Annual Plan 2020/2021

Narrative plan with focus on objectives/expected results (impact, outcome and outputs)

Building systems for high quality, relevant research & innovation in Tanzania

Tanzania Commission for Science and Technology

June, 2020

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OVERALL ANNUAL PLAN

AGGREGATED SUMMARY OF ALL SUB-PROGRAMMES AND PROJECTS

Programme Title: ***Building systems for high quality, relevant research and innovation in Tanzania***

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1. Executive summary of programme

The Tanzania Commission for Science and Technology (COSTECH) has signed official agreement with Swedish International Development Cooperation Agency (Sida) to support Research Cooperation Programme entitled *" Building Systems for High Quality Relevant Research and Innovation in Tanzania"* for the period of five years started in July, 2015. Five sub-programmes namely Research Funding, Research Management, Research Communication, Innovative Clusters and Innovation funding have been supported. Up to May, 2020 the programme has received a total of **SEK 31,010,195** equivalent to **Tsh 8,341,848,038.** Funds not received **SEK 17,205,069** equivalent to **Tsh 4,820,889,033** using the rate (273) used during proposal submission**.** For the year 2020/2021 COSTECH is requesting **SEK 21,692,093** equivalent to **Tsh 5,921,941,362** of which carry forward funds is **Tsh 1,238,510,993** and **Tsh 4,683,430,369** being new funds. Below is the summary of activities implemented and those left to be done for the year 2020/2021 for each sub-programme.

Research Funding: Research funding is geared towards the generation of fact-based knowledge that contributes to the attainment of Tanzania's development vision 2025. The main objective of the subprogram was to improve capacity for research, training and production in Research and Development institutions leading to utilization of research that informs decision-making and addresses national priorities, by 2020 mainly targeting R&D Institutions. It has two specific objectives namely to establish a functional and robust framework for conduct of relevant high quality research through postdoctoral programs and research projects by 2019 and to mobilize resources for support of research and technologies addressing sustainable development priorities by 2020. The following has been done to achieve the objectives; in consultation with stakeholders the subprogram has developed National Postdoctoral Research Framework (NPRF) which has been completed and 500 copies has been printed; the framework has been operationalize by issuing call for postdoctoral fellowship of which 6 postdoctoral research projects are on-going; the framework was further sensitized to research players in R&D and higher learning institutions of both Mainland and Island and 2 institutions have adopted the framework; the subprogram has also supported 20 research projects (16 competitive and 4 commissioned) which are ongoing expect to end by June, 2021; further the subprogram has supported 113 young researchers (which made up 21 research teams) from R&D and HLIs from both public and private institutions and capacitated them in writing fundable research proposals and be able to compete with other researchers around the world; 24 proposals have been developed and 2 teams have managed to win research funds; the subprogram has managed to developed 2 bulletin which summarizes the research results in simple language to allow non-scientists community to understand, use them and appreciate research.

For 2021 the subprogram want to upscale 2 supported research projects which have shown to have impact to the society, continue with the capacity building to young researchers, continue monitoring progress of 26 ongoing research projects including assessing the beneficiary of training on writing wining research proposals and support 3 institutions to adopt NPRF. The

subprogram is requesting a total of **SEK 7,443,075** equivalent to **Tsh 2,031,959,363** of which **Tsh 237,648,560** is carry forward and **Tsh 1,794,310,803** new funds.

Research Management: In ensuring quality and standards of research in the country the skills and competencies of COSTECH staff that manage research need to be of competitive standards so that these are matched to the expected outcomes. The overall objective of the subprogram is to improve the coordination capabilities of COSTECH to manage and promote quality research, in particular research integrity including Monitoring and Evaluation in R&D institutions by 2019 targeting primarily COSTECH and secondarily to R&D Institutions. Its specific objective includes to improve research management systems and capabilities at COSTECH to facilitate production of high quality research and innovation that addresses socio-economic challenges in Tanzania by 2019 and to establish competitive and robust frameworks for research integrity and M&E for advancing quality conduct of research and management in Tanzania by 2019.

The following has been done; with technical support from the Swedish Research Council (SRC) 15 staff have been capacitated on research grants management including attending reviews' panel meetings as part of improving NFAST management, their attendance has helped to review grants manual and its managements systems (including incorporation of gender aspects in research and innovation, developing gender policy, developing reviewers guideline); 6 staff attended hands on training on communicating science to non-scientist the training has help in packaging research and innovation outputs to be used by wider stakeholders, increase visibility of COSTECH through using online platforms, enhanced link with media and branding of COSTECH material; 3 staff have attended advanced training on programme management the training has helped in proper management of research and innovation programme and has manage to attract funds from two partners (IDRC and World bank); Commission's Financial system has been improved and Human Resource Information Systems has been automated. Trainings were availed to COSTECH staff in the areas of e-procurement, contract management, monitoring and evaluation, change management, strategic human resource, administration, finance, ICT, strategic thinking and others. All the training opportunities availed were geared at ensuring quality and standard performance in operational processes as well as ensuring that COSTECH achieve its objectives. With the support from SPIDER the Research Management System (for calls management and research registration) has been developed and is operational. In consultation with national stakeholders and SRC the programme has developed 2 frameworks and a manual namely National Research Integrity Framework, National Research and Innovation Monitoring Framework and Research and Innovation Grants Manual a total of 500 copies have been printed for each for wider dissemination. The two frameworks have been sensitized to R&D and HLIs of both public and private in both Mainland and Island for their adoption. All Zanzibar HLIs and R&Ds have been capacitated on how to establish ERBs/RECS for Mainland only Mzumbe University has been capacitated, the rest of the institutions will be capacitated in 2021.

For 2021 the subprogram will do the following activities; training to COSTECH staff in the areas of quality management system, risk management, administration and performance

management, financial management, research translation, monitoring and evaluation, scientometrics, resource mobilization, data management, review of COSTECH Strategic Plan, develop 4 framework on center of excellence, research chairs, institutional research and innovation M&E and resource mobilization, establishment of 4 ethical review boards and finalize and disseminate National Research Priorities Areas document. The subprogram is requesting a total of **SEK 3,127,014** equivalent to **Tsh 853,674,716** of which **Tsh 496, 203,262** is carry forward funds and **Tsh 357,471,454** new funds.

Research Communication: The subprogram aimed at popularizing STI and dissemination of scientific and technological information. It popularize science and technology at all levels including the general public; acquire, store and disseminate scientific and technological information; organize or sponsor conferences, symposia, meetings, seminars or workshops; publish in newspaper, journal or periodical designed to promote interest in science and technology development and transfer; and acquire and analyse information on alternative sources of technology and its delivery to users. The objective of the subprogram was to increase use of evidence-based knowledge and technologies for legislation, policy and programme decision-making that contributes to sustainable development, by 2020. For the past five years, the following activities has been archived: trained 248 (89 females) science communicators who include editors, researchers and journalists; conducted 3 Annual STI Conferences which brought together more than 1,000 participants who include decision and policy makers, researchers, academicians, entrepreneurs, innovators, students and the general public; organised and attended more than 24 annual exhibitions where research findings and innovation products were showcased and disseminated; organized and facilitated 8 STI fora/dialogues; produced and broadcasted 12 STI documentaries, more than 360 STI TV/radio news programmes were aired; produced more than 1,250 news and feature articles were in different newspapers; printed and disseminated a total of 15,510 knowledge products; renovated and equipped the room for knowledge studio, restructured and maintained the new COSTECH website; equipped the COSTECH library as well as developed the library management system and linked to it a total of 6 R&D and higher learning library institutions, developed National Institutional repository (hub) and linked to it a total of 8 institutional repositories from R&D and higher learning institutions.

For the year 2020/21, the Research Communication sub programme will continue to implement the planned activities that have been implemented since the inception of Sida support in financial year 2015/16. Some of activities such as development and installation of Institutional Repository (hub); renovation of the knowledge laboratory room and were delayed due to procurement processes while other activities such as promoting and motivating local researchers to publish in reputable journals and establishment and maintenance of Research Grants Management system are added to existing activities.

The following activities will be implemented in the year 2020/21: conduct a seminar to policy and decision makers on the use of evidence based for decision making; training of at least 40 researchers and/or media personnel on research communication; production of one (1) STI Documentaries/ 2-3 media programs and 3-4 print materials; maintenance of

knowledge studio (train at least 2 administrators and other 3 staff of knowledge studio on multimedia); facilitate training to promote and motivate local researchers to publish in reputable journals; installation and maintenance of Institutional Repositories (IRs) by connecting additional 10 - 15 Repositories from R&Ds and HLIs to COSTECH Repository (hub); maintenance of COSTECH website; facilitate 2- 3 STI fora/dialogues, and establish and maintain Research Grants Management (RGM) system. The subprogram is requesting a total of **SEK 2,607,548** equivalent to **Tsh 711,860,724** of which **Tsh 105,121,507** is carry forward funds and **Tsh 06,739,217** is new funds.

Innovative clusters: It focuses to establish collaboration between academic institutions, entrepreneurs and government authorities in a so-called Triple Helix configuration. Through this format entrepreneurs will get assistance from research and higher education institutions to do science and technology supported innovations. The subprogram will also involve governmental authorities in order to safeguard a mutual alignment of innovations to policy-goals and of policies to facilitate innovation. With such cooperation programme aim at facilitating innovations that contributes to all three aspects of sustainable development, the social, the environmental and the economic. The program has conducted baseline survey for 15 Clusters, laid out a foundation for ICT use as enabler to cluster development; various trainings and awareness creation seminars to clusters, clusters facilitators and cluster stakeholders were conducted, project coordinating institutions were capacitated on cluster coordination and management and also signed a memorandum of understanding with Clusters and their respective LGAs in order to implement the project and facilitate triple helix linkage. Three potential tools (Cluster Research & Innovation Model (CRIM), M&E Framework and Technology and Innovation Assessment guideline) were developed and put into operationalization. The project also has managed to establish cluster development committees for each of the 15 clusters. Furthermore, cluster interventions has started where by fundable business plans were prepared for each cluster and minor investments to common cluster challenges were done.
For 2020/2021 the programme will continue to accomplish activities remained from previous financing years which mainly include; Development of the remaining cluster support guidelines, engagement of PhD and Masters students doing research in Clusters, and advocacy of Cluster development initiatives to stakeholders, decision makers and to the public. In addition to that the program will facilitate operationalization of 5 cluster guidelines, conducting Monitoring, evaluation and learning to clusters, stakeholders and project coordinating institutions as well as preparing a full proposal for continuation, replication and scale up. The subprogram is requesting a total of **SEK 2,452,445** equivalent to **Tsh 669,517,412** of which **Tsh 399,537,664** is carry a forward funds and **Tsh 269,979,748** new funds.

Innovation fund: This sub programme contributes to the buildup of the National Innovation System in Tanzania through the strengthening of the COSTECH NFAST Innovation Fund.

The main focus is to create a learning process within COSTECH on how to promote innovations. The model chosen is to encourage collaboration between research institutions, entrepreneurs, communities and government authorities in a so-called Quadruple Helix configuration. Through this format entrepreneurs and/or innovators will get assistance from research and higher education institutions to do science and technology supported innovations. COSTECH has already developed and reviewed a Grants manual for innovation, specifying eligibility, forms and scope of innovation projects. The manual was used to guide a granting process of 17 innovation projects as a pilot program to test it in relation to granting of innovation project proposals as well as facilitating the knowledge development within the projects. The subsequent project monitoring, evaluation and learning processes is being finalized. For 2020/2021 this subprogram expects to continue supporting Innovation activities in the country by granting at least 200 collaborative innovation projects targeting beneficiaries from previous Sida, HDIF and MAKISATU support. As the supported projects are approaching the end, it is expected that some of the resulted prototypes and innovations have established a promising indication for a big societal impact when they receive more support for commercialization or upscaling. The subprogram is requesting a total of **SEK 4,670,070** equivalent to **Tsh 1,274,929,147** of which no carry forward funds and **Tsh 1,274,929,147** new funds.

COSTECH is cognizant of the fact that building a knowledge-based economy cannot be achieved by a single organization, as matters of STI are cross cutting. COSTECH works closely with partners in public and private sectors, non-governmental, national and international organisations and individuals to realize its objectives. The implementing partners from Sweden include; School of Natural Sciences, Technology and Environmental Studies (Södertörn University), Swedish Research Council and Department for Computer and Systems Sciences (DSV) at Stockholm University (SU).

2. General objectives and expected results 2015-2021

COSTECH through implementing this programme will be able to establish a coordinated and resourced internal research and innovation system that improves standards of performance and contributes to quality relevant research and innovation for Tanzania's socio-economic development.

In order to achieve the mentioned overall objectives, the following specific objectives should be addressed:

1. To improve capacity for research, training, production in **Research and Development institutions** leading to utilization of research that informs decision-making and addresses national priorities, by 2020. (Target Group – R&D Institutions)

2. To improve the coordination capabilities of **COSTECH** to manage research, in particular Monitoring and Evaluation and Research integrity in R&D institutions by 2019. (Target Group: primarily COSTECH and secondarily R&D Institutions)

3. To increase use of evidence-based knowledge and technologies for legislation, policy and programme **decision-making**, that contributes to socio-economic development, by 2020. (Target Group: Primarily decision makers and enterprises and secondarily implementing development partners and the scientific community)

4. To develop a method for replication and scale-up of competitive and innovative clusters in the emerging knowledge society of Tanzania.

5. To strengthen the national innovation system in Tanzania by 2020

In the five years COSTECH intends to contribute to the following outcomes through its initiatives:

1.1 Progressive adoption of a national postdoctoral research framework by R&D institutions (4-5 per annum) by June 2019 [Yr 1framework, Yr 2-5 adoption]

1.2 Increased implementation of the postdoctoral research framework by R&D institutions (3-4 team projects every two years) by June 2019 [Yr 2 – 4]

1.3 Increased amount of national support for research and innovation

1.4 Increased funding for research projects

1.5 Increased products and services (10-20) from R&D institutions that address sustainable development priorities by June 2019 [Yr 3-5]

1.6 Increased external support to research and innovation in R&D institutions by 20% of Government funding [Yr 3-5]

1.7 Increased support with partners in conduct of mutual research priorities (2-3 new partners) by 2020 [Yr 2-5]

2.1 Integration of STI in formulation of national development targets (1 programme) by June 2016

2.2 Increased achievement of national development targets utilizing STI (2-3) by 2020

2.3 Increased standards of research in 20 – 30 R&D institutions by 2020

2.4 Increased R&D institutions implementing M&E framework, at least 40% of all R&D institutions by 2020 [Yr 1, framework and baseline, Yr 2-5 implementation]

2.5 Improved effectiveness in research management by use of ICT in 30 – 40 R&D institutions by 2018

2.6 Target 2: Clusters and LGAs trained to use the Cluster research model

3.1. Increased use of scientific evidence in decision-making processes at Central and Local government levels (2) by 2020

3.2. Use of STI data and information to [promote] public dialogue related to specific sustainable development issue in 2 policy areas by 2020.

3.3 Increased [availability] of STI knowledge products for a non-technical audience by 2018

3.4 Increased coordination of research by R&D institutions over an ICT platform by 2017

4.1 Increased Capacity for COSTECH and SIDO to promote govern and manage innovative cluster interventions by June 2020

4.2 Enhanced capacity in Regional and Local government Authorities (LGAs) in the implementation of innovative clusters initiatives

4.3 Enhanced sustainable competitiveness of relevant innovative cluster products and services by June 2020

4.4 Develop and disseminate the cluster research and Innovation model among clusters and academic/research institutions

4.5 Building ICT-support for cluster development by June 2020

5.1 Support functioning of innovation fund with good governance, effective management of the grants process and accountability in financial management by 2020

5.2 Granting 17 cooperative innovation projects (2 large and 15 small grants) by 2020

3. Summary of annual targets 2020-2021

In this implementation period COSTECH has planned to achieve the following targets:

A. Objective 1: To improve capacity for research, training, production in **Research and Development institutions** leading to utilization of research that informs decision-making and addresses national priorities, by 2020. (Target Group – R&D Institutions). Under this objective the following activities will be implemented:

1.1 Adoption of framework by 3-5 institutions (survey of 8): In this planning period, About 500 copies of the framework documents will be distributed to all HL and R&D institutions. In order enhance the adoption of the framework the training to heads of Institutions will be conducted to ensure that their institutional frameworks are aligned with the National framework. It is expected that, the framework will be adopted by at least 3 R&D/HL institutions by June 2021.

1.2 6 postdoctoral projects supported: In this planning period, monitoring of the supported postdoctoral projects will be conducted. The disbursement of second installment will be done on the first half of 2021/22 following the receipt of progress report of the first installment and successfully monitoring and evaluation report.

1.3 Funding remittance increased by 5%: COSTECH hosts the Government mechanism for funding research and innovation, the National Fund for Advancement of Science and Technology (NFAST). Increased efficiency of NFAST operations and production of quality outputs that contribute to national objectives is the key to influencing Government to increase support to the fund. Together with other development partners Sida has been supporting the review and improvement of the NFAST administration. In 2018 /2019 COSTECH issued call to support research and innovation, about 84 projects were successful for support. In 2020/2021 COSTECH will monitor the progress of the ongoing supported projects and will administer call and process 4 commissioned research and upscale 2 research projects which have shown promising results supported by three partners; one from NFAST, 3 from IDRC and 2 from Sida. COSTECH will also managed funds for two research chairs supported by NRF South Africa for the period of five years. The Commission will continue to solicit funding from other sources to support research and innovation projects through the NFAST window.

1.4 Monitor and evaluate effectiveness of processes: For this financial year COSTECH, continue operationalize the use of revised Research and Innovation Grant manual and Research Management System to guide the funding processes and monitoring mechanisms in order to keep track on the implementation of the funded projects.

1.5 Support 16 competitive and 4 commissioned research in line with National priorities: In this planning period, monitoring of the projects progress will be conducted. Thereafter, the disbursement of second installment will be done on first half of 2020/21 following the receipt of progress report of the first installment and successfully monitoring and evaluation report.

1.6 Target- External funds mobilized 10-20% of government subvention: Sida and HDIF have supported COSTECH to improve NFAST processes which include incorporation of the innovation window; therefore it is expected that the gained support, experience and the developed manual will help COSTECH attract more funds. This year COSTECH has attracted funds from IDRC to support commissioned research and have received positive due diligence report done by NRF South, this has allowed Commissioned to manage funds for two research chairs support by NRF South Africa for the period of five years. It is anticipated that for this financial year 2020/2021 COSTECH will attract another development partner to support research and innovation activities in the country.

1.7 Target - 1-2 teams of researchers received grants: In order to increase access to research grants to groups of researchers, COSTECH intends to continue support junior researchers from HL and R&D institutions who seek for funding to write and submit research proposals to an open calls of research proposals. The plan is to support about 35 researchers to develop at least 4 research proposals in line with the National Research Priorities.

B. Objective 2: To improve the coordination capabilities of **COSTECH** to manage research, in particular Monitoring and Evaluation and Research integrity in R&D institutions by 2019. (Target Group: primarily COSTECH and secondarily R&D Institutions). Under this objective the following activities will be implemented:

2.1 **STI featured in Five year development Plan 2021-2025:** To ensure R&D in Tanzania is conducted to the standards and contribute to the FYDPII more COSTECH staff are to undergo training in research coordination, management and granting process. This is to be done in collaboration with the SRC and other training organizations. The training will improve the capability of COSTECH staff not only to provide STI input to the planning process, but also in the management of NFAST processess. This will be accompanied by other trainings such as Quality Management System, Risk management, administration and performance management, financial management, knowledge translation, monitoring and evaluation, scientometrics and resource mobilization. This will enhance efficiency of processes and gain stakeholder acceptance of the services COSTECH provides.

2.2. STI input to targets in development plan attained and communicated: COSTECH has a mandate to advice the Government on all STI matters in the country. COSTECH perform this through sectorial R&D Advisory committees which then channel their recommendations to the Board of Commissioners who advise the Minister responsible for Science and Technology. In 2020/21 COSTECH will ensure that it continues to advise the Government through the different R&D advisory committees.

