

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)  
Engagements with the Science, Technology and Innovation Strategy for Africa  
(STISA)



Consultative Meetings with Key Stakeholders on AUC MoU with RUFORUM and  
Draft Implementation Plan & Strategy for STISA-2024 Pillar One – “Eradicating  
Hunger and Achieving Food Security in Africa”

Safari Court Hotel, Windhoek, Namibia, 26 – 28th August, 2015

## EXECUTIVE SUMMARY

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is a dynamic Network of 55 member universities operating in 22 African countries in Sub-Saharan Africa (SSA). RUFORUM's mission is 'to strengthen the capacities of Universities to foster innovations responsive to demands of small-holder farmers through the training of high quality researchers, the output of impact oriented research and the maintenance of collaborative working relations among researchers, farmers, national agricultural research institutions'. RUFORUM seeks to focus the attention of Vice Chancellors as leaders of higher education institutions in Africa and other key actors in the policy arena on how to strengthen agricultural higher education in Africa. However, due to their positioning within national education sectors and systems, universities are usually under the ambit of Government Ministries responsible for Higher Education<sup>1</sup> in each country. Engagement of these Ministries, their relevant officers and stakeholders is critical to the overall vision and mission of RUFORUM and that of respective members at national level. The Higher education sector is faced with a number of critical challenges. Successful universal primary and secondary education programs have created a huge demand for higher education in Africa resulting in a proliferation of higher education institutions. Despite this, access to higher education remains a major challenge with enrolment in Africa remaining significantly lower than in other parts of the world (6-8% in SSA compared to global average of 32% and over 90% in the United States). Qualifications of staff at higher education institutions (proportion with PhDs) in Africa remain low. This presents challenges related to maintaining quality; while increasing gross enrolment. Equally research output needs to be increased, in tandem with the enrolment of PhDs which is currently at a meagre 0.7% and requires urgent redress. The role of universities in general is being critically analyzed by various stakeholders. The clear relationship between knowledge generation, its use and economic development highlights the importance of universities to Africa's future development. In light of this the RUFORUM Network has since 2006 been at the fore-front to champion advocacy for higher education, enhancing utility of knowledge generated to accelerate Africa's transition to an innovation-led, knowledge based economy.

As part of efforts to implement activities and engagements geared towards providing a platform for networking and advocacy for higher education in Africa, the RUFORUM Network hosted consultative meetings with stakeholders drawn from over 30 countries in Africa and Development partner representatives. The consultative meetings piggy-backed on arrangements for the 11<sup>th</sup> RUFORUM Annual General Meeting (AGM) which was held 26 – 30 August, 2015 in Windhoek, Namibia and jointly hosted by the Government of Namibia and the University of Namibia. The Consultative Meetings were a side-event prior to the 11<sup>th</sup> RUFORUM AGM and this presented opportunity for the Governance organs of RUFORUM to engage in discussions on key continental frameworks. Subsequent to endorsement of a Memorandum of Understanding between the African Union Commission and RUFORUM, the AUC mandated RUFORUM to participate in the implementation of the STISA and take led in mobilizing partners to support activities under Pillar 1 of the STISA-2024. Furthermore, the Chairperson of the African Union Commission invited RUFORUM to engage stakeholders and prepare for a Side

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<sup>1</sup> Usually Ministries of Education or Ministries of Higher Education, Science and Technology etc.

Event on Higher Education Science and Technology to be hosted during one of the Heads of States and Government Summits in 2016. These constitute the agenda for discussion during the consultative meetings in Windhoek, Namibia.

**Key Messages and recommendations from the consultative meetings are highlighted below:**

- The different stakeholder represented at the consultative meetings, recognized that STISA-2024 provides a broader framework and recommended that companion documents to the STISA-2024 that highlight the contribution of higher education, research and capacity building across the six pillars should be formulated to guide implementation.
- Repackage and show-case appropriate technology and innovations with potential to attract investments for scaling-up.
- Need to revisit the education system and engineer changes that will facilitate training and learning that produces graduates that measure to the current labour market demands.
- Encourage agricultural production by putting in place incentive systems.



*Facilitator Prof. Rukudizo Murapa (with microphone), Former Vice Chancellor and Chairperson RUFORUM International Advisory Panel summarized the key messages arising from the proceedings of the Roundtable discussions.*

- African Union and Governments to set up a competitive grants systems to develop knowledge and technologies.
- Generating knowledge and technologies is not enough, but deliberate efforts must be made to enhance utility of new knowledge and innovative approaches to increasing productivity in agricultural sector and this implies efforts to address value-chain constraints.
- Universities need to work with industries and other private sector entities.

