Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Jun-2020 | Report No: PIDC223329

BASIC INFORMATION

A. Basic Program Data

Country	Project ID	Parent Project ID (if any)	Program Name
Indonesia	P174091		Improving Higher Education Quality, Equity and Resilience
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Does this operation have an IPF component?**
EAST ASIA AND PACIFIC	07-Dec-2020	18-Mar-2021	No
Financing Instrument	**Borrower(s)**	**Implementing Agency**	**Practice Area (Lead)**
Program-for-Results Financing	Ministry of Finance	Ministry of Education and Culture	Education

Proposed Program Development Objective(s)

To improve the quality, equity and resilience of higher education in Indonesia.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	10,000.00
Total Operation Cost	200.00
Total Program Cost	199.50
Other Cost	0.50
Total Financing	200.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	200.00
World Bank Lending	200.00

Concept Review Decision

The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **Indonesia has reduced poverty and gained human capital as its economy has grown over the past 20 years**. This progress is threatened by COVID-19 and its impacts on the economy, poverty rates and drivers of human capital creation. Gross national income (GNI) per capita rose six-fold from US$580 in 2000 to US$3,840 in 2018,[1] including large gains in poverty reduction, moving from 19.1 percent of the population in poverty in 2000 to 9.4 percent of the population by March 2019. Between 2000 and 2017, life expectancy increased from 66 to 69 years while under-five mortality declined from 52 to 25 per 1,000 live births.[2] Access to education has increased, with the total enrollment of students increasing by more than 10 million since 2000 (25 percent[3] (BPS, 2019)). The current pandemic threatens many of these gains, with more than 534,000 pre-primary through tertiary schools closed across the country by March 24 2020[4], and more than 68 million students out of school (MoEC 2020).

2. **Despite these improvements, low levels of learning create a worrisome human capital gap.** With an overall human capital index score of 0.53 in 2017, Indonesia ranked 87 out of the 157 countries that were included in the analysis and showed large differences between urban and higher-income citizens and the poor.[5] The World Bank's Human Capital Project estimates that a 4-year old today will complete 12.3 years of education by age 18 but her learning will only be equivalent to 7.9 years of schooling, meaning that the rapid increase in attainment is not necessarily leading to equivalently higher skills attainment.[6] In terms of gender, girls have seen greater advantages than boys in the HCI (the HCI for girls and boys is 0.55 and 0.52, respectively). However, this has not translated into greater employment opportunities for women.

3. The April 2019 elections returned to power incumbent president Joko Widodo, who has pledged to invest in infrastructure and human capital, as well as reforming regulations to attract more investment. The COVID-19 crisis has increased the need for investments in human capital to support recovery and future growth while simultaneously eroding the fiscal resources of the government to maintain support for this key policy goal. In addition to economic and fiscal impacts, school closures have the potential to erode gains in human capital development, with lower-income students expected to be most heavily affected. The duration and impact of school closures for early-childhood, primary, secondary and tertiary students is not yet known, but estimates of the impact include tens of thousands of additional students dropping out of education and about half a year of learning loss, in addition to financial distress and possible closure for some private schools especially at the tertiary level (WB forthcoming).

Sectoral (or multi-sectoral) and Institutional Context of the Program

4. **The Government of Indonesia has high ambitions for tertiary education, considered essential to boost the nation's human capital and economic growth through increased productivity and competitiveness**. The Ministry of

[1] United Nations, Department of Economic and Social Affairs, Population Division. 2017. *World Population Prospects: The 2017 Revision*. Custom data acquired through website (https://population.un.org/wpp/DataQuery/).
[2] World Bank, Indonesia Public Expenditure Review 2020
[3] https://data.worldbank.org/indicator/SE.SEC.NENR?locations=ID&view=chart
[4] MoEC circular letter No 4/2020 Implementation of Education activities in the Covid-19 Emergency Period (March 24, 2020)
[5] https://databank.worldbank.org/data/download/hci/HCI_2pager_IDN.pdf
[6] https://www.worldbank.org/en/publication/human-capital; OECD (2016) *Skills Matter: Further Results from the Survey of Adult Skills*. OECD Skills Studies (OECD Publishing, Paris).