2.3 Increased standards in 10 R&D Institutions: In this planning period about 500 copies of the National Integrity framework will be distributed to all HL and R&D institutions. This will go together with awareness training on the use of framework to R&D and HL institutions from mainland as it has already been done in Zanzibar. Thereafter 4 R&D/HL institutions will be supported to establish Research Ethics Committees/Boards in different fields of specialization.

2.4 Research in 10 R&D Institutions benchmarked favorably within nation: Following the printing of National Research and Innovation Monitoring Framework, the plan is to continue training the HLIs and R&Ds institutions on the adoption of the frameworks and provide support at least two institutions to establish / strengthen their institution M&E systems.

2.5 **10-15 R&D institutions with functional repositories**: In this planning period COSTECH will focus of ensuring that the repository is well populated with content. This will be achieved through continued connecting other institutions and harvesting from existing repositories, acquisition of new content guided by our partners COTUL and SPIDER/DSV.

C. Objective 3: To increase use of evidence-based knowledge and technologies for legislation, policy and programme **decision-making**, that contributes to socio-economic development, by 2020. (Target Group: Primarily decision makers and enterprises and secondarily implementing development partners and the scientific community).

3.1. **10-20 number of programmes/ policies utilizing/ informed by scientific evidence in decision making:** In the planning period, COSTECH intends to conduct at least one knowledge seminar to policy and decision makers whereby at least 10 research findings and innovation will be presented. The seminar is intended to increase demand for evidence for policy and decision makers and build capacity for knowledge translation at COSTECH and within R&D and HL institutions. COSTECH also plans to engage Government ministries, departments and agencies in order to identify various needs for evidence.

3.2 **2-3 dialogues informed by STI data and information:** In this fiscal year 2020/2021, COSTECH plans to organise three fora to address contextual issues. These fora will be closely linked with discussions in collaboration with motivated local researchers and other decision makers with aim of mobilizing evidence for the identified needs of Government Ministries, Departments and Agencies (MDAs).

3.3 **Increased number of STI knowledge products (8-10):** In this planning period, COSTECH intends to operationalize the Communication Strategy by developing guidelines for production of various knowledge products and produce and disseminate one documentary, news and feature articles, brochures, policy briefs, live TV and radio programs. In addition, COSTECH plans to strengthen internal capacity by training its staff on multimedia so that they can use facilities on the knowledge laboratory to prepare contents for printing and online knowledge products.

3.4 **10-15 R&D with operational Repositories:** In this fiscal year COSTECH will continue to interlink R&D and HL institutions repositories to COSTECH repository. The plan is to connect 10 institutions with Institution Repositories (IR). Furthermore COSTECH intends to conduct training to promote and motivate local researchers on how to prepare publishable research papers which will be easily accepted and published in reputable journals.

D. **Objective 4.** To develop a method for replication and scale-up of competitive and innovative clusters in the emerging knowledge society of Tanzania.

4.1 **Capacity building for COSTECH and SIDO to promote, govern and**

manage innovative clusters interventions: In this financial year the subprogram will finalize development of the remaining guidelines and operationalize the selected 5 among the established guidelines. The essence of operationalization of these guidelines is to facilitate the scale up of the innovative cluster firms

4.2 Monitoring, Evaluation and Learning: In this financial year the subprogram intends to perform MEL to the clusters firm with the aim of collecting data and see how they perform. The subprogram further intends to perform assessment to the entire subprogram as a way of documenting success story for future designing of the cluster program and preparing a model for cluster development support in Tanzania.

4.3 Advocacy of Cluster development Activities facilitated: In 202/2021 the plan is to consolidate contacts with external stakeholders (donors, Government Agencies, banks, companies), through arranging a conference/meeting on cluster development, taking stock of achievements and outlining future prospects. The events will have a focus on the cluster initiative´s contributions to the national development policies and how it can be used to meet the SDGs. All clusters will be assisted to showcase their products and activities at exhibitions and fairs.

4.4 Cluster research model among clusters and academic/research institutions: The target is to engage R&Ds researchers and students in collaborative research projects where PhDs, masters and undergraduate students (15) will be supported to conduct research in the clusters. In this planning period, Contracts/ MoU will be signed with respective institution or University participating in the cluster subprogram research activities and field work will also be done.

4.5 Building ICT-support for cluster development: In this financial year the plan is to use ICT as enabler to cluster development activities. ICT has a special role as enabler to business operation.

E. Objective 5. To strengthen the national innovation system in Tanzania by 2020

5.1 **Support to Innovation Activities:** In 2010/2020 the programme supported 17 projects which aimed **to** support prototype development, development and commercialization stages of innovative ideas for one year. These projects are approaching the end, the resulted prototypes and innovations are established promising indicators for big societal impact when receive more support. For this financial year the program intends to support innovation from three categories of identified groups namely: MAKISATU winner of 2019 and 2020, previously supported innovators who have potential for national wide impact when up-scaled and walk-in innovators which include innovators who submitted their innovative ideas directly to COSTECH.

5.2 Strengthening Innovation Support Systems (15 Innovation Spaces) in Universities and R&D institutions: In this financial year CISTECH intends to support Buni to undertake its activities that aimed at supporting innovation spaces to establish suitable

programs for their community, support Hub Managers to understanding the Innovation Ecosystem, organise high-level awareness training to management of hosting institutions.

4. Summarizing analysis

The plan for 2020/2021 will take into account gender and environmental sustainability and thus disaggregated data will be presented for those involved and those benefitting the interventions. As this is the last year for programme implementation COSTECH will make all effort to make sure all the activities are completed within the specified time, where possible request for reallocation will be done, but all aimed at making sure that activities are completed and providing intended results.

The following are potential internal and external risks and corresponding mitigations predicted for the planning period:

Potential risks

- Change of mode of delivering activities due to corona virus pandemic
- Delay in implementing some of the planned activities due many activities taking place at the same time
- R&D and HLIs do not have the ICT capacity and competency to access information availed through the COSTECH platform.
- Policy makers may not use of outputs coming from the research.
- HL and R&D institutions fail to adopt the developed framework due to lack of resources

Mitigation of risks

- Plan ahead of time and design feasible way of undertaking the activities
- Close working with the R&D institutions to familiarize with the developed ICT infrastructure and link it with their ICT infrastructure
- Involve policy makers during dissemination of research outputs and conceptualization of policy briefs.
- Support HL and R&D institution to allow them to adopt and operationalize the developed

5. Enclosures

1. **Overall Aggregated Budget attached**

9th June, 2020								
Overall Program: Building Systems for High Quality, Relevant Research in Tanzania								
Period: July 2020 - June 2021								
Tanzanian Institution/Dept: Tanzania Commission for Science and Technology								
Collaborating Institutions in Sweden: SRC, SPIDER/DSV & SICD								
Exchange rate: 273								
Tanzania	**Funds expected to be carried forward from 2019/20**	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
Program	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Research Funding	237,648,560	6,389,418	1,744,311,120	183,149	49,999,683	6,572,567	1,794,310,803	2,031,959,363
Research Management	496,203,262	698,070	190,573,037	611,350	162,321,572	1,309,419	357,471,454	853,674,716
Research Communication	105,121,507	1,682,213	459,239,217	540,295	147,500,000	2,222,508	606,739,217	711,860,724
Innovative cluster	399,537,664	174,903	47,748,555	814,034	222,231,193	988,937	269,979,748	669,517,412
Innovation funds	-	2,336,737	637,929,147	2,333,333	637,000,000	4,670,070	1,274,929,147	1,274,929,147
Operational costs and audit (~10%)		586,081	190,000,000	586,081	190,000,000	1,172,162	380,000,000	380,000,000
Operational costs for innovative clusters	-	-	-	-	-	-	-	-
Operational costs for innovation funds		-	-	-	-	-	-	-
TOTAL - TANZANIA	**1,238,510,993**	**11,867,422**	**3,269,801,076**	**5,068,241**	**1,409,052,448**	**16,935,663**	**4,683,430,369**	**5,921,941,362**

Sweden DSV	**Funds expected to be carried forward from 2019/20**	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
Programme	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Research Management								
Research Communication	0	279,500	76,303,500	279,500	76,303,500	559,000	152,607,000	152,607,000

Operational costs								
SUB TOTAL	**0**	**279,500**	**76,303,500**	**279,500**	**76,303,500**	**559,000**	**152,607,000**	**152,607,000**

SRC	**Funds expected to be carried forward from 2019/20**	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
Programme	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Research Funding								
Research Management		**149,088**	**40,700,888**	**149,088**	**40,700,888**	**298,175**	**81,401,775**	**81,401,775**
Operational costs and audit								
SUB TOTAL		**149,088**	**40,700,888**	**149,088**	**40,700,888**	**298,175**	**81,401,775**	**81,401,775**

	Funds expected to be carried forward from 2019/20	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
Sweden- Sodertorn University	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Innovative Cluster		560,560	153,032,880	780,540	213,087,420	1,341,100	366,120,300	366120300
Operational costs			-	-	-	-	-	
SUB TOTAL		**560,560**	**153,032,880**	**780,540**	**213,087,420**	**1,341,100**	**366,120,300**	**366,120,300**

ISP	**Funds expected to be carried forward from 2019/20**	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
Programme	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Sw. Research Coordination								
SUB TOTAL								

TOTAL -SWEDISH PARTNERS	**0**	**989,148**	**270,037,268**	**1,209,128**	**330,091,808**	**2,198,275**	**600,129,075**	**600,129,075**

	Funds expected to be carried forward from 2019/20	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
SIDO -Tanzania	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
Innovative Cluster								
Operational costs								
TOTAL - SIDO								

GRAND TOTAL	**Funds expected to be carried forward from 2019/20**	**July-Dec 2020**		**Jan-June 2021**		**Total**		**Total funds to be executed 2020/21**
	TZS	**SEK**	**TZS**	**SEK**	**TZS**	**SEK**	**TZS**	**TZS**
	1,238,510,993	**12,856,569**	**3,539,838,344**	**6,277,369**	**1,739,144,256**	**19,133,938**	**5,283,559,444**	**6,522,070,437**

2. **Budget Description and Justification**

i. **Sub-programme total costs:** These costs are for the activities and have been detailed at the sub-programme level in the appropriate sections.

ii. **Overall Operational Costs:** To be used as per internal policy.

iii. **Partner costs:** DSV/SPIDER, SRC and Södertörn costs are included as DSA and travel costs for the time spent on activities in Tanzania and institutional costs in Sweden. Operational cost included cover operations and audits and indirect costs related to salaries.

iv. **Research Coordination costs:** These funds are included in the agreement with COSTECH but are disbursed directly to UU/ISP for their oversight role for the programme on behalf of Sweden.

3. **Results Based Matrix**

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Specific Objective 1: To improve capacity for research, training, production in **Research and Development institutions** leading to utilization of research that informs decision-making and addresses national priorities, by 2020. (**Target Group** – R&D Institutions)						
Assessment report Workshop report, Documented framework	1.1 Progressive adoption of a national postdoctoral research framework by R&D institutions (4-5 per annum) by June 2019 [Yr 1framework, Yr 2-5 adoption]	Number of R&D Institutions adopting framework	0	Adoption of Postdoctoral framework by 3-4 R&D institution		
Application from R&D institutions, 6 postdoctoral projects supported	1.2 Increased implementation of the postdoctoral research framework by R&D institutions (3-4 team projects every two years) by June 2019 [Yr 2 – 4]	Number of projects (m/f) supported after establishment of framework a) Research b) Innovation	0	Increased in number of postdoctoral fellowship (f/m)		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Annually allocated national budget	1.3 Increased amount of national support for research and innovation	Percentage national funds managed by COSTECH for a) research (grants) b) innovation grants	NFAST allocation 2015 4.3BN	Funding remittance increased by 3%		
Proposals for funding MoU with partners	1.4 Increased external support to research and innovation in R&D institutions by 20% of Government funding [Yr 3-5]	Percentage **external** funds managed by COSTECH for a. research (grants) b. innovation grants	Percentage **external** funds managed by COSTECH for a. research (grants) b. innovation grants	External funds mobilized 5-10% government subvention		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Research proposals Contracts with researchers	1.5 Increased funding for research projects	Number of research grants awarded to f/m and type of grant (by COSTECH)	28	Disbursement and monitoring of supported research projects (competitive -16 and commissioned research - 4)		
Innovation proposals Contracts with innovators	1.6 Increased funding for innovation projects	Number of innovation grants awarded to f/m and type of grant (by COSTECH	0	Disbursement and monitoring of 17 supported innovation project		
Proposals for funding MoU with partners	1.7 Increased support with partners in conduct of mutual research priorities (2-3 new partners) by 2020 [Yr 2-5]	Number of external collaborations (MoU/agreements)	0	1-2 teams of researchers receive grants		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Assumptions: • Postdoctoral research is considered part of researchers career progression by employers • Non-Sida supported R&D institutions are interested and willing to adopt and implement post doctoral framework • Research implemented to address national priorities is published and available in a central repository • Potential donors ascribe to COSTECH funding policies and priorities • R&D institutions are willing to demonstrate value on utilization of improved/ shared facilities on research performance						
Specific Objective 2: To increase the coordination capabilities of **COSTECH** to manage research, in particular Monitoring and Evaluation and Research integrity in R&D institutions by 2019. (**Target Group**: primarily COSTECH and secondarily R&D Institutions)						
National development documents and other sectorial documents Trained Staff	2.1 Integration of STI in formulation of national development targets (1 programme) by June 2016	Extent of STI reflected in national targets	2010 – 2016 Five Year Development Plan implementation	Financial management meets standards HRMIS performance meets standards		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
National development documents Trained staff	2.2 Increased achievement of national development targets utilizing STI (2-3) by 2020	Number of targets utilizing STI	2010 – 2016 Five Year Development Plan implementation	The increased number national development targets utilizing STI in the year		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Proposal for standards Communiqué for launch Signed agreements Consultative Workshops Seminars and training Publication and digital dissemination	2.3 Increased standards of research in 20 – 30 R&D institutions by 2020	Number of R&D institutions adhering to standards	To be established in year one	Increased standards in 4 R&D Institutions		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
National Framework for M&E Training reports Publication and digital dissemination	2.4 Increased R&D institutions implementing M&E framework, at least 40% of all R&D institutions by 2020 [Yr 1, framework and baseline, Yr 2-5 implementation	National M&E system established Number of R&D institutions linked to national M&E system established by COSTECH	To be established	Research in 4 R&D Institutions benchmarked favourably within nation		
Comments from potential users Help desk set up Content formulated for use on platform	2.5 Improved effectiveness in research management by use of ICT in 30 – 40 R&D institutions by 2018	Increase in number of R&D institutions that will start using ICT based platforms for research management	0	5 - 10 number of R&D institutions with functional repositories		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Assumptions: • National agencies responsible for development plans support STI integration in targets • Developed competencies and skills relevant to national development • COSTECH [working environment] is conducive to optimal use of acquired skills and competencies • Supported R&D institutions have functional M&E systems • R&D institutions are able to readily access information over ICT based platforms • Incentives for compliance to research integrity are created to encourage R&D institutions to comply/ conform with principles of research integrity • Central repository easily accessible to all R&D institutions						
Specific Objective 3: To increase use of evidence-based knowledge and technologies for legislation, policy and programme **decision-making**, that contributes to sustainable development, by 2020. (**Target Group**: Primarily decision makers and enterprises and secondarily implementing development partners and the scientific community)						

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Policy briefs Seminar/ Workshop reports Revised/ developed policy, legislation, regulations	3.1. Increased use of scientific evidence in decision-making processes at Central and Local government levels (2) by 2020	Number of policy briefs downloaded from COSTECH web page Number of programmes using evidence Number of policies developed with support from researchers (information from M&E system)	1	2-5 number of programmes/ policies utilizing/ informed by scientific evidence in decision making		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Press Conferences Issue briefs Brochures Online discussion forum/ Social media STI Conference proceedings Implementation strategy	3.2. Use of STI data and information to [promote] public dialogue related to specific sustainable development issue in 2 policy areas by 2020.	Number of fora for technical/knowledge transfer/dissemination Number of scientific events organized (by or supported by COSTECH)	2 in the last six years none with Sida support	2-3 STI fora conducted		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Updated COSTECH Website Laboratory equipment Staff trained Videos and Documentaries Systems for documentation	3.3. Increased used of knowledge products by target group by 2020	Number of fora for technical/knowledge transfer/dissemination Number of scientific events organized (by or supported by COSTECH)	2 in the last six years none with Sida support	2-3 dialogues informed by STI data and information		
Repository (Connected R&D institutions)	3.4 Increased coordination of research by R&D institutions over an ICT platform by 2017	Number of coordinated research initiatives Number of collaborations including researchers (result of using COSTECH platforms) How to measure?	0	10-15 R&D with operational Repositories		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Specific objective 4: To develop a method for replication and scale-up of competitive and innovative clusters in the emerging knowledge society of Tanzania.						
Annual plan developed; Workshop reports; Re-established National Steering Committee	4.1 Capacity to analyze enhanced	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made.	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies	Meetings reports of National Steering Committee	Meetings reports of National Steering Committee
		M&E show that analysis is guided with subsequent steps				
		Analytical competence on gender dimensions and environmental impact assessment in place				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Analytical documents convince stakeholders outside the program				
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
training report(M/F)	4.2 Capacity to govern, manage and organize enhanced	number of staff trained on innovative cluster	Baseline study	SIDO staff have the knowhow on innovative clusters	Proper report of cluster activities produces regularly and shared	Guideline adopted
		Guidelines produced	No baseline			

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Documents: M&E framework, data collection tools, Training report, annual report, guidelines, data collection tools, gender analysis report (M/F)	4.3 Capacity to monitor and evaluate enhanced	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies Enhanced Stakeholders' capacity to monitor and evaluate program and communicate to	M&E framework And other four guidelines piloted and adapted	M&E framework
		M&E show that analysis is guided with subsequent steps				Four guidelines
		Analytical competence on gender dimensions in place				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place		external stakeholders		
Documents; workshop report, Signed MoUs, cluster business plans	4.4 Capacity to analyze, govern, manage, organize, perform and implement enhanced	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made M&E show that analysis is guided with subsequent steps	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies	M&E framework And other four guidelines piloted and adapted	Guidelines adopted

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
Institution		Cluster business plan validated	Baseline study	MoU with LGA signed	Cluster initiatives integrated or mainstreamed in District development plans	Cluster activities included in district plans
		Increased opportunities for: regional specialization, diversification, Improved employment figures, Increased tax revenue	Baseline study	LGA have initiated discussions on priorities on cluster support		
				Baseline on employment figures and tax revenue created		
Decision				1st		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
s				development plan containing cluster priorities produced		
Documents; field reports, workshop reports, clusters intervention roadmaps, list of selected clusters(M/F)	4.5 Capacity to analyze	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made.	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies		
		M&E show that analysis is guided with subsequent steps				
		Analytical documents convince stakeholders outside the program				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
Institution	4.6 Capacity to govern, manage and organize	Number of examples of sharing knowledge and business opportunities	Baseline study	Cluster member firms aware of opportunities	Opportunities are shared among the cluster and R&Ds Institutions	Data base of research results
clusters collaborating with researchers		Number of clusters in collaboration with researchers	7 clusters, 5 Research Institutions	Cluster member firms aware of cluster research model		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Documents; cluster business plans, workshop report and , refined proposals	4.7 Capacity to monitor and evaluate	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies		
		M&E show that analysis is guided with subsequent steps				
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Documents	4.8 Capacity to analyze, perform and implement	Number of Research projects on cluster development	Baseline study	Research projects on cluster development	Opportunities are shared among the cluster and R&Ds Institutions	Data base of research results
Institution		Number of researchers and students engaged with clusters	Baseline study	Researchers trained for cluster research model		
Documents		Number of studies emerging from clusters	Baseline study	Research proposals and/or collaborative projects started	Opportunities are shared among the cluster and R&Ds Institutions	Data base of research results
Design or prototypes						
Innovations		Number of research result transferred				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Documents	4.9 Capacity to monitor and evaluate	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made	No baseline	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies	Indicators for the success of each intervention are known and documented for reference during M&E	Expected outputs are established
		M&E show that analysis is guided with subsequent steps				
		Analytical competence on gender dimensions and environmental impact assessment in place				