- Incentives need to be given to higher education; inadequacies in funding support has demotivated scholars in Africa. Despite the inadequacies, the academia in Africa has strived to generate products and services but – “you do well and you are not appreciated”.
- Governments should engage Universities in generating evidence-base for policy decision making; and Universities should focus on relevant research that is focused on solving the problems of small holder farmers.

## 1.0 INTRODUCTION

During the recently concluded 11<sup>th</sup> RUFORUM Annual General Meeting (RUFORUM 2015 AGM) two side-events focusing on discussions on modalities for implementation of STISA Pillar 1 were held. The first side-event was held 26 – 27<sup>th</sup> August and was part of the RUFORUM Technical Committee deliberations with several stakeholders in the agricultural and higher education sectors invited to join the meeting (see Annex 1 – List of Participants). The Agenda for the Meeting was as outlined below.

### 26<sup>th</sup> August 2015

18:00	Presentation, Amendment & Adoption of the Agenda
18:10	Communication from Chair
18:20	Presentation, Review and adoption of Minutes of the 7 <sup>th</sup> TC Meeting
18:35	Matters Arising from Minutes of the 7 <sup>th</sup> TC Meeting
19:20	Health Break
19:35 – 20:00	Introduction to STISA Discussions

### 27<sup>th</sup> August 2015

09:00	Thoughts and Reflection on STISA – Presentation by Malcolm Blackie Review and Discussion of Draft Implementation Strategy & Plan
11:00	Health Break
11:20	Higher Education Regional Consultations, Heads of State Meetings, etc. Closing Remarks
12:45	Executive Secretary TC Chair
13:00	LUNCH

The second side event was held on the 28<sup>th</sup> August 2015 and was a roundtable discussion with higher education policymakers, vice-chancellors drawn from RUFORUM Member Universities in sub-Saharan Africa and other key stakeholders including practitioners (see Annex 2 – List of Participants at the Policy Dialogue). The Agenda for the Roundtable discussion was as outlined below:

### Roundtable for Permanent Secretaries and Directors of Education

Time	Sub Theme	Responsible
15:00-15:20	Meeting background and objectives	Prof. Adipala Ekwamu, ES, RUFORUM
15.20-15.40	Background presentation	Dr. Moses Osiru
15.40-16:30	Facilitated discussion	All participants/ facilitator (Prof. Rukudzo Murapa)
16.30-17.00	Heath Break	
17:00-17:15	Plenary featuring comments and contributions from participants	Selected PS
17:30-17:45	Recommendations and Way Forward	All
17:45	Meeting closure	

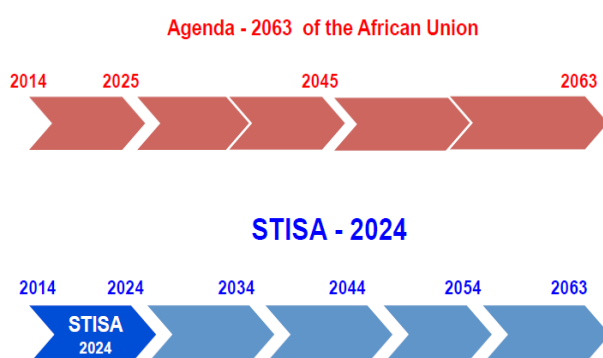


## 2.0 HIGHLIGHTS OF PROCEEDINGS FROM THE JOINT MEETING WITH RUFORUM TECHNICAL COMMITTEE

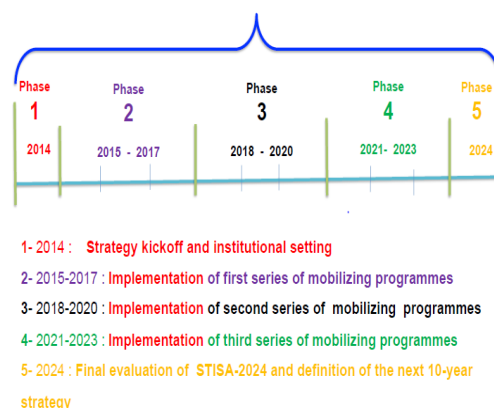
RUFORUM's engagement with, and background to the, STISA 2024 was given in a presentation by Dr. Moses Osiru, the Deputy Executive Secretary, RUFORUM. He indicated that in July 2014 during the 4<sup>th</sup> RUFORUM Biennial Conference in Maputo, Mozambique a policy session and discussion with AU Chair, HE Madam Nkosasana Dlamini Zuma, an MoU between RUFORUM and the African Union Commission (AUC) was endorsed in July 2014. The MoU engaged RUFORUM Network to support science, research and innovation in Africa. As part of implementation of the MoU, RUFORUM has been working closely with the Department of Human Resources Science and Technology (HRST) to clarify roles, support to development of Priority 1 (Pillar 1) of the STISA 2024. The MoU also specifically requestes RUFORUM to work with Pan African University Earth and Life Science Institute (PAULESI). Based on these interactions, a Draft Implementation plan for STISA 2024 Pillar one has been developed and part of this consultation was to share the draft document and seek input from stakeholders.

