains 19 sectors, each of which containing at least 10 subsectors known as researchable areas. Sectors identified include: Agriculture, Livestock, Fisheries, Food security and nutrition, Climate change, environment and conservation, Land management and human settlement, Energy, Health, Water and Sanitation, Land Management and Human Settlements, Education, Sports, Tourism, Historical Culture and National Heritage, Information, Labour and employment, Macroeconomy and Financial management, Private sector, business environment and PPP, Democratic governance, and Gender.
By Theophil Pima

On 30th January, 2014 The Minister for International Development of Finland, Hon Pekka Haavisto visited the TANZICT Innovation space at the Tanzania Commission for Science and Technology (COSTECH).

The Minister also had an opportunity of discussing Innovation and e-Learning issues with the Minister for Communication, Science and Technology Prof. Makame Mbarawa and the Minister for Education and Vocational Training Dr. Shukuru Kawambwa.

Giving the opening remarks during that event, COSTECH Director General Dr Hassan Mshinda said that cooperation between Tanzania and Finland has been an important element in technology development and transfer in the country.

On his part, the Tanzania Minister for Communication Science and Technology, Prof Makame Mbarawa acknowledged the courtesy of the Finish Embassy in Dar es Salaam to organize that event and urged the TANZICT-Innovation space and other Tanzania startup companies to learn how Finish companies leverage technology for education transformation.

“Finland has sophisticated Mobile Phones applications. I know Tanzania startups companies who are here will link Tanzania experiences and that of Finland. The only thing that I want to promise here is I will discuss with Mobile Phone Companies in Tanzania to find ways of boosting young scientists’ efforts in developing Mobile phones applications for Tanzanian Schools.

In his speech, Minister for International Development of Finland, Hon Pekka Haavisto noted that it is now time stakeholders needed to assess the position of education in bringing about socio-economical development.

Earlier, the Minister for Education and Vocational Training (MoEVT), Dr Shukuru Kawambwa said the government has been striving to transform education sector in Tanzania by introducing new learning mechanisms that involve the use of technology.

“The Ministry of Education and Vocational Training with support from the Ministry of Communication Science and Technology (MCST) and the World Bank are now running Science Technology and Higher Education Program (STHEP), a project that aims at introducing digital learning in higher learning institutions,” he added.

He noted that STHEP is an important project involving Commission for Science and Technology (COSTECH) to implement both an Education Management Information System (EMIS) and an e-Library system to support education and research activities.

He also commended different Start ups incubated by COSTECH by giving example from the Digital Brain Company which has designed software that uses Internet and Mobile phone application to assist University student’s admissions. “I am very pleased that the company also was incubated under COSTECH and it has already started to help the Ministry,” he said.
By Merchades M. Rutechura

On January 28, 2014, the Parliamentary Standing Committee on Infrastructure paid a visit to the Tanzania Commission for Science and Technology (COSTECH), in order to inspect some of the activities that are carried out by the commission and also to learn about the challenges that the commission is facing in accomplishing its mission and vision.

Led by Honorable Prof. Juma Kapuya, the committee which included 20 parliamentarians was also accompanied by Prof. Patrick Makungu, the Permanent Secretary of the Ministry for Communication, Science and Technology.

Briefing the Committee members, the COSTECH Director General, Dr. Hassan Mshinda noted that the Commission is doing its best to make sure its mission and vision are achieved.

He pointed out that since 2010 the Commission has provided sponsorship to more than 515 researchers from research and development institutions and academic institutions to pursue academic courses at the level of Masters and PhD in various universities in the country.

On research infrastructure improvement Dr. Mshinda noted that more than 20 research institutions have been supported in terms of constructing new facilities or renovating the existing ones.

“The recent example of infrastructure improvement could be cited from the handing over of the newly-built research laboratory to Kizimbani Agricultural Research Institute, in Zanzibar that took place on 30th December, 2013,” he said.

On coordinating research projects he revealed that the Commission has started to witness some of the achievements from some research projects conducted by local researchers under ‘Kilimo Kwanza’ initiative.

“At least twelve research projects have exhibited tangible results which we intend to disseminate to farmers and other stakeholders for implementation”, he revealed.

On technology commercialization Dr. Mshinda noted that the Commission continues to support some of the activities COSTECH performed by technology transfer institutions such as TEMDO, CAMARTEC, TATC-Nyumbu and Mzinga Corporation.