Education and Culture's (MoEC's) new policies aim at encouraging universities to introduce innovative curricular and pedagogical practices, strengthening quality assurance at the national and institutional levels, modernizing governance and management through higher levels of autonomy and accountability, and adopting a sustainable financing strategy. Movement in this direction was initiated in January 2020, when the ministry announced the **Freedom to Learn (Merdeka Belajar)–Freedom Campus (Kampus Merdeka)** policy, which gives accredited higher education institutions (both public and private) the right to open a new program without prior approval from the ministry. The new policy also gives students the right to take courses outside of their formal program of study, spells out measures to strengthen the national accreditation system, opening the door for international accreditation, and proposes to grant much more autonomy to higher education institutions (HEIs). The underlying philosophy of the new administration is that tertiary education institutions will achieve better results if they have more freedom and flexibility to design their strategy and manage their resources, and that competition can, in the long term, contribute to higher performance of the tertiary education system.

5. **The MoEC and the Ministry of Religious Affairs (MoRA) are the two Government agencies currently responsible for the oversight and management of higher education (HE) in Indonesia**. MoRA is responsible for Islamic HEIs (*Perguruan Tinggi Keagamaan Islam*, PTKIs) consisting of universities, institutes, colleges, and academies.[7] In addition to PTKIs, faculties of Islamic religion (*Fakultas Agama Islam*, FAI) are overseen by MoRA though they are located in private universities which are institutionally under MoEC. Higher education institutions operating under MoEC represent 70.5 percent of total enrollment in Indonesia[8].

6. **Access to tertiary education system is highly inequitable, and there are important gender differences in fields of study.** The supply of places is insufficient to meet the demand for tertiary education, and there are serious disparities in access and achievement. Students from the bottom economic quintile face many barriers in accessing higher education, with only 2.4 percent of the population age 20-24 years old enrolled in tertiary education. A 24-year-old from the highest wealth quintile is fifteen times more likely to be studying than a 24-year old from the lowest wealth quintile (Susenas, 2018). This is very low, and even below the corresponding proportions in Mongolia (3.0%) and Vietnam (5.1%),[9] two countries that started building their higher education system later than Indonesia. While females enroll in tertiary education at slightly higher rates than males (51.5%), they tend not to enroll in key faculties such science, technology, math and engineering. For example, the national representation of female students in faculties of engineering is only 25% (Higher Education Statistics, 2019).

7. **The quality and relevance of existing programs are generally low.** The average rate of return to education overall is 6.9 percent in Indonesia, on par with low income countries in the East Asia region, but far below that of other middle-income countries. This suggests that the skills acquired are less valued by the market as compared to other middle-income countries in the region. There is little if any input from and collaboration with the private sector with respect to the development of curricular content, work-study and cooperative programs or other forms of experiential learning, teaching, supervision, and research. Despite these weaknesses, tertiary education is still a ticket to the middle class. Workers with a post-secondary education hold 15.6 percent of all jobs but 47 percent of middle-class jobs (Wihardja and Cunningham, forthcoming, World Bank).

[7] The Higher Education Act 12/2012 specifies types of HEIs that can be established in the country—university, institute, college, polytechnic, academy, and community academy—and provides respective definitions, but Islamic HEIs do not include polytechnic and community academy. Higher education consists of vocational programs (diploma) and academic programs. Universities offer diploma, Stratum 1 (S1) (bachelor's), Stratum 2 (S2) (master's), and Stratum 3 (S3) (doctoral) degrees; institutes offer diploma, S1, S2, and S3 degrees; and colleges offer diploma (1–3 years postsecondary), S1, and S2 degrees. The act further requires that all HEIs be nonprofit, which automatically excludes for-profit providers from the system.

[8] PDDikti, December 2018. Accessed June 5th, 2020. https://pddikti.kemdikbud.go.id/pt

[9] UNESCO Global Monitoring Report Database accessed June 5, 2020

8. **The licensing and accreditation of TEIs is ineffective and slow, and has already been a target of reform.** To be successful, the autonomy of HEIs needs to be balanced with a robust accountability mechanism that supports quality improvement**.** Academic accountability was first introduced in Indonesia in 1994 in the form of the accreditation system by the National Agency of Higher Education Accreditation (BAN-PT). Despite Law No. 12/2012 on Higher Education requiring all HEIs and programs to be accredited, according to BAN-PT itself only about half of HEIs nationally have been accredited. In terms of accountability to the public at large, no other mechanism is in place to keep the public informed on institutional performance. Accreditation policy changes in early 2020 enacted by MoEC appear to increase accountability and allow international accreditation processes,[10] but are still in the early stages of implementation.