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
Documents; Conference report, workshop report	4.10 Capacity to communicate	Responses from stakeholders Media coverage	No baseline	Communication strategy developed	Pathway for channeling cluster reports are known and followed	OPs for
		Visibility of the sub-programme to outside stakeholders				
		Visibility of the qualitative and quantitative impacts of the implementation of gender dimension		Specific communication efforts on SDG 12 and SDG 8 documented		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Visibility of consideration of environmental issues and sustainable consumption and production initiatives				
Tools, database and website in place	4.11 Capacity to analyze, manage, monitor, evaluate and communicate enhanced	Computer based analytical tools distributed and functional	Baseline study	Assessment of information needs and information sources		
		Administrative system functional	Baseline study	Design process started and tested		
		Computer literacy in clusters and LGAs	Baseline study	Initial training in connection with assessment conducted		
		Cluster database maintained with accurate information	Baseline study	Design process started and tested		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
		Website functional	Baseline study	Design process started and tested		
Types of Outputs	**Outcomes (including targets)**	**Performance Indicator of Outcome**	**Baseline (if established)**	**Annual Outcome Targets for 2018/2019**	**Actual Outcomes Achieved: Results Observed in year (2018/2019)**	**[Key] Outputs produced in year to obtain Outcome in 2018/2019**
<u>Specific Objective 1</u>: To improve capacity for research, training, production in **Research and Development institutions** leading to utilization of research that informs decision-making and addresses national priorities, by 2020. (**Target Group** – R&D Institutions)						
Assessment report Workshop report, Documented framework	1.1 Progressive adoption of a national postdoctoral research framework by R&D institutions (4-5 per annum) by June 2019 [Yr 1framework, Yr 2-5 adoption]	Number of R&D Institutions adopting framework	0	Adoption of framework by 4-5 institutions (survey of 8)		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Application from R&D institutions, 6 postdoctoral projects supported	1.2 Increased implementation of the postdoctoral research framework by R&D institutions (3-4 team projects every two years) by June 2019 [Yr 2 – 4]	Number of projects (m/f) supported after establishment of framework c) Research d) Innovation	0	6 projects commissioned (f/m)		
Annually allocated national budget	1.3 Increased amount of national support for research and innovation	Percentage national funds managed by COSTECH for a) research (grants) b) innovation grants	NFAST allocation 2015 4.3BN	Funding remittance increased by 5%		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Proposals for funding MoU with partners	1.4 Increased external support to research and innovation in R&D institutions by 20% of Government funding [Yr 3-5]	Percentage **external** funds managed by COSTECH for c. research (grants) d. innovation grants	Percentage **external** funds managed by COSTECH for c. research (grants) d. innovation grants	External funds mobilized 10-20% of government subvention	MoU between 15 clusters and LGAs/Universities	MoU between 15 clusters and LGAs/Universities
Research proposals Contracts with researchers	1.5 Increased funding for research projects	Number of research grants awarded to f/m and type of grant (by COSTECH)	28	Monitor and evaluate effectiveness of processes		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Innovation proposals Contracts with innovators	1.6 Increased funding for innovation projects	Number of innovation grants awarded to f/m and type of grant (by COSTECH	0	17 innovation project supported	200 innovation project supported	200 innovation project supported
Proposals for funding MoU with partners	1.7 Increased support with partners in conduct of mutual research priorities (2-3 new partners) by 2020 [Yr 2-5]	Number of external collaborations (MoU/agreements)	0	1-2 teams of researchers receive grants		

Assumptions:

- Postdoctoral research is considered part of researchers career progression by employers
- Non-Sida supported R&D institutions are interested and willing to adopt and implement post-doctoral framework
- Research implemented to address national priorities is published and available in a central repository
- Potential donors ascribe to COSTECH funding policies and priorities
- R&D institutions are willing to demonstrate value on utilization of improved/ shared facilities on research performance

Specific Objective 2: To increase the coordination capabilities of **COSTECH** to manage research, in particular Monitoring and Evaluation and Research integrity in R&D institutions by 2019. (**Target Group**: primarily COSTECH and secondarily R&D Institutions)

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
National development documents and other sectorial documents Trained Staff	2.1 Integration of STI in formulation of national development targets (1 programme) by June 2016	Extent of STI reflected in national targets	2010 – 2016 Five Year Development Plan implementation	Financial management meets standards HRMIS performance meets standards Research Leadership and management by COSTECH ranked positively		
National development documents Trained staff	2.2 Increased achievement of national development targets utilizing STI (2-3) by 2020	Number of targets utilizing STI	2010 – 2016 Five Year Development Plan implementation	The increased number national development targets utilizing STI in the year		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Proposal for standards Communiqué for launch Signed agreements Consultative Workshops Seminars and training Publication and digital dissemination	2.3 Increased standards of research in 20 – 30 R&D institutions by 2020	Number of R&D institutions adhering to standards	To be established in year one	Increased standards in 10 R&D Institutions		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
National Framework for M&E Training reports Publication and digital dissemination	2.4 Increased R&D institutions implementing M&E framework, at least 40% of all R&D institutions by 2020 [Yr 1, framework and baseline, Yr 2-5 implementation	National M&E system established Number of R&D institutions linked to national M&E system established by COSTECH	To be established	Research in 10 R&D Institutions benchmarked favorably within nation		
Comments from potential users Help desk set up Content formulated for use on platform	2.5 Improved effectiveness in research management by use of ICT in 30 – 40 R&D institutions by 2018	Increase in number of R&D institutions that will start using ICT based platforms for research management	0	10-15 number of R&D institutions with functional repositories		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/ 20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Assumptions: • National agencies responsible for development plans support STI integration in targets • Developed competencies and skills relevant to national development • COSTECH [working environment] is conducive to optimal use of acquired skills and competencies • Supported R&D institutions have functional M&E systems • R&D institutions are able to readily access information over ICT based platforms • Incentives for compliance to research integrity are created to encourage R&D institutions to comply/ conform with principles of research integrity • Central repository easily accessible to all R&D institutions						
Specific Objective 3: To increase use of evidence-based knowledge and technologies for legislation, policy and programme **decision-making**, that contributes to sustainable development, by 2020. (**Target Group**: Primarily decision makers and enterprises and secondarily implementing development partners and the scientific community)						

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Policy briefs Seminar/ Workshop reports Revised/ developed policy, legislation, regulations	3.1. Increased use of scientific evidence in decision-making processes at Central and Local government levels (2) by 2020	Number of policy briefs downloaded from COSTECH web page Number of programmes using evidence Number of policies developed with support from researchers (information from M&E system)	1	10-20 number of programmes/ policies utilizing/ informed by scientific evidence in decision making		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Press Conferences Issue briefs Brochures Online discussion forum/ Social media STI Conference proceedings Implementation strategy	3.2. Use of STI data and information to [promote] public dialogue related to specific sustainable development issue in 2 policy areas by 2020.	Number of fora for technical/knowledge transfer/dissemination Number of scientific events organized (by or supported by COSTECH)	2 in the last six years none with Sida support			

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2019/20	Actual Outcomes Achieved: Results Observed in year (2020/21)	[Key] Outputs produced in year to obtain Outcome in 2020/21
Updated COSTECH Website Laboratory equipment Staff trained Videos and Documentaries Systems for documentation	3.3. Increased used of knowledge products by target group by 2020	Number of fora for technical/knowledge transfer/dissemination Number of scientific events organized (by or supported by COSTECH)	2 in the last six years none with Sida support	2-3 dialogues informed by STI data and information		
Repository (Connected R&D institutions)	3.4 Increased coordination of research by R&D institutions over an ICT platform by 2017	Number of coordinated research initiatives Number of collaborations including researchers (result of using COSTECH platforms) How to measure?	0	10-15 R&D with operational Repositories		

4. **Time Plan**

The institutional programme is to provide oversight of the entire programme between July, 2020 to June 2021.

July to December 2020: In this first half of the year the following activities will be undertaken; preparation of the annual report for 2019/2020; attending coordinators meeting and annual review meeting and audit of the programme for the ending year.

January to June 2021: In the second half of the year, the annual plans and meetings are to be held; preparation of full proposal for the new cooperation; and initial preparation of annual report and programme final report.

ANNUAL PLAN SUB-PROGRAMMES/PROJECTS YEAR 2020/ 2021

1. RESEARCH FUNDING

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1. Executive summary of sub-programme/project

COSTECH is the national body responsible for coordination, promotion and popularization of Science and Technology in the country. COSTECH plays an advisory role to the government on the best use of Science, Technologies and Innovation for improved livelihood and ultimately social economic development. In order to fulfill its mandate, COSTECH supports Research and innovation initiatives that address National priorities and others that generate new thinking. The United Republic of Tanzania (URT) is committed to supporting research and innovation by dedicating 1% of her GDP to this effect part of which shall be channeled through the National Fund for Advancement of Science and Technology (NFAST).

NFAST supports research; development and transfer of appropriate technologies; capacity building in R&D and STI activities in terms of human resources and research facilities and infrastructure; organization of and/or attendance to scientific forums and information dissemination through publications; promoting innovativeness and inventiveness and any other activities whose objectives would be the promotion of STI for national development, albeit with minimal funding from the URT subventions.

Following the awareness training about the Postdoctoral framework document, two higher learning institutions namely Ardhi University and KCMUCo, have already adopted the framework. The plan for 2020/21 is to continue sensitization for adoption of the NPRF to other R&D institution. Adoption will be coordinated through facilitation and Training of

heads of Institutions in order to ensure that the Institutional frameworks are aligned with the National framework. It is expected that, COSTECH will facilitate the adoption of at least 3 frameworks to R&D institutions by June 2021.

Following the support of 6 Postdoctoral Fellowships. Each fellowship cost about Tshs.70 million out of which around 50% were disbursed by end of May 2019 as first installment. The second installment will be disbursed in the first half of 2020/21 following the submission of progress reports and MEL report.

In addition to supporting postdoctoral fellowships, in 2019/2020 COSTECH supported 16 competitive and 4 commissioned research projects. Each project cost about Tshs.70 million from which about 50% were disbursed by end of May 2019 as first installment. The second installment will be disbursed in the first half of 2020/21 following the submission of progress reports by the projects PI and MEL report.

Due to high demand, COSTECH intended to continue support junior researchers who seek to develop proposals for funding in order to increase access to funding for research. This will involve convening and training researchers from higher learning and R&D institutions to write and submit research proposals to open calls of research proposals. For the period of five years starting from 2015/16 to 2019/20 a total of 21 Research groups consisted of 113 junior researchers to develop 24 research proposals. It is expected that the support will increase the grants to research groups and hence leading to increased products and services for improved livelihood and ultimately social economic development.

During 2019/2020 findings from the 12 COSTECH supported projects were published in the "*Research and Innovation Impact Bulletin Number 2"*. The bulletin was printed and will be widely distributed through National events such as Nanenane farmer's day and STI conference. The plan for year 2020/21 is to mobilize the materials from various research projects and produce "*Research and Innovation Impact Bulletin Number 3".*Mobilization will be done by deploying researchers to bring up research findings with high impact. The promotion materials will be compiled, printed and published in the second half of financial 2020/21. Promotion materials are expected to influence decisions of Policy Making for improving livelihood and hence social economic development.

In this period it is also planned to assess the performance of almost all researchers supported in writing research proposals from 2015/16 to date. Furthermore, it is planned to monitor and evaluate 6 postdoctoral fellowships and 20 research projects in the first half of 2020/21.

2. General objectives and expected results 2015-2021

General objective: To improve capacity for research, training, and production in research and development institutions leading to utilization of research that informs decision-making and addresses national priorities, by 2021. (Target Group – R&D Institutions).

Specific Objective 1: To establish a functional and robust framework for conduct of relevant high quality research through postdoctoral programs and research projects by 2019.

Specific Objective 2: To mobilise resources for support of research and technologies addressing sustainable development priorities by 2021

Expected outcomes

The following are the expected outcomes for the 2020/2021 of the programme implementation

1.1 Progressive adoption of a national postdoctoral research framework by R&D institutions (4-5 R&D Institutions per year

1.2 Increased implementation of postdoctoral fellowship by R&D institutions

2.1 Increased products and services (10-20 per annum) from R&D institutions that address sustainable development priorities by June 2021

2.2 Increased number of research grants won by R&D Institutions from external sources (at least 2-4 per annum) by 2021

2.3 Increased dissemination and uptake of Research outputs (at least 3 per annum)

3. Annual targets for the Year 2020/2021

In this implementation period COSTECH has planned to achieve the following targets of which build towards completion and or implementation of activities initiated in 2020-2021:

A. Objective 1:

Outcome(s) target contributes to:

1.1 *Progressive adoption of a national postdoctoral research framework by R&D institutions (4 - 5) by June 2021*

Target 1.1: Framework used by at least 3 R&D institutions by June 2021

Before supporting postdoctoral fellowship, a National postdoctoral framework was developed consultatively by higher learning and R&D institutions through the coordination of COSTECH. The purpose was to have a functional national framework for running a postdoctoral research program. The document was then endorsed by heads of institutions before the approval by Board of Commissioners. Thereafter, awareness creation was done to representatives from 52 Higher Learning and 24 R&D institutions to make them aware of the document and to ensure design of Institutional frameworks are aligned with the National frameworks.

About 500 copies of the framework documents have been printed and will be distributed to all higher learning and R&D institutions. Assessment in 2019/20 found that two higher learning institutions namely Ardhi University and KCMUCo, have adopted the framework. The plan for 2020/21 is to continue sensitization for adoption of the NPRF to other R&D institution. Adoption will be coordinated through facilitation and training of heads of Institutions in order to ensure that the Institutional frameworks are aligned with the National framework. It is expected that, the framework will be adopted by at least 3 R&D institutions by June 2021.

Assessment of the adoption of developed NPRF by R&D institutions is expected to be effected by June 2021.

Expected Outputs:

i. Institutions received NRPF
ii. Trainings conducted
iii. institutions adopted the National framework;
iv. Institutional reports and
v. assessment report

Outcome(s) targets contributes to:

1.2 Increased implementation of postdoctoral fellowship by R&D institutions

Target 1.2: Support six (6) postdoctoral fellowships:

A call was floated that was guided by the developed National Postdoctoral Research Framework.34 applications were submitted and after Internal screening 10 applications were sent to external reviewers and 6 applications were selected for funding. After approval of 6 applications by Board of Commissioners, due-diligence was conducted to verify the capability of host institutions to manage research funds. Agreements were entered between the Commission and host institution prior to awarding of grants to approved research projects.

Then Commission supported 6 Postdoctoral Fellowships. Each fellowship costs about Tshs.70 million out of which around 50% were disbursed by end of May 2019 as first installment which mostly catered for initial travel costs, Daily Subsistence /field allowances, equipment/consumables, laboratory work and facilities and conference/ meeting attendance. Quarterly reports for the first year of implementation have been received from Postdoc fellows. Monitoring, Evaluation and Learning (MEL) of fellowship progress is expected to be conducted before issuing next disbursement following the submission of more progress reports by the Postdoc fellows and MEL report.

Expected Outputs:

i. Postdoc fellowship progress reports and
ii. MEL reports.

B. OBJECTIVE 2:

Outcome(s) target contributes to:

2.1Increased products and services that address sustainable development priorities by June 2021

Target 2.1.1: Support 16 competitive and 4 commissioned (ongoing) researches in line with National priorities:

A call was floated that was guided by the Grants Manual.156 applications were submitted and after Internal screening 80 applications were sent to external reviewers and 16 applications

were selected for funding as competitive research projects and 4 commissioned research projects where the ideas derived from R&D committees, then institutions submitted their proposals in which review process was conducted by external experts according to their specialization. After approval of 16 competitive and 4 commissioned applications by Board of Commissioners, due-diligence was conducted to verify the capability of host institutions to manage research funds. Agreements were entered between the Commission and host institution prior to awarding of grants to approved research projects.

Thereafter, Commission supported 16 competitive and 4 commissioned research projects. Each project costs about Tshs.70 million from which about 50% were disbursed by end of May 2019 as first installment. Quarterly reports for the first year of implementation have been received from project PI's. Monitoring, Evaluation and Learning (MEL) of projects progress is expected to be conducted before issuing next disbursement following the submission of more progress reports by the projects PI and MEL report.

Expected Outputs:

i. Quarterly reports;
ii. Annual report and
iii. MEL reports.

Target 2.1.2: Support 2 commissioned (upscaling) research projects

During 2020/2021 the Commission intends to upscale supported research projects which shown to have impact to the society. In the first semi-annual of 2020/2021, closed projects will be identified and project PI's will be invited to present their findings and the PI's with promising findings will be invited to submit their applications for upscaling. Received applications will be subjected to internal screening and peer review process by internal and external reviewers based on set criteria.

Expected Outputs:

i. Applications;
ii. Proposal Review report and
iii. 2 signed contracts

Outcome(s) target contributes to:

2.2 Increased number of research grants won by R&D Institutions from external sources (at least 2-4 per annum) by 2021

Target 2.2.1: 1-2 teams of junior researchers receive grants from a developed research proposal

COSTECH intends to support junior researchers who seek to develop proposals for internal and external funding so as to increase access to funding for research. This was planned to capacitate and facilitate researchers from the R&D and higher learning institutions to team up and respond to research calls by writing research proposals. The outcome for this is increased

number of research grants won by R&D Institutions and increased rate of solutions generated from research to address national challenges. From 2015/16 to 2019/20 a total of 21 Research groups were formulated and facilitated to develop 24 research proposals. The groups consisted 113 (71m/42f) junior researchers. Assessment conducted in 2019/20 found that about 4 research proposals developed by supported junior researchers managed to win the funds.

Due to high demand of this activity, COSTECH intends to continue supporting junior researchers who seek to develop proposals for funding. This will involve convening and facilitating researchers from higher learning and R&D institutions to write and submit research proposals to open calls of research proposals. During 2020/21 it is targeted to facilitate about 35 researchers to develop at least 5 research proposals in the National research priorities in order to increase access to funding for research.

Expected Outputs:

i. Research groups established;
ii. Submitted grant proposals;
iii. Training report and
iv. Won research projects.

Target 2.2 2: Monitoring of Projects and Assessment of performance of researchers trained on writing research proposal

Assessment of performance of researchers started in this financial year of 2019/2020 by starting with few researchers and assessment is still going on. Assessed researchers managed to submit a lot of research proposals and out of them 4 succeeded to win the funds.
During 2020/21 it is also planned to assess the performance of remaining researchers supported from 2015/16 to date. Assessment will be done in order to establish performance of researchers previously trained on writing research proposals. In the other hand, 6 postdoctoral fellowships and 20 supported research projects have finished their first year of implementation after first disbursement in May 2019. The plan is to conduct monitoring and evaluation exercise so as to assess the progress of the projects compared to the agreed time plan.

Expected Outputs:

i. Assessment Report

Outcome(s) target contributes to:

2.3 Increased dissemination and uptake of Research outputs (at least 3 per annum)

Target 2.3.1: Consolidation of Research Findings for Production of dissemination materials:

Research findings from COSTECH supported research projects were gathered from various research projects. Principal Investigators (grantees) of projects with tangible results were facilitated to present contents of research findings. Findings from the best performing projects

with promising National impact have been documented in the "Research and Innovation Impact Bulletin" number 1 and 2.
The bulletin was printed and distributed to various institutions and through National events such as Nanenane farmer's day and STI conference.

The plan for year 2020/21 is to mobilize the materials from various research and innovation projects and produce "*Research and Innovation Impact Bulletin Number 3".*Mobilization will be done by deploying researchers to bring up research findings with potential impact in order to produce promotion materials such as projects, policy briefs and bulletin. The promotion materials will be compiled, printed and published in the second half of financial 2020/21. Moreover, during 2020/2021 COSTECH intends to establish Research Intellectual Asset Profile where by the results from NFAST funded research projects will be consolidated.

Promotion materials such as project, policy briefs and bulletin from the mobilised contents are expected to influence decisions in policy making for improving livelihood and hence social economic development.

Outputs:

i. Contents of promotional materials such as bulletin,
ii. Event's report.
iii. Research Profile

4. Analysis

In 2019/20, Research funding sub programme was implemented as planned. All five planned activities, were implemented equivalent to 90%.