The STISA is at the centre of the AUC Vision for Africa (see Agenda 2063 The Africa We Want") and is designed to coincide with a Century of establishment of the Organization of the African Union (now the African Union) which was founded in 1963 with milestones interspersed every 10 years.

### Timing of the strategy



### Detailed Timing of STISA-2024

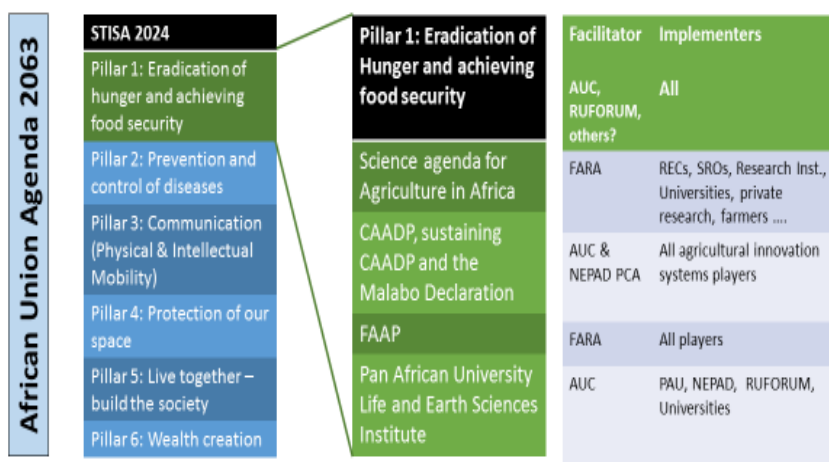


There are 6 Pillars of the STISA 2014 and RUFORUM is mandated by the AUC mandated to mobilize key actors and led implementation of Pillar 1 which is informed by other key continental frameworks including the Comprehensive African Agricultural Development Programme (CAADP) and the Science Agenda for Africa (S3A).

The STISA 2014 identifies “conditions for success” and these are:

- Upgrading and/or building research infrastructure,
- Enhancing technical and professional competencies,
- Innovation and entrepreneurship and
- Providing an enabling environment for STI.

## STISA, CAADP and the Science Agenda for Agriculture in Africa



As a follow up to these consultations, a meeting is scheduled for September. 15 – 16, 2015 in Lilongwe, Malawi. This meeting will be part of sub-regional consultations of the draft implementation plan for Pillar 1 of the STISA-2024.

The following questions were raised after the presentation:

- Do we know is looking after other pillars – which institution or consortium of institutions are mandated to lead implementations of Pillars 2 - 6?
- Why should implementation and collaboration be restricted to the PAULESI.
- Reference to Ruforum and AUC chair MoU : ensure a broad STI link beyond food security
- Ruforum should utilise its network to cover STI across partner universities
- Is it possible to consider other factors, in the conditions for success? For example:
  - Link to NEPAD and UNECA; and the Vice Chancellor Mzuzu University in Malawi (Prof. Robert Ridley) offered to engage in discussion with relevant contacts at NEPAD and UNNECA on behalf of RUFORUM as and when necessary.
  - Broadening the issues beyond food security

These questions generated debate and discussions in plenary and the key conclusions include the following:

1. The meeting resolved that although the MoU with African Union Commission requires RUFORUM to work with the Pan-African University Institute of Life and Earth Sciences at University of Ibadan, Nigeria; RUFORUM should not only work with PAULESI but should engage other institutions of Higher learning and particularly the other Pan African Universities.
2. The meeting further observed a need to mobilize universities and other stakeholders in Africa to participate in the implementation of STISA under leadership of RUFORUM.
3. It was noted that although RUFORUM is mandated by the AUC to lead Pillar I, implementation of the Pillar I should not be done in isolation of the other pillars.
4. It was resolved that universities in Africa under the leadership of RUFORUM develop a key position paper that features the role of Higher education with forward and backward linkages for the entire STISA and not just the Food Security Pillar.
5. The implementation of the MoU between RUFORUM and AUC should be operationalized through a functional Working Party (Task Team).
6. The STISA 2014 should be viewed as a segment of the Agenda 2063 and should therefore entail aspects of foresight.
7. The meeting observed the need to recognize that Africa is in transition and this has implications related to the impact on future changes which are linked to the global development agenda.
8. The meeting advised RUFORUM should provide annual reports to the AUC on RUFORUM's diverse contributions to improving the relevance of higher education and how they are contributing to the broad Africa Agenda 2064, as part of MoU with AUC.