9. **Academic programs do not successfully foster complex cognitive, social, and emotional skills required by the labor market[11] and essential for foreign investment**. As a result, the unemployment rate among Indonesian youth at 15.8 and 15.9 in 2018 for males and females, respectively, is higher than the global and regional averages.[12] The World Bank Enterprise Survey asks firms that are searching for new employees to rank the degree of difficulty in finding employees. Indonesian employers identified foreign language skills (non-routine cognitive), managerial skills (non-routine cognitive), work ethic/commitment (non-routine interpersonal), and interpersonal/communications skills as most lacking.[13] In order for Indonesia's economy to diversify and grow, the country will require a meaningful share of the labor force with a higher level of relevant skills.

10. **The overall funding available for higher education is limited.** Government spending for tertiary education is low, at only 0.5 percent of the GDP, much lower than the neighboring countries like Singapore (1 percent) and Malaysia (1.1 percent) and the 1.1 percent OECD average[1]. In 2020, overall MoEC will manage IDR75.7 trillion, or 15% of the total education budget (IDR505.8 Trillion IDR), the rest of which is spent by provinces, districts, schools and other ministries.[3] The allocation for higher education within MoEC's budget is IDR 32.0 trillion, or around 42.3%, as lower levels of education are the responsibility of Provinces and Districts.

11. Private (or 'non-public') contributions to the overall sector are also low compared to other countries in the region, such as Korea, Malaysia and the Philippines. The OECD estimated in 2015 that the private contribution to higher education in Indonesia was about 25 percent, which comes almost exclusively from household spending. This proportion is small compared to other countries, for example Korea, where the private share for tertiary education expenditure was 63.9 percent (45.5 percent was from household spending, the rest was from other private entities).[4] The OECD average is 36 percent. Ideally, there would be some cost sharing (private contribution) in public institutions, particularly for students from the upper income quintile, while low-income students would attend for low-cost or for free. For private institutions, scholarships for low-income students would increase the equity of the system. There is no 'magic number' for the private contribution[14], but the equity and the efficacy of the subsidies to institutions and students should prioritize removing financial barriers for the poorest.

12. **A large portion of the budget goes to routine expenses for salary payments and operational costs**, which constituted a total of 40.5 percent of MoRTHE budget for higher education in 2018[15]. This large chunk of the budget is calculated based on historical ways with little adjustment from the current data of personnel and program. Moreover, there are a couple of sources for this funding, as well as multiple ways this money is allocated and provided to HEIs and students, based on the type of HE institutions. Public HEIs in Indonesia are classified into three categories: (i) Satker PNBP,

[10] Permendikbud No 5/2020 on HEIs and Study Program Accreditation and BAN-PT Regulation No. 2 year 2020 dated March 16, 2020
[11] Future of Jobs Survey 2018, World Economic Forum; OECD 2018 The Future of Education and Skill- Education 2030.
[12] Scoping of Youth Employment Policies for Indonesia, 2019 WB
[13] Gomez-Mera and Claire Hollweg. 2018. "Firm Performance and Constraints in Indonesia." World Bank
[14] Following J. Salmi, The Tertiary Education Imperative p157-159 (2017)
[15] MoRTHE Planning Bureau presentation, May 30th 2018.

the 77 public universities which currently receive funding only from the public resources and student tuition fees; (ii) BLU, 34 semi-autonomous public universities; and (iii) PTN-BH, fully autonomous public universities and have more flexibility in managing their resources, determining tuition fees, opening new study programs and recruiting students.[16] In 2018, 24 percent of MoRTHE's higher education budget was revenue from PNBP, which means this amount will be allocated back to each institution (Satker PNBPs and BLUs) with little to no control from MoEC or MOF. This leaves only 35 percent of the allocation (IDR 12.42 trillion) left for other MoEC spending on higher education which includes: scholarships, operational grant for universities (BOPTN), and other national and ministerial priority programs. In 2020, MoEC established a separate allocation of IDR 170 billion for the *Kampus Merdeka* reform.

13. Funding for HEIs is also distributed through several mechanisms. Salary and operational cost allocations from BOPTN are calculated based on historical data and is available for both public and private universities.[17] The total budget for 14 LLDIKTI (*Lembaga Layanan Pendidikan Tinggi* , formerly Kopertis) is 2.7 IDR trillion in 2020, 96.9 percent of which is allocated to support management PTN and LLDKTI (salary and allowance) and the rest is allocated for supervision of private HEIs (3.1 percent). BOPTN for non-research activities is only available for public universities and is budgeted based on certain formula, which is regulated by ministerial regulation. Meanwhile BOPTN for research is competitive and available for private universities.

