



Towards Sustainable Financial Management
of Cambodian Universities

National Conference

***Funding Higher Education: towards sustainable financial
management at Cambodian Universities***

**WP4 Strategic Development
T4.3 National Conferences**

November 1st and 2nd, 2022

University of Heng Samrin Thbongkhmum



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1. Executive summary

The II National Conference on Funding Higher Education: towards sustainable financial management at Cambodian Universities took place in person at the University of Heng Samrin Thbongkhmum, the 1st and 2nd of November of 2022.

The Conference wanted to be an opportunity to discuss and showcase project results and lessons learnt, to promote the exchange of case studies and good practices of modernisation initiatives undertaken in EU and Cambodia, contributing to the harmonisation of Financial Management practices in Cambodian HEIs as well as present the final version of the policy White Paper, aiming to propose specific measures for the improvement and harmonisation of financial models and financial management practices in Cambodia.

The opening ceremony was led by the Secretary of State, His Excellency Dr. Touch Visalsok, Ministry of Education Youth and Sport.

The conference attracted more than 80 participants from both project partner universities and other educational institutions. Among the speakers were the representatives of the MoEYS, the World Bank, University of Alicante and University of Genoa. Those sharing would be significant inputs for participants to discuss and come up with suggestions, measures and comments to improve these aspects and benefit the Cambodian HEIs, by improving the financial management practices in Cambodia.

The BALANCE National Conference provided an opportunity to discuss and present project results and lessons learned, to encourage the exchange of case studies and best practices of modernization initiatives undertaken in Cambodia and the EU, and to contribute to the standardization of Financial Management (FM) practices in Cambodian HEIs. It also provided an opportunity to present the Policy White Paper's final draught, which aimed to suggest specific measures for the improvement and harmonization of FM practices.

On the 2nd day of the Conference, it took place a very fruitful panel discussion with 11 representatives of the partner HEIs, facilitated by the Ministry of Education, Youth and Sports, to share the impact of the BALANCE Erasmus+ Project at various levels, including personal, institutional, and national, as well as the next steps to ensure the sustainability of the results achieved beyond the project's lifespan.



2. Agenda

<p style="text-align: center;">CONFERENCE Day I</p> <p style="text-align: center;"><i>Funding Higher Education: towards sustainable financial management at Cambodian Universities</i></p>		
<p>Tuesday, 1st November 2022</p> <p>Meeting room, LBN Asian hotel</p>		
From	To	
8:30	9:00	Participants registration
9:00	10:00	<p>Opening Ceremony</p> <ul style="list-style-type: none"> - <i>National Anthem</i> - <i>Welcome Remark by H.E. PIN Vannaro, Rector, University of Heng Sarmin Thbongkhmum (UHST)</i> - <i>Welcome Remark by Dr. Roberto Escarré, University of Alicante (UA), Spain</i> - <i>Opening Remark by His Excellency Dr. TOUCH Visalsok, Secretary of State, Ministry of Education, Youth and Sport (MoEYS)</i> - <i>Group photo</i>
10:00	10:15	<p>BALANCE project + agenda presentation</p> <p><i>Ms. Olga Bloschinska</i>, University of Alicante</p>
10:15	10:45	<i>Coffee break</i>
10:45	11:30	<p>Managing resources in a post-pandemic university</p> <p>Q&A</p> <p><i>Dr. Joaquin Marhuenda, Dr. Roberto Escarré</i>, University of Alicante</p>
11:30	12:15	<p>Higher Education Data Management</p> <p>Q&A</p> <p><i>Dr. KAO Sovansopha</i>, Vice-chief of Office, DGHE</p>
12:15	13:30	<i>Lunch break</i>

13:30	15:00	<p>Good practices sharing (15min per each HEI)</p> <ul style="list-style-type: none"> • <i>UHST</i> • <i>NUCK</i> • <i>SRU</i> • <i>NMU</i> • <i>NUBB</i> • <i>KCIT</i>
15:00	15:15	Day 1: Closing session and remarks
15:15	15:45	Coffee break – Networking

<p>CONFERENCE Day II</p> <p><i>Funding Higher Education: towards sustainable financial management at Cambodian Universities</i></p>		
<p>Wednesday, 2nd November 2022 Meeting room, LBN Asian hotel</p>		
From	To	
8:30	8:30	Participants registration
8:30	9:30	<p>Higher Education Governance: A Core Strategy Q&A</p> <p><i>Mr. BENG Simeth</i>, Senior Education Specialist, World Bank</p>
9:30	10:00	<p>Presentation of the Policy White Paper</p> <p><i>Dr. Roberto Escarré</i>, University of Alicante</p>
10:00	10:30	<i>Coffee break</i>
10:30	11:30	<p>Financial and Non-Financial Reporting in Public Universities Q&A</p> <p><i>Prof. Renata Paola Dameri</i>, University of Genoa</p>

11:30	12:00	Good practices sharing (15min per each HEI) <ul style="list-style-type: none"> • <i>KSIT</i> • <i>RUA</i>
12:00	13:15	<i>Lunch break</i>
13:15	14:00	Good practices sharing (cont.) <ul style="list-style-type: none"> • <i>RUPP</i> • <i>NUM</i> • <i>NIE</i>
14:00	14:45	Panel discussion: BALANCE impact & expectations <i>All participants, mediated by UA</i>
14:45	15:00	Conference closing <i>His Excellency Dr. TOUCH Visalsok, Secretary of State, Ministry of Education, Youth and Sport (MoEYS)</i>



3. Key notes

Managing resources in a post-pandemic university

BALANCE National Conference II

Funding Higher Education: towards sustainable financial management at Cambodian

Universities

Krong Kampong Cham, Cambodia

November 2022

Authors

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Short bio - Authors

Professor Joaquín Marhuenda is coordinator of the BALANCE project at the University of Alicante. Marhuenda is full professor at the Finance Department of the University of Alicante. He has wide international experience via research and capacity building projects, mainly in Latin America and Asia.

