

Research Application Summary

Internationalisation of PHARMBIOTRAC: An Eastern and Southern Africa Higher Education Centre of Excellence in “Pharm-BioTechnology and Traditional Medicine” at Mbarara University of Science and Technology

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Abstract

PHARMBIOTRAC (Pharm-BioTechnology and Traditional Medicine Center) is a newly established centre of excellence at MUST with support from the World Bank under Africa Centres of Excellence (ACE II) Programme and recruits at least 30% Africa wide with lots of visiting African and international professors and experts. Therefore, it is prudent to establish an international centre with central facility to serve this purpose. Internationalisation of PHARMBIOTRAC at Mbarara University of Science and Technology (MUST) stems from the fact that although there is an internationalisation strategy at MUST, the plan is not fully operational due to a number of other factors. The project PHARMBIOTRAC is currently implemented at MUST with a loan from The World Bank through Republic of Uganda under Eastern and Southern Africa Higher Education Centres of Excellence project “ACE II” and provided as a grant to MUST. The main objective of PHARMBIOTRAC is capacity advancement through graduate training at the level of MSc & PhD with a view to strengthening quality of postgraduate training in Eastern and Southern Africa in order to raise a critical mass of specialized and skilled human capital that can use multidisciplinary and transdisciplinary approach to advance Traditional Medicine and Pharm-Biotechnology. Activities of PHARMBIOTRAC are implemented with in collaboration with eighteen (18) partners (academia, government/non-governmental, industry/private sector) including national, regional and international institutions with MUST as the lead implementing institution/host and the centre is headed by Dr. Casim Umba Tolo as the Centre Leader/Director. The PHARMBIOTRAC International Centre will therefore help facilitate the mandate of PHARMBIOTRAC to serve the region in its quest to recruit at least 30% internationally (both students and faculty) and partly support realize the internationalisation plan of MUST as a university. This will be achieved by among others- through benchmarking best practices in regional/international universities in order to set more effective structures of internationalisation at MUST and put in place a strategy to establish an International Students/Staff Centre at MUST.

Résumé

PHARMBIOTRAC (Centre de Pharm-BioTechnologie et de Médecine Traditionnelle) est un centre d'excellence récemment établi à l'Université des Sciences et Technologies de Mbarara (MUST) avec le soutien de la Banque Mondiale dans le cadre du Programme des Centres Africains d'Excellence (ACE II) et recrute au moins 30% d'Africains avec de nombreux professeurs et experts africains et internationaux invités. Il est donc prudent d'établir un centre international avec des installations centrales pour servir cet objectif. L'internationalisation de PHARMBIOTRAC à MUST découle du fait que, bien qu'il existe une stratégie d'internationalisation à MUST, le plan n'est pas pleinement opérationnel en raison d'un

certain nombre de facteurs. Le projet PHARMBIOTRAC est actuellement mis en œuvre à MUST grâce à un prêt de la Banque mondiale, par l'intermédiaire de la République de l'Ouganda, dans le cadre du projet ACE II (Eastern and Southern Africa Higher Education Centres of Excellence) et sous forme de subvention à la MUST. L'objectif principal de PHARMBIOTRAC est le renforcement des capacités par le biais d'une formation supérieure de niveau Maîtrise et Doctorat, en vue d'améliorer la qualité de la formation supérieure en Afrique orientale et australe, afin de créer une masse critique de capital humain spécialisé et qualifié, capable d'utiliser une approche multidisciplinaire et transdisciplinaire pour faire progresser la médecine traditionnelle et la pharmaco-biotechnologie. Les activités du PHARMBIOTRAC sont mises en œuvre en collaboration avec dix-huit (18) partenaires (universitaires, gouvernementaux/non gouvernementaux, industrie/secteur privé), y compris des institutions nationales, régionales et internationales, le MUST étant l'institution de mise en œuvre/hôte principale et le centre étant dirigé par le Dr Casim Umba Tolo en tant que chef/directeur du centre. Le Centre international du PHARMBIOTRAC contribuera donc à faciliter le mandat du PHARMBIOTRAC pour servir la région dans sa quête de recrutement d'au moins 30% d'étudiants et de professeurs internationaux et à soutenir en partie la réalisation du plan d'internationalisation du MUST en tant qu'université. Ceci sera réalisé, entre autres, par l'analyse comparative des meilleures pratiques dans les universités régionales/internationales afin de mettre en place des structures plus efficaces d'internationalisation à MUST et de mettre en place une stratégie pour établir un centre international pour les étudiants et le personnel à MUST.