14. **The importance of climate change as a risk to Indonesia is a topic that merits more attention from the tertiary education sector.** Floods pose a major threat to Indonesians in major urban centers and rain-triggered landslides are common in rural areas; sea-level rise threatens 42 million Indonesians who live less than 10 meters above sea level. Climate change is a priority of the Government. Indonesia's National Climate Document (2016) identifies the education sector as a key contributor to reducing risk from climate change, noting: "For 2020 and beyond, Indonesia envisions achieving archipelagic climate resilience as a result of comprehensive adaptation and mitigation programs and disaster risk reduction strategies." The draft Pathway 2035 document specifically mentions "depletion of fossil fuels, water crisis, climate change, sea level rise" as major concerns, but climate-change specific targets for tertiary education have not yet been announced.

15. **COVID-19 is expected to have negative financial consequences for students and institutions, revealing the limited resilience of the existing system.** The income of some public and all the private tertiary institutions will likely decline from lost tuition fees and contributions, negatively impacting their ability to pay teacher salaries and eventually re-open. In the absence of urgent government support, this financial stress may lead some university and post-secondary institutions to close permanently. Temporary closures initiated in April 2020 in response to COVID-19 currently affect approximately 6.3 million tertiary-level students. Despite attempts to compensate closures with online and distance learning, the expected negative impact on learning and skill accumulation is large with a risk of large numbers of dropouts, especially among the poorest. In many cases, TEIs were underprepared for distance teaching and learning, and students, staff and the institutions as a whole are suffering more than if a resilient system had been in place pre-crisis. Moreover, without government support, institutions will not be able to make the investments needed to shift their operations to being more flexible and resilient and of better quality.

Relationship to CAS/CPF

16. The proposed program is in line with the Indonesia Country Partnership Framework 2015-2020 (CPF) and the Performance and Learning Review of the CPF (FY16–20). As the CPF is coming to a close, the team has consulted the draft

[16] Government regulation No 4, 2014: Organization of Higher Education and Management of Tertiary Institutions
[17] Brief description of LLDikti and its budget detail in 2019-2020 is available in Annex 2

of the Systemic Country Diagnostic (SCD), which has not been finalized. The CPF 2015-2020 identifies five engagement areas, one of which is Delivery of Local Services and Infrastructure which supports "the government's acceleration and improvement of investments in human capital." The proposed Program aligns with this fourth engagement area of the CPF as well as the Supporting Beam 2 of the CPF: Shared Prosperity, Equality, and Inclusion.

17. Key lessons from the PLR that will be incorporated in the Program include the findings that: i) scale matters for impact in a country the size of Indonesia, therefore national programs rather than local or regional approaches should be used, ii) capacity limitations in planning, budgeting, coordination can constrain results and should be addressed to support sustainability, and iii) there is the need to adapt WB knowledge to different audiences and to engage with champions across government levels and with the private sector.

Rationale for Bank Engagement and Choice of Financing Instrument

18. For the first time in many years, the Minister of Education has defined an ambitious reform agenda for the higher education sub-sector. The Government program is focused on improving overall quality and linkages to the private sector including specific targets to improve the sector's contribution to economic growth and employment. The Ministry has explicitly requested World Bank support in the form of policy advice, technical assistance and financial backing. The financing element is particularly important to MoEC given the increased resources required to launch new sectoral financing mechanisms. The World Bank is well positioned to respond to the government's request because of its wide international experience with higher education reforms and the recent analytical work in tertiary education in Indonesia. In addition, by helping to improve the quality of teacher education within Indonesian universities, the proposed Operation will contribute indirectly to substantial improvements in the quality of primary and secondary education.[18]

19. The proposed instrument to support Indonesia's aspirations in enhancing its tertiary system is Program for Results (PforR) rather than IPF or DPF. The instrument is selected because there exists a clear government program which the World Bank Program will support which calls for clear output and outcome-based results as proposed below. Importantly, there is already client experience with PforR instruments (e.g., Investing in Nutrition and Early Years (P164686)).

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

To improve the quality, equity and resilience of higher education in Indonesia.