Dr Roberto Escarré is Project Manager of the BALANCE project at the University of Alicante. Escarre is Director of the Institutional Project Management Office at the University of Alicante. Escarré has worked as an expert and evaluator for various international organizations like the European Union, the European Patent Office or the World Bank.

SYNOPSIS

This paper aims to provide some ideas on how managing resources at higher education institutions in Cambodia in a post-pandemic era, by: 1) Assessing the impact of the pandemic at universities and higher education systems; 2) Analysing the main challenges; 3) Identifying opportunities and their potential financial implications. As main conclusion we

consider that the COVID-19 pandemic had a huge impact in most Higher Education Institutions in the world, but also opened up opportunities to the countries in order to upgrade its educational model of delivery and transfer its attention to emerging technologies. Following this, Cambodian Universities need to respond to this situation by strengthening its financial management practices and making the curriculum and the research responsive to the needs of the changing times.

INTRODUCTION

There are several studies that have assessed the impact of the pandemic, both at macro and micro level. According to UNESCO, on 1 April 2020, schools and higher education institutions (HEIs) were closed in 185 countries, affecting 1 542 412 000 learners, which constitute 89.4% of total enrolled learners. Restrictions last different depending on the country and health conditions. The most relevant study at macro level is “The impact of COVID-19 on Higher Education around the World”, from the International Association of Universities.

ASSESSING THE IMPACT OF COVID-19. IAU STUDY MAIN CONCLUSIONS

The following are the most important conclusions of the IAU study about the impact of COVID-19 on Higher Education around the world:

- Almost all institutions that replied to the survey were impacted by COVID- 19: 59% replied that all campus activities stopped, and the institution was completely closed;
- Almost all HEIs (91%) have infrastructure in place to communicate with their students and staff about COVID-19. Despite this, respondents reported an immediate challenge to ensure clear and effective communication streams with staff and students.
- COVID-19 had an impact on the enrolment numbers, both international and local students. Some HEIs, especially private ones, reported that this impact had more negative financial consequences.

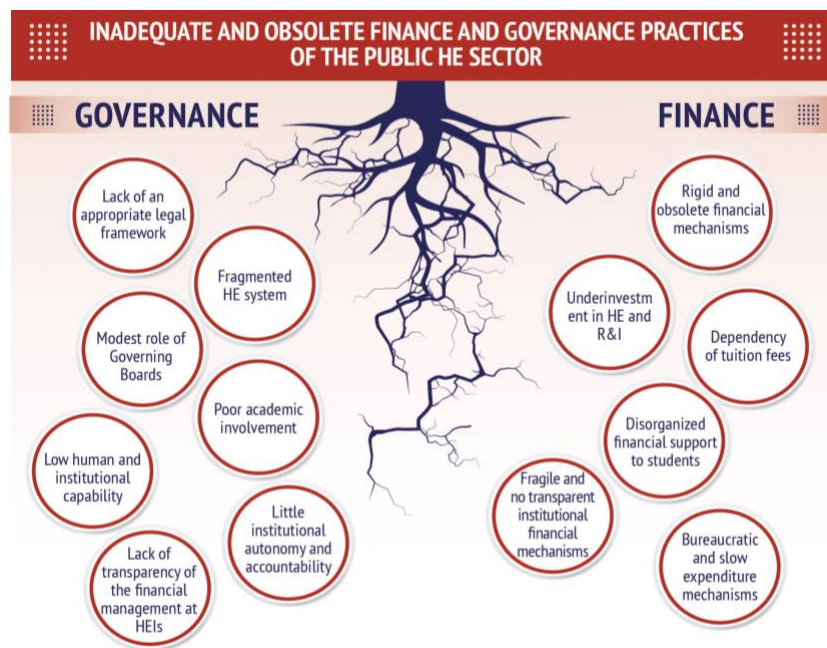
- Two-thirds of HEIs reported that their senior management and faculty were consulted by public or government officials in the context of public policy development relating to COVID-19.
- Almost half (48%) of respondents indicated that their government/ministry of education supported their institution in mitigating the disruption COVID-19 caused. The most common support being assistance to complete the academic year.
- As far as partnerships are concerned, 64% of HEIs reported that COVID-19 had a variety of effects. Half of them reported that COVID-19 weakened the partnerships, while only 18% reported that it strengthened them. However, for 31% of respondents, the COVID-19 pandemic created new opportunities with partner institutions.
- At almost all HEIs, COVID-19 affected teaching and learning, with two-thirds of them reporting that classroom teaching was replaced by distance teaching and learning. The shift from face-to-face to distance teaching did not come without challenges, the main ones being access to technical infrastructure, competences and pedagogies for distance learning and the requirements of specific fields of study.
- At the same time, the forced move to distance teaching and learning offered important opportunities to propose more flexible learning possibilities, explore blended or hybrid learning and to mix synchronous and asynchronous learning.
- COVID-19 had an impact on international student mobility at 89% of HEIs. The type of impact is diverse and varies from institution to institution, but everywhere was negative. Fortunately, the majority of HEIs had contingency plans in place to mitigate this impact.
- 60% of HEIs also reported that COVID-19 increased virtual mobility and/or collaborative online learning as alternatives to physical student mobility.
- As far as research is concerned, 80% of HEIs reported that research was affected by the COVID-19 pandemic at their institutions. The most common impact of COVID-19 has been the cancelling of international travel (at 83% of HEIs) and the cancellation or postponement of scientific conferences (81% of HEIs). Moreover, scientific projects are at risk of not being completed at more than half of HEIs (52%).

- Only 41% of HEIs were involved in COVID-19 research, but at almost all of them researchers contribute to current public policy development.
- For the large majority of HEIs, COVID-19 impacted their community engagement initiatives. At a bit less than half of them the impact was positive - the crisis increased HEIs' community engagement, whereas at a bit less than one third the impact was negative - it decreased HEIs' community engagement activities.

Considering this framework there are some interesting, good practices regarding the assessment of the Impact of the COVID at universities or higher education systems. One of this is the MAPS Project supported by the Bill & Melinda Gates Foundation (<https://sicdata.shinyapps.io/MAPS-dash/>). This Project has designed a dashboard to assess how the impact affect the different institutions, but also which was the impact of the pandemic in the students.