Implemented activities include;

i. Supporting and monitor progress of 6 postdoctoral fellowships,
ii. Support and monitor progress of 20 research grants,
iii. Sharing of the National Postdoctoral Research Framework (NPRF) to R&D and Higher Learning institutions in which two institutions adopted the framework and
iv. Formulation of 3 Research groups consisting of 26 junior researchers to develop 3 research proposals.
v. Consolidation of Research Findings for Production of dissemination materials was done and research impact bulletin number 2 was produced and is in the printing stage.

In 2020/21 it is intended that the bulletin number 2 will be shared to stakeholders and bulletin number 3 will be produced, printed and shared to relevant stakeholders to influence decisions of policy making for improving livelihood and hence social economic development.

Numbers of risks are envisioned with the 2020/21 plan as detailed below:

Potential risks

1. Some of the supported projects may not be implemented and completed timely due to unforeseen circumstances.
2. Completing some activities which involve gathering of large number of participants due to pandemic of Corona virus since it is not clear when it will end.

Mitigation of risks

1. Continuous monitoring and evaluation of projects through reports, audits and physical visits.
1. Ensure that staff follow procedures provided by the Government and WHO in stopping the spread of the corona virus. Using ICT and online facilities as a preventive measures against Covid-19 pandemic disease.

5. Enclosures

1. **Budget and activity plan (Attached)**

2. Justified Sub-Programme/Project Budget

a) **Conference venue**: This covers the cost for the venue (if not at COSTECH). Primarily the venue will be in accordance with government directives[1] and a venue that avails best outputs, if more than the budgeted workshops are deemed necessary the COSTECH venue can be used to ensure the budget is not exceeded;
b) **Daily subsistence allowances (DSA)**: Provided when workshop or event is hosted away from COSTECH and at a distance that participants cannot commute regularly. It covers accommodation and meals not covered under the refreshments based on Government rates
c) **Travel costs**: Cover taxi fare within Dar es Salaam and compensation for fuel and mileage; Return tickets covers economy tickets for local travel;
d) Field Work costs: This covers cost for conducting research.
e) **Report writing:** cost which cover the writing of a report after a meeting or workshop.
f) **Facilitation costs:** This covers costs for facilitators/ mentors/experts who will be facilitating the sessions (it is to be considered an honorarium rather than consultancy).
g) **Refreshment:** covers small amount of food and drinks available after the meeting.
h) **Internet bundle connections:** This covers costs for connecting internet during online meetings like zoom.
i) **Working Allowances:** This is provided to stakeholders who attend the sessions.

8. Subprogramme Procurement Plan for 2020/2021

Description	**Event/Source**	**Budget**	**Time frame**
NON CONSULTANCIES			
Provision of catering Service/Refreshments	1.Support writing winning research proposals	8,427,510	July – Dec. 20
	2. Consolidation of Research Findings for Production of dissemination material	5,136,768	July – Dec. 20
	3. Support and facilitate R&D Institutions to formulate Institutional Postdoctoral frameworks	7,118,340	Jan – June 21

[1] It has been directed to utilise government halls and not hotels to reduce costs.

	Sub Total	**23,252,618**	
Supply of venue	1.Support writing winning research proposals	3,001,635	July – Dec. 20
	2. Consolidation of Research Findings for Production of dissemination material	1,600,872	July – Dec. 20
	3. Support and facilitate R&D Institutions to formulate Institutional Postdoctoral frameworks	2,901,090	Jan – June 21
	Sub Total	**8,303,597**	
Provision of Air Tickets Services	1.Support writing winning research proposals	3,000,000	July – Dec. 20
	2. Consolidation of Research Findings for Production of dissemination material	3,000,000	July – Dec. 20
	3. Support and facilitate R&D Institutions to formulate Institutional Postdoctoral frameworks	2,000,000	Jan – June 21
	Sub Total	**9,500,000**	
Supply of Office stationeries	1.Support writing winning research proposals	915,000	July – Dec. 20
	2. Consolidation of Research Findings for Production of dissemination material	546,000	July – Dec. 20
	3. Support and facilitate R&D Institutions to formulate Institutional	761,000	Jan – June 21

	Postdoctoral frameworks		
	Sub Total	**2,472,000**	
	Grand Total	**40,528,215**	

9. Results Based Matrix

Types of Outputs	**Outcomes (including targets)**	**Performance Indicator of Outcome**	**Baseline (if established)**	**Annual Outcome Targets for 2020/ 2021**	**Actual Outcomes Achieved: Results Observed in year (2020/2021)**	**[Key] Outputs produced in year to obtain Outcome in 2020/2021**
<u>Specific Objective 1</u>: To establish a functional and robust framework for conduct of relevant high quality research through postdoctoral programs and research projects by 2021.						
Institutional reports, assessment report, NPRF documents distributed and institutions adopting the National framework	1.1 *Progressive adoption of a national postdoctoral research framework by R&D institutions*	Number of R&D Institutions adopting framework	None	Adoption of Postdoctoral framework by 3-4 R&D institution		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Postdoc fellowship progress and MEL reports	1.2 *Increased implementation of postdoctoral fellowship by R&D institutions*	Number of projects (m/f) supported after establishment of framework	None	Increase in number of postdoctoral fellowship (f/m)		
Assumptions: • R&D Institutions and government adopt postdoctoral fellowships as part of career progression						
Specific Objective 2: To mobilize resources for support of research and technologies addressing sustainable development priorities by 2020						

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Quarterly reports, annual reports and MEL reports Applications; Proposal Review report and 3 signed contracts	2.1 Increased products and services (10-20 per annum) from R&D institutions that address sustainable development priorities by June 2021 [Yr 3-5]	Number of research projects supported (f/m)	28	Support ongoing competitive (16) and commissioned research (4) in line with National priorities (m/f). Support 3 new commissioned research		
Research groups established, Submitted grant proposals, Training report and won research projects	2.2 Increased number of research grants won by R&D Institutions from external sources (at least 2-4 per annum) by 2021	Number of research projects won (f/m)	Six research grants in 2013 supported by Sida	The number of grants won		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Contents of promotional materials such as bulletin and Event's report Research Profile	2.3 Increased dissemination and uptake of Research outputs (at least 3 per annum)	Number of knowledge products disseminated		At least 3 knowledge products disseminated per annual		
Assessment Report	Increased number of research grants won by R&D Institutions	Number of researchers assessed	None	At least 80 researchers assessed		
Assumptions: • Research groups mobilised • Positive perception and uptake of research outputs by stakeholders						

10. Time Plan.

The activities to be implemented are spread over the year between July to December 2020 and January to June 2021

July to December 2020: In this first half of the year, research findings contents will be gathered from various research projects. Furthermore, the process of disbursing the second

installment of 6 postdoctoral fellowships and 20 research projects will be implemented. Additionally, researchers will be supported to write competitive grants. Likewise, the process of finding research projects that will be up scaled will commence in the first half of the year.

January to June 2021: In the second half of the year; support and facilitate R&D institutions to adopt the postdoctoral framework and the assessment of performance of researchers trained on writing research proposal will be conducted.

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Executive summary of sub-programme/project

For Tanzania to transform to an industrial based economy, sound scientific knowledge is fundamental. The essence may not only be researchers who only discover new knowledge but also understand how to; coordinate, manage, monitor, evaluate and report research findings/outputs, transfer of knowledge to others, develop and manage their innovative ideas for maximum social and economic benefit. Research management in the country has not been viewed as an independent career as seen in other countries but is taught during higher learning and people develop skills at work. This is a continuing challenge for most R&D institutions including apex organizations like COSTECH, which coordinate and promote research and innovation. The challenge is worsened by the changing global economy and labour market forces that require employers like COSTECH to seek people who are not only highly trained, but also highly adaptable and able to function effectively in different contexts including as research managers, academic and commercially oriented scientists. However, such talent is not readily available in the country and as a prerequisite step; COSTECH is obliged to maximize the use of employed researchers and equip them with additional skills to enhance their competence in performing different tasks. The eventual popularization of research management capacity to other researchers in the country aims to enhance skill coverage among researchers. In doing that it will increase the number of such personnel that will be able to compete with other players in research and technological development,

undertaking research of high quality, and therefore contribute significantly to the realization of Tanzania Development Vision 2025.

General objectives and expected results 2015-2020

General objective: To improve the coordination capabilities of COSTECH to manage research, in particular to enhance Monitoring and Evaluation of research and promote research integrity in R&D institutions by 2019. (Target Group: primarily COSTECH and secondarily R&D Institutions)

Specific Objective 1: To improve research management systems and capabilities at COSTECH to facilitate production of high-quality research and innovation that addresses socio-economic challenges in Tanzania by 2019. (Target group – COSTECH)

Specific Objective 2: To establish competitive and robust frameworks for research integrity and M&E for advancing quality conduct of research and management in Tanzania by 2019 (Target Group – COSTECH and All R&D institutions)

The following are the expected outcomes for the five years of the programme implementation

1.1 Improved Human resource management capability at COSTECH by June 2019 [Yr 2 set up system & train champions, Yr 3&4 in-house trainings]

1.2 Increased efficiency and quality of research management by COSTECH staff by 2017

1.3 Increased efficiency in financial management by 2017

2.1 Increased R&D institutions implementing the National Research and Innovation Monitoring framework, at least 40% of all R&D institutions by 2020 [Yr 1-2 framework development and baseline, Yr 3-5 implementation

2.2 Increased adoption and application of research standards in 20 – 30 R&D institutions by 2020

2.3 Improved effectiveness in research management by use of ICT in 30 – 40 R&D institutions by 2018

Summary of Annual Target

For the year 2020-2021, this sub-program, which contributes to the second institutional objective, intends to build capacity of COSTECH staff in order to improve coordination and management of research and overall programme management capacity. Key areas of the program are on improving the financial management system; improving the human resource capability and ability to effectively coordinate and manage STI activities in the country. The program will focus on building the capacity of R&Ds to effectively monitor research and

innovation and research outputs and impacts. The program will also build the capacity of R&Ds in fostering culture of research ethics as a way of enhancing the quality of research.

Outcome(s) target contributes to:

1.1 Improved Human resource management capability at COSTECH by June 2019 [Yr 3 set up system & train champions, Yr 4&5 in-house trainings]

Target 1.1.2 – Development of New COSTECH strategic Plan:

COSTECH is implementing the rolling Strategic plan (2016/17-2020/21) that was prepared between 2014/2015 and 2015/16. The plan has been rolling for four years and many achievements have been realized. The Strategic Plan has come to an end this year therefore for the financial year 2020/2021 the plan is to develop new strategic plan that will operate for the coming five years.

Outputs: New Strategic Plan Document.

Target 1.1.3 Training in Administration and Performance Management

COSTECH is required to develop competences of its staff in areas of effective communication, management, and relationship building skills as part of the strategy to work with its various stakeholders, generic soft skills in management and leadership are imperative for COSTECH's growth and visioning. The transformation of COSTECH operations intends to improve quality of service and comply with the emerging societal changes governing its activities. All these make it necessary for COSTECH to train its staff to have multiple competences in meeting the demand of the Commission and country in general. In the financial year 2020/2021 the plan is to conduct trainings in Risk management, Quality Management, Systems Certification to Management and QMS Auditing team. The renewal of the current ISO certification will be applied for once the trainings are done and this will be funded through COSTECH's internal resources. Also, trainings will be availed to COSTECH staff in areas of multimedia, e-procurement, human resource management, leadership, planning, monitoring and evaluation.

Outputs: Training reports

Outcome(s) target contributes to:

1.2 Increased efficiency and quality of research management by COSTECH staff by 2017

Target 1.2.1 Staff training in Grant management

This is a carried over activity. With the facilitation of SRC, fifteen COSTECH staff have been capacitated on grants management including attending review panel meetings as part of improving NFAST management. Their attendance has helped to review grants manual and its managements systems (including incorporation of gender aspects in research and innovation, developing gender policy, developing reviewer's guideline). However, there is a balance allocated to this activity which will be carried over to the financial year 2020/2021 to fund additional trainings. The identified areas of trainings are seen to be relevant in the process of ensuring that grants are effective and efficiently managed. These areas are resource mobilization, planning, quality assured review and decision processes, monitoring and evaluation.

Output: Training reports

Target 1.2.2 In-house staff training in Research Management

This target aimed at building capacity to COSTECH staff to effective coordinate and manage research and innovation in the country. Last year four staff attended advanced training on programme management. The training has helped COSTECH in proper management of research and innovation programme as well as managing to attract funds from two partners (IDRC and World Bank). This was a carried over activity in the financial year 2019/2020, however, there is a balance allocated to this activity which will be carried over to the financial year 2020/2021 to fund additional trainings. The identified areas of trainings are seen to be relevant in the process of ensuring that research is effectively and efficiently managed. The identified focus areas includes advanced data management and analysis, monitoring and evaluation, risk management, foresight, research management and coordination, scientometric analysis, research translation, planning, monitoring and evaluation, procurement management and gender integration. Some of the training will be offered by DSV (advanced data management and analysis and gender integration)

Outputs: Training reports

Outcome(s) target contributes to:

1.3 Increased efficiency in financial management by 2017

Target 1.3.1 - Financial officers trained on the use of financial system: COSTECH is using digital financial and human resource management systems that are intended to improve the quality of financial management. To enhance the knowledge of individuals involved in managing or handling of finances of various donor funded projects, it is planned to carry out 2 trainings in financial management for donor funded projects to two groups of staff. First group will be for accountants and auditors and the second group will be for COSTECH staff

who are involved in managing projects but have no background in financial management especially in managing donor funded projects. Trainings are geared to enhance the effectiveness and efficiency in the acquisition and utilization of donor funds for advancement purposes, using proper application and techniques of accounting and finance concepts.

Outputs: Training reports.

Outcome(s) target contributes to:

2.1 Increased R&D institutions implementing the National Research and Innovation Monitoring framework, at least 40% of all R&D institutions by 2020

To attain this target the subprogram started by developing a National Research and Innovation Monitoring Framework, the framework was developed through a consultative workshops with R&D and HLIs. The framework has been completed, approved and 500 copies have been printed for a wider dissemination. This was followed by sensitization of the framework whereby a total of 120 researchers and heads of institutions representing 49 institutions were facilitated. For 2020/2021 the activity will be to enhance the use of framework so that the R&D and HLIs institutions to adopt the framework and develop their own. It is anticipated that three institutions will be facilitated to adopt the framework.

Outputs: Institutional framework, workshops reports

Target 2.2 – Development of COSTECH Research and Innovation M&E Framework and Resource Mobilization Framework

COSTECH to effectively execute its mandate of coordination and promotion of STI in the country, for 2020/2021 will be embarked on the completion of institutional M&E framework and research resource mobilization frameworks. The two framework will assist Commission on the areas were investment should be geared, assess its self in terms of implementation but also to find other sources which will assist in supporting STI activities in the country. This is a new activity to the program but with the same objective of improving the coordination capabilities of COSTECH to manage and promote quality research in the country.

Outputs: Institutional framework, workshops reports

Outcome(s) target contributes to:

2.2 Increased adoption and application of research standards in 20 – 30 R&D institutions by

2020

Target 2.2.1 – Establish a National Research Integrity framework:

To attain this target the subprogram started by developing a National Research Integrity in consultation with R&D and HLI institutions of both public and private institutions. The process has been complete, framework has been approved and 500 copies have been printed for a wider dissemination. This was followed by sensitization workshop whereby a total of 99 researchers and heads of institutions representing 37 institutions were facilitated. Followed by assisting two institutions Zanzibar Health Research Institute (ZAHRI) and Mzumbe University to establish Ethical Review Boards. For 2019/2020 the plan was to assist R&D institutions to establish review boards; the plan was by the end of the financial year 4 review boards were to be established. The activity was already planned to be held in April and May, 2020 with the support from SRC; but unfortunately the activity could not take place due to corona virus pandemic. So the activity will be implemented in 2020/2021.

Target 2.2.2 Development of Research Chair and Centre of Excellence Framework

To facilitate the R&Ds and HLIs to continue undertaking research of high quality which contributes to solve societal problems. For 2020/2021 COSTECH is planning to develop two more frameworks namely research chair and centre of excellence, this is a new activity but contributes to overall objective the subprogram, that aimed at enhancing R&Ds and HLIs to undertake high quality research. The aim of the two frameworks are to cultivate culture of doing high quality research and innovation that will bring impact to the society. This will complement the new initiative as from next financial year COSTECH is expected to manage two research chairs that will be supported by South Africa's National Research Foundation for the period of five years. The activity will be implemented with the technical support from SRC.

Target 2.2.3 To finalise and disseminate National Research Priorities Areas

Due to the recent changes in the socio-economic agenda, COSTECH has embarked in the process of revisiting and updating the current research agenda (2015-2020) in order to develop the new Research Priority Agenda to be implemented for the period 2021 -2025. The National Research and Development Priorities are developed to guide research areas that will spearhead industrialization for socio- economic transformation of the country. The document has been developed through a series of consultative workshops with stakeholders from R&D and HL institutions among others. The preparation of the document has been completed, is awaiting to be submitted to the R&D Advisory Committee meeting for endorsement and later be submitted to the Commission for approval. The activity will be implemented on the first semi-annual, this is a new activity.

Outputs: Reports, 4 Institutional Ethics Review Boards, 2 frameworks & National Research Priority Areas document.

4. Summarizing analysis

For 2019/2020 a number of activity has been implemented which includes finalization and printing of the three frameworks namely National Integrity Framework, National Research and Innovation Monitoring Framework and Research and Innovation Grants Manual. Also COSTECH staff had opportunity to attend grants management training in SRC and participated in interview panel meetings which was significant input in continuing improving research grants management system at COSTECH. The only activity which could not be touched was establishment of ethical review boards which has been shifted to 2020/2021 financial year.

Cross cutting matters in reporting of the activities:

In 2020/2021 it is intended that all trainings for COSTECH staff will take into account gender aspects as indicated in the results matrix attached as one of the indicators. For participants in the trainings for non-COSTECH staff, likewise gender will form part of the reporting. In the preparation of two frameworks and while implementing other subprogram activities other aspects like environment, health and safety issues and the principal of research integrity will be built in to ensure supported work and the institutions are in compliance with national standards.

The main risk envisioned with the 2020/2021 plan which is likely to affect the achievement of the planned targets as detailed below:

Potential risks

Completing some of the activities which involve gathering of large number of participants, with the pandemic of Corona virus, it is not clear when it will end. Currently most of the training institutions are closed, and large gatherings are banned.

Retaining of trained staff at their current employment following training.

There has been movement of staff out of COSTECH and R&D institutions this is a continuous challenge that in some cases affects the implementation of activities particularly where staggering and mentoring is not in place.

Mitigation of risks

Ensure that all staff follow guidelines provided by the Government and WHO in stopping the spread of the corona virus.

Keeping the staff and stakeholders healthier will ensure that the activities planned are carried out smoothly.

Moreover, COSTECH management and R&Ds should ensure staggering and mentoring of staff is instituted, furthermore exit meetings with staff that leave will provide insight into reasons of turn over that can inform COSTECH and R&Ds on mechanisms to minimize this risk.

5. Enclosures

Budget and Procurement (Attached)

Justified Sub-Programme /Project Budget

a) **Refreshments**: This caters for lunches/teas/water for workshop participants. Primarily the venue will be in accordance with government directives and a venue that avails best value for money, if more than the budgeted workshops are deemed necessary the COSTECH venue can be used to ensure the budget is not exceeded;

b) **DSA-Daily Subsistence Allowances**: This is provided when workshops or event are hosted away from COSTECH (outside of Dar es Salaam) and at a distance that participants cannot commute regularly. It covers accommodation and meals based on Government rates [secular attached]. Given that the government secular stipulates that all trainings and meetings are to be conducted in institutions/ venues run and managed by the government, which happen to offer the venue package and not accommodation and meals it is important that participants are facilitated to pay for their own accommodation and meals

c) **Travel costs**: Covers taxi fare within Dar es Salaam and compensation for fuel and mileage when participants of a training session have to travel out of Dar es Salaam; Participants coming from distant locations (eg. Mwanza or Arusha) are provided with return tickets which cover economy tickets. In the event of international travel, economy class is what is paid for. The estimates provided in the budget are for planning purposes but participants are paid actual expenses. For local and international travel including visas where relevant.

d) **Facilitation costs:** This covers costs for facilitators/ mentors/experts who will be facilitating the sessions (it is to be considered an honorarium rather than consultancy).

e) **Training fee:** Refers to the fee to be paid to the institution providing training to COSTECH staff

9. Results Matrix

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Specific Objective 1: To improve research management systems and capabilities at COSTECH to facilitate production of high quality research and innovation that addresses socio-economic challenges in Tanzania by 2019. (Target group – COSTECH).						