PDO Level Results Indicators

1) Improved quality will be measured by:
    a. Proportion of students with internships
    b. Proportion of Lecturers who have private sector experience or certification *OR* private-sector practitioners instructing in institutions

2) Improved equity will be measured by:
    a. Disparity ratio (GER of students from richest quintile over GER of students from poorest quintile)

[18] The World Bank is supporting needed reforms in basic education through the MoRA project (Realizing Education's Promise, P168076), which covers 15% of student enrollment, and an extensive analytical program.

b. Proportion of female students in STEM programs

3) Improved resilience will be measured by:
   a. Proportion of self-generated resources in public tertiary education institutions amongst total resources
   b. Readiness for online learning metric including i) improvements in physical connectivity ii) improvements in online infrastructure such as learning platforms established and ready to use if needed iii) secure data systems available online for access and input iv) training for teachers and students in how to teach, learn and assess online.

D. Program Description

PforR Program Boundary

20. MoEC has undertaken a series of major policy changes under the second Jokowi administration across the education sector. These reforms are laid out in the *Freedom To Learn* reform program of which the tertiary-focused Kampus Merdeka or *Freedom Campus*[19] reform is a part, as well as the draft *Education Pathway 2020-2035*[20] strategy document and the RPJMN, along with the equity principles and targets contained in the 2012 Higher Education Law.[21] Together these constitute the government program in tertiary education for institutions under MoEC. The proposed WB Program includes support to key areas of improvement for quality, equity and resilience.

21. The government's overall program for the tertiary sector as defined in the Freedom Campus, draft Education Pathway and RPJMN is to:

- make it easier to establish new tertiary study programs
- make the accreditation process more responsive and open
- expand the number of universities eligible to convert to autonomous status
- require tertiary institutions to allow students to take courses outside their major and outside the institution.
- increase the gross enrollment rate to 37.6% during 2020-25 to 50% by 2035;
- increase the proportion of graduates who get a job within a year after graduation to 80% in 2020-25 and 85% by 2035;
- increase the average graduate income to 1.5 times the regional minimum salary in 2020-25 and 2 times by 2035;
- increase the proportion of professors with industry experience to 50% in 2020-25 and 70% by 2035; and
- increase the proportion of students who spend at least one semester off campus to 50% in 2020-25 and 65% by 2035 (cross-faculty class, internship, community development, student exchange, etc).

22. The Government is planning two main strategies to complement the draft Pathway: *Establish world-class universities* and *Simplify the accreditation mechanisms and provide more autonomy to HEIs*. The first strategy aims at promoting clearer differentiation of HEIs, setting up centers of excellence and strengthening relations with industry and global partners. The second strategy includes **simplifying accreditation mechanisms** and offering **more autonomy** to HEIs, based on their performance results, the extent to which they are in line with global best-practices, and their community involvement. Accreditation will be voluntary to reduce the administrative burden on HEIs, while increasing credibility of

[19] https://www.kemdikbud.go.id/main/blog/2020/01/mendikbud-luncurkan-empat-kebijakan-merdeka-belajar-kampus-merdeka
[20] Peta Jalan Pendidikan Indonesia 2020-2035, MoEC, May 2020 (draft)
[21] Rencana Pembangunan Jangka Menengah Nasional *(National Medium-Term Development Plan)*
https://www.bappenas.go.id/files/rpjmn/Narasi%20RPJMN%20IV%202020-2024_Revisi%2028%20Juni%202019.pdf

the system to give more room for HEIs to become autonomous. Accreditation criteria and standards will include output and outcome indicators. International accreditation will also be encouraged and recognized.

23. To support the planned reforms, MoEC will rely on three financing mechanisms: an operational fund based on performance (IKU), a matching fund, and a competitive fund. The matching and competitive funds are new mechanisms, while the operational fund exists but its allocation process (the funding formula) will be modified.

24. The PforR will cover activities related to the following categories of HEIs: Satker PNBP, BLU and BH. All accredited HEIs in a given category will be included as target institutions of the PforR, with all activities within the institution be supported (and hence the PforR will benefit all students, faculty and staff of these institutions). The PforR will not cover private HEIs or those under MoRA.