Current status of the PHARMBIOTRAC International centre at MUST

Dialogue on Innovative Higher Education Strategies (DIES) project is coming as one-year seed support. However, the thinking behind this project is to develop one funding ready investment plan for an international centre of PHARMBIOTRAC at MUST. This concept will therefore be implemented in 2 phases. Phase 1 will focus on objectives 1 and 2 of the concept which is directly fitting in addressing the vision of internationalisation of ACE II PHARMBIOTRAC at Mbarara University of Science and Technology and will constitute phase 1 of the project (to be achieved directly during the DIES Project period ending July, 2020). Meanwhile, as building a physical infrastructure with a central facility to serve as international centre can take years (a long-term investment), objective 3 and 4 can be considered as phase 2 of this project with only key activities implemented as pilots.

Funding status and fundraising strategy for the PHARMBIOTRAC International centre at MUST

This project has funding for Phase 1 by the host project PHARMBIOTRAC of a tune of 10.000USD. The Phase 2 is integrated in this proposal to show the bigger picture of where the phase 1 DIES project is leading to. This is important to show that this project phase 1 leads to the phase 2. The phase 2 will be funded through fundraising, and sharing this concept with potential interested funders / partners during and beyond the DIES period ending in July 2020.

Project relevance

Establishing PHARMBIOTRAC International Centre at MUST is critical in coordinating the activities of the centre in collaboration with eighteen (18) other partners/stakeholders coming from national, regional and international institutions (including academia, government/non-governmental, industry and private sector) with MUST as the lead implementing institution. Besides, at least 30% of all the graduate students enrolled on PHARMBIOTRAC programmes at MUST are international students and they need at least a central facility to serve their international needs and other challenges e.g. orientation, settling in support, intercultural communication and management as well as networking.