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
1. Automated Performance management system + Standardized Balance score card for each staff 2. 80 Trained staff (f/m) 3. Training reports and materials	1.1 Improved Human resource management capability at COSTECH by June 2019 [Yr 2 set up system & train champions, Yr 3&4 in-house trainings]	Number of staff (f/m) trained in financial management, quality management system and risk management		Institutional performance – finance, procurement and human resource reports developed by system		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Training reports (m/f) 2 in-house training reports (m/f)	1.2 Increased efficiency and quality of program management by COSTECH staff by 2017	Number of R&D registering positive feedback on services	0	COSTECH staff capacitated in research management (f/m) COSTECH staff capacitated in resource mobilization (f/m) COSTECH leadership (m/f) trained on change management staff (f/m) attend training in research communication		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Financial management system Staff training reports (m/f)	1.3 Increased efficiency in financial management by 2017	Functional financial management system	Enterprise Resource Management Suite system in place	Financial officers trained in financial system (m/f)		
Assumptions: • COSTECH [working environment] is conducive to optimal use of acquired skills and competencies • Assigned COSTECH staff have the capability and skill (without long term training) to manage programs						
Specific Objective 2:To establish competitive and robust frameworks for research integrity and M&E for advancing quality conduct of research and management in Tanzania by 2019 (Target Group – COSTECH and All R&D institutions).						

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Endorsed M&E Framework 2 Training reports on M&E held for R&D institutions and COSTECH (m/f) Centre of excellence framework Research chair framework	2.1 Increased R&D institutions implementing M&E framework, at least 40% of all R&D institutions by 2020 [Yr 1-2 framework development and baseline, Yr 3-5 implementation	Number of R&D institutions linked and adopting the Standardized Research M& E framework	0	R&D adopted M&E framework Centre of excellence framework developed Research chair framework developed Research and innovation M&E framework Resources mobilization framework		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
2 training reports for members of Institutional IRBs	2.2 Increased adoption and application of research standards in 20 – 30 R&D institutions by 2020	Number of R&D institutions adhering to research standards	To be established in year one	4 review boards established Training materials developed		
Assessment report Maintenance report		Number of R&D institutions using ICT based platforms for research management	0	Number of users using the platform		

Types of Outputs	Outcomes (including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
Assumptions: • Developed competencies and skills relevant to national development • Supported R&D institutions adopt and practice good conduct of research standards • R&D institutions are able to readily access information over ICT based platforms • Incentives for compliance to research integrity are created to encourage R&D institutions to comply/ conform with principles of research integrity						

10. Time Plan

The activities to be implemented are spread over the year between June to December 2020 and January to June 2021

June to December 2020: This period will be spent to improve research management systems at COSTECH by enhancing capabilities of staff to ensure high quality research processes. Staff will receive training in research management. During this period staff will be trained on quality management system, risk management and Financial Management systems to improve the overall functioning of COSTECH performance in managing research and tracking its operations in a more systematic manner and development research chair framework, finalization of COSTECH Research and Innovation M&E Framework, development of Resource Mobilization Framework, finalization and dissemination of National Research Priorities Areas, establishment of 2 ethical review boards and training and adoption of the National Research and Innovation Monitoring framework.

January to June 2021: This period will be utilized to train COSTECH management on leadership and management; to train COSTECH staff on change management. R&Ds and COSTECH staff will also be trained on research monitoring and evaluation, establishment of the 2 remained ethical review boards and development of centre of excellence framework and training on research management.

Subprogramme Procurement Plan for 2020/2021

Description	Event/Source	Budget	Time frame
NON CONSULTANCIES			
Provision of catering Service/Refreshments	1. Staff training in Quality Management System and Risk Management	3,000,000	July – Dec. 20
	2. Development of New COSTECH Strategic Plan	8,362,675	July – Dec. 20
	3. In-house staff training in Research management	25,009,830	Jan. – June. 21
	4. Training on the use of the National Research and Innovation Monitoring framework for R&Ds, HLIs and COSTECH staff	5,593,362	Jan – June 21
	5. To develop research center of excellence framework and research chairs	14,447,160	
	6. COSTECH Research and Innovation M&E Framework and Resource Mobilization Framework	4,668,296	
	7. Establishment of 4 ethical review boards	20,252,224	
	8. To finalize and disseminate National Research Priorities Areas	3,210,480	
	Sub Total	**84,544,027**	
Supply of venue	1. In-house staff training in Research management	11,342,327	July – Dec. 20

	2. Training on the use of the National Research and Innovation Monitoring framework for R&Ds, HLIs and COSTECH staff	1,700,654	July – Dec. 20
	3. To develop research center of excellence framework and research chairs	16,008,720	Jan. – June. 21
	4. COSTECH Research and Innovation M&E Framework and Resource Mobilization Framework	7,004,360	Jan – June 21
	5. Establishment of 4 ethical review boards	6,002,616	
	6. To finalize and disseminate National Research Priorities Areas	1,200,654	
	Sub Total	**212,347,385**	
Provision of Air Tickets Services	1. Staff training in Administration and Performance Management	10,000,000	July – Dec. 20
	2. Staff training in Financial Management	6,881,000	Jan – May 21
	3. Staff training in Grants Management	6,000,000	
	4. Training on the use of the National Research and Innovation Monitoring framework for	6,059,700	July – Dec. 20

	R&Ds, HLIs and COSTECH staff		
	5. To develop research center of excellence framework and research chairs	12,012,000	
	6. COSTECH Research and Innovation M&E Framework and Resource Mobilization Framework	4,460,000	
	7. Establishment of 4 ethical review boards	9,282,000	
	Sub Total	**54,694,700**	
Supply of Office stationeries	1. Staff training in Quality Management System and Risk Management	682,500	July – Dec. 20
	2. Development of New COSTECH Strategic Plan	682,500	July – Dec. 20
	3. In-house staff training in Research management	1,253,284	July – Dec. 20
	4. Training on the use of the National Research and Innovation Monitoring framework for R&Ds, HLIs and COSTECH staff	1,565,000	
	5. To develop research center of excellence framework and research chairs	5,460,000	
	6. COSTECH Research and Innovation M&E Framework and Resource	730,000	

	Mobilization Framework		
	7. Establishment of 4 ethical review boards	1,365,000	
	Sub Total	**11,738,284**	
Printing	1. To finalize and disseminate National Research Priorities Areas	20,000,000	Jan – June 21
	Sub Total	**20,000,000**	
	Grand Total	**383,324,396**	

RESEARCH COMMUNICATION

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1. Executive summary of sub-programme

COSTECH is entrusted with the advisory role of formulating policy on science and technology and its implementation; it monitors and co-ordinates scientific research, technology development and transfer; acquires, stores and disseminates scientific and technological information and fosters regional and international cooperation. In delivering the mission, COSTECH through the Directorate of Knowledge Management, is responsible for popularization of STI and dissemination of scientific and technological information. The strategic functions of the directorate are to popularize science and technology at all levels including the general public; to acquire, store and disseminate scientific and technological information; to hold or sponsor conferences, symposia, meetings, seminars or workshops; to publish in newspapers, journals or periodically designed to promote interest in science and technology development and technology transfer events; and to acquire and analyse information on alternative sources of technology and its delivery to users.

In carrying out its mandate of promoting and supporting research, COSTECH has an obligation to ensure that research results influence how society develops by ensuring a continuous dialogue between researchers and potential users. Such dialogue can only be meaningful if the research system is able to present its findings in a way that is comprehensible to the recipients. Users must also communicate their knowledge needs to the research system at an early stage. Support is needed to facilitate strengthening of research communication capacities among stakeholders and the creation of forums of various kinds that facilitate a constructive dialogue between research

practitioners and recipients.

2. General objectives and expected results 2015-2020

General Objective (2015-2020): To increase use of evidence-based knowledge and technologies for legislation, policy and programme decision-making that contributes to sustainable development, by 2020. (Target Group: Primarily decision makers and enterprises and secondarily implementing development partners and the scientific community).

Specific Objective 1: To build skills and mechanisms for communicating research results by 2020 (Target group: R&D Primarily Decision makers and secondarily R&D institutions and Media)

Specific Objective 2: To increase access to information that informs decision-making and STI utilization by 2020 (Target group: Primarily COSTECH and secondarily R&D Institutions specific interest (consumers and developers) groups, scientific community and decision makers.

Expected outcomes for 2020/2021

The outcome of the sub-programme for this year (2020/2021) will be:

1.1. Increased use of research results in decision-making processes by at least two (2) decisions.

1.2. Improved STI communication to researchers and journalists by at least one training.

2.1 Increased production of quality STI knowledge products by at least 3-4.

2.2 Increased online STI information for 10 - 15 R&D by June 2021

2.3. Increased public awareness on technology utilization cases discussed by interest groups (communities of practice) for sustainable development ranging from 2 – 3 fora/dialogues per annum

3. Annual targets for the Year 2020/2021

For the year 2020-2021, this sub-program which contributes to the third institutional objective, intends to build on previous achievements and focus more on realization of project outcomes and tracking of impact. The subprogram will put special priority and urgency on operationalization of skills and mechanisms for communicating research results that have been built in previous years. Moreover, additional efforts will be put into mobilizing more STI information and availing them to potential users such as decision makers and practitioners. This year's plan outlines activities that have been careful designed to effectively contribute into each of the project's targets and specific objectives. The planned activities include:-

i. Conduct seminar to policy and decision makers on the use of evidence based decision making
ii. Training of at least 40 researchers and/or media personnel on research communication
iii. Production of one (1) STI Documentaries/ 2-3 media programs and 3-4 print materials
iv. Maintenance of knowledge studio (train at least 2 administrators and other 3 staff of knowledge studio on multimedia)
v. Facilitate training to promote and motivate local researchers to publish in reputable journals
vi. Installation and maintenance of Institutional Repositories (IRs) by connecting additional 10 - 15 Repositories from R&Ds and HLIs to COSTECH Repository (hub)
vii. Maintenance of COSTECH website
viii. Facilitate 2- 3 STI fora/dialogues.
ix. Establish and maintain Research Grants Management (RGM) system
x. To participate in STI exhibitions

Objective 1

Outcome(s) target(s) contributes to:

1.1. Increased use of research results in decision-making processes by at least 15-20 decisions per annum

Target 1.1.2 At least two (2) decisions based on scientific evidence presented

For the past five years, the sub programme planned to increase access and use of selected research results in decision making processes ranging from 3 - 5 per annum. Due to regular change of higher leadership after the 2015 general election and staff turnover at COSTECH, this activity has not been implemented to the fullest. However, in financial year 2019/2020 COSTECH realized that it needed a policy brief framework and guideline to guide the process.

During financial year 2020/2021, COSTECH in collaboration with UONGOZI Institute, an identified Government agency responsible for training on leadership matters, plan to develop policy brief framework and guidelines for presenting scientific evidence using the experience gained in the support from Human Development Innovation Fund (HDIF). After the framework and guidelines have been developed, COSTECH is planning to conduct at least two (2) seminars to 50 policy/decision makers. These seminars will help the policy/decision makers to make informed decisions based on the scientific evidences presented.

Outputs:

- Developed the framework and guidelines
- Seminar report(s).

2.1 Improved STI communication by at least 2-4 media house per annum

Target 2.1.1 At least 40 researchers and/or media personnel trained:

For the past five years, with support from Sida, the sub programme planned to train 200 science communicators and so far it has managed to train 248 (89 females) science communicators who include editors, researchers and journalists. The training workshops have continued to bridge the gap of science communication between researchers and journalists/ media personnel and most of the information prepared and published in the media houses have reached the public in a language that is understood easily. Also, there has been an increase of COSTECH visibility and accessibility of STI information to the public.

For this financial year 2020/2021, COSTECH will organize two (2) science communication training workshops. These trainings will be held in central zone (Dodoma and Singida) which will comprise a total of 40 researchers/media personnel each from different Research and Development institutions and from different media houses. The trainings will also be followed by field trips whereby journalists will be facilitated to visit research and innovation projects that have exhibited tangible results in order to produce knowledge products such as STI documentaries, news/ feature articles, TV and radio programmes.

The partnership with SPIDER/DSV is key here as the practice of communicating science is one they have shared experience on during the last two years. COSTECH will consult with the Swedish partner on how they can contribute to this activity.

Outputs:

- Training report(s),
- STI documentary,
- News and feature articles,
- TV and radio programmes

Target 2.1.2: one (1) STI Documentaries/media programs and print materials produced

For the past five years, the sub programme planned to prepare and broadcast 15 documentaries; to prepare and air 10 – 15 TV/radio news programmes per annum; produced and publish 100 - 150 news and feature articles; print and disseminate 100 - 150 knowledge products. So far, COSTECH has produced and broadcasted 12 STI documentaries' prepare

and air 360 STI TV/radio news programmes; produced and published more than 1,250 news and feature articles in different newspapers; printed and disseminated a total of 15,510 knowledge products.

For 2020/2021 COSTECH is planning to continues with finalization of the development of Communication Strategy; produce one (1) documentary; broadcast and print STI knowledge materials as way to increase access to information that inform decision making and STI utilization as will be guided by the newly developed Communication Strategy; continue to engage media houses to cover stories in different STI events; continue to engage researchers and innovators to showcase their products and services and utilize its social channels (Facebook, twitter, WhatsApp and YouTube channel and COSTECH TV online to publicize and disseminate STI information.

Further to that, COSTECH will continue to print and disseminate different STI knowledge products as need arise.

Outputs:

- The newly developed Communication Strategy
- 1 documentary,
- News and feature articles,
- TV and radio programs,
- Copies of brochures, etc.

Objective 2

Outcome(s) target(s) contributes to:

2.1 Increased production of quality COSTECH STI knowledge products by 3-4 per annum

Target 2.1.1 ***Increased production of quality STI knowledge products***

2.1.1.1. Knowledge studio maintained: For the past five years, the sub programme planned to renovate the room for knowledge management laboratory; equip it with modern studio equipment and train staff who will be responsible for running it. Due to delays of procurement processes, the renovation started in 2017. So far, the knowledge studio room has been renovated and equipped whereby COSTECH continues to use outside experts and a few equipment which were procured to produce knowledge products such as documentaries and other publicity contents.

In this financial year (2020/2021) COSTECH plans to operationalize its Institutional Communication Strategy by first developing the guidelines for production of various knowledge products. Also, COSTECH plans to collaborate with SPIDER/DSV to strengthen

internal capacity of its staff by training at least 2 administrators and other 3 on multimedia so that they can use facilities on the knowledge laboratory to prepare contents for print and online knowledge products.

Furthermore, due to the outbreak of Corona pandemic, and other unforeseen pandemics, which has affected the usual arrangements in conducting meetings, and has led to the increase in the use of online platforms to conduct meetings, COSTECH plans to add more ICT facilities that will increase the organization to participate in e-meetings efficiently.

Outputs:

- STI knowledge products i.e. documentaries,
- Copy of broadcasted information,
- Knowledge studio manual,
- TV and radio programmes,
- Training report(s).

2.2 Increased online STI information for 10-15 R&D per year by 2020

Target 2.2.1: Ten to fifteen (10-15) R&D institutions connected to the platform

2.2.1.1 E-Library content development and acquisition:

Through the sub programme, COSTECH intended to develop and update E-Library system, furnish it and link all R&D institutions to it. So far, the library management system has been developed, the library has been furnished with computers, heavy duty scanner, and electric back up, and linked to it a total of 6 R&D and higher learning library institutions. Also, COSTECH managed to establish a list of 140 local journals so that it can provide support for indexing and other visibility mechanisms as well as came up with the guideline for analysing and evaluating Tanzania Local Journals.

In this coming year (2020/2021), COSTECH plans to continue to connect at least ten (10) Research and higher learning institutions to COSTECH library system so as to increase number of Research and Higher learning Institution who will contribute in sharing information. In addition, COSTECH will publicize the information obtained from local journals on the COSTECH e-library; select researchers from 10 HLIs and R&Ds as pilot and will be trained and guided until they publish in reputable journals which are free; select a few journals and provide

support for international visibility and reward those who will manage to publish in reputable journals.

Outputs:

- Linked R&Ds to COSTECH Library
- Training reports
- Published papers in reputable journals

2.2.2 Installation and Maintenance of Institutional Repositories:

During the planning period of 2015 – 2020 the sub programme planned to develop information platform (institutional repository – hub), which will harvest information from higher learning and R&D institutions' repositories (IR) which will be linked to it. Also, for those institutions without institutional repositories COSTECH intended to assist in developing the IR and link them to COSTECH hub. So far, COSTECH has already developed the National Institutional repository (hub) and linked to it a total of eight (8) institutional repositories from R&D and higher learning institutions.

In the fiscal year 2020/2021, COSTECH will continue to develop and connect 30 - 40 R&Ds institutional repositories for those who have them to central Institutional repository (hub). Furthermore, in order to strengthen security of the many developed information platforms, COSTECH will continue to work with SPIDER DSV experts to develop a practical data harvesting, recovery, security policy and guide. The policy and/or guide will be informed by the security assessment report that has recently been submitted to COSTECH by Electronic Government Agency of Tanzania. This activity will help the connected institution to share STI information among themselves.

Output:

- Progress report on the implementation of the Installed and development of IRs.

2.2.3 COSTECH Website restructured:

Through the sub programme, COSTECH intended to restructure and maintain COSTECH Website. So far, the website has been restructured and maintained by editing and uploading the contents on website and social media pages. Also COSTECH formulated a specific committee of five (5) staff to review and improve the contents of the website.

In the coming financial year (2020/2021) COSTECH intends to continue with maintenance of the website by gathering relevant contents, editing/ developing them in a way that can easily be understood by the public, and uploaded to the website after approval by the Management. Also,

Output:

- Updated COSTECH website,
- Updated Social media pages.

2.2.4 Establishment and Maintenance of Research Granting Management system

From the previous years, COSTECH through Sida programme under Research Management component developed and installed Research Portal which is a system that intends to manage research ecosystem in COSTECH and nation as a whole. Currently, the system has research clearance, research grants and monitoring and evaluation modules which are already operational. The system was reviewed and found the need to upgrade in order to incorporate further functionalities that include innovation grants, research facilities and infrastructure. Different research stakeholders will convene between May – June 2020 to produce system requirements and start development on key priority areas and innovation grants based on the stakeholders needs.

For this Financial Year 2020/2021, COSTECH intends to extend development for research registration, facilities, infrastructure and technology management in the system by increasing the functionalities of the system to perform more than what is being performed by including the monitoring of STI indicators.

Output:

- Updated Research System operational.
- Reports

2.3 Increased public awareness on technology utilization cases discussed by interest groups (communities of practice) for sustainable development ranging from 1 – 3 forums/dialogues per annum)

Target: 2.3.1 Facilitate and support 3 STI fora/dialogue:

For the past five years, the sub programme planned to facilitate and organise 1-3 fora per annum. So far, COSTECH organised and facilitated 8 STI fora/dialogues.

In this fiscal year (2020/2021), COSTECH plans to organise at least three (3) fora which will be from different Science, Technology and Innovation (STI). This will be done through organising a discussion group which will be established in collaboration with motivated local researchers and other decision makers. The topic could be on outbreak of certain issue like issue of diseases e.g. COVID -19 or other diseases; ICT related issues, land conflict, tourism, etc. The impact of these dialogues/fora is to engage the public and professionals so as they can recommend to government the best ways to solve STI challenges.

