PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA54497

Project Name	Eastern and Southern Africa Higher Education Centers of Excellence (P151847)
Region	AFRICA
Country	Eastern Africa
Sector(s)	Tertiary education (60%), Health (5%), General agriculture, fishing and forestry sector (15%), General energy sector (10%), Informat ion technology (10%)
Theme(s)	Education for the knowledge economy (80%), Technology diffusion (10%), Other rural development (10%)
Lending Instrument	Investment Project Financing
Project ID	P151847
Borrower(s)	Ministry Of Finance and Economic Planning, Republic of Rwanda, Ministry of Finance and Planning, United Republic of Tanzania, Ministry of Finance, Planning and Economic Development, Republic of Uganda, National Treasury, Republic of Kenya, Ministry of Finance, Economic Planning and Development, Republic of Malawi, Ministry of Economy and Finance, Republic of Mozambique, Ministry of Finance, Republic of Zambia, Ministry of Finance and Economic Cooperation, Federal Democratic Republic of Ethiopia
Implementing Agency	Ministry of Education, Federal Democratic Republic of Ethiopia, Ministry of Education, Science, Technology and Sports, Republic of Uganda, Ministry of Education, Science and Technology, Republic of Malawi, Ministry of Education and Vocational Training, United Republic of Tanzania, Ministry of Higher Education, Republic of Zambia, Ministry of Science & Technology, Higher, Technical & Professional Education, Republic of Mozambique, Ministry of Education, Science and Technology, Republic of Kenya, Ministry of Education, Republic of Rwanda, Inter-University Council for East Africa
Environmental Category	B-Partial Assessment
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Appraisal Review Decision (from Decision Note)	

I. Project Context

Country Context

Sub-Saharan Africa (SSA) has experienced remarkable economic growth, and boosts in productivity in the last decade. Its annual Gross Domestic Product (GDP) growth has accelerated from an average of 2 percent in the 1990s to 5 percent in 2014. The low-income economies in SSA grew on average at 7.4 percent. The share of the population living below poverty (USD 1.90 per day) in the region declined from 57 percent in 1990 to 43 percent in 2012. The African middle class has tripled in size over the past 14 years, and the expansion is continuing. Overall, this growth has been driven largely by a relatively sound fiscal policy, an improved business environment, domestic production and consumption power, and increased trade and investment in specific sectors such as agriculture, extractives, construction, services, information and communication technology (ICT), and tourism.

As part of SSA, the Eastern and Southern African (ESA) countries have enjoyed similar development. Despite having some differences in economic structures, there continues to be a heavy reliance on agriculture and extractives in majority of the countries. Some East African countries such as Rwanda and Tanzania were outliers in the ESA region and had annual GDP growth rates of around 7 percent in 2014. Growth in oil, gas, mining and agriculture together account for 60 percent of the overall economic growth. The potential for growth in these sectors has attracted a significant amount of foreign investment, with foreign investment in East Africa alone having grown by 11 percent to US$6.8 billion in 2014. These investments are mainly targeted toward fast expanding sectors such as oil and gas in Tanzania and textiles in Ethiopia. To expand, transform, and sustain their economies into the next level of development, the ESA countries have to rely more on higher level skills and knowledge, with a focus on science and technology (S&T).

To sustain such growth and transform the economy to be globally competitive, ESA requires higher order skills in Science, Technology, Engineering and Mathematics (STEM). However, the required human capital, especially at the higher level, is insufficient across the ESA countries. Gaps are most acute in the following areas:

(a) Post-graduate training in S&T. The region does not produce sufficient number of skilled graduates required for expanding and diversifying its economy. While higher education enrollment has increased rapidly over the years, the region still lags far behind other regions, especially in generating graduates in S&T, health, and other related disciplines. In Rwanda and Tanzania, for example, the percentage of enrollment in the arts and social sciences (60 percent and 45 percent respectively) was substantially higher than that of science and engineering (20 percent and 9 percent respectively). In Mozambique, only 8 percent of enrollment and 4 percent of graduates were in engineering and technology compared to 44 percent of enrollment and 47 percent of graduates in social sciences, law, and business.