He revealed that these institutions manufacture proven technologies that have impacts to economic development in Tanzania, and therefore the Commission grants some seed capital to manufacture and commercialize their prototypes, a process that have led into increasing production to the extent of reaching the central African market.

He mentioned other projects that are administered by the COSTECH including: World Bank projects under the InfoDev, SIDA projects, TASENE project, innovation space, cluster initiative, ICT incubator and science and technology awards to innovator.

The committee members hailed COSTECH for what is currently doing and urged it to share most of the research findings whenever they arise. They also promised to remind the government to commit to its promise of allocating 1% of its GDP to research and development activities.
Iringa selected for pilot study of solar powered learning gadgets

By David Mtei
8th January, 2014

The Tanzania Commission for Science and Technology (COSTECH) in collaboration with the Voluntary Service Overseas organization (VSO) of Finland has launched a research in Iringa Region on the possibility of using solar powered learning gadgets in primary and secondary schools in the country.

COSTECH Director General Dr Hassan Mshinda revealed this in Dar es Salaam yesterday when signing a Memorandum of Understanding (MoU) with VSO to launch the research.

Dr Mshinda said with the current fast technological changes, the Commission has seen the importance of changing the country’s learning system from analogue to digital.

He said they have started with Iringa Region as a pilot study to create awareness in schools before implementing it in other schools.

He said so far students in selected schools in the region have been provided with the solar powered gadgets in order to familiarize them with the current technological changes.

He said the pilot study will be completed in six months enabling the commission to advise the government on the need to introduce technological tools in teaching at schools.

Dr Mshinda added that apart from students, the programme will also benefit other stakeholders such as academics, scientists, publishers and the general public as it will enable them to publish and have access to high quality publications.

“We can’t advance economically without acquiring new knowledge from different writings. Through this platform many people will have access to various local materials through electronic publications,” he added.

VSO Country Director, Jean van Wetter said the organization has carried out various initiatives in the country for 52 years now, mostly aiming at bringing advancement in primary and secondary education as well as the health sector.

“This move will help more researchers in science and agriculture to go on-line,” he said.

For her part, VSO Programme Manager, Rose Tesha said there are over 167,000 students graduating from higher learning institutions annually, but their research reports are not put on-line. Through the programme many research reports will be published to benefit the general public, she said.

Publishers Association of Tanzania (PATA) Chairman, Ian Moshi said the idea has come at the right time as local publishers have been living in a challenging world of daily technological revolutions.

He said the implementation of the electronic publication initiative will ease the access of knowledge to many people in and out of the country and minimise costs of production and distribution of hard copy materials.

Source: The Guardian.
The government has reiterated the need to train smallholder farmers, who constitute over 70 per cent of Tanzania's agriculture sector, in modern farming crop husbandry practices with access to credit facilities and markets for their produce if food insecurity and poverty are to be tamed.

President Jakaya Kikwete said in Dar es Salaam when opening the two-day Agribusiness East Africa conference that under Southern Agriculture Growth Corridor of Tanzania, the focus is on improvement of productivity of smallholder farmers.

Citing an example of Kilombero Plantation Limited, which has been allocated 10,000 hectares of land where British and American large-scale commercial rice producers are working with smallholder paddy rice farmers, President Kikwete said the model has worked so well such that some African countries are borrowing a leaf from it.

"Under SAGCOT, smallholder farmers working in partnership with large scale farmers have successfully managed to increase rice yields per acre from two metric tons to eight tons," Mr Kikwete told the gathering of over 300 agroexperts, company executives, farmers and policy makers.

Kilombero Plantation Limited is a private company which is a subsidiary of British Agrica Tanzania Limited running a 10,000 hectares of rice farm in Kilombero district of Morogoro region since 2009 which emanated from a United Nations Development Programme hatched Africa Training and Management Services (AMSCO) project.

Under the project, key undertakings included development of 5,000ha of rice farming, construction of cleaning, drying, milling, and storage facilities to handle high production volumes with employment of over 400 people directly.

"With this partnership, Kilombero Plantation is now the largest rice producer in East Africa," Kikwete pointed out saying his government is also targeting to improve productivity of smallholder farmers under Kilimo Kwanza blueprint.

SAGCOT involves five regions of Iringa, Mbeya, Morogoro, Rukwa and Ruvuma regions which are the country's bread basket.

Under the programme, farmers are trained by extension officers on best crop and animal husbandry practices, supplied with agro-inputs such as fertilizer and hybrid seeds, given access to credit facility and reliable markets.