Outputs:

- STI Forum reports

- Issue briefs

Target: 2.3.1: Participate in annual STI exhibitions

For the past five years, COSTECH has been organising and participating in various annual STI exhibitions. Some of these exhibitions were part of the annual STI Conference organised by COSTECH while others were organised by COSTECH stakeholders and COSTECH was invited to showcase its products and services.

In this fiscal year (2020/2021), COSTECH plans to attend at least six (6) annual STI exhibitions which include: the Annual Dar es Salaam International Trade Fair; Annual Higher Education, Science and Technology exhibition; the Annual Farmers Exhibition; the annual national STI Competitions (MAKISATU); Young Scientists Tanzania exhibition and the National Institute of Medical Research exhibitions, etc.

Outputs

- Participation Exhibition reports

4. Analysis

Impact of the activity backlog to the 2019/2020 plans:

During the ongoing implementation year 2019/20, additional experience was acquired and some tested approaches to various activities of the sub programme proved a success. This includes media training organized into zones and accompanied by visitation to neighbouring R&D institutions. The excitement that was created during such training in Zanzibar has led to plans to continue organize similar trainings in other zones in Tanzania mainland such as Southern and Northern zones. The draft STI Communication and Engagement Strategy that is currently going through internal approval machinery is expected to provide a framework for the sub-programme activities in more coherent ways. Presence of such a framework, which consolidated inputs and lessons from various players (e.g. Swedish institutions such as SPIDER/DSV, - Stockholm University SRC, and Swedish National Television) and completion of the knowledge studio, now forms a very strong foundation for increased production of quality STI products and commission's contribution to media houses and social media platforms. One particular approach that will be implemented in year 2020/21 and that will continue to transform the way the sub programme communicates STI is to build capacity of STI communication teams at Higher Learning Institutions and R&D institutions in ways that make their information feedback to COSTECH. The aforesaid plans and strategies have been carefully put in place to minimize the effects of activity backlog for year 2019/20.

Internal Capacity Issues:

The biggest challenges which we had before was understaffing, labour turnover and skills to implement some of the activities within the sub programme. COSTECH has currently received new four staff including, the new acting head of the department, new acting Manager for Documentation and Publications, and two more junior staff dealing with ICT and Public Relations issues. The new Organization structure continues to strengthen middle management levels in a way that is anticipated to increase the rate of implementation of activities. With these new improvements, activities within the sub programme will be better coordinated under the guidance of the STI Communication Strategy.

Potential risks

1. Labour turn over i.e. ability to retain staff in the area of mass communication especially shortage of staff (experts) in operating the knowledge studio.
2. Lack of exposure to advance in technology affects our capacity to operationalize technological projects like e-library, repository and Knowledge studio.
3. Low uptake of new initiatives to strengthen STI communication teams at higher learning and R&D Institutions.
4. The outbreak of COVID-19 pandemic which has led to restructuring of implementation of most activities.

Mitigation of risks

1. COSTECH will continue to nurse existing relations with various partners as well as foster new win-win partnerships and collaborations.
2. COSTECH will identify necessary training for sub programme staff in order to bridge the skills gap as well as joint working with local and international partners.
3. COSTECH will closely supervise sub programme implementation activities to ensure intended objectives are largely met.
4. COSTECH will continue to explore various mechanisms such as using online platforms to implement most of its planned activities and will partner with SPIDER/DSV in this process.

5. Enclosures

1. Budget and Procurement Plan

6. Budget Description and Justification

a) **Conference package**: This covers the venue for STI Conference and Exhibitions which covers stationery, public address system and refreshments generally the range is 35-45USD per person.

b) **Daily subsistence allowances**: Provided when workshop or event is hosted away from COSTECH and at a distance that participants cannot commute regularly. It covers accommodation and meals not covered under the conference package based on Government rates.
c) **Travel costs**: Cover taxi fare within Dar es Salaam and compensation for fuel and mileage; Return tickets covers economy tickets for local travel;
d) **Refreshments**: This caters for lunches/teas/water for workshop participants
e) **Venue**: This cater for fund to be paid to the Government venue
f) **Stationery**: This cater for papers/tonner/pens etc. to be used during the workshop
g) **Facilitation costs:** This covers costs for facilitators/ mentors/experts who will be facilitating the sessions (it is to be considered an honorarium rather than consultancy).
h) **Design and publishing:** These are for the printing houses where policy briefs and banners are submitted. This is subject to procurement.
i) **Documentaries and broadcast:** These are to be conducted by media houses that will be commissioned the work through procurement procedures.

Types of Outputs	Outcomes (Including targets)	Performance Indicator of Outcome	Baseline (if established)	Annual Outcome Targets for 2020/ 2021	Actual Outcomes Achieved: Results Observed in year (2020/2021)	[Key] Outputs produced in year to obtain Outcome in 2020/2021
S Specific Objective 1: To increase quality and quantity of skills and mechanisms applied to communicating research results by 2020 (Target group: R&D Primarily Decision makers and secondarily R&D institutions and Media)						
Updated COSTECH website/ social media pages Seminar/ Workshop reports (M/F) COSTECH annual reports	1.1. Increased use of research results in decision making processes by at least 15-20 decisions per annum	Number of decisions made using scientific evidence Number of scientific evidence that can influence decision making	10~20 Journal articles published	1. at least two decisions based on scientific evidence presented		

Documentaries, Radio programmes,						
Training content 40 trained media personnel & researchers Training report(M/F) Audit report STI communication reports in media (M/F) 3 STI	1.2. Improved STI communication between researchers and journalists in least 2-3 zones per annum	Number of communication products (print and visual news and feature articles, etc.) Published and broadcasted in electronic and print media	At least 200 articles published during the previous Sida support At least 400 articles published annually through Government support and other donors	1. At least 40 media personnel/researchers trained 2. Three (3) STI documentaries and/or media programs produced and aired 3. At least 12 TV and radio programmes broadcasted 4. At least 100 news/feature articles		

documentaries (M/F) 12 Broadcasted TV and radio programmes			(WEMA, OFAB, etc.) At least 5 programmes prepared and broadcasted previous during the Sida support	published 5. At least 500 brochures printed and disseminated		
Assumptions: • End users are involved early in the research cycle such that they are ready and willing to adopt the outputs for poverty alleviation • Commitment by Government of 1-3% of the Gross Domestic Product to support high priority research and innovation strategies • Research communication capabilities are developed to translate research results in terms that can be understood and used by target groups • Research outputs are available for repackaging and communication						
Specific Objective 2: To increase access to information that informs decision-making and STI utilization by 2020 (Target group: Primarily COSTECH and secondarily R&D Institutions specific interest (consumers and developers) groups, scientific community and decision makers.						
Functional knowledge lab, Knowledge lab staff training report (M/F),	2.1 Increased production of quality STI knowledge products by 3-4 by COSTECH per	Number of knowledge products developed	0	Increased production of STI knowledge products (3-5)		

Videos and Documentaries, Systems for documentation, Needs analysis report,	annum					
Information platforms and repository established,	2.2 Increased online STI information for 10-15 R&D per year by 2018	Number of R&Ds linked	1 (COSTECH Website)	10 to 15 R&D and higher learning institutions connected to the platform		

strengthened and linked to 77 R&D institutions; e - library staffs trained (M/F)						
Speakers' forums (M/F) Issue briefs Brochures	2.3. Increased public awareness on technology utilisation cases discussed by	Number of issues addressed	None[2]	2 - 3 forum/ dialogue conducted		

[2] COSTECH has supported two under the Open Forum for Agricultural Biotechnology (OFAB).

Study visit (M/F) Online forum	interest groups (communities of practice) for sustainable development ranging from 1 – 3 forums/dialogues per annum					

Assumptions:

- COSTECH possesses in house capability for knowledge product development
- Available issues for discussion and interest groups trust COSTECH to facilitate dialogues
- Allocation of resources to implement recommendations emanating from dialogues
- Scientific content readily available to justify investment and distribution over digital devices to improve access to STI information
- R&D Institutions possess functional ICT infrastructure and capabilities to facilitate access to digital resources

The activities to be implemented are grouped into six months periods; July to December 2020 and January to June 2021

July to December 2020: In the first half of the year (2020/2021), continue production of knowledge products; training on Research communication for researcher and media; Facilitation of 2 STI dialogues (fora); Maintenance of new COSTECH website; First promotion and motivation training of local researcher to publish in reputable journal; One (1) policy makers seminar on the use of evidence based decision making Establishment and Maintenance of RGM.

January to June 2021: In the second phase; the 2nd policy makers seminar on the use of evidence based decision making; Continuation of Maintenance of institutional repositories; One (1) forum will be conducted; 2nd promotion and motivation training of local researcher to publish in reputable journal will take place.

Subprogramme Procurement Plan for 2020/2021

Description	Event/Source	Budget	Time frame
NON CONSULTANCIES			
Provision of catering Service/Refreshments	1.Training of researcher and media personnel	3,611,400	July – Dec. 2020
	2. Seminar for use of evidence based decision making	1,058,400	July – Dec. 2020
	3. Facilitate STI fora workshops	4,914,000	July 2020 – June. 2021
	4. Training to promote and motivate researcher to publish in reputable journal	6,000,000	July 2020 – June 2021
	Sub Total	**15,583,800**	
Supply of venue	1. Training of researcher and media personnel	800,436	July 2020 – June. 2021
	2. Facilitate STI fora workshops	1,500,135	July – Dec. 2020
	3. Training to promote and motivate researcher to publish in reputable journal	200,000/=	July 2020. – June. 2021
	Sub Total	**2,500,571**	
Supply of Office stationeries	Participating in Annual STI Exhibitions	227,560/=	July 2020 - June 2021
	Training of researcher and media personnel	3,000,000/=	July 2020 - June 2021
	Facilitate STI fora workshop	1,638,000/=	July 2020 - June 2021

	Training to promote and motivate researcher to publish in reputable journal	3,000,000/=	July 2020 - June 2021
	Sub Total	**7,865,560**	
Printing	Printing of knowledge products	74,000,000	July 2020 - June 2021
	Sub total	**74,000,000**	
Goods	ICT facilities to enable e- meetings	8,000,000/=	July 2020 - June 2021
	Sub total	**8,000,000/=**	
	Grand Total	**107,949360**	July 2020 - June 2021

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1. 1. Executive summary of sub-programme/project

This sub programme aims at contributing to the build-up of the National Innovation System in Tanzania. The ultimate goal is to shape this system in such a way that it promotes innovations for sustainable development, in line with the national five years development plan (2016-2020) and the 2030 Agenda for Transforming Our World. It focuses to establish collaboration between academic institutions, entrepreneurs and governmental authorities in a so-called Triple Helix configuration. Through this format entrepreneurs will get access to research and higher education institutions to collaborate in science and technology supported innovations. Involving governmental authorities in the cooperation safeguards a mutual alignment of innovations to policy-goals and of policies to facilitate innovation. With such cooperation thesubprogram aims at facilitating innovations that contribute to all three aspects of sustainable development; the social, the environmental and the economic.

The subprogram emphasizes the build-up of innovative clusters of small and medium sized firms in Tanzania with the general objective of developing a method for replication and scaling-up of competitive and innovative clusters in the emerging knowledge society of Tanzania. The subprogram has five specific objectives, which are carefully monitored to provide experiences for replication and scale-up. Intervention modalities will be documented in a set of guidelines that will present the main ingredients for the successful development of innovative clusters. These clusters contribute to sustainable consumption and production patterns, gender equality and decent work for the cluster members and employees.

The outcome of the previous financial year 2019-2020 demonstrated a substantial increase in the capacity of stakeholders in cluster interventions to collaborate and co-develop for increased competitiveness of the clusters and to secure their contributions to regional development. In addition, collaboration between knowledge institutions, governmental authorities and private sector has increased. These outcomes have been documented in the implementation of a Baseline survey, a Cluster Research and Innovation Model, a Technology and Innovation Assessment Model, M&E frameworks as well as in improved capacity at project coordinating institutions for Innovative Clusters management mechanisms.

COSTECH acknowledges that it couldn't work alone so it has identified two institutions to work as partners, namely Small Industries Development Organization (SIDO) and the School of Natural Sciences, Technology and Environmental Studies at Södertörn University, which is hosting the SICD team.

2. General objectives and expected results 2017-2020

General objective: To develop a method for replication and scale-up of competitive and innovative clusters in the emerging knowledge society of Tanzania.

Specific Objective 1: Capacity building for COSTECH and SIDO to promote, govern and manage innovative cluster interventions

Specific Objective 2: Enhancing capacity in regional and local government

	authorities in the implementation of innovative clusters initiatives
Specific Objective 3:	Enhance sustainable competitiveness of relevant innovative cluster products and services
Specific Objective 4:	Disseminate and develop the cluster research model among clusters and academic/research institutions
Specific Objective 5:	Building ICT-support for cluster development.

Expected outcomes for 2017 - 2020

The main outcome of this program is the demonstrated capacity of the stakeholders in cluster interventions to collaborate and co-develop for increased competitiveness of the clusters and to secure their contributions to regional development. This outcome will be demonstrated in a publication "Guidelines for development of innovative clusters", that can be used for the replication and scale-up of innovative clusters.

The following are the expected outcomes for the three years of the programme implementation. For each of the objectives there will be specific outcomes. The descriptions build on a general framework for outcomes related to capacity.

The general outcomes for capacity building are:

1) Capacity to analyse enhanced
2) Capacity to govern, manage and organize improved
3) Capacity to perform and implement improved
4) Capacity to monitor and evaluate progress enhanced
5) Capacity articulate problems and communicate results enhanced

The five capacities could also be expressed in terms of 1) Thinking, 2) Planning, 3) Doing, 4) Rethinking, 5)Telling. These general terms must be applied to the context, the roles and responsibilities for each of the actors and specific objectives.

3. Annual target 2020/21

The global and national sustainable development goals require that Tanzania transform itself to a knowledge society. COSTECH, SIDO and the Swedish partner SICD see clusters as an instrument for this transformation. While this logic may be theoretically clear, it needs to be built up in a testable practice. Hence, this subprogram aims at developing a replicable model for cluster interventions that can be justified as an instrument for Tanzanian development strategies (Macro policies), Local government economic development strategies and as an opportunity for aid donors seeking better impact of grants and programs.

Another important contribution of this sub-program is to develop a method to monitor all interventions in the clusters and evaluate the results. The framework for monitoring and evaluation (M&E) will be an instrument for testing of hypotheses regarding cluster development. A regular use of this instrument will create opportunities for learning by doing and a continuous adjustment of the intervention plans. Results from the M&E exercises will also lead to reviews of the guideline working papers, securing that the project will deliver tested approaches to the different challenges involved in development of innovative clusters.

The program execution is mainly built on "learning-by doing" through the daily activities performed by each of the Triple Helix actors, supplemented by learning through cooperative and co-development activities and by formal training in workshops. The funding scheme on this component was estimated budget of 12 million SEK for three and a half years started from July 2017. In this implementation period COSTECH, has planned to achieve mainly six targets which built up from the activities initiated in 2019-2020 and contributes to Consolidation and Preparation for scale up phases.

It is impossible to describe in detail what this phase will entail, as it will mostly build on the developments obtained during set up and experimentation phase. However, the support organizations will build their capacity to act as "process supporters" to the clusters. The final step will be used to prepare for scale-up the project, while, at the same time, securing continuation for the activities and negotiate on opportunities to replication and scale up. During this period the main focus will be on compiling and analysing the results from the M&E exercises made throughout the project. This analysis will result in a final project report.

Target 1: Five (5) Guidelines to support Cluster development activities developed and operationalized by June 2021

Sida through its funding is supporting the development of 8 guidelines, of which 3 are already finalized (the Cluster Research and Innovation Model, the Technology and Innovation Assessment Model, the M&E framework). All the guidelines are expected to be used as a roadmap for the establishment and scale up of innovative clusters in Tanzania. The major lesson learned during developing the guidelines is that while they are conceived as important components for cluster development, they have not yet been systematized as in the new approach. Therefore, this implementation year, funding will be used to finalize development of

the remaining guidelines and operationalise the selected 5 among the established guidelines. The essence of operationalisation of these guidelines is to facilitate the scale up of the innovative cluster firms. The use of these guidelines will help the clusters to Improve the quality of the products (goods and services) they deliver, Increase the productivity in the parts of the value chain that the clusters control, branding their products to be recognized in the targeted markets. All these will lead to **increased and more sustainable incomes** and further **job creation** in the home regions of the clusters. Under the operationalization of established guidelines the following specific activities will be carried out for each guideline. In the implementation model for funding cluster activities, the selected 5 guidelines will guide what prerequisites the 15 participating clusters have to show to get funded.

Activities

1.1 Cluster funding and external cooperation guideline

SICD together with COSTECH have conducted literature review and came with a draft National guideline on cluster funding and external cooperation. This draft will continue to be improved while seeking advice from knowledge experts from Universities and R&D Institutions. Workshops will further be conducted to engage in dialogue with national policy makers, with donor agencies and the financial sector to secure political and financial support for a scale-up of the program, and to find joint business ventures for the clusters.

1.2 Guideline for Technology cooperation and IPR issues with National, and Foreign firms or researchers:

SICD is facilitating COSTECH with the development of Guidelines for Technology cooperation and IPR issues with National and Foreign firms. When this guideline is finalized, the clusters and their academic partners will take consolidation step and engage in detail in innovation processes. During this financial year, each cluster will start explorations for securing IPR (patent, trademark, pattern protection or copyright) of their products. The guideline **will enhance** and facilitate the engagement of clusters in at least three projects for design or prototyping. The clusters will be facilitated to secure the needed and most relevant IPR issue.

1.3 Guidelines for exports of cluster products

This guideline will aimed at enhancing the of capacity clusters to analyze on a practical as well as abstract level. It will involve all key steps to be followed and requirements of all key stakeholders, what are the market opportunities for their products and services? Which are the quality demands and standards requirements on the respective markets

1.4 Guidelines for skills formation (cooperation with VETA)

The developed guideline will enhance the support organizations to increase their efforts on public relations. They will be engaged in dialogue with national policy makers, with donor agencies and the financial sector to secure political and financial support for a scale-up of the program, and for ideas emerging in the clusters. Another important arena for dialogue is with companies active in Tanzania to find opportunities for joint business ventures with the

clusters. A third area for dialogue is with the education sector. At this stage of the subprogram, clusters will have defined their skills needs (as part of the business strategy) and the Support organizations can start to seek opportunities together with Vocational Education Training Authority (VETA) and academic institutions. COSTECH will organize the dialogue session with VETA and academic institutions discuss the guidelines for skills formation for the 15 clusters.

1.5 Guideline for Cluster Communication

Methods for data collection from the M&E framework will be designed to take into consideration reporting, learning, decision conditions and communication flow. However, reporting requirements at different levels will weigh heavily in the first iteration of the M&E framework. As experiences build up, modifications of the data collection methods will be considered and tested to better fit the conditions for learning, decisions conditionality and communication. Support to communication of results will be provided through manuals and trainings with particular emphasis on defining the adequate messages to be communicated to different target groups.

SICD has started to facilitate the development of this guideline. As part of learning by doing COSTECH is also part of this development. COSTECH will closely work together with potential experts from School of Journalism and Mass Communication (SJMC) to finalize the guidelines in Tanzanian context.

Outputs: Guidelines on funding and external cooperation, Guidelines for technology cooperation with national or foreign firms or researchers, including wider approaches to IPR-issues, Guideline for exports of cluster products, Guideline for skills formation, Guideline for Communication, Guidelines for cluster development in Tanzania and workshop reports.

Target 2: Field work supervision, Data Analysis, Project Synthesis and Proposal write up for continuation, replication and scale-up conducted by June 2021

A monitoring and evaluation framework guides the procedures for field work supervision, data-collection, analysis and reporting throughout the process of project implementation as well as for project outcome and proposal write up for continuation, replication and scale-up. The M&E framework addresses issues on several levels:

- The skill enhancement within individual cluster members
- Processes of cluster development
- Results of proposals and project implementation in terms of steps taken towards capacity building, quality, productivity and branding.
- Impact at the territorial level
- Learning within the innovation system promoting cluster development

The framework also addresses the need of key stakeholders, each one with a particular capacity. This has implications for the data that needs to be gathered, the data collection processes and the way data are searchable and represented in reports to different instances. As

far as possible the M&E framework needs to provide data to be used in the regular reporting schemes for the agencies, authorities, academic institutions and businesses involved. It is further designed to respond to crucial questions for the different stakeholders, as regards their performance.