Results Area 1: Improved quality of higher education

25. The following interventions are proposed to enhance quality:

(i) **Building institutional capacity**, targeting:

a. Faculty by developing expertise to lead activities related to **program and course development**, including competency-based curricula that foster cognitive, social and emotional life-long learning skills, values, and attitudes, **innovative pedagogies and assessment methods**, including problem-based and inquiry learning, co-op programs, etc. that help the successful transition to the workplace, and **developing and strengthening research capacity**.

b. Academic leaders such as chancellors and other managers by developing expertise to deliver professional development programs in areas related to governance, leadership, performance-based accountability, resource allocation and management, fundraising, and responsibilities associated with autonomy such as internal quality assurance, evidence-based practice that require systematic data collection and analysis.

(ii) **Developing quality indicators and standards**, targeted for institutions with differing missions and **scorecard criteria for assessing institutional performance and allocating public resources**.

(iii) Introducing, extending and implementing robust **quality assurance and accreditation practices,** including internal formative processes such as systematic collection and reporting of data on unit performance, rationalizing allocation of resources based on the review outcome and commensurate with approved strategic plans, tracking development in preparation for accreditation, as well modernizing the national accreditation system to conform to best practices and be aligned with newly established performance standards and criteria.

Results Area 2: Improved equity in access to higher education

Low-Income Students

26. To ensure that enrollment expansion fully benefits students from under-represented groups (low-income, rural areas, Western Indonesia), the Operation will support the Government's equity promotion efforts. This would involve a two-pronged approach combining (i) financial support in the form of scholarships and loans to eliminate monetary barriers, and (ii) non-monetary measures, such as outreach activities to attract promising senior secondary school students, affirmative action to encourage access for students from under-represented groups, and special support such as mentoring, counselling, and accessible facilities for students with disabilities to ensure retention. Such efforts could help students from disadvantaged groups overcome the psychological, motivational and academic challenges that they face, which makes it more difficult for students in equity target groups to graduate.

Gender

27. Gender is one of the specific areas that the equity promotion policies can target. Indonesia has achieved gender balance in terms of overall enrollment,[22] and more women than men attain a tertiary degree: 18 percent of 25-34 year-old women in Indonesia hold a tertiary degree compared to 14 percent of 25-35 year-old men.[23] However, two key gender gaps remain in tertiary education:

(i) Girls are underrepresented in several STEM programs as noted above, which represents a costly loss of opportunity for talented female students. This is linked to limited work opportunities in the sector, as females are employed predominantly in jobs requiring low levels of STEM skills.[24] It also means women are not progressing into careers that would enable them to take advantage of future job opportunities.[25]

(ii) The proportion of females among senior academics and university leaders is also low. For all higher education institutions in Indonesia, only 32 percent of the professors and head lecturers are women. This percentage is even lower in the Engineering and Art faculties, with the average female senior academics are only 20 percent and 19 percent respectively[26], while women make up almost 50 percent of the Indonesian population[27]. Women's interest to become lecturers is initially high and then tends to drop when they reach age 36 and above, which is when people often start to become eligible for leadership positions. This is related to the social pressure and norms that women carry in the society.[28]

28. To address these gaps, the project will support several activities to help reduce gender-barriers to entry and retention in STEM programs and academic professions, such as introducing scholarships or in-kind support for female students in specific STEM programs, introducing grants for women's research projects in STEM-related fields at tertiary level, and revising HR policies and providing leadership training for female academics to improve recruitment and retention in senior academic positions. The project results framework will include two indicators to track progress in closing these gaps: (a) increase in the proportion of female students in STEM program; and (b) increase in proportion of women university presidents and rectors.

Results Area 3: Improved resilience of the higher education sector

Financial Resilience

29. Tertiary education needs to expand to meet growing human capital needs. But considering pressing demands on government resources, tertiary education institutions must become less reliant on public resources. By expanding their resource base, tertiary education institutions can become more financially resilient. Progress on this front will be achieved through a matching fund, which is a financing mechanism that will provide funding in an amount equivalent or proportional to the funds raised from sources other than central government transfers. In the case of higher education, it is funding that the Government would give to universities to promote and incentivize fund-raising on their part. The main objective of the matching fund would be to encourage public higher education institutions to be less dependent on government budget resources and diversify their funding sources by actively seeking external resources from families, corporations and philanthropists to finance their development plan and transformation projects.

Resilience to external shocks – Online Learning Initiatives

[22] Gross Enrollment Rate in tertiary education are 28.93 for men 28.93 and 31.67 for women 31.67 (BPS, 2019)

[23] OECD. 2019. *Education at a Glance 2019: Indonesia.* https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_IDN.pdf.