With production of food at 118 per cent of the country's needs largely due to Agriculture Sector Development Programme (ASDP), the president said the target is to produce enough for the EA market. "In order to succeed we also need to incorporate the private sector," he stressed.

Earlier, Agriculture, Food Security and Cooperatives Minister Christopher Chiza and Agriculture Council of Tanzania (ACT) Chairman Dr Yussuf Sinare said the innovation, which targets smallholder farmers, is key to improving the agriculture sector.

Engineer Chiza said to realize the goal of having a middle income economy by 2025, the government has singled out agriculture as a sector requiring urgent attention hence part of the Big Results Now initiative.

"One of the things we are focusing on is how a smallholder farmer can be included in a production value chain without compromising his interests," Eng. Chiza noted saying his ministry and SAGCOT partners are working towards putting innovations into action.

In a vote of thanks, Dr Sinare paid tribute to the government for undertaking massive mechanization of the country agriculture sector. "For the first time, I have seen a showroom of tractors in Dar es Salaam."

Source: Daily News
By Correspondent

January 28, 2014

International researchers have agreed on joint methodology to conduct survey on consumers’ preferences for processed cassava products in Benin, Cameroon, Nigeria, Sierra Leone and Tanzania. They reached the agreement at a just-ended four-day meeting held in Dar es Salaam. It was hosted by the International Institute of Tropical Agriculture (IITA), which is headquartered in Ibadan in Nigeria but has a wing in Tanzania.

“The study aims to get a better understanding of the variety of processed cassava products in the five countries, their quality and consumer preferences,” IITA said in press release issued yesterday, adding: “The study will look at the food chain, the economic viability of the products, and the gender roles in the processing of these products.”

The project is funded under a global Programme of Roots, Tubers and Banana of the CGIAR. It is one of three case studies to be conducted as part of efforts to boost the post-harvest management of roots, tubers and banana.

Victor Manyong, IITA Director for Eastern Africa, says the study is “very relevant to Africa as cassava is a very important crop for smallholder farmers in the continent.”

Genevieve Fliedel, a food scientist from ‘Le Centre de cooperation international en recherché agronomique pour le développement’ (CIRAD) and one of the workshop conveners, meanwhile says the case study would give researchers “a clearer picture of the diversity of processed cassava products in the five countries, quality characteristics and consumer preferences.”

“We have wanted to conduct this kind of study for a long time to get data to support the government’s desire to promote the blending of maize flour with cassava flour to create demand for cassava flour,” he said.

“This in turn, will drive the production of cassava, create jobs through processing, and contribute to food security and reducing unemployment and poverty especially in the rural areas,” he added.

Organizations involved in the case studies are IITA, CIAT, CIRAD, Natural Resource Institute (NRI), and the national research partners in the five countries.

IITA is one of the world’s leading research partners in finding solutions for hunger, malnutrition, and poverty. Its award-winning research for development (R4D) approach addresses the development needs of tropical countries.

A non-profit organization, it works with partners to enhance crop quality and productivity, reduce producer and consumer risks, and generate wealth from agriculture.

It works on cowpeas, soybeans, banana/plantains, yams, cassava and maize. IITA is a member of the Consultative Group on International Agricultural Research (CGIAR), a global agriculture research partnership for a food secure future.

Source: The Guardian
By Waryoba Yankami
27th January 2014

Tanzania in collaboration with a US based MIT Sloan School of Management has promised to start helping Tanzanian youth entrepreneurs to create new business ventures.

This was revealed over the weekend in Dar es Salaam by the Dar es Salaam Teknohama Business Incubator (DTBi) Chief Executive Officer, George Mulamula when briefing journalists about the coming of students from MIT Sloan School of management to assess and consult how they can support new and growing companies in Tanzania.

Mulamula said while in the country the students will help Tanzanian youths identify potential funding sources and review business plans and models of the most successful companies that emerged from the incubator so as to capture best practices and strategic advice.

He said the team has also been investigating global best practices among other incubators and accelerators with an emphasis on technology across frontiers and emerging markets including in Tanzania.

He said the students’ off-site work on the project began in October 24, last year and will culminate in February this year with final in-depth analysis supported by the MIT Sloan School of management global entrepreneur laboratory.

He noted that Tanzania is lagging behind in technological entrepreneurship among youths because most of them lack enough capital and there is little cooperation with the government to invest in technological investments. He challenged telecom companies in the country that are still reluctant to support innovative youths to start doing so.

Connie Cheung a former banker, entrepreneur and one of the team members said Tanzania is growing very fast in Information and Communication Technology (ICT) sector hence the incubator will help boost innovative entrepreneurship amongst the youth.