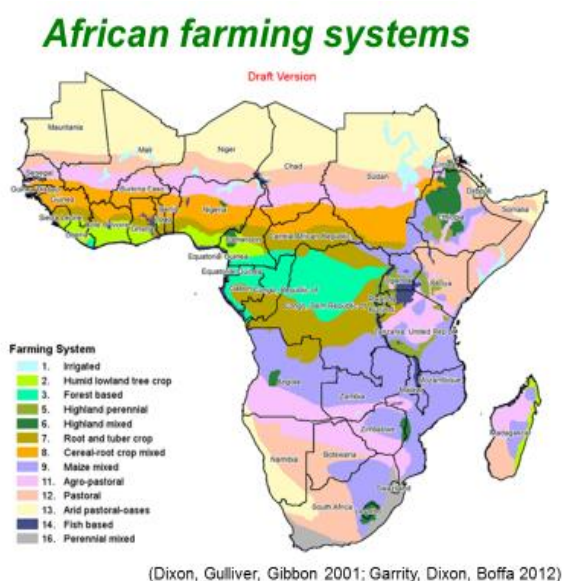


A second key note presentation by Prof. Malcolm Blackie highlighted key points in the Draft Implementation Strategy and Roadmap for Priority 1 of the STISA-2024. This presentation provided the context for African Agriculture – it is potential and challenges. It was observed that despite the many challenges and untapped potential through application of science and innovative approaches there have been many achievements. Nonetheless, these achievements some of which have largely come through CAADP influence (e.g., M-PESA in Kenya, Nigeria food security status and job creation, Ghana cocoa industry and Sierra Leone Rice production increase) are seldom celebrated. These achievements provide a basis for justification of increased investment.



A case in point here is Malawi's Starter Pack which turned its food deficit into a 1.3 million tonnes surplus within a period of two years. These achievements provide pointers for some key intervention points, in the largely diverse African farming systems, including among others the following:

- a) Food staple dominant but integrated with trees, other crops and livestock (legumes, tobacco, cotton, sorghum, cattle, goats, and poultry).
- b) Remittances from off-farm work significant.
- c) Diversity declining as farm size decreases (especially in mono-modal rainfall areas).
- d) Smallholders manage 90+% of the major farming systems.
- e) Only tiny area irrigated in most systems



The STISA implementation is an opportunity to accelerate Africa's transition to an innovation-led, knowledge based economy. In particular, the STISA is posed to:

- Enhance effectiveness of Science, Technology and Innovation (STI).
- Improve technical competencies and institutional capacity for STI development
- Promote economic competitiveness - innovation, value addition
- Protect and enhance knowledge production
- Facilitate STI policy reforms, harmonization, science diplomacy and resource mobilization

Key pre-requisites for accelerating Africa's transition include:

- The transformation of agriculture in Africa will require African professionals of the highest quality.
- A higher education system that addresses effectively the development challenges of the continent must be put in place today to create the innovators of tomorrow.
- Need for suitably qualified and experienced teachers who also mentor for young graduates.
- Stopping the most talented African professionals leaving frustrated by the lack of resources and support at home.

## 2.1 Plenary discussions

The second presentation generated the following points and recommendations:

- a) The RUFORUM Network has the capacity to look at the 6 priority areas that the STISA provides especially since they all necessitate generating research and innovations as well as human-resources. Thus, we should strategically focus to "Improve Technical Competencies and Institutional Capacity for STI development" not only for Pillar 1 but for all the Pillars. All the six areas outlined under STI exist within the member universities; member universities are actually implementing the STISA at various levels along commodity value chain.
- b) RUFORUM is supposed to provide a supporting role to the AUC and for this reason, we may consider situating the Implementation Plan and Strategy document around the Agenda2063. It should include foresighted that helps the continent to conceptualize the agricultural sector under the "Africa we want".
- c) There is need to remodel training institutions and approaches to learning to secure a new kind of a university but also a new kind of graduate student with hands-on skills, with a mindset change that promotes and encourages innovativeness.

