REPORT OF THE FINAL INDEPENDENT SELECTION PANEL FOR INCUBATION CENTERS

13th - 14th MAY 2019
JACARANDA HOTEL, Nairobi, Kenya
INTRODUCTION

In August 2018, UCEA issued a Call for African Centers of Excellence (ACES) to prepare and submit proposals to host Incubation Centers in the four priority areas (health, industry, agriculture and education/applied statistics) through a co-financing arrangement. The proposals were to be evaluated by an independent panel of experts with requisite experience in incubation, entrepreneurship and support of business start-ups and commercialization activities. The evaluation process consisted of the following three steps:

a) Initial desk review of 14 submitted proposals by the Independent Selection Panel;

b) Site visits of 10 shortlisted proposals out of the 14 from the desk reviews;

c) Final meeting to select the top four/five proposals recommended for funding.

The following four/five proposals were recommended for selection at the end of the entire process:-

- ACEESD - African Center of Excellence in Energy for Sustainable Development, University of Rwanda
- CREATE - Center for Research Advancement, Teaching Excellence and Sustainability in Food and Nutrition Security, Nelson Mandela African Institution of Science and Technology (Tanzania)
- PHARMBIOTRAC - Center for Pharm-Bio Technology and Traditional Technology, Mbarara University of Science and Technology (Uganda)
- PTRE - Center of Excellence in Phytochemicals, Textile and Renewable Energy, Moi University (Kenya)

CDT-AFRICA - Center for Innovative Drugs Development and Therapeutic Trials for Africa, Addis Ababa University

DESK REVIEW

A total of 15 proposals were received at the deadline including one proposal from Jomo Kenyatta University. Of the submitted proposal, 4 were in medical/health sciences, 3 in agriculture, 2 in energy and mining, 3 in engineering and 3 in other disciplines (data science, education and business). A summary of received proposals is presented in Table 1:
Table 1: Summary of proposals for establishment of Incubation Centers

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<tr>
<th>SN</th>
<th>ACE</th>
<th>AREA</th>
<th>DESCRIPTION TO THE PROPOSED IC</th>
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<tbody>
<tr>
<td>1.</td>
<td>ACE-DS</td>
<td>Data Science</td>
<td>Establishment of a center for communication between academia and industry</td>
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<td>2.</td>
<td>ACE-ESD</td>
<td>Energy and sustainable development</td>
<td>Incubation of energy technologies</td>
</tr>
<tr>
<td>3.</td>
<td>CDT- AFRICA</td>
<td>Biomedical Science</td>
<td>Incubation of drugs, vaccine and care delivery</td>
</tr>
<tr>
<td>4.</td>
<td>ACESM</td>
<td>Mining</td>
<td>Development of a learning factory for mining</td>
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<tr>
<td>5.</td>
<td>CREATE S</td>
<td>Agriculture (Food and Nutrition)</td>
<td>Incubation of ICT Based smart solution in agriculture</td>
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<tr>
<td>6.</td>
<td>MAPRONANO</td>
<td>Medical Science</td>
<td>Incubation of Nanobody-based immunodiagnostics for cervical cancer.</td>
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<td>7.</td>
<td>MaRCCI</td>
<td>Business Incubation</td>
<td>Support for students innovations and products</td>
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<tr>
<td>8.</td>
<td>PHARMBIOTRAC</td>
<td>Traditional Medicine</td>
<td>Incubation of innovative ideas in medical research outputs into products</td>
</tr>
<tr>
<td>9.</td>
<td>PTRE</td>
<td>Photochemistry</td>
<td>Support and mentorship to graduates and development of products</td>
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<tr>
<td>10.</td>
<td>WISE FUTURES</td>
<td>Water Infrastructure</td>
<td>Construction of incubation space and equipment</td>
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<tr>
<td>11.</td>
<td>AQUAFISH</td>
<td>Aquaculture and Fisheries Science</td>
<td>Promotion of youth entrepreneurs and enterprises</td>
</tr>
<tr>
<td>12.</td>
<td>CESAAM</td>
<td>Agriculture and Agribusiness management</td>
<td>Developing commercially sustainable business enterprises</td>
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<tr>
<td>13.</td>
<td>ARERI</td>
<td>Railway education &amp; research</td>
<td>Railway transportation development innovations</td>
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<tr>
<td>14.</td>
<td>ACEITLMS</td>
<td>Teaching and Learning Mathematics and Science</td>
<td>Strength human capacity in teaching and learning through effective teaching practices</td>
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<tr>
<td>15.</td>
<td>Jomo Kenyata University</td>
<td>Business Incubation</td>
<td>Campus business incubator using best incubation practices.</td>
</tr>
</tbody>
</table>

Proposal no. 15 did not undergo desk review because the submitting institution is not part of ACEs.