DTBi was launched in 2011 as a public private partnership with initial investment from the government of Tanzania through its Commission for Science and Technology (COSTECH), with the support of infodev, a global partnership program in the financial and private sector development network of the World Bank Group and the Tanzania Communications Regulatory Authority (TCRA).

Source: The Guardian

COSTECH hosts Horizon 2020 workshop

On January 20th, 2014 the Tanzania Commission for Science and Technology (COSTECH), in collaboration with IIMC Ireland (IST Africa Project Coordinator) organized a Joint IST Africa CAAST –Net Plus Horizon 2020 Workshop that took place at the COSTECH Conference Centre.

The objective of the workshop was to address all research and innovation funding that was previously provided through the Framework Programmes for Research and Technical Development, Competitiveness and Innovation Programme (CIP) and European Institute of Innovation and Technology.

COSTECH hosted that Workshop as it is a chapter on Tanzania as a part of the overall IST-Africa Study on ICT initiatives and research capacity. It is a chapter on Innovation Spaces and Living Labs in Tanzania as part of overall IST-Africa Study on Innovation ecosystem. It publishes articles on ongoing and emerging ICT and innovation activities in Tanzania on the IST-Africa portal and in the newsletters. It raises awareness of upcoming Calls for Proposals and international funding opportunities. Apart from that, it also has access to IST-Africa Network including Ministries and National Councils in 17 African Countries to share knowledge, experiences and success stories.

Fig. 12: COSTECH Director General Dr Hassan Mshinda gives the welcoming remarks during the workshop.

IST-Africa supports development of the Information Society and Knowledge Economy in Africa through International Research Cooperation, Innovation and Entrepreneurship. It also develops knowledge Sharing and Skills Transfer between IST-Africa Partners. It Supports Implementation of 8th Africa-EU Strategic Partnership (Science, Information Society, Space) including Hosting JEG8 Meetings.

Horizon 2020 is the new Framework Programme to implement Research and Innovation with funds of €80 billion from 2014 – 2020.
Tea growers in the country stand to benefit from the four newly improved clones released by the Tea Research Institute of Tanzania (TRIT). The clones include 20 and 10 tea improved cultivars obtained from the Tea Research Foundation of Kenya (TRFK) and TRIT.

Speaking in an exclusive interview with The Guardian at Ngwazi Tea Research Station in Mufindi District, Iringa Region at the weekend, TRIT Head of Crop Improvement Programme Solomon Msomba said the clones were identified and selected among 30 tested ones from the clonal adaptability Trial (CAT).

According to Msomba the trial was conducted between 2005/06 and 2011/12 at four locations which represent the key tea based agro-ecological zones. These include Ngwazi Tea Research Station (NTRS) in Mufindi District, Ilenge site in Rungwe District in the Southern Highlands and Marikitanda Tea Research Station (MTRS) in the Usambara Mountains.

“The four clones are 301/5, 381/5, 303/178 and 430/63, whereby their superiority was based on parameters such as high yields of made tea (mostly out-yielding the comparable commercial clone by up to 23 percent (301/5)). The average yield for smallholders is in the range of 900 to 1000 kilogramme of made tea per hectare per annum, he said.

“All four new clones have proved better than smallholder yield performance,” he said.

He added: “Some of these newly released clones achieved excellent black tea brew quality (381/5 has excellent quality of black tea similar to standard clone 6/8). Others have moderate quality but well acceptable by most tea testers. The clones have demonstrated the high ability to tolerate drought stress -- especially clone 430/63.

He underscored that other clones are moderately tolerant to drought stress as well as ability to withstand pest infestation such as helopeltis which is common during the dry season, especially at Ilenge in Rungwe District.

“The released clones have demonstrated vigorous growth during the early stages in the nursery under cool temperatures of 430/63,” he said.

“These characteristics are very important for adaptation of tea cultivars. Changing weather and climate patterns have rendered some of the areas which supported productive tea cultivation unsuitable hence the need for well adapted improved tea cultivar,” he went on to say.

The released clones will offer a rare opportunity for Tanzanian tea farmers to increase productivity while being assured that their tea gardens will survive adverse growing conditions, he observed.

In order to speed up the distribution and absorption of these clones by farmers, TRIT has embarked on the establishment of satellite mother bush plots at various representative tea growing areas, he said.

The plots will conveniently enable both smallholders and large tea growers to easily and adequately access the required propagating material (cuttings), he added. He noted that the strategy is complemented by a persistent campaign to create awareness on the potential and availability of these materials to all tea stakeholders for wide adoption.