(b) Quality, relevance, and accountability. Firm surveys across ESA reveal that firms face difficulties in filling technical and managerial positions, while at the same time, many university graduates are not able to find jobs. This is not simply due to the inadequate number of graduates, but also due to the low quality and relevance of their education and training. Despite the increase in enrollment, faculty qualification has not improved much. Very few faculty members have Doctor of Philosophy (PhD) degrees. It is estimated that only about 100 PhDs are produced by higher education institutions across 31 countries in SSA in science, technology and engineering.

Institutions often do not have the resources to attract top quality faculty, nor are they able to provide faculty support with research facilities. There is little accountability demanded of higher education institutions, leading to inadequate quality of education across the region. In addition, curriculum inputs from, and training engagements for students in the private sector are minimal, resulting in a mismatch between the graduates and labor market requirements, especially in S&T.

(c) Research outputs and researchers. SSA contributes less to than 2 percent of the global research output and just 0.1 percent of patents. From 2005-12, Ethiopia acquired only one patent and Kenya acquired 29. The region also produces the lowest number of scientific researchers in the world. For example, Rwanda, Malawi, Uganda and Zambia produce only 54, 123, 83 and 49 researchers per million inhabitants respectively. In comparison, Malaysia and Thailand produce 1,780 and 546 researchers per million inhabitants.

These deficiencies are particularly severe in the following regional priority areas.

(a) Industry. In general, ESA countries are experiencing low and declining levels of enrollment in areas associated with the growing industrial sectors which require skills in STEM. This is despite the vast demand for graduates in emerging sectors with high growth potential such as oil and gas, energy, extractives, and railways industries across ESA. The region faces a shortage of skilled professionals with specialized knowledge who can innovate and boost productivity in these areas, such as engineers (civil, petroleum, and mechanical), geoscientists, and mechanical technicians. Graduates in the fields of engineering, manufacturing and construction are only 11.2 percent of the total graduates in Rwanda, 6.4 percent in Uganda, 3.82 percent in Mozambique, 17.45 percent in Kenya and 4.88 percent in Ethiopia respectively.

(b) Agriculture. Low levels of agricultural productivity, which has exacerbated food insecurity and slowed poverty reduction, is partly driven by skill constraints and the slow adoption of technology. Primarily this low productivity is because of factors such as frequent droughts, rampant diseases (crop and livestock), unimproved crop varieties, lack of access to quality seeds/fertilizers, and poor management of water resources. However to address these challenges, Africa needs trained personnel such as agribusiness specialists/managers, crop scientists, plant breeders, veterinarians, agronomists, water and irrigation engineers, and food preservation and processing specialists to drive innovative research and teaching for agricultural advancement, improved nutrition, and agricultural sustainability. Africa has moved from being a food exporter in the 1970s to a food importer whose share of agricultural exports has fallen from 8 percent to 2 percent; Thailand's share of agricultural exports as a share of world exports is now greater than SSA's share. Even though the value of the food market in Africa is predicted to rise threefold in the coming decades, the region will be unable to meet this demand due to low productivity, inadequate capacity, and slow adoption of technology. For example, maize yields in SSA is the lowest in the world.

(c) Health. Low life expectancy in ESA (60 and 59 for Eastern and Southern Africa respectively; much lower than the global average of 71) is traced to a myriad local health challenges. Infectious diseases account for 40-50 percent of illness in the region; these include malaria and tuberculosis, diseases that have been eliminated elsewhere. Infectious diseases are also a major constraint to both the export of African livestock and the spread of diseases from animals to humans. One reason the region has inadequate capacity for management of epidemics is a lack of qualified personnel. For example, enrollment in medical and health sciences is only 6 percent in

Ethiopia, 4 percent each in Mozambique, Tanzania and Zambia, and 7 percent in Rwanda, all of which are significantly lower than comparable countries in other regions. Resources in traditional medicine and knowledge are not fully explored and utilized in drug development and there are concerns that the drugs and vaccines that western pharmaceutical industries produce are tailored more towards western diseases and less targeted to the needs of ESA.