ANALYSIS OF CHALLENGES / MACRO APPROACH

The challenges of the Cambodian Higher Education system regarding financial management are described in the following figure:



Source: White for a Financial Model for the Cambodian Higher Education sector. BALANCE Consortium (2022)

More specifically, if we group some of these challenges and add some effects of the pandemic, we may have very complex situations. As for instance:

- Besides the rigid and obsolete financing mechanisms, the underinvestment in Higher Education, the dependency on tuition fees and the bureaucratic/slow expenditure mechanisms we could add a lack of digital infrastructure and learning resources;
- Or besides the poor academic involvement and the low human and institutional capability we could add a very limited digital literacy and experience.

Thus, the result could be quite catastrophic in a higher education system like the Cambodian, if clear and effective policies are not implemented in order to solve these issues.

ANALYSIS OF THE MAIN CHALLENGES / MICRO APPROACH

The following are some examples of challenges identified at micro level, divided in the following categories: Universities, Academic & Research Staff and Students.

Regarding Universities, the following may be the most important challenges:

- Closure of Higher Education Institutions
- Potential Bankruptcy / Lack of financial resources
- Lack of digital infrastructure and learning resources
- Potential decrease of quality of teaching and learning

For the Academic and Research staff we could consider the following challenges:

- Limited Digital Literacy and Experience;
- Lack of experience in adapting the Curriculum to the new conditions;
- No experience in organising evaluations covering all the content taught and to prevent fraud when the test was taken remotely;
- Research staff had to reorient their lines of research to relevant topics for the pandemic.

And with regards students, the following could be the more important challenges:

- Access to reliable internet connection and appropriate digital services;
- Access to computers, laptops or tablets to support online learning;
- Limited Digital Literacy and Experience;
- Worsening of Skills gaps and educational inequality;
- Mental health issues;

OPPORTUNITIES

But at the same time that the pandemic provoked several challenges, also opportunities arose for Higher Education Institutions. The following could be the more relevant:

- Improving Digital Infrastructure and Learning Resources
- Digitalizing Delivery Approach
- Align Curriculum Competencies
- Diversification of Academic Offer
- Providing Regular Professional Development and Training
- Promoting Diverse Collaboration and Partnerships
- Strengthen Research, Data monitoring (IA) and Evidence-Based Practices
- Integrate Environment and Health Courses in the Curriculum
- Strengthen Environmental and Hygiene Practices
- Incorporate Online Mental Health and Medical Services

CONCLUSIONS

In summary, the COVID-19 pandemic had a huge impact in most Higher Education Institutions in the world, but also opened up opportunities to the countries in order to upgrade its educational model of delivery and transfer its attention to emerging technologies. Cambodian Universities need to respond to this situation by strengthening its financial management practices and making the curriculum and the research responsive to the needs of the changing times.

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Higher Education Governance: The Core Strategy of Rectangular Strategy Phase 4

AUTHORS

Mr. BENG Simeth, Senior Education Specialist, World Bank

INTRODUCTION

The purpose of governance is to serve the best to the interests of people and to build a nation, through the decentralization of authority into the local administration and public services.

The education indicators and data below is designed based on the data framework in The digital economy and society framework 2021-2035 signed by Prime Minister on 10 May 2021. Higher education sub-sector will start to collect the data twice a year on every third week of September 2021 and March onward. Data collected will be in an accumulative manner. The data framework below shows how data at all level of the system must be accumulative toward changes and connected.

The existing laws are consistently demand all below data to support country leader to do the jobs that has been promised to response to people need during each of the election campaign. Rectangular Strategy Phase 4, Industrial Development Policy, Public Financial Management Reform Program, Sub-decree on Public Investment Program, Royal Decree on Public Administrative Institution, Sub-Decree on Public Administrative Institution, Digital Economy and Society Framework, Royal Decree assigns sector leaders, Sub-Decree assign sector managers, Prakas assign sector officials. Each public leader, manager and official must be accountable on his/her performance to perform political agendas that have been promised with people by using public fund to serve the best interests of people and not vias versa.

Rectangular Strategy Phase IV			
RS4 Goals: Growth, Employment, Equity, Efficiency: Building The Foundation Toward Realizing Cambodia The Cambodia Vision 2050			
Education Goals: Improve quality of education, science, and technology			
	Strengthen Ownership and Partnership in Development and International Cooperation		
Peace, Political Sustainability and Public Order	Strengthening Accountability and Integrity in the Public Administration	Strengthening of Private Sector Governance	Strengthening Cambodia's Capacity to Further Promote Its Integration Into Regional and Global Economy
	Accelerate of the Governance Reform		
	Institutional Reform and Capacity Building	Strengthening of Work Effectiveness	
	Favorable Environment for Business Investment and Development		

Governance through decentralization of autonomy to Institution requires institution to be accountable for results by doing the right choices/strategies to support the institution mission and four country goals.

Institution has autonomy to generate incomes and **spend fund efficiently** "Sub-Decree 41 Public Investment Management" to support institution accountability and integrity.

Institution sustain itself by implementing reform programs "**FMR and PAR**" through the application of FM system and HR management "Management and Staff Performance Management System to build and sustain institution/staff capacity to support **equity in quantity and quality, relevance as shown by better jobs with better wages, and sustain and green growth.**

1. TERTIARY EDUCATION PRODUCES ADVANCED SKILLS AND INNOVATION THAT ARE ESSENTIAL TO GROWTH AND SOCIAL COHESION

- Tertiary education is both an aspiration for **growing numbers of young people around the globe and a fundamental requirement for employment in the industries** that drive the global knowledge economy.

- As such, tertiary education is the **central hinge for human capital development** and equality of opportunity as well as promoting shared prosperity.
- A **well-managed, strategically oriented, diversified, and well-articulated tertiary education system is vital** for producing the caliber and diversity of graduates needed both for the economy of today and for the economy of the future.
- From **providing skills for immediate professional application to building stages of complexity of learning** toward post graduate studies and research, tertiary education offers multiple avenues for **social mobility and the foundation to economic development**.