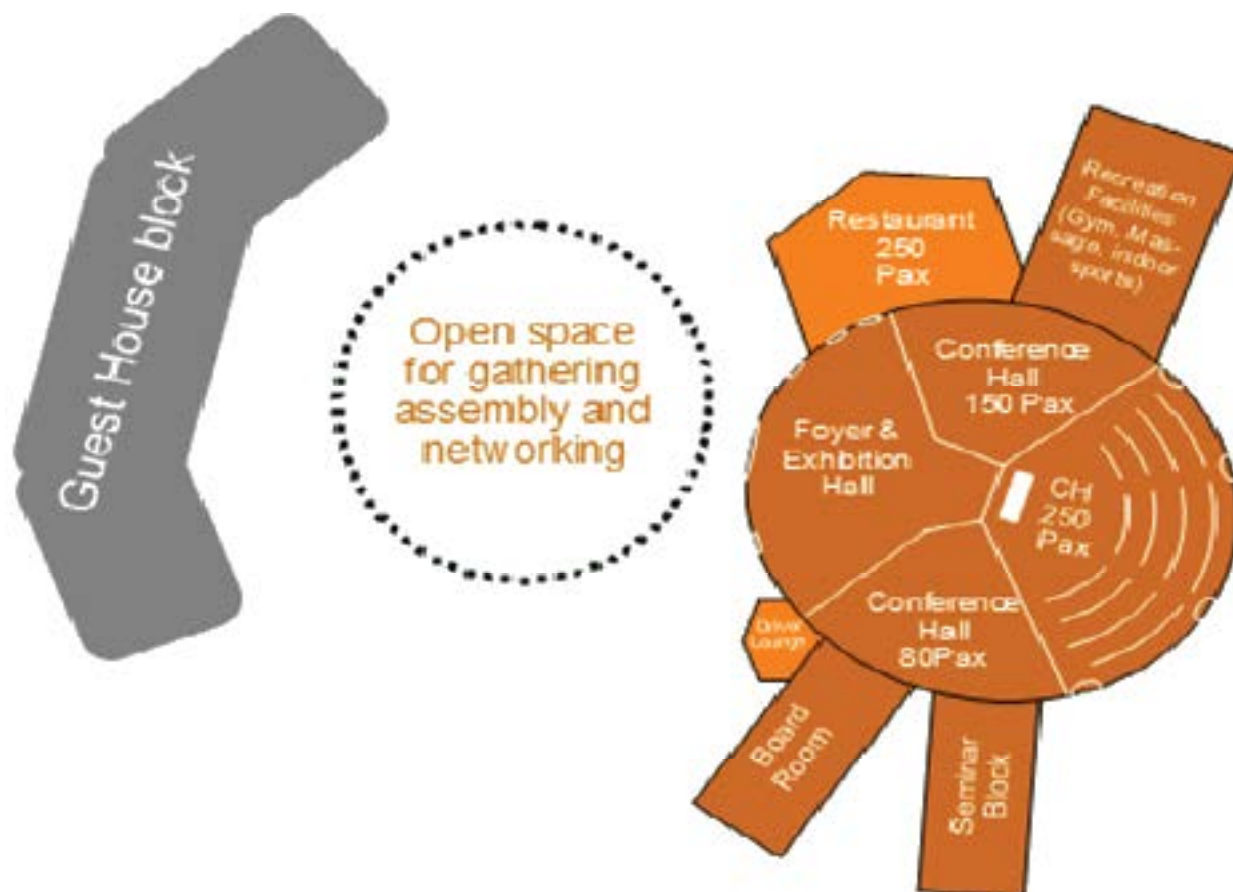


Figure 1. Sketch of the PHARMBIOTRAC International centre at MUST

In light of the above, the DIES Project (Management of Internationalization 2019-20) is extremely important for realizing Internationalisation strategy of MUST. The concept of building PHARMBIOTRAC international centre at MUST is an ideal opportunity for the university to effectively and efficiently coordinate several international partnership activities. It will further help manage processes and tasks of internationalisation with regard to not only PHARMBIOTRAC activities but also that of Mbarara University as a whole. It is a capacity building opportunity for staff to set up more effective structures of internationalisation at Mbarara University of Science and Technology (MUST).

Project goals

This project will be implemented in 2 phases. Phase 1- to be implemented during the DIES project period (ending July, 2020) and phase 2- as a long-term investment.

Phase 1 Objectives (during the DIES project period ending July, 2020)

- 1) Develop one funding ready investment plan for an international centre of PHARMBIOTRAC at MUST
- 2) Develop and enhance visibility and international partnerships/networks of PHARMBIOTRAC and MUST at large.

Phase 2 Objectives (a long-term investment plan)

- 3) Increase and support international student recruitment and alumni relations at PHARMBIOTRAC and MUST at large.
- 4) Promoting international diversity and academic mobility for both, PHARMBIOTRAC and MUST faculty and students

Expected deliverables of this project in the period ending July, 2020

Deliverables for phase 1 are;

Develop one funding ready investment plan for an international centre of PHARMBIOTRAC at MUST.

- Funding investment plan- ready to be pitched to investors and international donor community (Fundraising tool),
- Pitch deck presentation ready to be used for presenting to wider audience (awareness / and introduction tool to interested audience,
- Funder matrix, comprising of funders who could be interested in supporting construction/ physical infrastructure of the international PHARMBIOTRAC centre of MUST.

Develop and enhance visibility and international partnerships/networks of PHARMBIOTRAC and MUST at large.

- Communication strategy developed,
- Visitor information booklet/manual developed,
- Fine-tuned PHARMBIOTRAC Brand (identity and visibility of the centre),
- Signed partnership agreements (MoUs with international partner).

Deliverables for phase 2 are;

Increase and support international student recruitment and alumni relations at PHARMBIOTRAC and MUST at large.

- Student recruitment strategy developed,
- Alumni engagement strategy and database developed,
- Alumni tracer study framework and tools developed.

Promoting international diversity and academic mobility for both, PHARMBIOTRAC and MUST faculty and students

- Mobility strategy both inbound and out bound to promote collaboration with international partners developed,
- Stakeholder matrix of partner institutions with identified areas of engagement at PHARMBIOTRAC / MUST developed,
- Database of faculty interested to teach / research at PHARMBIOTRAC / MUST (inbound and outbound) developed.