2.1 Data collection and Data analysis (Two sessions)

A supervising team from COSTECH and SIDO will go to the field with the aim of collecting data from cluster firms as a matter of progress supervision and monitoring. Data collection tools will be applied to capture data from the field studies. Closed and open ended questionnaires derived from the M&E framework will basically be applied to both COSTECH and SIDO Project Coordinators for acquiring data related with capacity on facilitating creative and innovation to intended clusters within the project. Secondly, questionnaires to cluster enterprises and officials from the local government authorities will be gathered. Furthermore, focus group discussion will be applied to the 15 clusters, where leaders and core members from each cluster will form the focus groups.

Data analysis process will be conducted based on information obtained from the clusters, LGAs, COSTECH and SIDO. SPSS and other statistical analysis software will be used for data management including data entering process, data set creation, cleaning and data analysis.

2.2 M&E and cluster development (Final report based on analysis of all M&E exercises) prepared by June 2021

Planning meetings will be conducted with the aim of organizing and scheduling the cluster development project activities, whereby all project partners will be examining current situation and agreed on the best way to enhance smooth execution of the project. All program partners will contribute to the annual report. However, COSTECH will take the lead and coordinate the task to complete the annual report.

COSTECH and SIDO have built the capacity to monitor and evaluate the clusters performance as well as interventions to promote cluster development. This includes the development of a viable M&E framework that provides the data required for analysis. Data collection will be delegated to SIDO, the LGAs and the clusters, but COSTECH will need to safeguard the quality of the data and the analysis, to provide a sound basis for policy formulation and further, adjusted or new, interventions.

The developed viable M&E framework is a tool that will be used to monitor and evaluate the clusters performance as well as interventions to promote cluster development. This includes the development of a viable M&E framework that provides the data required for analysis.

The analysis of M&E and analysis of general experiences of implementation of activity areas will result in a revised version of all the guidelines. The documentation that is

available for the public beyond the project will be tested as valid. While previous editions have been available, the final versions will have to be published as official documents.

2.3 Proposal for Continuation, replication and scale up prepared

Since this program is coming to an end, there is a need to review and document the lessons and experience learned from this ending sub program and come up with plan for the appropriate support to newly formed clusters, replication and preparing a model for cluster development support in Tanzania.

The cluster support model will be based on the experiences of the Subprogram Fostering Innovation at COSTECH Tanzania by looking on experiences from the program period 2017-2020 and earlier phases of the cluster support 2005-2015. The proposal will intend to follow the development of the current clusters as well as provide appropriate support to newly formed clusters. With such a flexibility there will be opportunities to replicate and to adapt when circumstances changes. The range of components proposed for the current level of maturity are:

- **Support to innovation management** - for newly formed clusters starting with basic business administration up to more advanced models for knowledge management in mature clusters.
- **Support to knowledge development** through the Cluster Research and Innovation Model linking clusters to researchers and students to develop knowledge for innovations (through innovation spaces at Tanzanian Universities)
- **Support to entrepreneurial experimentation**, including prototype development, design, testing, user inclusion, etc.
- **Support to quality improvement and intellectual property protection,** to meet standards, certification requirements and to protect against IP violations.
- **Support to market development and exports** should give opportunities to explore the currently most viable ways to get outreach for the goods or services provided by the cluster firms to the users/beneficiaries. Export may be an eventual outcome, a goal to strive for or an immediate intention.

While the main actor in this project is COSTECH, the proposed model presupposes collaboration with several agencies in the Tanzanian innovation system. This includes research actors within the universities as well as the research institutes. The linkage to international research cooperation will ensure access to international research results that may be important to innovations in a Tanzanian context. Other partners can be found in the public industrial support organizations (i.e. SIDO, TBS, BRELA etc), private sector development agencies, and within non-governmental organizations engaged in industry and trade, such as the TCCIA. Another important partner to COSTECH and to the clusters is the Local Government Authorities, LGAs.

Outputs: M&E reports, Annual reports, Cluster support model proposal, field reports, data collection tools.

Target 3: Advocacy of Cluster development Activities facilitated by June 2021

Finally, COSTECH as well as SIDO must have built the capacity to advocate for innovative clusters as a development model, which in practice means a development of communication skills and public relations. The following will be modalities of which cluster development initiative will be communicated to the public;

- The cluster webpage
- Press releases on cluster development events
- Breakfast seminars, networking events twice a year
- Showcasing at exhibitions
- Conference participation
- Radio/ Tv broadcasts

To consolidate contacts with external stakeholders (donors, Gov. Agencies, banks, companies), the subprogram will arrange a conference on cluster development, taking stock of achievements and outlining future prospects. The conference will have a focus on the cluster initiative´s contributions to the national development policies and how it can be used to meet the SDGs. All clusters will be assisted to showcase their products and activities at exhibitions and fairs. In addition, the most successful clusters will be offered to participate in international or local conferences, together with COSTECH and SIDO staff. This will give an opportunity to benchmark, get inspiration and extend their networks.

Activities

3.1 A synthesis report to support decisions on including cluster development in industrial policies developed by June 2021

Throughout this year, project coordinating institutions will continue to collect data, conduct desk studies, analyze and finally come up with a synthesis report on "Guidelines for cluster development in Tanzania" to support decisions on including cluster development in industrial policies. A workshop will be organized for project coordinating institutions and R&D institutions to gather inputs for developing guidelines.

3.2 Published versions of all guidelines reviewed and edited for accessibility by June 2021

The main outcome of this program is the demonstrated capacity of the stakeholders in cluster interventions to collaborate and co-develop for increased competitiveness of the cluster firms and to secure their contributions to regional development. This outcome will be demonstrated in a publication "Guidelines for development of innovative clusters", that can be used for the replication and scale-up of innovative clusters. The publication will be produced through a series of outputs in the form of guidelines all related to components that provides for successful cluster initiatives. The final "Guidelines" will be results of tested methodologies through practical interventions in the selection of regionally based clusters. For accessibility the guideline will be uploaded to websites and.

3.3 External communication and experience sharing workshop (Cluster stakeholders) facilitated by June 2021

COSTECH and SIDO need to communicate, hence create visibility of the cluster program to outside stakeholders to create awareness and interest in the cluster program and its impact. To create awareness and interest among actors such as key government organizations and donors will be instrumental for the success of this program. These public relation efforts will be initiated by a workshop where all key actors for this program will be invited as a first step of COSTECH and SIDO's public relations strategy.

3.4 Communication with central government regarding results and findings and discussions on national cluster policy (Stakeholders' Workshop/ dialogue) facilitated by June 2021

A two days workshop will be conducted to engage national policy makers, donor agencies, and the financial sector to secure political and financial support for a scale-up of the program and to find joint business ventures for the clusters.

To consolidate contacts with external stakeholders (donors, Gov. Agencies, banks, companies).

Outputs: M&E reports, annual reports, cluster support model proposal, field reports, data collection tools, workshop reports, communication material about the cluster program and its progress, public relations, visibility of cluster initiatives, communicate progress to central government.

Target 4: Engaging R&Ds researchers and students in Cluster collaborative research projects by June 2021

The subprogram emphasizes the build-up of innovative clusters of small and medium sized firms in Tanzania, with the general objective of developing a method for replication and scaling -up of competitive and innovative clusters in the emerging knowledge society of Tanzania. One of the objectives of the sub-program is to "*develop and disseminate the cluster research and Innovation model among clusters and academic/research institutions.*" Under this objective, a total number of 15 students (PhD or MSc program) will have the opportunity to participate in the cluster program. While collaborating with the clusters, these students will be financially supported to conduct their research linked to the innovative clusters. The funds will support the students with local transport, field allowance, consumables, laboratory cost and minor

Activities

4.1 Supervision to 15 PhD or Masters students or researchers conducting research in collaboration with clusters facilitated by June 2021

The researchers who have engaged in cooperation with clusters during previous phases have built a particular capacity to analyze the needs of partners in clusters and local

governments. As researchers they have a particular advantage as they can relate these needs to research and technology resources. The capacity to conduct research in cooperation with clusters includes capacity to

- formulate and implement research jointly with non-academic partners
- relate existing research results to partner needs and find ways for implementation
- guide students in research tasks together with clusters, which will contribute to build a future skills base for the clusters.

The timing of student tasks is crucial as it must correlate with the time periods for thesis work. Specifically they should be engaged already in the problem / need identification within the cluster. The model for collaboration requires a slightly different way of managing and conducting research projects and student thesis work than "normal" in-house academic research. The way to communicate research results will also be different from and supplementary to scientific publishing, thus requiring the build-up of another type of communication skills. Contracts/agreements/MoU will be signed with respective institution or university participating in the cluster program.

4.2 PhD. or Masters students, researcher (15) supported to conduct research in clusters by June 2021

Experienced researchers will, together with the students and with the clusters define tasks that would be feasible to conduct as thesis work for students at master's level. PhD students can participate but due to the length of the cluster program they will not be able to do a complete PhD within this program. Study visits to clusters will be arranged for interested students. This will also give the cluster-firm representatives opportunities to interview the students before assigning them the task. All student work depends on the engagement in cluster development of the supervisor, which means that they have to be selected with care, and in some cases, will need to have a mentor. A total number of 15 students will have the opportunity to participate in the cluster program. While working with the clusters, these students will be supported with local transport, field allowance, consumables, laboratory cost and minor equipment.

4.3 Progress Review meetings on selected research projects within clusters facilitated by June 2021

Progress Review meetings will be carried out with assistance from SIDO staff from the regional offices in collaboration with the academic and R&D institutions participating to be able to follow the progress of the specific research projects within the clusters. Follow up will be made for every research project within the cluster program before the annual report to be able to verify the current status and progress. This activity will start to be carried out during the first half of year 2020 to allow commencement of said research collaboration.

4.4 Research Students Conference Participation for cluster project facilitated by June 2021

Some of Research students and their supervisors will be facilitated to participate in local conference or seminars. This activity aims to be a way of strengthening networking and collaboration in cluster development.

Outputs: Agreements/contracts/ MoU's signed with academia to conduct research in collaboration with clusters, progress review reports, workshop and training reports, 15 students supported to conduct research in collaboration with clusters, student research publication.

Target 5: Building ICT-support for cluster development by June 2021

This activity aims to lay a foundation of using ICT as enabler to cluster development activities. The role of ICT has a special emphasis as an enabler to business operation. The project has started developing a website for the cluster program which will ensure transparency and digitization of cluster Initiative operations. The website will be an important communication tool, externally to key stakeholders and decision makers but will also function as an important communications tool with the clusters. The website will give the opportunity to showcase the program, milestones, reports and other relevant information. The individual cluster websites of the selected clusters will give them an opportunity to market their products and/or services to a broader market.

Some analysis will also require ICT- tools for analysis of quantitative and qualitative data, for tools for decision-making and predictive analysis. Softwares are available for a number of applications, ranging from advanced database queries, web-analysis, document handling, etc. For each such item it must be evaluated if Open Source could be used or if commercial software packages would provide the best solution.

Activities

5.1 Cluster Data/ Information processing and maintenance of the cluster database/website

The aim is to developed database and website as a communication tool, externally to key stakeholders and decision makers but will also function as an important communications tool by cluster members. The website will give the opportunity to showcase the programme, milestones, reports and other relevant information.

The individual Cluster websites of the selected clusters will be established to give them an opportunity to market their products and/or services to a broader market. Maintenance will be carried out throughout the project lifetime.

Outputs: Project management tools, cluster database, version 1 of the cluster program website, format for individual cluster websites.

Target 6: Process Support to Cluster activities by June 2021

Activities

6.1 Process Support to facilitator/supporting staff in field work facilitated by June 2021

This activity was planned to be carried right after implementation of the cluster intervention programs following the completion of the baseline study. However, it couldn't be done due to delay in completion of survey and identification of areas of intervention. The findings from the study has enhanced the identification of key strategic areas for intervention such as standards compliance, marketing skills and business management. This financial year COSTECH and SIDO staff, together with SICD, will make field visits to the 15 selected clusters to facilitate implementations of intervention recommendations. Each cluster will be visited by two staff. These visits will further reassure that the facilitators have the right tools to support the clusters.

6.2 Three projects for design or prototyping facilitated by June 2021

For the clusters and their academic partners, these final stages would be to engage in detail in innovation processes. The ambitions should be set high, but realistic. Each of the clusters would be able to engage in at least three projects for design or prototyping. During this stage, which is planned to last over 12 months, it should be possible to start at least 3 explorations for securing IPR (patent, trademark, pattern protection or copyright) among all of the selected clusters.

A minor fund has been set aside for quick wins to support these activities, i.e. to help clusters to come up to speed with the design and innovation processes by facilitation fee to cluster trainers (leadership and cluster management training).

6.3 Re-establishment of National Steering Committee (NSC) and experience sharing

According to this sub program, COSTECH was responsible to ensure that the NSC is re-established to perform its intended roles in the new program setup. During the third project partner's workshop conducted in March 2019, participants discussed and agreed to retain member institutions from the previous NSC members' composition with minor amendments.

The fund set aside for re-establishment of NSC on 2019/20 will now be carried forward to facilitate the re-inauguration workshop for NSC committee's members to be held on first quarter of 2020/21.

6.4 Cluster Steering Meetings (twice a year):

According to the Innovative cluster sub program COSTECH is responsible to ensure that the NSC is reestablished to perform its intended roles in the new program setup. The

committee members will start holding their regular meeting once again to discuss cluster related issues at national level. The Committee plays an important role in aligning, advising cluster related issues on a national level.

The NSC shall generally oversee that all interventions under the Innovative Clusters Project are in line with the project support document and that the implementing partners are appropriately tasked to deliver the results expected. The committee shall be further responsible to review and comment all documents and agreements resulted from current project implementing activities and ensure that resources are deployed to the most productive way. During this year, COSTECH will organize and host two (2) National Steering committee meetings.

Outputs: Workshop reports, minutes of the meetings, 3 designs or prototypes for each cluster developed and field reports.

4. Analysis

The project started in July 2017 as opposed to the planned month (Jan 2017). Therefore, this resulted into more than six months delay in project implementation. It's fortunate that Sida has granted a one year no cost extension for project coordinating institutions to finalize project implementations of each sub programme.

Despite the delay in starting the project, generally the progress in implementation of the project activities is good, and partners have been closely working together. Busy schedules of partner particular SIDO and COSTECH resulted in unequally representation of partners in some of the key planning meetings and piloting activities. But this has been always rectified by 'team work' approach for each and every activities performed.

A number of achievements has been observed which includes;

- Increased understanding of the cluster concept and its benefits of collaboration
- Increased Interactions with academic institutions and on R&Ds for instance collaboration with Sokoine University of Agriculture (Department of food science and Department of engineering), University of Dar es Salaam, and Nelson Mandela African Institute of Science and Technology (NM-AIST)
- Increased capacity for cluster facilitation
- Active engagement with local governmental Authorities and private institutions
- Increase of employment opportunities for women
- Increased skills, particularly in the female labour force
- Increased number of firms, productivity and Increased firms turn-over
- Viable business plans and Formalization of businesses
- Increased number of Value added products
- Collaboration on joint purchases, job sharing and joint exhibitions
- 3 guidelines finalized and started to be implemented.

In 2020/2021 financial year which is the final project implementation year, the program will continue to take into account environmental and gender aspects as indicated in the results matrix attached as one of the indicators. Specific objective 5: Building ICT-support for cluster development will be cross cutting throughout the programme. Environment and Gender aspects have been considered and will continue to be well-thought-out throughout the program, but particularly in the following activities.

- Cluster selection criteria and selection process
- Design of the cluster research model
- Workshops with selected clusters
- Facilitators training
- Baseline study
- M&E framework
- Meeting industrial standards
- Technology assessment
- Local Development Plans
- Engaging students in working with clusters

A number of potential risks are envisioned within the 2020/2021 plan, the following are details of potential risks and ways of mitigation.

Potential risks

1. Delay in project completion: The Current global pandemic Covid-19 disease which has freezes most of movements and working environments disturbed. This may lead to again delay in project completion or completed but with inadequate performance. The likelihood of this risk is high and the impact is also high.

2. Since COSTECH and SIDO are independent Institutions each with its own mandate it might be difficult to implement some project activities on time due to Management decisions. And since most of these activities are interlinked then it might became hard to harmonize their implementation. Likewise SIDO has regional offices which are independent, hence coordination to implement this project might be challenging in terms of Time, HR, decision making etc. The likelihood of this risk is Medium and the impact is medium.

3. Inadequate participation of cluster / cluster members in the project: Clusters may not or participate passively in the project activities due to the intended interventions not delivering equal benefit to all members. The likelihood of this risk is low, however, the impact is very high.

4. Reduced commitment of LGAs and Research / academic communities: This may lead to none or limited realization of targets and thus low impact of the project objectives to the community and the country. This may be caused by limited understanding and information of the project by key actors (LGAs, partners and research institutions). The likelihood of this risk is low, however, the impact may be very high.

5. The coming general election may claim sometime of implementation and resulting in slow implementation of some activities

Mitigation of risks

2. Initiatives are being made to educate, facilitate and support for prevention and control of COVID-19 and other emerging and re-emerging diseases. Working from Home and using ICT and online facilities as a preventive measures against Covid-19 pandemic disease.
3. Signed MoUs have eventually pave the way to involve Participating Institutions commitment and engagement. For instance a "buy-in"/interest from the respective LGAs which safeguard the feasibility of this programme since they will play such a vital role. Regular meetings and communication among partners has been instrumental in ensuring close collaboration. Therefore these meetings will continue to be done via various means including skype and planned annual workshops where all partners are obliged to attend.

4. The ongoing application of CRIM is emphasizing on prioritizing interventions that have common agenda to all cluster members, identify needs of research related cooperation and also funding opportunities for projects should be encountering both the needs of the cluster firms and the interest of researchers.

5. Initially top leaders from all relevant LGA's and Regional Commissioner Offices were actively involved in the cluster sensitization workshops. We intend to continue engaging top leaders form LAGs and Regional offices in subsequent project activities. In addition, the M&E framework has been designed to ensure flow of information reaches to all key players within respective regions.