2. BENEFITS OF INVESTING IN TERTIARY EDUCATION ARE HIGH FOR INDIVIDUALS AND SOCIETIES, ALTHOUGH RETURNS ARE HETEROGENEOUS

- **Human capital and employment are key determinants of economic growth**, together with total factor productivity and capital investments. Tertiary education not only increases individuals' and societies' human capital, but also **leads to increased labor productivity and correlates with longer working lives**.
- Moreover, tertiary education provides an important link to innovation, thereby impacting total factor productivity across a nation's economy.
- Technological innovation as well as adaption requires highly skilled individuals.

Training graduates for the labor market

- and that **includes the local and global ones, the existing and future ones, and the ones that are emerging for industries yet to be created by these and future graduates**
- and **employability more broadly** — are human capital investments effectively delivered via tertiary education.

3. THE TERTIARY EDUCATION SECTOR HAS EXPERIENCED DRAMATIC CHANGES

- Globally, many long-standing challenges facing tertiary education have been steadily addressed over the past 30 years — including expanded access, and measured relevance.
- **Quality and Relevance:** Most middle-income countries continue to struggle with ensuring quality and relevance despite the significant resources invested in tertiary education. Returns to tertiary education, while high on average, are very heterogenous. Although there are challenges in measuring learning outcomes, employer surveys indicate persistent skills mismatches and individual and their families continue to invest in fields of study with dimmed labor market prospects. Tertiary systems are increasingly expected to develop the skills and innovation needed to sustain green and inclusive economic growth.
- **Internationalization and regional cooperation:** Global interconnectivity, education, and experience are fundamental for countries, institutions, and individuals to harvest the benefits of cross-country cooperation on an equal footing; currently, even with the known benefits of international cooperation and collaboration, impactful internationalization remains largely the privilege of the global elite.
- **Learning across a lifetime:** Tertiary education institutions must continually revamp their operations to ensure their relevance as key lifelong learning players in a fast-changing environment where individuals need skilling and reskilling over a lifetime.

This has resulted in:

- **A new emphasis on steering:** While most countries recognize the crucial role, the sector can play in their advancement, *the tertiary education sector often operates as a ship without a map and compass, and subsequently without proper steering. Governance, financing, and quality assurance are central steering elements vital to ensuring the tertiary education sector is as high impact and effective as possible.*

- **A holistic view of the tertiary ecosystem:** Adequate steering also ensures that the sector is considered in its entirety and not as isolated siloes of universities, technical institutions, colleges, and tertiary technical and vocational education institutions.
- **Non-university tertiary education** — which often provides the gateway to tertiary education for students from lower income groups³ — is as important a part of this ecosystem as universities, as countries strive to support multiple and well-articulated pathways through the whole tertiary education section while promoting efficient spending, expanded access, equity, applied and relevant research, and support to local companies and communities.

It is essential that all institutions in the tertiary ecosystem are appropriately supported, and quality assured and that systems are permeable, pathway options clear and accessible, and that learners on all levels are supported.

➤ **STRATEGIC DIVERSIFIED SYSTEMS:**

Supporting all postsecondary institutions, ensuring agile, articulated pathways and diversity of forms, functions, and missions.

- **Developing future-oriented strategies** that center on a strong **contribution of tertiary education** not only to growth and competitiveness but also to **social cohesion** and **human development** more broadly for the tertiary education sector, subsectors, and institutions. This is an agenda for high- and middle-income countries but is particularly important for fragile and low-income countries that need to kick-start the technological innovation and adaption engine and provide the young generation a productive and peaceful future.
- Positioning **tertiary education in a lifelong learning context with flexible pathways, second-chance options, and greater adaptability** to the needs and opportunities afforded by employers, civil society, and governments. This means permeability across pathways and providers, modularization of learning offers, and

student-centered credit systems to allow for flexible pathways as well as bridging and mentoring programs to boost tertiary remedial education to give everyone a good start and adequate support in tertiary education.

➤ **TECHNOLOGY:**

Designed and applied in a purposeful and equitable manner

- **Harnessing the power of technology to improve teaching and research capacity** while simultaneously acknowledging and countering the impact of expanding digital divides. With tertiary education sectors massively expanding across the globe and low-income groups and countries trailing behind, technology might be the only way to effectively ensure equity and resilience.
- **Building a digital ecosystem with the help of National Research and Education Networks (NRENs) and effective collaboration across government portfolios.** Harnessing the power of technology means that tertiary education institutions not only profit from digitalization but also advance digitalization through the development of digital skills, and application of digitalization across its functions and related research and development.

➤ **EQUITY:**

A universal approach to the benefits and opportunities of postsecondary learning

- Acknowledging that **inequity is a form of injustice**
- Acting to **ensure that equity and inclusion in access and success** are a driving ethos for an effective and relevant tertiary education system

➤ **EFFICIENCY:**

A goal-oriented, effective use of resources

- **Improving information systems** so that sectors, subsectors, and institutions **can be managed and enhanced utilizing evidence and sound information**
- **Devising and deploying governance, financing, and quality assurance instruments** that are designed to weather the current and potential future crises.

- **For financing**, this means, for example, that systems and institutions diversify their funding base and reduce dependency on a single income source (which will require revisiting questions of cost-recovery and a rethinking of student grant and loan schemes in many countries) and use innovative funding mechanisms.
- **For quality assurance**, this means that remote options for accreditation and evolution are established and applied when the environment requires such agility in ensuring quality under all conditions.
- **For governance**, this means **ensuring the external governance** — legislative and ministerial oversight — and **institutional governance** — boards and oversight bodies — are developed and operated in such a manner that promotes effective connections with external actors and the world of work and allows for rapid innovations to be tested and embraced in such a way that institutions are able to continue their operations within the scope of their charters and missions.