None-deliverables of this project in the period ending July, 2020

- The physical establishment of the centre is not expected within the DIES project period (ending July, 2020),
- Funding might or might not be acquired during the project period,
- Not all partnerships agreements might be successfully established within the DIES project period (ending July, 2020).

Stakeholders

The stakeholders of this project are diverse and they include:

a) Stakeholders internal to MUST:

- Mbarara University Administration (comprising members of the Top Management),
- Mbarara University Faculty Deans, Directors of institutes,
- Mbarara University Heads of Relevant Departments, and Academic Programme Coordinators,
- Mbarara University Student Guild Representatives, International Representatives.

b) Stakeholders external to MUST:

- Ministry of Education and Sports (MoES), Uganda
- Ministry of Science Technology and Innovations (MoSTI), Uganda
- Members of University Council, MUST
- Parents/guardians of students
- Funding bodies
- Industry partners
- Traditional Medicine Practitioners and Indigenous Knowledge holders

c) Collaboration partners of PHARMBIOTRAC (18 of them):

i) National Partners

- Universities: Makerere University, Bishop Stuart University, Gulu University
- Industry: CIPLA Quality Chemicals Limited (CIPLAQCL), Movit Products Ltd, Kazire Health Products,

ii) Regional Partners

- Universities: University of Malawi, Malawi, University of Jos, Nigeria, Gezira University, Sudan

iii) International Partners

- NGOs: ANAMED International, Germany, SNV, Netherlands
- Universities: University of Michigan, USA and TDU, India

The above stakeholders are already implementing the activities of PHARMBIOTRAC with MUST as the lead implementing institution. Stakeholders internal to MUST comprising members of the Top Management led by the Vice Chancellor are already kept aware of this project and are supporting the concept of developing and establishing a PHARMBIOTRAC international centre at MUST with central facility to serve international students/staff at MUST. Similar efforts are on the way to actively engage faculty, deans, directors of institutes, directorate of research and graduate studies, as well as heads of relevant departments, and academic programme coordinators of the MUST for buy-in of the concept and to support the establishment of the international centre. This will immediately be followed by direct engagement with MUST students' guild representatives and international students' representatives. Among external stakeholders, Ministry of Education and Sports (MoES), Uganda is the line ministry coordinating activities of ACE II at national level and works closely with other ministries through their respective representations on the national steering committee of the project. Other external stakeholders with vested interests include; Ministry of Science, Technology & Innovation (MoSTI), members of MUST university council, parents/guardians of students, funding bodies (e.g. World Bank), industry/private partners as well as Traditional Medicine Practitioners and Indigenous Knowledge holders who are already working closely with PHARMBIOTRAC.

Collaboration partners of PHARMBIOTRAC are also regarded among external stakeholders and they play very important role in internationalization of PHARMBIOTRAC. For example, they take part in hosting students during internship, joint supervision, exchange programme, guest lectures, research collaboration etc. Some of these partners have been already earmarked for benchmarking on how internationalization can best be achieved at institutional level. These partners include; Makerere University, Bishop Stuart University, Gulu University, CIPLA Quality Chemicals Ltd (CIPLAQCL), Movit Products Ltd, Kazire Health Products Ltd, University of Malawi, Malawi, University of Jos, Nigeria, Gezira University, Sudan, ANAMED International, Germany, SNV, Netherlands, University of Michigan, USA and Transdisciplinary University (TDU), Bangalore India.

Table 1. Four categories of stakeholders and their managements

Category group	Management
High Interest and High power (green)	Manage Closely: Fully engage these stakeholders, and make the greatest efforts to satisfy them.
High interest and low power (light green)	Keep Informed: adequately inform these stakeholders, and talk to them to ensure that no major issues are arising. People in this category can often be very helpful with the detail of your project
High Power and low interest (brown)	Keep Satisfied: put enough work in with these stakeholders to keep them satisfied, but not so much that they become bored with your message.
Low power and low interest (grey)	Monitor these stakeholders, but don't bore them with excessive communication.