5. Enclosures *(Attached)*

1. Justified Sub-Programme/Project Budget.
2. Result Matrix for Sub-Programme/Project
3. Time Plan
4. Procurement Plan

5.1 JUSTIFIED SUB-PROGRAMME/PROJECT BUDGET.

5.2 RBM MATRIX FOR CLUSTER DEVELOPMENT SUBPROGRAM

Types of outputs	Type of outcome	Performance Indicator of Outcome	Baseline (If established)	Annual Outcome Targets for 2020/2021	Actual Outcomes Achieved: Results	Key Outputs produced in year to obtain Outcome in 2020/2021
Specific objective 1: Capacity building for COSTECH and SIDO to promote govern and manage innovative cluster interventions						
Documents: Guidelines on funding and external cooperation, Guidelines for technology cooperation with national or foreign firms or researchers, including wider approaches to IPR-issues, M&E reports,	1, 2. *Capacity to analyze, Capacity to govern, manage and organize enhanced*	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made.	Baseline conducted	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies		
		M&E show that analysis is guided with subsequent steps				

Annual reports, Guidelines for cluster development in Tanzania.		Analytical competence on gender dimensions and environmental impact assessment in place		Enhanced Stakeholders' capacity to monitor and evaluate program and communicate to external stakeholders		
		Analytical documents convince stakeholders outside the program				
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
		Analytical competence on gender dimensions in place				
Specific objective 2: Enhancing capacity in regional and local government authorities in the implementation of innovative clusters initiatives						

Documents: Workshop reports, minutes of the meetings	1, 2, 3, 5. *Capacity to analyze, govern, manage and organize enhanced, Capacity to perform and implement improved, Capacity articulate problems and communicate results enhanced*	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made	Baseline conducted	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies LGA have initiated discussions on priorities on cluster support		
		M&E show that analysis is guided with subsequent steps				
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place				
		Analytical documents convince stakeholders outside the program	Baseline conducted			

		Analytical competence on gender dimensions in place	Baseline study conducted			
Specific objective 3: Enhance sustainable competitiveness of relevant innovative cluster products and services						
Documents: Guidelines for exporting cluster products developed, guideline for skills formation developed, field reports **Designs or Prototypes:** 3 designs or prototypes for each cluster developed **Innovations:** At least 3 processes for IPR started among all of the clusters,	1, 2, 3, 5. *Capacity to analyze, govern, manage and organize enhanced,*	Proven analytical skills: Reliable and valid information gathered Analytical methods applied Clear and strategic visions, Priorities made.	Baseline study conducted	The documents produced during the year shows clear strategic visions regarding the selection of clusters and design of support strategies Baseline on employment figures and tax revenue created 1st development plan containing		
		Increased opportunities for: regional specialization, diversification, Improved employment figures, Increased tax revenue				
		Analytical documents convince stakeholders outside the program				

At least 3 processes for establishing one innovation network started among all the selected clusters	*Capacity to perform and implement improved, Capacity articulate problems and communicate results enhanced*	Number of examples of sharing knowledge and business opportunities		cluster priorities produced Cluster member firms aware of opportunities Design process started and tested		
		Analytical competence on possible and actual impact of the environment from cluster activities and innovations in place	Baseline study			
Specific objective 4: Develop and disseminate the cluster research and Innovation model among clusters and academic/research institutions						
Documents: Guidelines for the cluster research	1, 2, 3, 4, 5. *Capacity to*	Number of Research projects on cluster development	Baseline study	Research projects on cluster development		

model, Progress review reports, workshop and training reports, 15 students supported to conduct research in clusters	*analyze, govern, manage and organize enhanced, Capacity to perform and implement improved, Capacity to monitor and evaluate progress enhanced and Capacity articulate problems and communicate results enhanced*	Number of clusters in collaboration with researchers		clusters collaborating with researchers		
Institution: Contracts/ MoU's signed **Decisions:** Contracts/ MoU's signed		Number of researchers and students engaged with clusters	Baseline study	Research proposals and/or		
Innovations: One innovation network started among all the selected clusters		Number of studies emerging from clusters Number of research result transferred	Baseline study	collaborative projects started		
Specific objective 5: Building ICT-support for cluster development						
Tools: Database and website in place, Project management	*1, 2, 4 & 5. Capacity to analyze, manage, monitor, evaluate*	Computer based analytical tools distributed and functional	Baseline study	Assessment of information needs and information sources		

tools, Cluster homepage, version 1 of the cluster **Documents:** Annual report, workshop reports, Conference reports **Public relations:** Communication material about the cluster programme and its progress, public relations, visibility of cluster initiatives, communicate progress to central government	*and communicate enhanced*	Administrative system functional	Baseline study	Design process started and tested		
		Computer literacy in clusters and LGAs	Baseline study	Initial training in connection with assessment conducted		
		Cluster database maintained with accurate information	Baseline study			
		Website functional Responses from stakeholders Media coverage Visibility of the sub-programme to outside stakeholders	Baseline study	Design process started and tested Communication strategy developed Specific communication efforts on SDG 12 and SDG 8 documented		

5.3 PROJECT TIMELINE

	QUARTER 1			QUARTER 2			QUARTER 3			QUARTER 4		
	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Target 1: Five (5) Guidelines to support Cluster development activities developed and operationalized by June 2021												
1.1 Development of Guidelines on Cluster funding and external cooperation												
1.2 Development of Guidelines for technology cooperation with national or foreign firms or researchers, including wider approaches to IPR-issues												
1.3 Guidelines for exports of cluster products developed												
1.4 Guidelines for skills formation (cooperation with VETA)												
1.5 Guideline for Communication												
Challenge call open to 67 Sida funded Clusters from 2007 - 2020												
Selection process using Grant manual (screening, review and pitching)												
Due diligence visit												
Granting the best 5 Clusters each to operationalize 1 guideline												
M&E and Learning												
Target 2: Field work supervision, Data Analysis, Project Synthesis and Proposal write up for continuation, replication and scale-up conducted by June 2021												
2.1 SICD, COSTECH, and SIDO												

Annual reporting meeting conducted												
2.2 SICD, COSTECH and SIDO progress review meetings												
2.3 Allowance field studies/data collection/ Data analysis (Two sessions)												
2.4 Annual reports of M&E and cluster development (Final report based on analysis of all M&E exercises)												
2.5 To Prepare a proposal for Continuation, replication and Scale up												
Target 3: Advocacy of Cluster development Activities facilitated by June 2021												
3.1 A synthesis report "Guidelines for cluster development in Tanzania" to support decisions on including cluster development in industrial policies												
3.2 Published versions of all guidelines reviewed and edited for accessibility												
3.3 External communication and experience sharing workshop (Cluster stakeholders)												
3.4 Communication to central government regarding results and findings and discussions on national cluster policy (Stakeholders' Workshop/ dialogue)												
Target 4: Engaging R&Ds researchers and students in Cluster collaborative research projects by June 2021												
4.1 Supervision to fifteen(15) PhD and Masters students to conduct research in clusters facilitated by June 2021												
4.2 Progress Review meetings on												

selected research projects within clusters facilitated by June 2021												
4.3 Research Students Conference Participation for cluster project facilitated by June 2021												
4.4 University students research in clusters												
Target 5: Building ICT-support for cluster development by June 2021												
5.1 Cluster Data/ Information processing -Lumpsum												
5.2 Maintenance of the cluster database/website-operational costs												
Target 6: Process Support to Cluster activities by June 2021												
6.1 Process Support to Facilitator/supporting staff in field work by June 2021												
6.2 Three projects for design or prototyping facilitated by June 2021												
6.3 Re-establishment of National steering committee and experience sharing												
6.4 Cluster Steering Meetings (twice a yr.)												
	QUARTER 1			**QUARTER 2**			**QUARTER 3**			**QUARTER 4**		
	Jul-20	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**

5.4 PROCUREMENT PLAN

SUB-PROGRAMME PROCUREMENT PLAN 2020/21

ANNUAL PROCUREMENT PLAN FOR THE YEAR 2020/21						
IINOVATIVE CLUSTERS SUB-PROGRAM				**Approved Budget**	**PMU Budget**	**Dept.**
	To develop 5 Guidelines to support Cluster development activities by June 2021			**95,043,312**		**CDTT**
		To Conduct literature review/ Analysis/ Desk study for the 5 Guidelines				
		To conduct Two days stakeholders' meetings				
			Fuel		600,000	
			Conference Facilities		1,583,400	
			Refreshments		4,414,410	
			Stationeries		200,000	
		To conduct validation workshop for stakeholders				
			Fuel		800,000	
			Conference Facilities		1,592,136	
			Refreshments		4,815,720	
			Stationaries		200,000	
	To support operationalization of 5 Cluster guidelines			**200,000,000**		**CDTT**
		To facilitate operationalization of 5 Cluster guidelines				

		Challenge call open to 67 Sida funded Clusters from 2007 - 2020				
			Advertising and Publication		1,000,000	
		Selection process using Grant manual (screening, review and pitching)				
			Air Travel Tickets		3,800,000	
			Fuel		1,200,000	
			Conference Facilities		900,000	
			Refreshments		3,600,000	
			Stationeries		800,000	
		Due diligence visit				
			Air Travel Tickets		4,184,000	
		Granting the best 5 Clusters each to operationalize 1 guideline				
			Fuel		800,000	
			Conference Facilities		1,592,136	
			Refreshments		4,815,720	
			Stationeries		200,000	
		M&E and Learning				
			Air Travel Tickets		4,184,000	
	Conducting Field supervision, Data Analysis , evaluation and creating proposals for continuation, replication and scale-up by June 2021					
		Allowance field studies/data collection/ Data analysis (Two sessions)		**25,662,000**		**CDTT**
			Air Travel Tickets		4,184,000	
			Fuel		800,000	

			Conference Facilities		1,200,000	
			Refreshments		4,800,000	
			Stationeries		200,000	
		To prepare annual reports of M&E and cluster development (Final report based on analysis of all M&E exercises) by June 2021		**5,170,347**		**CDTT**
			Conference Facilities		600,000	
			Refreshments		1,800,000	
			Stationeries		200,000	
		To Prepare a proposal for Continuation, replication and Scale up		**14,000,000**		**CDTT**
			Fuel		200,000	
			Conference Facilities		800,000	
			Refreshments		2,400,000	
			Stationeries		200,000	
	To facilitate Advocacy of Cluster Activities by June 2021					
		To synthesis report "Guidelines for cluster development in Tanzania" to support decisions on including cluster development in industrial policies by June 2021		**16,440,060**		**CDTT**
			Refreshments		2,407,860	
			Conference facilities		1,173,900	
			Stationeries		200,000	
		To publish versions of all guidelines reviewed and edited for accessibility by June 2021		**5,126,394**		**CDTT**
			Refreshments		1,203,930	
			Conference facilities		1,173,900	

			Fuel		200,000	
			Stationeries		200,000	
		To facilitate External communication and experience sharing workshop (Cluster stakeholders) by June 2021		**21,259,602**		**CDTT**
			Fuel		400,000	
			Conference Facilities		800,436	
			Refreshments		2,407,860	
			Stationeries		200,000	
		To communicate with central government regarding results and findings and discussions on national cluster policy (Stakeholders' Workshop/ dialogue) by June 2021		**21,247,590**		**CDTT**
			Refreshments		2,407,860	
			Conference facilities		791,700	
			Fuel		400,000	
	To facilitate development of three projects for design or prototyping within clusters by June 2021			**46,410,000**		**CDTT**
		To facilitate development of three projects for design or prototyping within clusters by June 2021				
		To facilitate process Support to Facilitator/supporting staff in field work by June 2021		**7,343,700**		**CDTT**
			Air Travel Tickets		1,859,400	
			Fuel		800,000	
	To Engage R&Ds researchers and students in Cluster collaborative research projects					
		To facilitate students supervision to fifteen(15) PhD and Masters students to conduct research in clusters		**16,926,000**		**CDTT**

		To facilitate progress Review meetings on selected research projects within clusters by June 2021		**16,953,300**		**CDTT**
			Air Travel Tickets		2,859,400	
			Fuel		600,000	
			Refreshments		360,000	
		To Facilitate Research Students Conference Participation for cluster project by June 2021		**16,380,000**		**CDTT**
		To support University students research in clusters by June 2021		**91,864,500**		**CDTT**
	To Build ICT-support for cluster development by June 2021			**23,205,000**		**CDTT**
		Cluster Data/ Information processing -Lumpsum				
		Maintenance of the cluster database/website-operational costs				
			Fuel		400,000	**CDTT**
	To facilitate Report writing and progress review meetings for innovative cluster project by June 2021			**50,809,381**		**CDTT**
		SICD, COSTECH and SIDO Pre-Annual planning and reporting meeting conducted				
			Fuel		600,000	
			Conference Facilities		400,000	
			Refreshments		1,200,000	
			Stationeries		200,000	
		SICD, COSTECH and SIDO progress review meetings				
			Fuel		800,000	
			Conference Facilities		400,000	
			Refreshments		1,600,000	

			Stationeries		200,000	
	To facilitate re-establishment of National steering committee and experience sharing by June 2021					
		To re-establish National steering committee and experience sharing by June 2021		**17,194,086**		**CDTT**
			Fuel		600,000	
			Conference Facilities		800,436	
			Refreshments		2,006,550	
			Stationeries		200,000	
		To facilitate Cluster Steering Meetings (twice a yr) by June 2021		**12,814,620**		**CDTT**
			Fuel		600,000	
			Conference Facilities		791,700	
			Refreshments		1,605,240	
			Stationeries		200,000	
			Sub total	**703,849,892**	**91,715,694**	

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Executive summary of subprogramme /project

This innovation fund contributes to the build-up of the National Innovation System in Tanzania through the strengthening of the COSTECH NFAST Innovation Fund. The main focus is to create a learning process within COSTECH on how to promote innovations. The model chosen is to encourage collaboration between research institutions, entrepreneurs, communities and government authorities in a so-called Quadruple Helix configuration. Through this format entrepreneurs and/or innovators will get assistance from research and higher education institutions to do science and technology supported innovations. Involving governmental authorities in the cooperation safeguards a mutual alignment of innovations to the Sustainable Development Goals and to National policy-goals. Involving community-based organizations and NGOs will give users the opportunity to influence the innovations. This approach is fairly new to Tanzania, which is why a pilot project with open calls is deemed as a necessary step.

The specific objectives are: To establish a well-managed innovation fund for financial support to innovation processes, with mechanisms to facilitate cooperation in the Triple or quadruple Helix formats; To train beneficiaries in innovation management and financial administration and to accomplish these objectives, the proposal includes capacity building at COSTECH to manage innovation process, as well as the grants program, facilitate training for fund applicants and grantees and to monitor and assess the results.

Providing grants for innovations is slightly different from providing grants for research. While research grants go to institutions that have well established procedures both for project execution and for the management of funds, innovation projects with multiple partners require a different

setup. For this pilot program, relevant partners to a specified innovation project will form innovation teams. The teams should have a formal registration such as CBOs with separate bank accounts for the project funding.

COSTECH has already developed a grants manual for innovation, specifying eligibility, forms and scope of innovation projects. The first innovation fund by Sida support provided opportunities to test the manual in relation to project proposals from the call and to the processes of selection and supporting with funding as well as facilitating the knowledge development within the projects. However, the government launched a guideline "Guideline to Identify and Promote Inventions, Innovations and Traditional Knowledge Practices (2018)" which introduced another avenues for identification of innovators and particular grassroots and students. Through this guideline the government introduced national STI award (commonly known as MAKISATU) which is capturing innovators form primary schools. Thus, this guideline fund is intended to continue perfecting the granting processes with even a wider range of innovators.

Partners for the Innovation fund are COSTECH and SICD, hosted under the School of Natural Sciences, Technology and Environmental Studies, Södertörn University.

General objectives and expected results 2015-2021

General objective: To strengthen the national innovation system in Tanzania by 2021

Specific objectives:

- *To Increase the capacity to innovate among researchers, private entrepreneurs, SME and others that has a potential for social, economic and environmental development.*
- *To Increased capacity for collaborations between academia, public and private sector (from both formal and informal) through various platforms.*
- *Improved capacity for innovation fund management.*

Expected outcomes: The most important outcomes of the pilot program will be:

1. A proposal for support to a full-fledged NFAST Innovation Fund that is supported with multiple partners.
2. Revised Grant Manual and procedures for COSTECH's support to innovation projects, in line with experiences from the program
3. A number of experienced innovation team members that can be promoted to become mentors and facilitators for forthcoming innovation projects.

Planned Activities and Target for the Year July 2020-June 2021

Target 1: Granting at least 200 Collaborative innovation projects by June 2021

1.1 Supporting to Innovation Activities

In the previous years, the project targeted and supported 17 innovation proposals (15 small and 2 large Grants) through a competitive call. The call included support for prototype development, development and commercialization stages of innovative ideas for one year. As the supported projects are approaching the end, the resulted prototypes and innovations are established promising indicators for big societal impact when receive more support.

In addition, Government supported another 130 innovations identified through National Competition for STI award (MAKISATU) for the past two years (2019 and 2020) and HDIF supported a total of 15 innovation. The results are the same as for the above 17 innovation. The other set of potential innovations in COSTECH database are about 150 innovations submitted by walk-in innovators that makes a total of about 297 potential innovations at different stages of development.

Therefore, in this financial year 2020-2021, this program intends to support innovation from three categories of identified groups of innovators so that the innovations can solve the intended problem in the society. The three categories are as follows:

i. Participant of MAKISATU 2019 and MAKISATU 2020 which include a total of 130 innovators.
ii. A total of 32 Innovation, 17 supported by Sida and 15 by HDIF that show potential for national wide impact when upscale.
iii. Walk-in innovators which include all innovators who submitted their innovative ideas directly to COSTECH or filled application forms available in the guidelines. A total of 150 applications were received.

This support will involve three main stages or activities; first will need to conduct a technical evaluation guided by the Guideline to identify eligible innovations and the required support from the three categories of innovators. Second will involve awarding (pre awarding training and due diligence). Third will be monitoring and evaluation according to the granting manual.

Target 2: Fifteen (15) Innovation Spaces are supported to develop program and being mainstreamed in the host institutions

2.1 Strengthening Innovation Support Systems (15 Innovation Spaces) in Universities and R&D institutions

Buni Innovation Hub (Hub of Hubs) through COSTECH aim at rolling out the concept of

Innovation Spaces in Universities and R&D institutions. This year (2019/20) Buni Hub supported establishment of 15 innovations Spaces especially in Higher Learning Institutions. Also work with existing innovation hubs through different activities which includes: innovation spaces management, aim at building capacity and knowledge on how to manage innovation spaces and best practices for innovation spaces. However, impact of the spaces, especially the ones established in universities will full be realised when the activities of the spaces are mainstreamed within host institution.

Thus, this financial year 2020/21 Buni is aiming to facilitate the following in-order to hasten the process of establishing and mainstreaming programs within host institutions:

- Program establishment support, this activity aims at supporting innovation spaces to establish suitable programs for their community.
- Help the Hub Managers to understanding the Innovation Ecosystem so as to be able to interact and recruit community members for different sets of innovation ecosystems existing in the country
- Organise High-level awareness training to management of hosting institutions (Universities and R&D institutions). The aim is to foster sustainability through mainstreaming of innovative spaces within host institutional policies.
- Hiring of four Staff /Personnel in charge of Buni Innovation Hub activities for 12 months.

3. Analysis

The launching of a guideline "Guideline to Identify and Promote Inventions, Innovations and Traditional Knowledge Practices (2018)" by the government, introduced another avenues for identification of innovators and particular grassroots and students. Thus, increased scope and types of innovation to be supported.

Also, guided by the guideline the government introduced national STI award (commonly known as MAKISATU) which is capturing innovators form primary schools up to universes. Therefore, this fund is intended to continue perfecting the granting processes with even a wider range of innovators as well as support structure particularly innovation spaces.

Potential risks

1. Positive perception and uptake of innovation outputs by stakeholders
2. Less collaborative or joint innovation project that involve researcher and innovators

Mitigation of risks

Exposure of the innovative products resulted from the funded innovation during the innovation

week, could attract up taking of the products. In addition, a parallel session that will involve researchers such as presentations will be organized.

4. Sub-programme procurement plan (attached)

Procurement Plan for 2020/2021

Description	Event/Source	Budget	Time frame
NON CONSULTANCIES			
Provision of catering Service/ Refreshments	Support to 200 innovators (MAKISATU winners 2019 & 2020, 47 Innovation Fund Grantees and walk in innovators)	27,580,000	July 20 – Oct. 21
	Strengthening innovation support systems (15 Innovation Spaces) in Universities and R&D institutions	2,400,000	July 20 – Oct. 21
	Support to Buni Innovation Hub activities for 12 months.	2,400,000	July 20 – Oct. 21
Supply of conference facilities	Support to 200 innovators (MAKISATU winners 2019 & 2020, 47 Innovation Fund Grantees and walk in innovators)	6,500,000	July 20 – Oct. 21
	Strengthening innovation support systems (15 Innovation Spaces) in Universities and R&D institutions	900,000	July 20 – Oct. 21
	Support to Buni Innovation Hub activities for 12 months.	900,000	July 20 – Oct. 21
Provision of Air Tickets Services	Support to 200 innovators (MAKISATU winners 2019 & 2020, 47 Innovation Fund Grantees and walk in innovators)	40,400,000	July 20 – Oct. 21
	Strengthening innovation support systems (15 Innovation Spaces) in Universities and R&D institutions	12,400,000	July 20 – Oct. 21
	Support to Buni Innovation Hub activities for 12 months.	12,400,000	July 20 – Oct. 21
Supply of Office stationeries	Support to 200 innovators (MAKISATU winners 2019 & 2020, 47 Innovation Fund Grantees and walk in innovators)	4,400,000	July 20 – Oct. 21

	Strengthening innovation support systems (15 Innovation Spaces) in Universities and R&D institutions	800,000	July 20 – Oct. 21
	Support to Buni Innovation Hub activities for 12 months.	800,000	Jan. – June. 21
	Grand Total	**130,203,550**	