(d) Education. The quality of tertiary education is impeded by poor learning outcomes in primary and secondary education, particularly in mathematics and science. Poor education quality, especially at the primary and secondary levels, is a significant obstacle to higher education access and outcomes. Poor teaching competencies, particularly, in mathematics and science are a barrier to the production of high-quality graduates and faculty in the field. This is despite the fact that there are currently 150 million primary school students and 52 million secondary education students in SSA. There is an inadequate capacity in producing innovative and effective teachers, school leaders, and administrators, with an added challenge of outdated teaching methodology and curricula.

(e) Applied Statistics. The absence of reliable and accurate data, data management systems, and skilled statisticians is a serious constraint to policymaking, adequate analysis of development challenges, and monitoring and evaluation (M&E) of interventions. In SSA countries, data and highly trained statisticians are not available or are of inadequate quality across various sectors. This makes it difficult to provide analyses, plan and monitor interventions, inform fact-based policy, and track progress. It may not be recognized directly, but inadequate capacity of research and training within higher education is an important contributor to the constraints in this area.

A regional approach to higher education in Africa offers the best way to build and sustain excellence in higher education in African economies to develop the human resources required for the severe development challenges mentioned above. A regional approach would offer the following benefits:

(a) Economies of Scale. Few, if any countries in ESA, have the persistent means to fund internationally competitive centers of excellence in the broad range of areas required for their economies. Regional specialization and coordination of investments is the only way that ESA countries can financially and academically develop quality provision of higher education in this broad range. Without coordinated investments, the region risks investing very scarce resources within the same areas, competing for the same faculty and producing similar knowledge, and more importantly, leaving the region with a number of gaps in skills, knowledge, and technology. A regional specialization of higher education will: (i) concentrate the limited available top-level faculty into a critical mass that can attain academic excellence; (ii) establish and sustain the necessary number of centers of excellence to support the region's demand for specialized human capital and knowledge at lower unit costs; and (iii) generate increased knowledge and flow of students across borders.

(b) Public Goods. Knowledge and research/innovation outputs generated by institutions in ESA countries are a regional public good. Therefore, the knowledge and innovation generated through applied research in this endeavor will be available/applicable to the consumption of the entire region. The inability to appropriate all the benefits from an investment in research and human capital development in its production results is due to under-investment. There are also a number of positive externalities from research and innovation which exacerbates this problem. For example,

the benefit of having a quantum amount of skilled workers, not available before, allows for new types of research and innovation, and economic production (including possibly greater entrepreneurship). There are also knowledge spillovers which allow newly trained workers to share new knowledge with other less skilled workers, resulting in enhanced productivity (i.e. within firms and in universities).

A regional approach would work best in focusing on the few dynamic institutions with pockets of quality faculty that have already been responding innovatively by offering quality, fee-based, courses to students in Eastern and Southern Africa. Success factors for regional collaboration in higher education are: (a) collaboration through specialization; (b) political emphasis on common standards in benchmarking; and (c) willingness to promote mobility of students and faculty. Institutions and centers within universities across ESA already specialize in offering high level training in STEM, agriculture, health and S&T innovation (including education and applied statistics). Supporting these institutions will allow them to improve and boost the quality of education in the region within their fields through partnerships, and allow them to compete with institutions in high-income countries for African students capable of paying for quality education.

There is a growing and keen understanding in ESA of the common development challenges that the region faces, and a regional response in addressing the skills and capacity constraints in S&T is desirable through a shared regional framework and collaboration. There is also recognition of the impact such a focus will have in addressing some of the more intractable challenges facing the region, including issues of poverty and inequity.

Sectoral and institutional Context

The higher education system in ESA has experienced expansion in the past decade with regard to enrollment and institutions. Despite the impressive growth in enrollments and institutions, the current sector is not sufficiently oriented towards the development needs of the region. It is largely input-driven and historically funded with inadequate attention to performance and results. It now faces numerous challenges that need to be addressed. These challenges are discussed below.

The higher education sector in ESA faces severe constraints with regard to producing a critical mass of graduates, including female graduates, to meet regional development needs. Despite recent rapid expansion in higher education enrollment in the region, gross enrollment rates in ESA countries are still very low (1 percent in Malawi and 6–8 percent in Ethiopia, Mozambique, and Rwanda). Female enrollment rates (as a percent of total enrollment) are even lower with rates of less than 1 percent in Malawi and 4 percent in Ethiopia. Overall, the ESA region produces low numbers of graduates in science, health, agriculture and engineering with less than 30 percent of graduates majoring in these fields, with female rates being even lower. This scenario is in marked contrast with emerging markets such as Vietnam, mid-income countries such as Malaysia, or advanced economies such as South Korea. Further, graduation rates of graduate students is also low, just 10 percent for PhD students in S&T fields. The low number of higher education graduates could potentially influence the overall teaching quality—teaching force availability and capacity—within these disciplines at lower levels of education.

Though some efforts have been made by regional institutions in crafting policies for establishing quality assurance systems across the region, most of these policies are not implemented. Individual countries have initiated efforts in improving the quality of their higher education institutions under

the pressure of system expansion. An example is the mandatory external quality assurance for all programs and institutions in Kenya. However, due to low capacity and investment, sound quality assurance mechanisms are either inadequate or non-existent. Institutions are struggling to provide quality education to students in the face of crumbling infrastructure and facilities, outdated curriculum and teaching methods, and insufficient research faculty. Particularly in S&T, the curriculum needs to be updated to ensure that graduates are abreast of the latest knowledge. Finally, universities need to overhaul the STEM pedagogy, particularly with regard to increasing the academic use of technology to deliver quality programs.

Higher education quality is undermined by the slow pace of faculty capacity development and qualifications. Many universities in ESA do not have sufficient number of qualified faculty, which in turn prevents them from providing relevant higher education training and research mentoring. Entrenched policies, institutional structures, and academic traditions have placed obstacles on female representation in teaching, research and administration. They are also constrained by the small number of PhDs produced each year who are candidates for faculty recruitment or to lead research hubs or centers. For example, in Kenya, 290 doctorates graduated in 2013, while tertiary enrollment expanded by 80,000. Even assuming full employment of all new PhD holders, the ratio of newly qualified faculty to new students was 1:275. To ensure high quality in higher education and research, the production of Master's and PhD's must be increased. The sector also needs to be cognizant of other issues that deter quality faculty recruitment – low salaries, lack of research funding and equipment, and limited autonomy. In addition, most African countries have experienced adverse effects of "brain drain"; less than 15 percent of staff in universities in Ethiopia, Kenya, Mozambique and Rwanda hold PhD degrees. Even flagship universities, such as Addis Ababa University (AAU) in Ethiopia and the University of Malawi in Malawi, employ only about 20-25 percent of staff with PhDs.

Independent research capacity is extremely low. Most of the research outputs in the ESA are produced with international (non-African) collaboration. Only 30 percent of publications in Eastern Africa and 20 percent in Southern Africa are the result of national and/or regional collaboration. Kenya, Uganda, Rwanda, and Ethiopia were the most productive countries in the region when it came to publications and most of the articles were produced with international collaborators. For example, more than 95 percent of articles from Rwanda were with international collaborators. Though international collaboration is important, it may result in the research agenda being driven by the international partner(s) rather than by problems or challenges that are local to the region. Regional collaboration on common development problems remains the most efficient way of solving the region's development challenges. Regional collaboration is however impeded by low researcher and staff mobility leading to insufficient cross-regional collaboration for addressing regional development challenges. A large majority of the articles produced in the region focus on health, with less than 2 percent of scientific publications produced by Ethiopia, Kenya, Malawi, Mozambique, and Zambia focusing on engineering, energy, and technology.

The limited engagement with the private sector is reflected in the mismatch between the labor market needs and competencies of graduates. Despite the fact that enrollment in higher education has been on the rise in the region, business surveys continue to highlight that firms cannot find sufficiently skilled workers, particularly those with scientific skills. An example is the growing, but unfilled employment need in sectors such as extractives and railways. The lack of engagement between industry and universities also hampers innovation. As universities have limited engagement with industry, industry has little confidence in the capacity of universities to generate

graduates as problem solvers for their specific problems. The barriers to university-industry linkages include: (a) the lack of universities' knowledge of industry needs as well as the industry's lack of knowledge of the universities' research capacity; (b) limited knowledge of how to engage with industry; (c) a lack of capacity to broker agreements/contracts with industry; and (d) a lack of knowledge on how to showcase research outputs and applications.

Sound governance, leadership and results orientation in higher education are all still lacking in spite of a systematic expansion of higher education in the region. Many ESA countries have enacted sweeping higher education laws promoting autonomy and improving accountability. For example, Tanzania has enacted a unified law to provide an integrated approach to both public and private universities and many university governing boards have included external representatives. Most countries also allow certain financial autonomy to institutions to collect funds from governments and donors, charge tuition fees, and indulge in revenue-generating activities. However, for the reforms to work, higher education institutions need strong leaders with the capacity to effect change in the sector, which is lacking. Increased institutional autonomy has not necessarily resulted in greater accountability or a results-oriented culture, which is reflected in the quality and relevance issues mentioned in the previous sections.

A regional approach that focuses on developing centers of excellence in areas of S&T to bridge skill gaps and foster an ecosystem for innovation is seen as the most effective use of regional resources to develop such capacity. Scarcity of faculty and resources, along with gender disparity, limit the ability of each individual country in the region to develop a whole spectrum of research and teaching excellence across all science fields. Coordinated investments with country specific specializations allows the region to develop a broad based S&T ecosystem, covering all critical areas where S&T capacity is needed, without gaps. A well networked and integrated S&T ecosystem can also have economy of scale advantages with declining unit costs for both graduates and for innovation. For example knowledge spillovers can develop between faculty and researchers across countries if they have the opportunity to collaborate and share ideas within and across disciplines with benefits beyond individual centers. Further, as the development challenges are common, regional collaboration can bring together the critical mass of capacity and knowledge, otherwise partial, to resolve regional problems.

The regional approach is already effectively being implemented in the first phase of the project in West and Central Africa. Phase I was launched in 2013 for West and Central Africa as the Western and Central Africa Higher Education Centers of Excellence Project (ACE I). The project had an initial investment of US$ 150 million, selected 19 African Centers of Excellence (ACEs) across seven countries – Benin, Burkina Faso, Cameroon, Ghana, Nigeria, Senegal and Togo – in three priority areas – STEM, Agriculture, and Health. ACE I, which is now operational in all the seven countries, also supports an emerging higher education system in Gambia. All the ACEs have started enrolling students, publishing research, developing partnerships and other activities that can make them become strong regional centers of excellence for the region. Redeemer University in Nigeria, which was the first to have tested an Ebola case in its lab was one of the selected ACEs under ACE I. Such regional initiatives are expected to set a global example for effectively stimulating collaboration, networking, and partnerships to cost-effectively solve regional development issues.

Building on the ACE I experience, the Eastern and Southern Africa Higher Education Centers of Excellence Project (ACE II) seeks to collectively address a set of key development challenges facing ESA through interventions in developing critically-needed science and technology capacity

by: (a) selecting ACEs, from existing higher education institutions that have the capacity in specialized areas and the potential to help address regional priorities, through a competitive and transparent process from existing higher education institutions that have capacity in specialized areas and potential to help address regional priorities; (b) strengthening these specialized ACEs and enabling them to produce excellent training and applied research that meets the demand for highly skilled personnel and knowledge/technology transfer within regional priorities; (c) building networks among these ACEs to promote regional collaboration and foster partnerships with other institutions and the industry to produce innovative solutions with real impact; and (d) developing a culture of results-orientation and accountability among these ACEs through a performance-based financing mechanism, helping to set an example for other higher education institutions in the region.

II. Proposed Development Objectives

To strengthen selected Eastern and Southern African higher education institutions to deliver quality post-graduate education and build collaborative research capacity in the regional priority areas.

III. Project Description

Component Name

Component 1: Strengthening Africa Centers of Excellence (ACEs) in Regional Priority Areas

Comments (optional)

Under this component, the IDA Credit will finance the strengthening of 24 ACEs in five clusters of regional priorities – Industry, Agriculture, Health, Education and Applied Statistics. Each of these 24 specialized regional centers will receive a grant of up to US$ 6 million for implementing its proposal in a specific regional priority area.

Component Name

Component 2: Capacity Building Support to ACEs through Regional Interventions

Comments (optional)

Under this component, the IDA Grant will finance activities at the regional level to enhance the capacity of the ACEs and help them overcome key challenges for achieving the PDO.

Component Name

Component 3: Facilitation, Coordination and Administration of Project Implementation

Comments (optional)

This component will be financed in the form of a Regional IDA Grant to the RFU. The sheer number of countries and institutions participating in ACE II makes the project implementation complex and requires a RFU that has a designated team for helping manage the project. The main role of the RFU is to deliver some capacity development activities under Component 2.

IV. Financing *(in USD Million)*

Total Project Cost:	148.00	Total Bank Financing:	148.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
BORROWER/RECIPIENT	0.00
International Development Association (IDA)	140.00
IDA Grant	8.00

Total	148.00

V. Implementation

Institutional and Implementation Arrangements

The implementation arrangements for ACE II follows a tiered structure with clear roles and responsibilities for key partners and stakeholders. The core implementing team is the ACE itself with support from its host university, its government, the RFU, the RSC, and its partners from both public and private institutions and firms.

Each selected institution will implement its own ACE proposal. A recognized academic or researcher with leadership and managerial capacity has been chosen (before negotiations) as the leader of the newly established ACE within the institution. The leader will come from the primary discipline of the ACE, be supported by faculty from all relevant departments, and receive support and guidance from the leadership of the ACE hosting university. Project implementation equally draws heavily on a large number of international, regional, and national partners to achieve academic and development objectives. The ACE will also receive support from its hosting university. Responsibility for fiduciary matters during the implementation will lie with existing implementation units within the ACE institutions. ACE II will build upon existing fiduciary capacity and find synergy within the Bank's existing portfolio in the respective countries.

Each participating government will constitute a National Steering Committee (NSC) through the ministry responsible for higher education. The NSC is tasked with the semi-annual review of performance, withdrawal applications, and implementation planning and support, but with no day-to-day implementation or approvals. The composition of the NSC will be defined by each country, which could include representatives from the ministry responsible for higher education, the MoF, relevant line ministries related to the focus area of the ACEs, the Vice Chancellors from the ACE hosting universities, and the private sector.

Kenya: Government Funding for the NSC. The Government of Kenya has agreed to support activities of the NSC with financial support of up to 5 percent of the credit (equivalent to a maximum of USD 900,000) over the project duration of five years. Operational activities include, but are not limited to communication and dissemination of the ACE activities, performance and progress reviews and conferences.

The RSC provides overall guidance and oversight for the project. The RSC is the decision making body of the project and has been involved in ACE II from the preparation stage. It comprises of representatives from participating countries, academics, and representatives from regional bodies and the private sector. The RSC discussed and approved the five priority cluster areas for ACE II to address regional development challenges. It also selected the IUCEA as the RFU for ACE II. The RSC approved the Call for Proposals and made the conditional selection of the 24 ACEs based on the recommendations of the technical evaluation conducted by the IEC. During the implementation phase, the main task of the RSC will be to provide oversight and guidance to the project, to ensure that the ACEs are working towards achieving the PDO, and to help unblock any obstacles in implementation.

The Regional Facilitation Unit for the project, IUCEA, provides overall coordination, facilitation

and administration to the project implementation under the oversight of RSC. It also directly oversees the implementation of Component 2. During the ACE selection process, IUCEA, with the assistance of the Bank team, put the IEC panel together and organized and managed the evaluation process. As the secretariat to the RSC, IUCEA is also responsible for organizing and coordinating all RSC meetings. Specifically, the firm is expected to implement the scholarship activity under Component 2. The firm will be managed and overseen by IUCEA. One of the major administrative tasks for IUCEA during the project implementation is to provide timely independent verification of the DLI results achieved and presented by each ACE for timely disbursement. In addition, IUCEA will provide overall project support and organize knowledge sharing events (see Annex 2). Besides existing staff, IUCEA is in the process of hiring additional staff including a project coordinator, a communication officer, and a FM specialist.

The project will be implemented in accordance with each ACE's Implementation Plan and the signed PFA with its government. These implementation documents will be reviewed jointly by the IUCEA and Bank teams. They are part of the project effectiveness conditions. In addition, the POM prepared by IUCEA will guide the overall project implementation, which will be reviewed at the project negotiations stage.

Results Monitoring and Evaluation

A strong focus on M&E is critical to the success of ACE II. The emphasis on M&E is key to the success of implementing a DLI model. To measure the progress of the ACEs and the overall project, a Results Framework and a selected list of DLIs (needs to be further discussed by the RSC) has been prepared. The M&E functions will be undertaken by each of the ACEs through their existing administrative arrangements, and when needed, through consultancies. At the ACE level, the tools for M&E will include: (a) reports on institutional progress, internal quality, and efficiency audit; (b) reports on results that are verified by an external independent verifier for disbursements and performance audits; and (c) direct stakeholder feedback. Each selected ACE is required to report its M&E capacity in its proposal.

IUCEA is ultimately responsible for monitoring and aggregating the data and results at the regional level. The IUCEA as the RFU will specifically oversee data collection and analysis for the overall ACE II operation as part of its responsibilities, as well as ensure that a robust M&E system is institutionalized and that all data is transparent and publicly available online. The detailed M&E structure and plan will be included in the POM. Comprehensive ACE II progress reports will be provided to the Bank semi-annually.

Sustainability

Institutional sustainability. ACE II aims to strengthen institutions through a strong focus on building collaborations and networks among the participating ACEs and their host institutions, as well as partnerships with other public institutions and the private sector. ACE II is also cognizant of the necessity for the university as a whole to support the ACE. To encourage the ACE hosting universities to provide a supportive quality improvement environment for the ACEs, the project has included a DLI which will reward universities to participate in regional benchmarking initiatives. IUCEA through regional initiatives under Component 2 will play a critical role in bringing these institutions and organizations together to help build collaborative platforms and institutional structures and processes that will build up and sustain the ACE leadership and the momentum of

higher education transformation in the region.

Financial sustainability. Financing will be the most challenging aspect of sustainability for ACE II. Though national governments have shown strong commitment and ownership towards the selected ACEs, prior experience has highlighted the necessity for the ACEs themselves to develop fundraising capacity and learn innovative ways to generate revenues to finance their development needs after the project closing. The project also requires the ACEs to develop action plans for additional funds generation at the midterm review. To build financial sustainability, IUCEA, through the initiatives under Component 2, will facilitate forums where ACEs are given opportunities to interact and network with public institutions, development partners (DPs) and private firms to seek potential funding avenues. The project has taken this into consideration by designing a DLI that will match revenue generated externally by the ACEs, thus providing the ACEs with incentives to generate additional funds. The project will match US$1 for every US$1 raised from national sources, and US$2 for every US$1 raised from regional and international sources. The project also includes an indicator in the Results Framework, externally generated revenue, to monitor progress of fundraising made by the ACEs under the project.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	×	
Natural Habitats OP/BP 4.04		×
Forests OP/BP 4.36		×
Pest Management OP 4.09		×
Physical Cultural Resources OP/BP 4.11		×
Indigenous Peoples OP/BP 4.10		×
Involuntary Resettlement OP/BP 4.12		×
Safety of Dams OP/BP 4.37		×
Projects on International Waterways OP/BP 7.50		×
Projects in Disputed Areas OP/BP 7.60		×

Comments (optional)

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