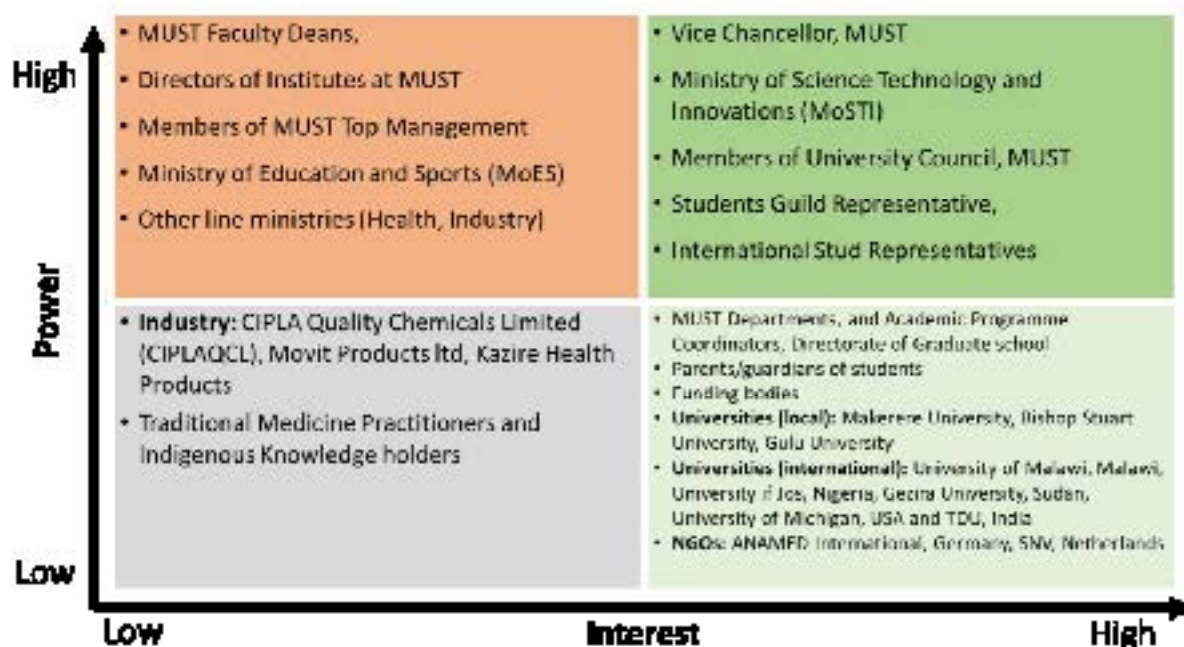


Figure 2. Stakeholder Power Grid

Resources: Budget and Cost/Benefit

Financial resources: US\$10,000 will be required from PHARMBIOTRAC small grants and will be used to cover costs of development of my project. However, additional funding will be needed to cover cost of e.g. benchmarking best practices in regional/international universities in order to set more effective structures of internationalisation at MUST.

Human resources: Project Assistants will be required in collecting important data/perform other administrative duties.

IT resources und further equipment: Secure and reliable internet connectivity/data bundle, laptop computer, etc. will be required.

Others: Telephone communication/ internet, stationery, etc. will also be required.

Table 2. DIES Budget

DIES Budget				
Activities / Items	Unit type	Units	Units cost	Total USD
Phase 1: During the DIES project period ending July 2020				
Objective 1: Develop one funding ready investment plan for an international centre of				
Funding investment plan – ready to be pitched to Investors and international donor community (Pre-drafting)	residential workshop and Consultations	1	4,000	4,000
Pitch deck presentation ready to be used for presenting to wider audience (awareness / and introduction tool to Funder metric, comprising of funders who could be interested in supporting construction/ physical Infrastructure of the International PHARMBIOTRAC centre of MUST	desk work	1	500	500
Sub total				5,000
Objective 2: Develop and enhance visibility and international partnerships/networks				
Communication strategy	residential workshop	1	3,000	3,000
Fine tune the PHARMBIOTRAC Brand concept	residential workshop	1	2,000	2,000
Drafting, Negotiating and signing of partnership agreements (MOUs)	Benchmarking	2	3,000	6,000
Subtotal				11,000
Total Phase 1				16,000
Phase 2: A long term Investment Plan				
Objective 3: Increase and Support International Student Recruitment				
Student recruitment strategy	residential workshop	1	7,500	7,500
Alumni engagement strategy and database,	service & workshop	1	3,000	3,000
Developing an alumni tracer study framework and tools	residential workshop	1	4,000	4,000
				14,500
Objective 4: Promoting International Diversity and Mobility				
Develop mobility strategy both inbound and out bound to promote collaboration with international partners	residential workshop	1	4,500	4,500
Stakeholder matrix of partner institutions with identified areas of engagement at PHARMBIOTRAC / MUST	desk work / meetings	1	2,000	2,000
Database of faculty interested to teach / research at PHARMBIOTRAC / MUST (Inbound and outbound)	desk work	1	3,000	3,000
Sub total				9,500
Total Phase 2: Operation				24,000
Administration and Equipment (Utilised in Phase 2)				
Director (12%)	Month	12	354	4,250
Project Manager (30%)	Month	12	893	10,000
National Expert (50 days)	Man days	40	350	14,000
Sub Total: Human Resources				28,250
Laptop computers	Piece	1	1,500	1,500
Projector	Piece	1	1,200	1,200
Consumables (printer toner, paper, communication)	set	1	3,000	3,000
Sub Total: Equipment and consumables				5,700
Total: Administration				33,950
Grant Total				73,950

Table 3. Challenges or risks with possible solutions

Possible Risks	Likelihood	Mitigation
Political instability	Medium	Regional cooperation
Lack of regional qualification network to encourage credit transfer	High	International accreditation of curriculum
Lack of funding support for mobility	Medium	Reaching out to funders widely, allow funders to partially support the concept

Major activities: Time planning

Each milestone represents the end of a specifically determined time section with defined tasks. A milestone is an event of particular significance with planned project results and a planned date. They can only be passed once and are important points for evaluation and further planning.

Table 4. Time planning

Activity	Project Month July, 2019 – June, 2020											
	7	8	9	10	11	12	1	2	3	4	5	6
Phase 1: During the DIES project period ending July 2020												
Objectives 1: Develop one funding ready investment plan for an international centre of PHARMBIOTRAC at MUST Develop and enhance visibility and international partnerships/networks of PHARMBIOTRAC and MUST at large												
Funding investment plan – ready to be pitched to investors and international donor community (Fundraising tool)	x	x	x	x	x	x	X	x	x	x	x	x
Pitch deck presentation ready to be used for presenting to wider audience (awareness / and introduction tool to interested audience)											x	x
Funder matrix, comprising of funders who could be interested in supporting construction/ physical infrastructure of the international PHARMBIOTRAC centre of MUST								x	x	x	x	x
Objectives 2: Develop and enhance visibility and international partnerships/networks of PHARMBIOTRAC and MUST at large												
Communication strategy				x	x	x	X	x	x			
Fine tune the PHARMBIOTRAC Brand concept	x	x	x	x								
Drafting, Negotiating and signing of partnership agreements (MoUs)	x	x	x	x	x	x	X	x	x	x	x	x
Phase 2: A long Term Investment Plan												
Objectives 3: Increase and support international student recruitment and alumni relations at PHARMBIOTRAC and MUST at large												
Student recruitment strategy								X	x	x	x	x
Alumni engagement strategy and database	x	x	x	x	x	x						
Developing an alumni tracer study framework and tool.	x	x	x	x	x	x	X	x				
Objectives 4: Promoting international diversity and academic mobility for both, PHARMBIOTRAC and MUST faculty and students												
Develop mobility strategy both inbound and out bound to promote collaboration with international partners					x	x	X	x	x	x	x	x
Stakeholder matrix of partner institutions with identified areas of engagement at PHARMBIOTRAC / MUST					x	x	X	x	x			
Database of faculty interested to teach/research at PHARMBIOTRAC /MUST (inbound and outbound)	x	x	x	x	x	x						

Table 5. Further Activities (breakdown to achieve milestones)

Activity – Milestone	Stakeholders	Time frame	Expectations
To develop and enhance visibility and international partnerships/networks of PHARMBIOTRAC and MUST at large			
Communication strategy	<ul style="list-style-type: none"> International faculty and students International institutions Industry/funding bodies 	• October, 2019 - March, 2020	Communication strategy to promote visibility of PHARMBIOTRAC internationally developed
Fine tune the PHARMBIOTRAC Brand concept	<ul style="list-style-type: none"> International Relations Officer of MUST Public Relations Officer of, MUST, Communication Officer of PHARMBIOTRAC University Planner 	July, 2019 - October, 2019	Branding of PHARMBIOTRAC achieved
Drafting, Negotiating and signing of partnership agreements (MoUs)	<ul style="list-style-type: none"> University Legal Officer International Relations Officer of MUST Vice Chancellor/ President of the partner institutions University Secretary 	July, 2019 - June, 2020	Partnership agreements (MOUs) between PHARMBIOTRAC/ MUST and international partners signed
To increase and support international student recruitment and alumni relations at PHARMBIOTRAC and MUST at large			
Student recruitment strategy	<ul style="list-style-type: none"> International students International Relations Officer Academic Registrar Director Graduate School 	January, 20120 - June, 2020	International students' recruitment strategy developed for MUST Realistic goals/targets for number of students to be recruited for each programme set
Alumni engagement strategy and database	<ul style="list-style-type: none"> Academic Registrar Director Graduate School International Relations Officer Dean of Students 	July, 2019 – December, 2019	Alumni database developed Alumni engagement events planned Contacts established with key alumni
Developing an alumni tracer study framework and tool.	<ul style="list-style-type: none"> Academic Registrar Director Graduate School International Relations Officer Dean of Students 	July, 2019 – February, 2020	Alumni tracer study tool developed
To promote international diversity and academic mobility for both, PHARMBIOTRAC and MUST faculty and students			
Develop mobility strategy both inbound and outbound to promote collaboration with international partners	<ul style="list-style-type: none"> Academic Registrar Director Graduate School International Relations Officer Students Guild Representatives Faculty Deans and Institute Directors 	November, 2019 – June, 2020	The status quo report on both inbound and outbound students and faculty drafted A mobility strategy for both inbound and outbound to promote collaboration with international partners developed
Stakeholder matrix of partner institutions with identified areas of engagement at PHARMBIOTRAC / MUST	<ul style="list-style-type: none"> Funding institutions Industry partners International universities Traditional Medicine Practitioners and Indigenous Knowledge holders 	November, 2019 – March, 2020	Stakeholder matrix for partner engagement developed
Database of faculty interested to teach/research at PHARMBIOTRAC /MUST (inbound and outbound)	<ul style="list-style-type: none"> Faculty and students Faculty Deans and Directors of Institutes 	July, 2019 – December, 2020	Database of faculty, students and researchers for both inbound and outbound developed

To develop one funding ready investment plan for an international centre of PHARMBIOTRAC at MUST

Funding investment plan – ready to be pitched to investors and international donor community (Fundraising tool)	<ul style="list-style-type: none"> • Members of University Top management (i.e. Vice Chancellor, University Secretary, Dean of Students, etc. • Funding Institutions • Students Representatives 	July, 2019 – June, 2020	An investment plan for international centre of PHARMBIOTRAC at MUST developed
Pitch deck presentation ready to be used for presenting to wider audience (awareness / and introduction tool to interested audience)	<ul style="list-style-type: none"> • Members of University Top management (i.e. Vice Chancellor, University Secretary • Funding Institutions/donors • Ministry of Education and Sports • Ministry of Science, Technology and Innovation 	May, 2020 – June, 2020	Pitch deck presentation developed Brochure ready to be used for wider audience
Funder matrix, comprising of funders who could be interested in supporting construction/ physical infrastructure of the international PHARMBIOTRAC centre of MUST	<ul style="list-style-type: none"> • Members of University Top management (i.e. Vice Chancellor, University Secretary • Funding Institutions/donors • Ministry of Education and Sports • Ministry of Science, Technology and Innovation 	February, 2020 – June, 2020	Funding matrix, comprising of potential funders / donors interested physical infrastructure development of the international PHARMBIOTRAC centre of MUS T developed

Evaluation and Monitoring

- Formulate the evaluation criteria and mechanisms to support the project success
- List out the unexpected outcomes of the project which was revealed during the evaluation

Outlook and Sustainability

- Roadmap for the further development of the project
- The mechanism (including personnel and budget) for the follow up of the project

Acknowledgement

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