- d) There is need to deal with the extension system particularly addressing the gap between the researchers and the scientists.
- e) Need to recognize that Africa is in transition; thus look at actions that strategically and recognize the future changes including gender issues and demographic aspects in Africa.
- f) The reason why the MDGs were not fully achieved was because we did not fully internalize the importance of linking the different goals; now we have the opportunity to conceptualize a systems approach to implementation as opposed to silo-wise into pillars. Similarly the challenge with CAADP has been approach of pillars (probably the main reason why these have now been collapsed); it didn't work because those who worked in the pillars worked in a smaller world. Thus, developing the strategy along the pillar approach requires caution.
- g) There is need to consider value addition; through village industries to reduce on losses. This should be linked to incubation processes within universities and knowledge centres.
- h) Universities should engage industry because they have the financial resources to promote the technologies developed.
- i) RUFORUM should engage to develop a synthesis paper/documentation on the role of higher education in taking the strategy forward. The paper should also address the forward and backward linkages between and within the different sectors (Pillars); such that it will no longer be about the food security agenda alone.
- j) Training from within the African continent propels innovation within Africa; retain a pool of experts and advance the African agenda

### 3.0 HIGHLIGHTS OF PROCEEDINGS FROM THE POLICY ROUNDTABLE DISCUSSION



The Policy RoundTable Meeting received a brief on key RUFORUM engagements that have focused on bringing together policy makers:

#### (a) Meeting of Ministers of Education and Agriculture in 2006.

Five countries (Kenya, Malawi, Mozambique, Uganda and Zimbabwe) engaged.

Key recommendations:

- Regular briefing of policy makers- at least once every three to five years
- Universities to support the CAADP process

#### (b) Conference on Higher Education in Africa (2010)

A resolution was developed and it highlighted the following:

1. A renewed and vigorous emphasis by African governments on restoring the quality of higher education in agriculture.
2. Increased investment in higher education in agriculture in Africa
3. Take urgent actions to develop an Africa-wide action and investment plan for implementing the African Union Commission and NEPAD-PCA strategies for strengthening capacity development in agriculture that are designed to support CAADP.
4. Ensure that Ministries responsible for higher education, education institutions and other relevant actors create conducive and friendly environments for women and girls education and career advancement at all levels.
5. Advocate for increased support and engagement of the African higher education networks in policy making and programme implementation for agricultural training and research
6. Support local and international partnerships which address critical capacity needs for sustainable agricultural development. This includes partnerships amongst universities and engagement with communities, private sector and the African Diaspora's.

#### (c) Kigali 2013: Meeting with Permanent Secretaries for Agriculture and Education

**Key recommendations:** Seek support from regional governments for legitimization of RUFORUM in East African Community, COMESA, and SADC.

## Maputo July 2014: Meeting of Vice chancellors, AUC Commission Chair, and Commissioners of HRST and DREA held to discuss Higher Education in Africa

A Communique' was generated and highlighted the following key recommendations:

- Universities should engage with policy makers at highest level
- Universities to contribute to Agenda 2063: The Africa we Want
- RUFORUM to lead in implementation of STISA priority area 1
- AUC Chair: Offered to host a Heads of State and Government session on Higher Education in Africa

These efforts have over the years supported process of engaging policymakers and the RUFORUM Network has enhanced its advocacy role in higher agricultural education in Africa. Member Universities have had opportunity to engage in high-level policy discussions and higher education is increasingly featuring on the continental agenda. RUFORUM actively participated in the Dakar Summit on Higher Education. We have as a Network in addition to taking on the led responsibility to mobilize stakeholders in implementation of Pillar one of the STISA also been invited to prepare and participate in a Side-Event on Higher Education Science and Technology at the a Heads of State Summit to be convened by the AUC Chairperson. Proposed objectives of the side-event will be to seek:

- Commitment by African Governments to national and regional investments in Higher Education, Science and Technology;
- Commitment to establish a continental 'accreditation standards and credit transfer system' to allow students and staff to switch between universities and widen their exposure; and,
- Commitment to develop an 'academic mobility scheme' and strengthen Centres of Excellence to enhance mobility, regional level training and enhance economies of scope and scale.
- Commitment to establish an 'African university ranking system' that recognizes the specific need for Higher Education in Agriculture and other fields, that would encourage universities to address those needs;

The progress for preparation of this event is as highlighted below:

- (i) Preliminary stakeholder consultation undertaken in Johannesburg, 25 November 2014**
  - (a) A one day meeting with 80 participants drawn from across Africa
  - (b) Considered challenges facing higher education and agreed on approach to prepare for the Heads of State Summit.
- (ii) Appoint a Reference Group of Experts**
  - (a) Advise RUFORUM and the AUC on the process and to provide feedback on the scientific papers and country case studies produced highlight regional components
- (iii) Country case studies (July& August, 2015):**
  - (a) Five country case studies, Uganda, Kenya (Eastern Africa); Malawi (Southern Africa) Ghana and Benin (West Africa).
- (iv) Undertake Stakeholder Consultations (April & May, 2015)**