➤ **RESILIENCE:**

The ability to persist, flourish, and deliver agreed goals despite adversity

- Acknowledging the need for **resilience planning**, by taking stock of the successes and failures of the COVID-19 response at the systems and institutional levels and analyzing options that would have mitigated the failures.
- **Utilizing adaptive governance frameworks** to embed immediate, strategic resilience interventions to address significant short- and long-term challenges facing tertiary education systems and institutions as a result of the shocks brought on by the pandemic, including diminished resources for institutions, personal and academic challenges for institutions and students, demand for improved infrastructure to support continued distance and blended learning models, reduced mobility placing pressures to improve regional and local tertiary institutions, questions of sustainability of funding models, and much more.

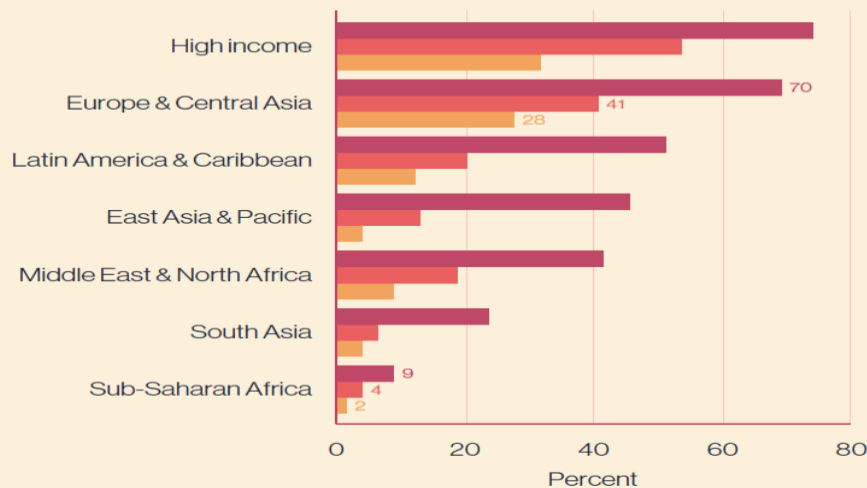
4. STEERING TERTIARY EDUCATION TOWARD RESILIENT SYSTEMS THAT DELIVER FOR ALL

BOX 1.1 Sub-Saharan Africa strives to catch up

The university must become a primary tool for Africa's development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment for the practice of good governance, conflict resolution, and respect for human rights, and enable African academics to play an active part in the global community of scholars.

— Kofi Annan

FIGURE B1.1.1 Gross tertiary enrollment rates, by region



5. ADVANCED SKILLS AND HIGHER PRODUCTIVITY ARE ESSENTIAL IN RAPIDLY CHANGING DEMOGRAPHIC ENVIRONMENT

Whether experiencing population growth or decline, **tertiary education systems must adapt** to a changing demographic environment and ensure that the abilities of graduates match the needs of their societies.

- **Population decline** in most middle-income and high-income countries will put **pressure on productivity** and **demand an acceleration of innovation** — including in the context of the green economy — serving an aging society.
- **Institutions will be required to redefine themselves** outside of traditional delivery and learn to serve as centers for lifelong learning, reskilling, innovation, inclusion, and, potentially, as partners with employers, for example, on targeted

micro-credentials. In countries experiencing demographic growth, more and more diversified institutions are required for a bulging student pipeline.

- TEIs must be agile, able to identify their niche, and open to expansion in their sectors. Regardless of the demographic setting, all **TEIs must be committed to quality and remain flexible in the face of rapid change in their student populations**. The decades ahead will be defined by these populations shocks, and tertiary education systems must be prepared to adapt to them.

6. TO ENSURE THE DEVELOPMENT OF ADVANCED (INCLUDING GREEN) SKILLS AND RESEARCH AND INNOVATION, COUNTRIES NEEDS TO STEER

The guiding principle of this policy approach paper is that policymakers and academic leaders must be purposeful in steering their tertiary sectors toward national and institutional strategic goals. To achieve these goals, the World Bank has identified five key dimensions that are instrumental for creating *agile, effective, and sustainable tertiary education*, particularly in the post-COVID-19 environment. To reach these goals, tertiary education requires purposeful *STEERING*, using:

- 1. Strategically diversified systems** — supporting all postsecondary institutions, ensuring agile, articulated pathways and diversity of forms, functions, and missions
- 2. Technology** — designed and applied in a purposeful and equitable manner
- 3. Equity** — a universal approach to the benefits and opportunities of postsecondary learning
- 4. Efficiency** — a goal-oriented, effective use of resources
- 5. Resilience** — the ability to persist, flourish, and deliver agreed goals despite adversity.

7. CAPTURING KEY WORDS TO DRIVE POLICY'S ATTENTION

Globally, many long-standing challenges facing tertiary education have been steadily addressed over the past 30 years — including expanded access, and measured relevance.

- A. Global expansion of access with weak foundation skills of students**
- B. Digitalization:** a **potential** great equalizer but also the great divider.
- C. Quality and Relevance of Outcomes** – Better Jobs/Pay
- D. Internationalization and regional cooperation remain largely the privilege of the global elite**
- E. Learning across a lifetime and Building Adaptability Skills**

The benefits include higher employment levels, higher wages, greater social stability, increased civic engagement, and better health outcomes.

Policymakers need to factor in these megatrends in their strategies for tertiary education investments. There are four main takeaways.

- 1) First, **transformation toward green growth** will place a premium on innovation and lead to an increased demand for advanced skills in support of this shift.
- 2) Second, **the trends will further raise the educational and social mobility** aspirations of families and individuals, especially youth.
- 3) Third, **demand for non-routine tasks requiring cognitive and socio-emotional skills will continue to grow**, while that of routine tasks preponderant in low and medium-skill jobs will likely fall. And
- 4) Fourth, **fast change will be the only constant**, putting a premium on the adaptability of individuals and systems.

One of the main results of these trends will be a continued increase in demand for quality- and innovation-based tertiary education.