On record, the official release of the clones marks the first ever release of improved tea clones since the introduction of tea crop in the country during the early 1900s.

Explaining the way forward, Msomba who is also doing PhD studies at the Sokoine University of Agriculture said: “The government has to initiate Tanzania tea hybridisation programme (THP) for future development of tea cultivars as well as rehabilitate old seed barriers at Ambarngulu Tea Company, at West Usambara in Lushoto District and at Marikitanda Tea Research Station, in East Usambara, Muheza District and at Kibena Tea Company in Njombe District.”

He went on to say that TRIT plans to establish new seed barriers at Ngwazi Tea Research Station in Mufindi, where the plots will serve to develop new improved tea clones through crossing, evaluation and selection of superior clones for future recommendations to tea growers.

“We continue to create awareness on the tea clones to all stakeholders including growers, processors, tea market personnel, packaging personnel, consumers as well as continue disseminating the new technology through establishment of satellite mother bush plots to cover all representative tea areas in the country,” he said.

Source: The Guardian
This article was submitted as part of the progress reports for research projects that are registered with the Tanzania Commission for Science and Technology (COSTECH).

The report is about excavations at the Limbo site, Mkuranga District, Coastal Tanzania, August 2011. It is submitted by Alison Crowther (University of Oxford), Ania Kotarba-Morley (University of Oxford), Edwinus Lyaya (University College London and University of Dar es Salaam), and Nicole Boivin (University of Oxford).

**Research abstract:**

This report details the results of the first season of archaeological fieldwork at the Limbo site, Mkuranga District, Tanzania by the University of Oxford’s Sealinks Project. The fieldwork took place from 6th to 14th August 2011 in conjunction with the University of Dar es Salaam Archaeological Field School directed by Mr. Edwinus Lyaya (UCL and UDSM).

The University of Dar es Salaam field school continued for a further 4 weeks after the Sealinks Project finished their investigations at the site, but this report only concerns the Sealinks-related fieldwork.

**Research Objectives/Goals:**

- To recover archaeological remains from the Early Iron Age (and any subsequent) archaeological contexts, so as to determine whether the site’s occupants practiced subsistence agriculture and the types of crops grown,
- To further develop the chronological and material culture sequence for the Early Iron Working period, and
- To better understand the communities occupying the region during the Iron Age, their local and international interactions, and their role in the emergence of urbanised, mercantile littoral culture.

**Research results/findings:**

In total, 1082 fragments of pottery (totaling at least 6.5 kg) 1917 fragments of slag (>6.85 kg), 116 tuyere fragments (>1.95 kg) were recovered, which comprised the bulk of cultural material finds (mostly iron wasters, but also iron nail), etc.

**Research Conclusion/Outputs:**

Sealinks excavations at Limbo have provided further evidence on the evolution of trade, settlement and production on the East African coast. Preliminary findings concur with those of previous archaeological studies at the site, which suggest that Limbo was a major iron smelting center on the East Coast during the Early Iron Working period.
Fig. 13: The Director General of COSTECH, Hassan Mshinda and the VSO Country director for Tanzania Mr. Jean Van Wetter sign an MoU that aims at strengthening Indigenous Academic and Digital Publishing in Tanzania and bringing together skills needed for research and publication. The event took place on January 7th, 2013.

Fig. 14: Councillor for Research and Innovation from the European Union Mr Stephane Hogan delivers a presentation about Horizon 2020 Framework during the workshop which took place at COSTECH on January 20th, 2014.

Fig. 15: COSTECH Director General Dr Hassan Mshinda explains to the Members of the Parliamentary Committee on Infrastructure how COSTECH use the fund from the government to promote and monitor research activities in the country. He pointed out that from 2010 to 2013 among other achievements COSTECH has been able to sponsor more than 500 researchers for post-graduate studies, built or renovated 20 research institutions and coordinated more than 56 research projects in the country.

Fig. 16: The Deputy Chairperson of the Parliamentary Committee on Infrastructure Prof. Juma Kapuya (middle), listens to one of the DTBi’s incubates who developed a mobile phone application that enables the user to listen to the parliamentary session through the mobile phone. The Parliamentary Committee on Infrastructure visited COSTECH on January 28th, 2014.
Announcement

We invite news, features, letters, opinions and analyses about science, technology and innovation for socio-economic development

Write to:

The Science Editor,
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Dar es Salaam.

Or email:
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