Selection Criteria

Based on the broader objective of establishing Incubation Centers, it was prudent that the best proposals be critically assessed using the following criteria:

i) Existing physical infrastructure
- Physical space including premises with suitable working space;
- Research and innovation facilities, including labs, relevant support equipment, etc.;
- Office support, including access to secretarial services, equipment (copiers, telephones, etc) and receptionist services;
- Use and optimization of internet technologies, (including accessible, reliable and high speed Internet connectivity);
ii) Industrial and innovation activity in the region

- The quality and level of education and research;
- Volume and level of research output, scientific publications, patents, etc;
- Proximity to industrial nucleus or demonstrated relations with the private sector;
- Proved effective collaboration with industry/proposed ideas for incubation and their potential impact/multi-disciplinary team;
- Capacity to attract top students from the region;

iii) High value-added differentiated services and products

- Service offer or package of support provided;
- Rationality of the center i.e. mechanisms for incubating ideas from other centers in the same field;
- Ability to provide free as well as pay services for some of their support packages;
- Initiatives for technology entrepreneurship development, including digital and technical support;
- Capacity for coaching on technical aspects, IP protection, and business plan development;
- Specialized counseling on different matters related to business management;
- Development of a viable sales and marketing strategy for the product or service;

iv) Management support

- Commitment and willingness of the host university for supporting the incubator;
- The position of incubation in the corporate mission, plans and/or strategies of the host institution;
- Faculty that demonstrates strong linkages with industry;
- Expertise for business creation, including advice on legal, IPR facilitation, financial and labor matters;
- Intellectual property policy and management;
- Maximum coordination among the different premises/teams/stakeholders;
- The creation of a task force with regular meetings in order to coordinate actions;

v) Partnerships and networking

- Existence of local, regional and international research and innovation partnerships and networks;
- Evidence of partnerships with prominent organizations across programmes, including large multinationals (e.g. healthcare, telecommunications), financial institutions, professional services providers, small to large research companies, technology companies, social enterprises and charities;
- Linkages with business umbrella bodies, including the chamber of commerce, businessmen's association, etc;
- Networking opportunities, including identifying and/or making contact with mentors, peers/alumni, and potential investors.

vi) Sustainability options

- Expected social and economic outcomes/benefits
- Terms and amount of financing support available as seed capital for co-financing
- Ability to network with venture capitalists for mentoring and financial support to the startups
- Synergies created between companies and relationships that may contribute to the incubator's sustainability
- Demonstrated ability to develop a range of products or services contributing to the incubator's sustainability
- Overall sustainability strategy, demonstrating ability to generate own funds
Selection Process

An Independent Selection Panel (ISP) was constituted to evaluate the endorsed proposals. In order to maintain objectivity and avoidance of conflict of interest, the Independent Selection Panel consisted of experts who were independent of the proposal-submitting institutions/ACEs.

The ISP was asked to undertake the following tasks:

- Carry out technical assessment of the proposals via desk reviews based on the selection criteria indicated above, and shortlist qualified proposals for consideration in the next step of the process below;
- Undertake an in-depth onsite assessment, in close coordination with IUCEA, of the ACEs whose proposals were shortlisted from the first stage in order to recommend the ones to be selected as incubation centers.

In carrying out the technical assessment, attention was also given to the following aspects:

- Financial feasibility
  - Working capital in place or to be mobilized
  - Revenue expected through services, facilitation and rentals
- Regional orientation of the proposal;
- Technology commercialization

To arrive at an objective selection, it was recommended that proposals be scored on the basis of six criteria, for both the desk reviews and the site visits, as follows -- to score each of the six (6) criteria buckets on a numerical scale of 0-to-5 OR on a scale of 0-to-10:

i. Scale of 0-5 for:
   a. Existing Physical Infrastructure; and
   b. Industrial and Innovation Activity in the region.

ii. Scale of 0-10 for:
    a. High value-added differentiated services and products;
    b. Management support;
    c. Partnerships and Networking; and
    d. Sustainability Options
## SUMMARY OF THE RESULTS FROM DESK REVIEWS

<table>
<thead>
<tr>
<th>Total score by Reviewers out of 50</th>
<th>ACE-DS</th>
<th>ACEED</th>
<th>ACETLMs</th>
<th>ACCE</th>
<th>CD-T-A</th>
<th>CESAM</th>
<th>ACE-SM</th>
<th>CREATE</th>
<th>AQUAFISH</th>
<th>MAPFENZ</th>
<th>MIRCCI</th>
<th>PHARBIOCTR</th>
<th>AC</th>
<th>PITRE</th>
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<td>Ms Kajsa Hedberg</td>
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6
SITE VISITS

The second stage of the evaluation involved an in-depth and on-site assessment of the ACEs whose proposals were short-listed from the first stage. The team consisted of two industry experts with proven expertise and experience in incubation, commercialization and business start-ups. The following aspects were assessed by the team:

- Leadership and management capacity of the ACE;
- Feasibility of hosting an incubation center based in criteria already stated; and
- Existing capacity of staff, facilities and infrastructure for research, incubation and administration.

In the evaluation process, priority was given to ACEs that already had good enough products that may require improvement, promotion for wider markets and potential for business incubation and start-up. In evaluating the ACE, attention was also paid to the capacity for incubation (i.e. the process for nurturing of early stages ventures to success) and the Incubator (the facility that provides the work place). Furthermore, the onsite assessment documented the capacity or existence of linkage/involvement of the private sector as mentors, investors and buyers in the demand and supply chain. One key criteria that was considered was the capacity to obtain co-financing and ensure the long-term financial sustainability of the incubation center.
### SUMMARY OF THE Site Visits RESULTS FROM EXPERTS

<table>
<thead>
<tr>
<th>Total score by Reviewers out of 50</th>
<th>ACE-DS</th>
<th>ACEESD</th>
<th>ACEITMS</th>
<th>ARCE</th>
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<td>Prof. Fred McBagonluri</td>
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<td>Ms Kajsa Hedberg</td>
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<td><strong>Average</strong></td>
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<td><strong>Ranking</strong></td>
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<td><strong>Clusters</strong></td>
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<td>HEAL</td>
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<td>Health</td>
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</tbody>
</table>

*Based on only a single score from one (1) expert – Ms. Hedberg was unavailable for the site visits.*
CENTERS:

- ACE – DS: African Center of Excellence in Data Science, University of Rwanda
- ACE – ESD: African Center of Excellence in Energy for Sustainable Development, University of Rwanda
- ACEITLMS: African Center of Excellence in Innovative Teaching and Learning Mathematics and Science, University of Rwanda
- ARCE: The African Railway Center of Excellence, Addis Ababa University
- CDT – Africa: Center for Innovative Drugs Development and Therapeutic Trials for Africa, Addis Ababa University
- CESAAM: Center for Innovation and Agriculture-Enterprise Development, Egerton University (Kenya)
-Creates: Center for Research Advancement, Teaching Excellence and Sustainability in Food and Nutrition Security, Nelson Mandela African Institution of Science and Technology (Tanzania)
- MAPRONANO: Center for Excellence in Materials, Products Development and Nanotechnology, Makerere University (Uganda)
- PHARMBIOTRAC – Center for Pharm-Bio Technology and Traditional Technology, Mbarara University of Science and Technology (Uganda)
- PTRE – Center of Excellence in Phytochemicals, Textile and Renewable Energy, Moi University (Kenya)

Physical Assessment/Site Visit participants

Physical assessments/Site Visits were done in two separate groups as follows:

Group I:

**Dr. Moses Asom (NOTE: Ms. Kajsa Hedberg could not make it)**

Accompanied by Dr. Appiah (RSC Member) and Ms. Evelyn Musoke (IUCEA)

- Uganda – PHARMBIOTRAC and MAPRONANO
- Rwanda – ACEITLMS, ACE-DS and ACE-ESD

Group II

**Ms. Karin Ruiz and Dr. Fred McBagonluri**

Accompanied by Jonathan (IUCEA/RFU) and Dorine (IUCEA/RFU)

- Ethiopia – CDT-Africa and ARCE
- Kenya – PITRE and CESAAM
- Tanzania – CREATES
FINAL SELECTION MEETING

The Final meeting of the independent expert panel to select Incubation centers was held on 13th - 14th May 2019 at Jacaranda Hotel, Nairobi, Kenya starting at 9.00am. This meeting of the Independent Selection Panel was to enable the panel of experts discuss the results from the two groups of site visits in order to harmonize and conclude on the recommended proposals to be presented to the Regional Steering Committee for consideration.

MEMBERS PRESENT:
1. Dr. Kwadwo A. Appiah (Chairperson)
2. Ms. Kajsa Hedberg (Expert)
3. Ms. Karin Camilla Ruiz (Expert)
4. Dr. Asom Moses (Expert)
5. Dr. Fred MacBagonluri (Expert)

MIN. 1 COMMUNICATION FROM THE CHAIRPERSON

The Chairperson welcomed members to the meeting and thanked them for offering their insight and expertise to the process of selection of incubation centers. He extended his gratitude for their involvement in the site visits exercise and wished them fruitful deliberations.

MIN. 2 REMARKS BY EACH EXPERT ON SITE VISITS/DESK REVIEW AND JUSTIFICATION OF SCORING

The individual experts reported on their site visits and desk reviews mentioning the weaknesses and strengths of each of the institutions they visited. This allowed each expert to justify their scoring to the entire panel. After reviewing reports and scores from each expert, members had a lengthy discussion to guide the selection of the most deserving proposals.

MIN 3 OPEN DISCUSSION ON FINAL SELECTION METHODOLOGY BASED ON SITE VISITS SCORES

Members provided a wide range of ideas on selection methodology based on the site visit scores. Members came to the agreement that the top two scores from each group of site visits would be considered for selection while considering the need to have the selections spread across the clusters of four priority areas. After deliberations, members decided to recommend these five proposals:
• ACEESD;
• CREATES;
• PHARMBIOTRAC;
• PTRE:

• CDT-AFRICA.

The independent selection panel recommended that CDT-AFRICA and PHARMBIOTRAC (which were in the same priority area of health and were also similar in their objectives) needed to collaborate, exchange ideas and processes, share knowledge and work together. Such collaboration will help both centers realize potential synergies inherent in their approaches.

MIN 4   FINAL SELECTION

Overall, the following institutions were selected as the best five institutions based on the full process of desk reviews, site visits by two groups and deliberations at the final selection meeting.

• ACEESD;
• CREATES;
• PHARMBIOTRAC;
• PTRE:

• CDT-AFRICA.

Members recommended that although the fifth selected institution (CDT-AFRICA) could not be funded, their proposal was assessed to be one of the best and needed to be considered as a “non-funded incubation center”.

Also, members resolved that the selected proposals for incubation centers should address the recommendations provided by the ISP panel before they can complete the process of being designated to host incubation centers and receiving the associated 250,000 USD financing awards.

The members felt that for the selected incubators to be successful there would be the need for continued engagement of the experts in providing guidance to the incubators as they progress towards the objectives of commercializing innovations into companies and businesses.
General Recommendations

1. Secure a Senior-Level Business Development Specialist as part of the core Incubation Center team who must have the requisite qualifications and experience in business incubation, entrepreneurship and support of start-ups and commercialization activities;
2. Maintain strong focus on commercialization and business development;
3. Fulfilment of regulatory requirements and operational needs of the business;
4. Development of a common framework for monitoring and evaluation of the incubators together with a high-level champion who will ensure adherence to the framework -- this champion works across all incubation centers and is different from the Senior Development Specialist;
5. Benchmarking the performance of incubators against those of other world-class incubators;
6. Establish exchange programs with other global incubators for cross pollination of best practice;
7. Ensure gender balance exists within incubators;
8. Define a clear path for sustainable financing;
9. Provide detailed description of planned use of funds from this award -- majority of the budget should be allocated to incubation and business development task;
10. Compliance with existing or establish new IP policy;

Specific Recommendations

PTRE
- A complete budget with clarity on co-financing and overall financial sustainability;
- Ensure regional partnerships

CDT-AFRICA
- Engage a Senior Business Development and Commercialization person to be part of the team;
- Provide clarity on budget with more allocation to commercialization;
- Collaborate with PHARMBIOTRAC to benefit from synergies;
- Strengthen interaction with partners;
- Develop an IP policy;
- Critical to ensure gender balance.
ACEESD

- Engage a Senior Business Development and Commercialization person to be part of the team;
- Identify specific project/product/service pipeline to be commercialized;
- Provide clarity on budget with more allocation to commercialization activities -- funds should not be used to upgrade physical infrastructure;
- Critical to ensure gender balance.

CREASES

- Engage a Senior Business Development and Commercialization person to be part of the team;
- Develop an IP policy;
- Provide clarity on budget with more allocation to commercialization activities;
- Provide details on co-financing and overall financial sustainability;
- Strengthen interaction with partners.

PHARMBIOTRAC

- Imperative to implement CAMTECH commercialization methodology;
- Collaborate with CDT-AFRICA to benefit from synergies;
- Provide clarity on budget with more allocation to commercialization activities -- funds should not be used for facility remodeling;

There being no further business to deliberate on, the Chairperson officially closed the meeting of the Selection Committee of Incubation Centers at 6:30 pm.

Signed this ..........day of .............. 2019 at Nairobi, Kenya

Dr. Kwadwo A. Appiah
CHAIRPERSON, SELECTION COMMITTEE