8. BUILDING 21st CENTURY SKILLS

<i>How Do We Built 21st Century Skills in Our Graduates? Design-Based Investment Project Teaching and Life and Work Problem Based Learning.</i>
1. Ways of Thinking: Creativity, critical thinking, problem solving, decision making and learning
2. Ways of Working: communication and collaboration. Knowledge: balance between concept and practice motivate students to engage.
3. Character (attitude, behavior, and values). Performance-Based traits (adaptability, persistence, resilience) and Moral-Based Traits (integrity, justice, empathy, and ethics). Tools for Working: ICT, and Information literacy
4. Meta-Layer: Learning how to learn, interdisciplinary, system thinking, personalization. Skills for living in the world: Citizenship, life and career, personal and social responsibility

9. CAMBODIA HIGHER EDUCATION CONTEXT AND CURRENT PROGRESS

Cambodia's recent economic success has been built largely on the expansion of relatively low technology, low wage/skill production in such industries as textiles, apparel, and basic electronics, and sustained by a steady flow of foreign investment. In order to remain competitive, Cambodia must address an increasingly serious human resource constraint in

the form of rising shortages of in Science, Technology, Engineering and Mathematics (STEM) produced by the universities.

Cambodia's future economic competitiveness depends, inter alia, on **producing quality tertiary graduates in STEM and agricultural subjects as well as increasing its research and development capacity**. Improvement of higher education in STEM and agriculture will produce **highly skilled graduates who can fill leadership roles in Cambodia's technological transformation**. This will help Cambodia to transition its economy to high-skill industries.

Government Reform Agenda Responding to Challenges focuses on three key sectoral policy areas: **(a) quality and relevance; (b) access and equity; and (c) governance**.

10. CURRENT PROGRESS FROM PARTNERSHIP PROJECT WITH WORLD BANK

Main partnership progress:

- A. 25 partnership agreements signed, 40 academic programs revised (785 course syllabus), 13 programs are being implemented, and 26 will be implemented in this new academic year 2022,
- B. 5 MSc completed course, 142 faculties are in courses (55 PhD and 87 MSc), and 315 staff upskilled,
- C. 6 Private HEI selected (STEM), and 9 partnership agreements signed, are trained on systems and operations.

Main partnership progress:

- 53 research projects approved - 14 led by female - are being implemented and 44 linked with industries. 26 among submitted 40 articles published in international journals. 12 projects completed by Q1 2023.
- 22 enrolled in PhD and 4 MSc graduated
- 28 Labs renovated/established. 31 Prototypes and 10 products produced

Progress on Governance: Systems Development

- Sub-sector and HEI Strategies 2021-2030, QA system, Tracer Study, Guideline on Student Grievances.
- CPD and CP, HR Master Plan, Medium Term HE CD Plan, PAI HEI Education Staff Management (Prakas),
- FMM, HEI FM Guideline (Prakas), Consolidated FM Report Format, HEMIS, and
- Research Manual, Partnership Manual, etc.

Progress on System Operations:

- 4 HEI – RUPP, RUA, SRU, NUBB – become Public Administrative Institution, ITC will become PAI by Q3 2023. UHST will become a Budget Entity by Q3 2023. 17 HEIs (6+11) completed 2021 SARs and are preparing 2022 SARs and 5 years action plan.
- 723 staff from DGHE and 6 HEIs produced ARA / join staff performance management system.
- RUA draft new incentive policy moving from teaching hour fee payment to monthly performance-based pay and submitted to Board for endorsement by end 2022. 5 HEIs produced FM consolidated reports.
- 26 HEIs input data into HEMIs.
- Cambodia Cyber University Network PIP 2023 funded by Public Budget.

Next steps: systems operations and connected

1. Most governance systems are in place and HEI shall make effort to operate and connect those systems to serve the purpose of PAI Status.
2. HEI shall make effort to develop institution capacity to become Young Professional Status by 2028.
3. HEIs shall make available the workplaces for student practicum either with industrial partners or HEI business start up as SME.
4. HEI shall continue to build support staff capacity with professional certification on procurement, financial management, M&E, and project management.
5. Data system: HEIs shall make information accessible (100% computerized) to students, staffs, and publics.

11. CONCLUSIONS

But still higher education is facing the challenge of low technology and low wage/skill production.

- ... what next is on your decision “To Do or Not To DO” and what if we do (benefits) and what if we do not (consequences)?
- The more you know yourself, the more you recognize yourself (Self-recognition).
- The more you Self-recognize, the more you Self-Actualize.
- The more you Self-Actualize, the more you live with well-being.

Self-actualization:

- “What a man can be, he must be - the desire to accomplish everything that one can, to become the most that one can be.

- Self-actualization can be described as a value-based system - understood as the goal or explicit motive, and *to become the step-by-step process* by which self-actualization is achievable.
- an explicit motive is the objective of a reward-based system *that is used to intrinsically drive the completion of certain values or goals.*
- Individuals who are motivated to *pursue this goal seek and understand how their needs, relationships, and sense of self are expressed through their behavior.*

Four components of well-being	
1 Awareness <i>Attention</i> <i>Self-awareness</i> <i>Mata-awareness</i> <i>Focus</i>	2 Connection <i>Kindness</i> <i>Empathy</i> <i>Maintaining a positive outlook</i>
3 Insight <i>Self-knowledge</i> <i>Decreased stickiness</i> <i>Heathy sense of self</i>	4 Purpose <i>Clear direction</i> <i>Sense that life has meaning</i> <i>Everyday tasks align with purpose</i>
All are for others Are You or Are You Not?	

Higher Education Data Management

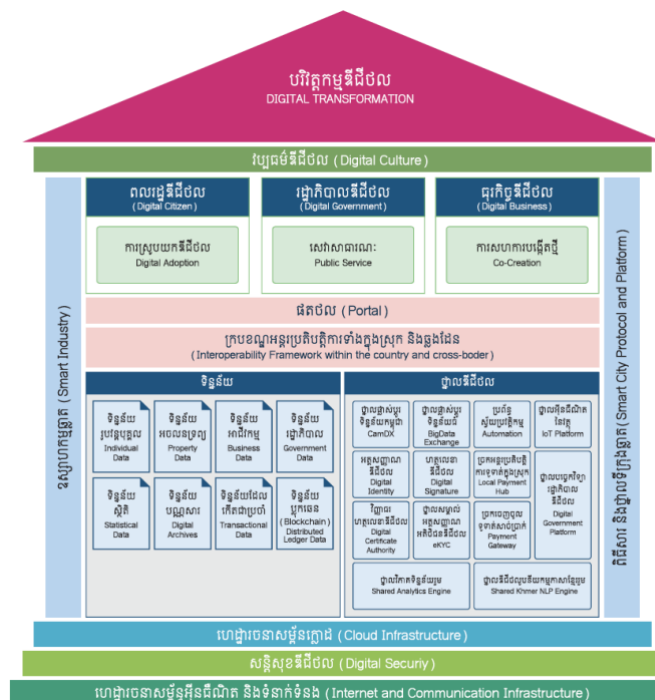
AUTHORS

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INTRODUCTION

The topic of Data Management in Higher Education is part of the Cambodia Digital Economy and Society Policy Framework (2021-2035). **Data** is an important digital asset for recording, verifying and analyzing system-level data. Therefore, the Royal Government will prepare a database containing important data related to people, business, property, and governance, etc. This data can be of many types and forms, which is managed by the competent authority and is regularly/periodically updated. This data will be shared and used in digital platforms to facilitate or duplicate data entry and increase data integrity. In addition to these basic data, there is transactional data through transactions, IoT derived data, and data from other sources, which will reflect the pace of digital transformation in Cambodia.

1. THE BLUEPRINT OF INTERACTIONS AMONG KEY STAKEHOLDERS BASED ON THE FOUNDATION OF DIGITAL TECHNOLOGY



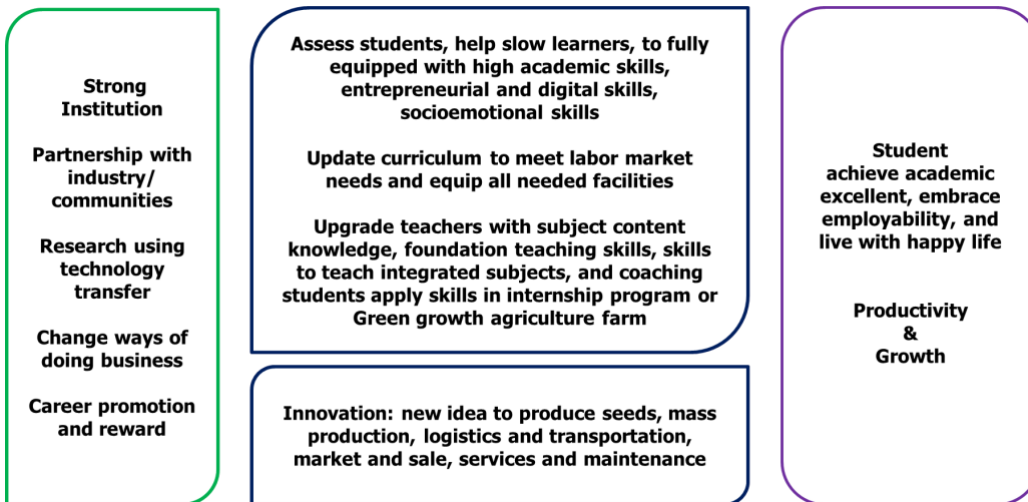
- | | | | |
|---|--|---|--|
| <p>Records of Individual Data</p> <ul style="list-style-type: none"> - Population Data - Immigration Data - Education Data - Health Data - Insurance Data - Income and Tax Data - Credit Risk Data - Farmer Data - Livestock Data | <p>Records of Properties</p> <ul style="list-style-type: none"> - Property Data - Vehicle Data - Geography Data - Resident Data | <p>Records of Businesses</p> <ul style="list-style-type: none"> - Business Data - Taxation and Customs Data - Employment Data - International Trade Data | <p>Records of Government</p> <ul style="list-style-type: none"> - Public Human Resources Data - Public Financial Management - Information System (FMIS) Data - Public Procurement Data - Enterprise Resource Planning (ERP) Data - Natural Resources Data - Administrative Document Data |
|---|--|---|--|

Source: Working Group of the Supreme National Economic Council

2. KEY DOCUMENTS PRODUCED



3. THEORY OF CHANGES



4. CURRENT METHOD TO COLLECT DATA- STANDARDS AND INDICATORS

Main Themes	Main Indicators	# Sub-Indicators
Long Term Impact of Rectangular Strategy core Strategy	Peace, political stability, public order	1
	Environment for business, investment, and development	1
	Strengthen ownership, partnership, and international collaboration	1
	Strengthen Cambodia capacity for regional and international integration	1
Core Strategy	Institution strengthened	1
	Status of work effectiveness strengthened	1
	Status of cleanliness in public service	1
	Status of governance of HEI	1
Medium Term Impact	Growth for sustainable HEI	5
	Jobs with better pay	4
	Equitable impact	9
	Effectiveness of civil servant performance	11
	Effectiveness of institution	7
Total Indicators		44

LONG TERM IMPACT OF RS CORE STRATEGY

Main Indicators	# Sub-Indicators
Peace, political stability, public order	Number of graduates from local programs meet standards working in Phnom Penh and provinces
Environment for business, investment, and development	Number of local programs use 21st century skill for green growth in farm or business
Strengthen ownership, partnership, and international collaboration	Number of investment programs owned by HEI in partnership with industries for development (academic program or research)
Strengthen Cambodia capacity for regional and international integration	Number of international programs have partnership with Asian or international universities (international program)

CORE STRATEGY

Main Indicators	# Sub-Indicators
Institution strengthened	Professional status of HEI
Status of work effectiveness strengthened	Number of professional titles: Young Professional (YP), Education Specialist (ES), Senior Education Specialist (SES/Professor)
Status of cleanliness in public service	Financial management consolidated report shows improvement in financial capital for investment program
Status of governance of HEI	Status of governance

MEDIUM TERM IMPACT: JOBS WITH BETTER PAY

Main Indicators	# Sub-Indicators
Jobs with better pay	Number/percentage of students gain volume of incomes from internship program
	Number/percentage of students get jobs after 1 to 3-month after graduate
	Number/percentage of students gain jobs with salary scale of 5 to 10 times compared to non-skill workers (salary should be during or after probation time?)
	Number/percentage of graduates gain middle and high-level management jobs in private firms/international organizations/bi-lateral agencies

MEDIUM TERM IMPACT: EQUITABLE IMPACT

Main Indicators	# Sub-Indicators
Equitable impact	Number of students enroll/graduate from international program
	Number of students enroll/graduate from local BA program standards
	Number/percentage of grade 12 students enroll in higher education. (Net number, Gross Number)
	Percentages/number of student dropouts
	Number/percentage of students get free scholarships

Main Indicators	# Sub-Indicators
Equitable impact	Number/percentage of students get tuition fee scholarships
	Number of lecturers master degree graduate on sciences from abroad with government scholarships
	Number of lecturers PhD graduate on science fields from abroad with government scholarships
	Number of student groups provide counseling supports to other students

EFFECTIVENESS OF CIVIL SERVANT PERFORMANCE

Main Indicators	# Sub-Indicators
Effectiveness of civil servant performance	Number of senior education specialist/professors in policy
	Number of senior specialist teachers/professor in academic
	Number of senior researchers/professors in research
	Number of specialist teachers/assistant associate professors
	Number of education specialists
	Number of support staff specialists

Main Indicators	# Sub-Indicators
Effectiveness of civil servant performance	Number of young professional teachers
	Number of young professional support staff
	Number of education young professionals
	Number of young professional teachers
	Number of young professional department heads

EFFECTIVENESS OF INSTITUTIONS

Main Indicators	# Sub-Indicators
Effectiveness of institution	Status of institution development
	Status of PAI (Public Administrative Institute)
	Consolidated financial report is prepared and submitted to Board every year
	Number of local BA science program meet standards
	Number of social science programs meet standards
	Number of international science BA programs
	Number of programs (national and international) connected with Cyber University Network



1. GOVERNANCE

#	Standards and indicators	Score 0	Score 1	Score 2	Score 3
1 Governance					
1	% of enrolment meet annual targets of 10-year result framework	NA	1-2 programs meet targets	3-5 programs meet targets	6 or more programs meet targets
2	% of graduates have jobs soon after graduation (one to six months) and earn income 5 times or more than un-skill workers	No data	1-2 programs meet indicator	3-5 programs meet indicator	6 or more programs meet indicator
3	A flat institutional structure is in place to support functional decision making	NA	Structure disconnect with strategy	Structure connects with strategy	Structure connects with strategy and functions as intended
4	HEI strategy approved followed or similar to 4Es+RBME Model	NA	Strategy does not tell to do what	1 st Strategy follows the 4Es+RBME model	2 nd Strategy follows the 4Es+RBME model
Sub-total scores		0	4	8	12

2. MANAGEMENT

#	Standards and indicators	Score 0	Score 1	Score 2	Score 3
2 Management					
5	Public investment planning and Budget Strategic Plan is applied	NA	Yes at initial stage 1-3 years in action	Yes at medium stage, 4-5 years in actions	Yes at advance stage, 6 and more years in actions
6	FM system to support public investment plan is used	NA	Yes at initial stage 1-3 years in action	Yes at medium stage, 4-5 years in actions	Yes at advance stage, 6 and more years in actions
7	HR system to support public investment plan is used	NA	Yes at initial stage 1-3 years in action	Yes at medium stage, 4-5 years in actions	Yes at advance stage, 6 and more years in actions
8	Research management system is used to support growth	NA	Yes at initial stage 1-3 years in action	Yes at medium stage, 4-5 years in actions	Yes at advance stage, 6 and more years in actions
9	% of lectures is promoted to professorships	NA	Has plan target	Achieved up to 70% of plan target	Achieved up to 100% of plan target
10	% of full-time staff and lecturers sufficient for investment programs	NA	80%	90%	100%
11	Using technology for 21 st century skills on program and research to support green growth	NA	Cover programs for new-born HEI	Cover programs for young professional HEI	Cover programs for professional HEI
Sub-total scores		0	7	14	21

3. FINANCIAL HEALTH

4. PROGRAMS

#	Standards and indicators	Score 0	Score 1	Score 2	Score 3
3 Financial health					
12	Trend of HEI capital fund increased sufficiently for HEI public investment programs.	NA	Yes at initial stage 1-3 years in action	Yes at medium stage, 4-5 years in actions	Yes at advance stage, 6 and more years in actions
Sub-total scores		0	1	2	3
4 Programs					
13	# of programs meet local program standards	NA	1-3 programs	4-5 programs	6 and more programs
14	# of programs meet international standards	NA	NA	1-2 programs	3 and more programs
15	# of research projects link with industries	NA	NA	1-10 projects	more than 10 projects
Sub-total scores		0	3	6	9
Total scores		0	15	30	45
HEI Status		Not yet born	New Born	Young Professional	Professional

5. **CURRENT DATA CONSOLIDATION PROCESS**

- ❖ Collect data in two rounds: April and September every year,
- ❖ Check the data quality and revise,
- ❖ Finalize and confirm the data, and
- ❖ Consolidate in Microsoft Excel and Import into SPSS for analysis purpose

6. **FUTURE DIRECTION FOR DATA COLLECTION**

- ❖ Proposal to develop online platform for data collection – 2023 was approved,
- ❖ Develop the online platform for data collection, and
- ❖ Integrate basic information of Education strategic plan
- ❖ **CAPACITY GAPS:**
 - Capacity to develop the online program/platform for data entry from HEI and relevant stakeholders.

ANNEXES:

ANNEX 1: Conference in Media

- https://fb.watch/gx_c97XGyp/
- <https://freshnewsasia.com/index.php/en/localnews/264432-2022-11-02-10-00-46.html>
- https://m.facebook.com/story.php?story_fbid=pfbid02psEhPQ8388ZHsH3g2Eoh1wZMsi6gGwYfCXLfob1HiJnDcXi5DSQzzLSZ8WLnhsi&id=100064302985114