- (a) Built on Dakar Meeting in March, 2015 on Higher Education in Africa
- (b) Deans meetings held in Khartoum produced Declaration
- (c) Deans at Windhoek, Namibia AGM
- (v) **Installation of HE Prof. Peter Arthur Mutharika as Champion for Higher Education (July 5, 2015)**

**Planned activities include the following:**

- a) Synthesis of the findings (September, 2015)
- b) Drafting of the statement to be discussed at the AUC Summit (September, 2015)
- c) Side event on higher education in Africa to be held at UN Summit in late September, 2015
- d) AUC (HRST) to facilitate approval of draft statement for submission to the Heads of States
- e) Meeting of Ministers of Education from 8-10 countries in October, 2015 in Lilongwe, Malawi
- f) Conducting the session at the Summit (January, 2016)
- g) Follow-up activity – Operationalizing the MoU between RUFORUM (or other actors) and AUC (February, 2016)

The Meeting was in light of the above presentations, requested to:

1. Make recommendations on key policy messages to Heads of State at the proposed side event offered by the African Union;
2. Explore how to enhance the sustainability of RUFORUM by obtaining support from African Governments and Philanthropists to RUFORUM

**3.1 Plenary Discussion: Questions, Clarifications and Recommendations**



A well-attended plenary raised the issues listed below:

- 1) Why the long-term framework for “The Africa We Want – Agenda 2063”? This is tied to the founding of the OAU and also the rolling plans are in line with the SDGs, that is, every 10 years.
- 2) Is the proposed Ranking for Universities to be for Agricultural Colleges only/discipline specific or will it cover other areas as well? The idea is to develop a ranking system for Africa and the consideration is to catalyze African universities to perform more effectively. Hopefully this initiative will attract more partners including the AAU to have consensus on a quality and credible Ranking System for Africa. Plans for establishing ranking systems in Africa should take into consideration the fact that every university has something to offer and it is this uniqueness that should be measured and celebrated for the different institutions to catalyze regional learning and sharing from areas of strengthen and comparative advantage of individual member universities.
- 3) There are so many actors concerned with STISA Priority Area one and there is need for a clear strategy and plan for mobilizing the key actors – this however, is not clear.
- 4) Plans to have coherence of implementation with the different pillars linking to each others are not clear. The STISA provides for cross-cutting issues and we need to have input of higher education sector and plans for building necessary human resources in all pillars not just the first pillar.
- 5) We need success stories and impact to share and make the case for increased investments in higher education and agricultural sectors. The engagement from National Forums under the RUFORUM Network arrangements is a good model, because through these platforms each member university has opportunity to interphase with stakeholders at national level. We need to look at this closely and profile these engagements and in the process highlight to key stakeholders the important role of universities in socio-economic development. It was observed that through National Forum engagements such as the case in Zimbabwe, Uganda and Malawi, the respective National Governments have requested for specialized training and research programmes including Gender Studies. The National Forums have helped in the design and formulation of relevant curricula.
- 6) There is need to popularizing of a science agenda to attract young people in fields of science and this may require starting early in their career for example in primary and secondary schools.
- 7) Success of RUFORUM measured in terms of MSc and PhD graduates trained- but we need to take interest in what happens after they have completed training – will they become the innovators and entrepreneurs that we badly need for Africa’s productivity challenges. We should continue and move several steps forward beyond the generation of scholars and engage to generate specific recommendations for a policy environment that encourages innovations to flourish and consider innovative approaches for measuring impact. The graduates can also through an organized association of alumna with clear structures for

managing alumni relations give-back to support the RUFORUM. This could be part of structured fundraising events (“organized begging”) that facilitate crowd-funding and crowd-sourcing as part of efforts to secure sustainability.

- 8) As a Network (RUFORUM) we may have to re-package success stories that will demonstrate to policy makers the urgent need to scale up innovations. There is a lot of good that we have accomplished as a Network but we need to engage in “organized boasting” which should go hand-in-hand with ‘organized-begging’. We also recognize the fact that the RUFORUM Secretariat has proactively engaged and mobilized member universities and as part of sustainability we need to assess and design strategies to sustain and enhance these efforts. Continued engaged with alumni through refresher courses and other innovative ways (such as introducing new products and services – open days to exhibit) may help galvanize the alumni.
- 9) Several decades ago, the phrase was “appropriate technology” and may be it is time for use to look at “appropriate innovations” because these exist and we have many examples that can be packaged for scaling-up:
  - a. One of the universities produced a handtiller, so patent and rolling out to remove the handhoe and increase agricultural production
  - b. Computer assembling in Jomo Kenyatta
  - c. Several universities engaged in supporting business incubation
- 10) Universities should focus on the value-add and continuously generate new technologies; and as indicated by Julius Nyerere, money will look for the innovations and innovators – “Do not look for money but let money look for you”. Innovations should be packaged to deliver on socio-economic interests such as job creation, gender equity, decent growth and development, etc. This should compel African Governments to establish competitive granting system to support research and generate knowledge. Otherwise without guarantee support to universities it is difficult to develop a consistent research agenda that will deliver desired impacts with a constant flow of products and services that can improve the quality of life in Africa.
- 11) Increased investment and funding support from National Governments is very critical and several commitments have been made to support research particularly the 1% of GDP contribution but these have not manifested in most countries except a few (only three in sub-Saharan Africa). Without adequate funding support, it is difficult to drive the human-capital development agenda. It is very surprising that many National Governments are no longer offering support to train postgraduate training and research.
- 12) Requests for commitments to Heads of States and National Governments should be specific and tied to specific issues, otherwise with generic commitments it is very difficult to attribute contribution. The RUFORUM Network should capitalize on the fact that the Vice-Chancellors have the potential to engage and mobilize the Heads of State to take

action and commit to support higher education and particularly higher agricultural education.

### 3.2 Key Messages

- The different stakeholder represented at the consultative meetings, recognized that STISA-2024 provides a broader framework and recommended that companion documents to the STISA-2024 that highlight the contribution of higher education, research and capacity building across the six pillars should be formulated to guide implementation.
  - Repackage and show-case appropriate technology and innovations with potential to attract investments for scaling-up.
  - Need to revisit the education system and engineer changes that will facilitate training and learning that produces graduates that measure to the current labor market demands.
  - Encourage agricultural production by putting in place incentive systems.
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- African union and governments to set up a competitive grants systems to develop knowledge and technologies.
  - Generating knowledge and technologies is not enough, but deliberate efforts must be made to enhance utility of new knowledge and innovative approaches to increasing productivity in agricultural sector and this implies efforts to address value-chain constraints.
  - Universities need to work with industries and other private sector entities.
  - Incentives need to be given to higher education; inadequacies in funding support has demotivated scholars in Africa. Despite the inadequacies, the academia in Africa has strived to generate products and services but – “you do well and you are not appreciated”.
  - Governments should engage Universities in generating evidence-base for policy decision making; and Universities should focus on relevant research that is focused on solving the problems of small holder farmers.

**Annex 1: List of Participants RUFORUM Technical Committee meeting held at the Safari Conference Center, Windhoek, Namibia – 26 - 27 August 2015**

No	Title	First name	Last Name	Gender	Nationality	Institution
1	Mr.	Joseph	Methu	Male	Uganda	ASARECA
2	Prof	Patrick	Rubaihayo	Male	Uganda	Makerere University
3	Dr.	Margaret	Kroma	female	Kenya	ICRAF
4	Prof	Charles	Mutisi	Male	Zimbabwe	Univ. of Zimbabwe
5	Dr.	Paul	Nampala	Male	Uganda	RUFORUM
6	Prof	Pinkie	Zwane	female	Swaziland	Univ. Swaziland
7	Prof	Julius	Ochuodho	Male	Kenyan	Univ. of Eldoret
8	Prof	Kay	Leresche	female	South Africa	Education consultant
9	Ms	Pauline	Atim	female	Ugandan	Student
10	Mr.	Hennry	Massa	Male	Uganda	RUFORUM
11	Dr.	Anthony	Egeru	Male	Uganda	RUFORUM
12	Prof	Malcolm	Blackie	Male	UK	IAP
13	Dr.	Moses	Osiru	Male	Uganda	RUFORUM
14	Dr.	D'Hauser	Luc	Male	UK	Univ. of Gent
15	Mr.	panduleni	Haindongo	Male	Namibia	UNAM
16	Ms.	Selma	Nghituwamhata	Female	Namibia	UNAM
17	Ms.	Mirjam	Fabian	Female	Nambia	MAWF
18	Dr.	Judith	Francis	Female	Jamica	CTA
19	Prof	Mabel	Imbuga	female	Kenya	JKUAT
20	Ms	Colette	Thoniootl	Female	Malawi	State House
21	Prof	Ahmed	Agab Edour	Male	Sudan	Kordofan Univ.
22	Prof	Anton	Stroh	Male	South Africa	Univ. of Pretoria
23	Prof	Emilio	Tastao	Male	Mozambique	Eduardo Mondlane Univ.
24	Prof	Rukudzo	Murapa	Male	Zimbabwe	IAP
25	Prof	Richard	Mibey	Male	Kenya	Moi Univ.
26	Dr.	Katherine	Namuddu	Female	Uganda	IAP
27	Prof	Julia	Aker Duany	Female	South Sudan	Dr JG Univ.
28	Mrs	Sylvia	Chindime	Female	Malawi	RUFORUM
29	Dr.	Leif	Christofferson	Male	Norway	IAP



30	Prof	Robert	Ridley	Male	Australia	<u>Mzuzu Univ.</u>
31	Prof	Linus	Opara	Male	South Africa	<u>Stellenbosch Uni.</u>
32	Dr.	Mary	Shawa	Female	Malawi	<u>Gov't.</u>

**Annex 2: Participants at the Policy Roundtable meeting held at the Country Club, Windhoek, Namibia – 28 August 2015**

1	Dr.	Moses	Osiru	M	Deputy Executive Secretary	Uganda	RUFORUM
2	Prof	Malcom	Blackie	M	IAP member	United Kingdom	bt Associates)
3	Dr.	Margaret	Kroma	F	TC member	Kenya	ICRAF
4	Prof	Charles	Mutisi	M	Dean	Zimbabwe	Univ. of Zimbabwe
5	Dr.	Paul	Nampala	M	Grants Manager	Uganda	RUFORUM
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9	Ms	Colette	Thomicroft	F	Personal Assistant to the President of Malawi	Malawi	LUANAR
10	Prof	Kay	Leresche	F	TC member	South Africa	Education consultant
11	Prof	Ahmed Abdalla	Agab Eldour	M	VC	Sudan	Univ. of Kordofan
12	Prof	Luc Joseph	D'haese	M		Belgium	Univ. of Ghent
13	Prof	Anton	Stroh	M	Deputy Vice Chancellor	South Africa	University of Pretoria
14	Prof	Murapa	Rukudzo	M	IAP member	South Africa	Khulisa Management Services
15	Prof	Richard K	Mibey	M	RUFORUM VC	Kenya	Moi University
16	Dr.	Katherine	Namuddu	F	IAP member	Uganda	

17	Mr.	Joseph	Methu	M	TC member	Uganda	ASARECA
18	Prof	Jullius	Ochuodho	M	TC Member	Kenya	Univ. of Eldoret
19	Dr	Anthony	Egeru	M	Assistant Grants Manager	Uganda	RUFORUM
20	Prof	Julia	Aker Dunay	F	Vice Chancellor	South Sudan	Dr. John Garang Memorial University of Science and Technology
21	Prof	Pinkie Eunice	Zwane	F	TC member	Swazi	Uni. of Swaziland
22	Ms.	Sylvia	Chindime	F	Training Officer	Uganda	RUFORUM
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24	Prof	Robert G.	Ridley	M	RUFORUM VC	United Kingdom	Mzuzu University
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27	Dr.	Christoffersen	Leif	M	IAP member	USA	Former Official-World Bank
28	Prof	Patrick	Rubaihayo	M		Uganda	Makerere Uni.
29	Prof	Emilio	Tostao	M	VC - representative	Mozambique	Eduardo Mondlane Univ.
30	Ms	Selma	Ngituwamhata	F	student	Namibia	University of Namibia
31	Ms	Mirjam	Fabian	F		Namibia	MAWF
32	Mr.	Punduleni	Haindongo	F	student	Namibia	
33	Prof	Olive	Mugenda	F	VC	Kenya	Kenyatta Univ.
34	Prof	Enalu	Mwase	M	Ag. VC	Zambia	Univ. of Zambia
35	Prof	John	Akec	M	VC	S. Sudan	Univ. of Juba

36	Prof .	Deo	Taganyi	M	DVC	South Africa	UKZN
37	Dr	Kristin	Davis	F		USA	GFAS
38	Prof .	Eriabu	Lugujjo	M	VC	Uganda	Ndejje Univ.
39	Prof .	John	Ddumba-Ssentamu	M	VC	Uganda	Mak. Univ.
40	Dr.	John	Senyonyi	M	VC	Uganda	UCU
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60	Mr.	Henry	Massa	M	Prog. Officer Grants	Uganda	RUFORUM
61	Ms.	Joan	Apio	F	Prog. Officer Communications	Uganda	RUFORUM
62	Dr.	Solange	Uwituze	F	Manager Training & Quality Assurance	Rwanda	RUFORUM
63	Prof	Alberto	Ferreira	M	VC	Mozambique	Catholic Univ. of Mozambique
64	Mrs	Elizabeth	Gaboona	F	Director Higher Educ.	Uganda	Min. of Education