[24] ILO, https://www.ilo.org/jakarta/whatwedo/projects/WCMS_624553/lang--en/index.htm

[25] Prospera and AlphaBeta Advisors. (2019). *Capturing Indonesia's automation potential*. Jakarta. https://prospera.or.id/wp-content/uploads/2019/07/FINAL-Prospera-Indo-automation-Latest-11-Cover-HR.pdf

[26] PDDikti, MoEC, data recieved April 2020.

[27] BPS, 2018. https://www.bps.go.id/dynamictable/2018/03/20/1288/persentase-penduduk-menurut-provinsi-dan-jenis-kelamin-2009-2013.html

[28] Herdianto, Pranova. "Gender Inequality in Human Resources and Higher Education", presented in 'Knowledge Sector Initiative (KSI)', 2018.

30. The COVID-19 pandemic has made the resilience agenda even more urgent and important. Tertiary education institutions need a strong foundational base (capacity to make difficult decisions, flexibility to introduce rapid change, open communication culture, adequate knowledge and positive attitude of the academic community, institutional support for faculty by specialized teaching and learning units for distance delivery, adequate digital infrastructure) to be able to **respond** positively to the current crisis, **recover and accelerate** after the crisis--recovery meaning the ability to re-establish operations at a higher level of quality and learning than before the crisis--and be **resilient** in the longer term whenever unforeseen circumstances arise. Of particular importance for the Response phase are the digital infrastructure (learning-management system, videoconference facilities, digital content) needed by each institution, the training of professors and students for the transition to online education, and measures to ensure that all students have good access to the internet (adequate device and affordable internet subscription, access to software). This should be complemented, at the national level, by substantial efforts to bring broadband to all tertiary education institutions through IDREN, and provide capacity building in the use of online education.

31. To prepare for the recovery phase, tertiary education institutions must pursue innovative ways of selecting incoming students, constructing and delivering the curriculum and flexibility in course selection, integrating on-campus and online education, and developing more adequate assessment methods, moving away from traditional high-stake exams to continuous, formative approaches for evaluating learning progress. They should also adjust their business model in view of the economic crisis after COVID-19. Finally, to strengthen their medium- and long-term resilience, tertiary education institutions need to include more systematically risk analysis and contingency planning in their management practices, taking various types of emergencies (economic and financial crisis, epidemic or pandemic, social unrest, and natural catastrophes) into consideration.

Climate Resilience

32. The project will contribute to the climate resilience objectives of the GOI through support for research collaboration and institutional partnerships, with additional incentives for partnerships and research related specifically to climate change through the competitive grants financing mechanism.

33. The Africa Centers of Excellent Project (P164546) incorporates social and environmental risk into relevant university course curricula, while in Indonesia, five universities participate in the *Promoting Sustainability in Postgraduate Education and Research (ProSPER.Net)* financed by the UN. The project could incorporate a results area targeting the participatory development of multiple modules of an environmental and social sustainability curriculum for Indonesia. The curriculum content would be complemented by participatory and research-based instructional support for professors, in line with international best-practice.

34. Another option is to have scholarships for climate-related fields of study be set at a more generous level than other scholarships. National policy on new infrastructure investments for tertiary education institutions could mandate energy efficient upgrades, use of solar power, hazard reduction related to flooding, earthquakes or rising seas, among other standards as the tertiary education sector and its infrastructure expand.

Alignment between the Government program and the PforR Program

35. The DLIs (Disbursement Linked Indicators) for this operation are still actively under discussion with Government, but it has been agreed that the project will focus on those results that are under the control or significant influence of the operation. Two specific targets from the draft Education Pathway strategy document are planned to be included as DLIs: (i) tertiary education instructors who have private sector experience or private sector certification (ii) enrolled students who spend at least one semester off campus in internship or similar professional learning situations.

36. Other targets set in the draft Education Pathway document such as percentage of graduates hired within twelve months, and the salary of those graduates, will not be included as DLIs since they are not attributable to government

action or action by tertiary institutions linked to government policy. The current pandemic has shown how outside events beyond the control of governments and education institutions can impact metrics such as employment and wages.29 However, the necessary conditions to achieve these outcomes can be included in the results framework with agreement from government.

37. For example, as part of the Quality Results Area the project may include DLIs on measuring graduate employment and income, a necessary precursor step to using these metrics to evaluate performance. The project may include DLIs on measuring student learning levels and the number of new curricula developed with the private sector. The Equity Results Area can include DLIs targeting enrollment rates of lowest-quintile students, enrollment of female students in study programs where they are underrepresented, and women in higher education leadership positions. The Resilience Results Area is expected to include DLIs on resource generation, autonomy, curriculum on environmental and social risk, and online-learning capacity. These indicators are attributable to government policy or actions by universities under the influence of government policy. Specific targets will be set that are achievable in the timeframe of the project, including early-stage ('Year Zero') DLIs linked to policy action currently under consideration by government. This is designed to jump-start implementation and create positive momentum around the Program.

E. Initial Environmental and Social Screening

38. The overall environmental and social outcomes resulting from the proposed PforR are expected to be positive. The Program seeks to foster quality enhancement and resilience of the Indonesia's HEIs through pedagogical innovation and research, partnership with the private sector, life-long learning for students and teachers in expertise where demand is present, fund channeling to incentivize performance, and readiness in terms of curricula and Information Technology (IT) infrastructure. The Program also seeks to promote equity in access to education, particularly amongst students from the poorest quintile as well as increase female representation in STEM program and faculty leadership. None of the activities in the Program is expected to result in adverse and irreversible environmental and social impacts.

39. Systemic economic, socio-cultural, and geographical challenges and discrimination in access to education may present barriers to participation of the poor and vulnerable in tertiary education. Furthermore, the geographical scope of the Program, which covers nation-wide, may strain the existing capacity within MOEC and hence, undermine the effectiveness of the proposed interventions, including affirmative action measures for the poor and vulnerable who are expected to benefit from the Program.

40. Promoting equity in the tertiary education system, including enhancing access amongst students from the poorest quintile, will require addressing various social, cultural and psychological barriers that may confront poor and marginalized segments of the population. Exclusion in access to education, including racial and gender discrimination and marginalization based on sexual orientation are systematic issues, requiring systematic and holistic solutions, involving concerted efforts of the broader sectors. The reform is being implemented against the backdrop of challenging policy and political economy environments, which in the past were often dictated by political party interests. With further weakening of the economy due to COVID-19, resources may potentially be rationed at the expense of required sound management of social aspects, including required consultations and community participation, particularly amongst vulnerable groups which the Program intends to cover.

41. The environmental risks identified are related to: (i) minor renovation of the existing facilities related to online teaching and learning, and (ii) the purchase of electronic devices such as computers for professors/staffs, servers, and

[29] https://www.universityaffairs.ca/opinion/in-my-opinion/covid-19-reveals-the-folly-of-performance-based-funding-for-universities/

learning devices. Risks associated with minor renovation works may include Occupational Health and Safety (e.g. falls from height, electrocution and other occupational related accidents), and the potential use and disposal of hazardous materials. The application and improper disposal of hazardous materials such as asbestos containing materials, lead-containing paints, mercury-containing light bulbs, although in small amounts, may affect human health and harm to the environment. Risks related to the purchase of electronic devices may include improper disposal of electronic wastes such as retired servers, computers and learning devices that contain harmful materials (lead, cadmium, chromium, polychlorinated biphenyls) may also affect human health and harm to environment from accumulation of toxic chemicals in soil and water. Mitigation of these environmental risks will be sought through the requirements of Government of Indonesia (GoI) laws and regulations on Occupational Health and Safety, hazardous waste management and E-waste management.

42. Further assessments of the environmental and social aspects of the Program, along with the corresponding GoI's system(s) to address potential impacts will be undertaken through a consultative process during the Environmental and Social Systems Assessment (ESSA) preparation. Relevant environmental and social measures to address gaps (if any) and enhance positive outcomes and sustainability will be consulted and agreed with GoI prior to the Program's appraisal. Due to COVID-19, early stakeholder engagement for the ESSA preparation will be undertaken virtually. Such engagement will seek participation of both government and non-government stakeholders, including student and university representatives and associations.

CONTACT POINT

World Bank

Name :	Noah Bunce Yarrow		
Designation :	Senior Education Specialist	Role :	Team Leader(ADM Responsible)
Telephone No :	5220+3251 /	Email :	nyarrow@worldbank.org

Borrower/Client/Recipient

Borrower :	Ministry of Finance		
Contact :		Title :	
Telephone No :		Email :	

Implementing Agencies

Implementing Agency :	Ministry of Education and Culture		
Contact :	Dr. Nizam	Title :	DG (acting) of Higher Education
Telephone No :	123456789	Email :	nizam@ugm.ac.id

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects