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Accelerating
Human Capital
Development

ACCELERATING HUMAN CAPITAL DEVELOPMENT

The Philippines acknowledges the importance of building human capital in increasing productivity and enhancing social cohesion. Hence, the government continues to prioritize programs and projects in health, nutrition, education, social protection¹ and enhancing employability and income potentials of the labor force. In 2018, landmark legislation have been passed (i.e., Mental Health Act, First 1000 Days Act, Philippine Qualifications Framework Act, and HIV and AIDS Policy Act) and implemented (i.e., Universal Access to Quality Tertiary Education) to improve health and education services. On the other hand, modest gains were achieved in the overall employment situation.

The country's requirements for human capital development are large and still growing. According to the World Bank's Human Capital Index² released in 2018, the Philippines' ranks 84th out of 157 economies. While this is higher than the average for those in the lower middle-income group, it is lower than the average in the East Asia and Pacific Region. Reflecting our commitment to accelerate human capital development, the Philippines is one of the early adopters of the World Bank's Human Capital Project – a global effort to mobilize engagement and resources to promote investing in people and reduce inequalities. Going forward, the country needs to build on these gains and ensure that the country's desired human capital outcomes are achieved through well-thought-out strategies.

Assessment

Improving nutrition and health for all

Table 10.1 Accomplishments versus Targets in Improving Nutrition and Health for All

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Sector Outcome A: Nutrition and health for all improved						
Life expectancy at birth increased (years)						
Male	2015	69.6	None	None	None	69.60
Female	2015	75.9	None	None	None	75.90
Total fertility rate decreased (total number of births per woman aged 15-49)	2013	3.0	None	None	None	Not available (Latest available is 2017)

¹ See Chapter 11

² The index measures the amount of human capital that a child born today can expect to achieve, considering the risks in the health and education sectors currently prevailing in the country where the child lives. It has three components: survival, expected years of learning-adjusted school, and health. The health and education components of the index, when combined, reflects their contribution to worker productivity. (from World Bank's The Human Capital Project.)

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Subsector Outcome 1: Care at all life stages guaranteed						
Maternal mortality ratio decreased (number of deaths per 100,000 live births)	2011 (FHS)	221.0	None	100	None	Not available
Neonatal mortality rate decreased (number of deaths per 1,000 live births)	2013	13	None	12	None	Not available (Latest available is 2017)
Infant mortality rate decreased (number of deaths per 1,000 live births)	2013	23	None	17	None	Not available (Latest available is 2017)
Under-5 mortality rate decreased (number of deaths per 1,000 live births)	2013	31	None	25	None	Not available (Latest available is 2017)
Premature mortality attributed to cardiovascular disease, cancer, diabetes, and chronic respiratory diseases decreased (number of deaths per 100,000 population)	2013	168.4	None	None	None	Not available (Latest available is 2016)
Prevalence of stunting among children under 5 decreased (%)	2015	33.4	None	26.7	None	Not available (Latest available is 2015)
Tuberculosis incidence decreased (per 100,000 population)	2015	322.0	287.0	273.0	258.0	Not available (Latest available is 2017)
Malaria prevalence decreased (per 100,000 population)	2015	7.7	3.4	2.5	1.5	Not available (Latest available is 2016)
Number of newly diagnosed HIV cases decreased	2016	9,264.0	None	None	None	11,427.00
Modern contraceptive prevalence rate increased (%)	2013	37.6	None	None	None	None (Latest data is 2017)

a/ Actual data as of December 2015, or most recent available data. May not necessarily be year-end values

Health budget and expenditure are generally increasing. The Department of Health (DOH) budget, including its attached agencies and corporations, increased by 13.0 percent from PHP151 billion in 2017 to PHP171 billion in 2018. The increase in budget was attributed to the Sin Tax Incremental Revenue for Health, amounting to PHP113 billion, where PHP48 billion was allocated to Philippine Health Insurance Corporation (PhilHealth) premium subsidy for the indigent, senior citizens, and sponsored members.³

Meanwhile, the total health expenditure, which includes government, private corporations, and households' spending, also grew by 8.0 percent from PHP659.3 billion in 2016 to PHP712.3 billion in 2017. Majority of these were from households' out-of-pocket payments, which reached 54.5 percent.⁴ Total health expenditure contributed 4.5 percent to the gross domestic product in 2017.

Efficient utilization of budget has remained a concern as DOH budget utilization rate was only 88 percent in 2017. Likewise, the mandate of local government units (LGUs) to provide health services, a devolved function under the Local Government Code of 1991, has not been manifested in their health spending, which comprised only 20 percent of overall government spending for health in 2017.⁵

Laws and policies that aim to contribute in improving health and nutrition were passed. In 2018, the following laws were passed: Republic Act No. 11036 (Mental Health Act), RA 11037 (*Masustansyang Pagkain Para Sa Batang Pilipino* Act 2018), RA 11148 (First 1,000 Days Act), and RA 11166 (Philippine Human Immunodeficiency Virus [HIV] and Acquired Immune Deficiency Syndrome [AIDS] Policy Act).

The Mental Health Act, which was signed into law in June 2018, aims to secure the rights and welfare of persons with mental health needs by providing mental health services down to the local level. These services include psychiatric, psychosocial, and neurologic services and mental health education. *Masustansyang*

³ DOH. (2018). *DOH Budget Brochures*.

⁴ Philippine Statistics Authority (PSA). (2017). *Philippine National Health Accounts*.

⁵ PSA. (2017). *Philippine National Health Accounts*.

Pagkain para sa Batang Pilipino Act was enacted into law in mid-2018. The law institutionalizes a national feeding program among Filipino children in public day care centers, kindergarten, and elementary. Another landmark legislation enacted, the First 1,000 Days Act, recognizes the importance of providing health and nutrition services to children during their early days of development. This Act will scale up nutrition interventions and programs in the first one thousand days of the child's life. These include prenatal care services, antenatal care services, maternal immunization, micronutrient supplementation, lactation management services, psychosocial support for mothers, oral health, health and nutrition counselling and consultations, among others. Meanwhile, Philippine HIV and AIDS Policy Act aims to increase access of the vulnerable groups, including at-risk youth, to HIV/AIDS testing and counselling. It will also lower the minimum age allowed for HIV testing and counselling to 15 years olds from 18 years.

The Universal Health Care (UHC) Bill was enacted into law in February 2019. This milestone legislation seeks to ensure that all Filipinos have access to quality health care services. This measure will automatically cover all Filipinos under the PhilHealth and will help strengthen the health service delivery system. Health outcomes are expected to improve with the passage of the UHC Act, provided that the government will allot a significant amount of its budget to support the law's full implementation.

Care at all life stages guaranteed

Numerous policies, programs, and interventions are being implemented to promote healthy lifestyle. These include Executive Order (EO) No. 26, s. 2017 that bans smoking in schools, workplaces, sidewalks and public vehicles; various anti-smoking campaigns; smoking cessation program such as DOH Quitline; imposition of higher tax for sweetened beverages under the Tax Reform for Acceleration and Inclusion (TRAIN) Act; among others.

“Triple burden of disease” remains a serious public health concern. Some health indicators fell short of targets or even worsened. The leading causes of death in the country were non-communicable diseases (NCDs), particularly cardiovascular diseases (CVD). This could be attributed to risk factors such as unhealthy diet, sedentary lifestyle, tobacco use, and harmful use of alcohol.⁶ Mortality due to CVD, cancer, diabetes, and respiratory disease increased in 2016 from 2013. This suggests the need to accelerate efforts to prevent and control NCDs in the country and restore budget for NCD-related programs.

There was also an increase in death rate due to road traffic accidents from 8.9 deaths per 100,000 population in 2014 to 10.9 deaths per 100,000 population in 2016.⁷ Such increasing trend in road traffic accidents shows the need to improve efforts on road safety.

Incidence of communicable diseases such as tuberculosis (TB) and HIV/AIDS, has also been increasing. TB incidence increased from 322 per 100,000 population in 2013 to 554 per 100,000 population in 2017. The country failed to meet the 2017 target of reducing TB incidence to 299 per 100,000 population despite efforts to address the problem. The rising number of TB cases may be attributed to the following reasons: those who have TB are not aware they have it; those who are detected with TB do not comply with the treatment regimen; and some patients who have started treatment fail to follow up. The increase in reported TB cases may also be attributed to the intensified case-finding activities and improved method in detecting TB.⁸ Prevention and elimination of the disease, however, remains a challenge.

A cause for concern and requiring immediate attention is the rising number of people with HIV. Case finding among vulnerable groups has been intensified which led to improved reporting. In 2018, 11,427

⁶ World Health Organization. (2018). *The Philippines Health System Review*, Vol. 8, No. 2

⁷ Based on the Civil Registration and Vital Statistics (CRVS) system of the PSA.

⁸ GeneXpert, which is proven to be a faster method in detecting drug-resistance TB patients, was utilized. Source: National Tuberculosis Control Program MOP 5th Edition; and DOH Information Brief on GeneXpert (Xpert MTB/Rif) in Multi-Drug Resistant Tuberculosis

newly diagnosed HIV cases⁹ were reported. Most of them were males and belonged to 25-34 years of age. The reported predominant transmission of HIV among males was sexual contact among males who have sex with males. Notably, the proportion of HIV cases among younger population (ages 15-24 years) also increased.

Meanwhile, malaria prevalence decreased from 7.74 per 100,000 population in 2015 to 6.45 per 100,000 population in 2016. Fifty provinces in the country were declared as malaria-free. However, malaria remained endemic to some barangays of Palawan, Sultan Kudarat, Maguindanao, Sulu, and Occidental Mindoro.

Prevalence of malnutrition (in all its forms) remained high. Based on the 2015 National Nutrition Survey, the prevalence of stunting remained high, affecting about one-third of children under five years. At the same time, the number of overweight and obese among various population age groups was also increasing. The prevalence of stunting, wasting, and overweight was 33.4 percent, 7.1 percent, and 3.9 percent, respectively. Children from the poorest quintile had higher rates of stunting compared to the richer quintile. On the other hand, overweight children were mostly from the richer households.

National government agencies issued policy measures and guidelines for the integration of programs aimed at combating malnutrition in all its forms to the whole-of-government planning and programming. The Department of Budget and Management (DBM) included programs and projects under the Philippine Plan of Action for Nutrition (PPAN) 2017-2022 in the 2019 Budget Priorities Framework to intensify the national government's provision of quality nutrition services. The DBM also issued Local Budget Memorandum No. 77¹⁰ to include nutrition programs among the priorities for local budgets. The Department of the Interior and Local Government (DILG) issued a Memorandum Circular (MC)¹¹ on the guidelines regarding the roles and responsibilities of DILG Field Offices and LGUs in the implementation of PPAN 2017-2022. The MC also enjoins LGUs to formulate local nutrition plans and include applicable PPAN programs in their respective Local Development Plans and Annual Investment Programs.

Reproductive and family health indicators posted some progress as family planning (FP) services were being delivered. EO 12, s. 2017, also known as the Attaining and Sustaining Zero Unmet Need for Modern Family Planning and Responsible Parenthood and Reproductive Health (RPRH) Act are strictly implemented. The DOH has been: procuring and distributing FP commodities to DOH regional offices and government health facilities; tracking FP commodity stock status at service delivery points through the FP Hotline; conducting demand generation activities with the Commission on Population and Development and civil society organizations (CSOs); and providing FP Competency-Based Training for health providers.¹²

With these interventions in place, the proportion of birth attended by skilled health personnel increased to 84.4 percent in 2017 from 72.8 percent in 2013. The use of modern contraceptives also increased to 40.4 percent (2017) from 37.6 percent (2013). The proportion of women of reproductive age who have unmet need for modern family planning slightly decreased to 30.6 percent in 2017 from 35 percent in 2013.

Child health outcomes are also slightly improving. Infant mortality ratio declined from 23 per 1,000 live births in 2013 to 21 in 2017, but neonatal mortality rate slightly worsened from 13 per 1,000 live births to 14 over the same period. Under-five mortality rate also decreased, from 31 per 1,000 live births in 2013 to 27 per 1,000 live births in 2017.

Other health indicators need closer attention. Adolescent pregnancies in the past three years have been decreasing. Specifically, live births among women ages 15-19 years old decreased from 205,844 in 2015 to

⁹ Data from January to December 2018.

¹⁰ DBM Local Budget Memorandum No. 77: FY 2019 Internal Revenue Allotment and Guidelines on the Preparation of the FY 2019 Annual Budget of LGUs.

¹¹ DILG Memorandum Circular No. 2018-42: Adoption and Implementation of the Philippine Plan of Action for Nutrition 2017-2022.

¹² DOH. (2017). 4th Annual Report of the RPRH Law Implementation.

194,401 in 2017.¹³ Meanwhile, based on the 2017 National Demographic and Health Survey, 9 percent of young women aged 15-19 years old have begun childbearing, and incidences of teenage pregnancies are more prevalent in rural areas than in urban (10% vs. 7%).

Coverage of the immunization program decreased. Based on the 2017 DOH-Field Health Service Information System (FHSIS), the percentage of fully immunized children dropped to 67 percent from 70 percent in 2016. Among the possible reasons identified by the DOH were limited local capacities such as inadequate and untrained staff, lack of commitment of some LGUs to the program, limited supervision and monitoring at the frontline, and weak surveillance.¹⁴ Another recent issue that affected the coverage of immunization program was the vaccine hesitancy phenomenon due to Dengvaxia controversy.¹⁵

There was also weak referral system and no effective gatekeeping at the primary care level. This could contribute to the inefficiencies and increasing cost of care to patients, especially those with simple conditions that can be treated in primary care facilities.

Access through functional service delivery networks ensured

Various health system support programs are being implemented by the DOH to continuously improve access to health care service. Through the DOH Human Resources for Health Deployment Program, health workers such as physicians, nurses, midwives, dentists, public health associates, among others, are deployed to LGUs, especially to far-flung municipalities and geographically isolated and disadvantaged areas. In 2018, 28,517 health professionals have been deployed. To further build up the resource pool, DOH offers pre-service full scholarship program to medical and midwifery students with two years return service for every year of scholarship provided.

The government, through the Health Facilities Enhancement Program (HFEP), constructed 25 barangay health stations, 10 rural health units, and eight (8) LGU hospitals in 2017. There is also ongoing upgrading and/or construction of 1,836 public health facilities (infrastructure and equipment) as of mid-2018.

Still, health infrastructure and human resources need to be more equitably distributed. Health facilities and health workers across and within the regions are concentrated mainly in Metro Manila and other major cities given the high population density in these areas. The number of hospital beds is much greater in Metro Manila at 23 per 10,000 population, compared with 8.2 beds in rest of Luzon, 7.8 beds in Visayas, and 8.3 beds in Mindanao.¹⁶ Physical access to doctors is also particularly low in Autonomous Region in Muslim Mindanao, MIMAROPA, and Caraga.

Health financing sustained

PhilHealth coverage and benefits were expanded. In 2018, PhilHealth had covered 98 percent of the population. The remaining non-PhilHealth members could be covered through the Point of Service Program of the Corporation, where PhilHealth benefits could be availed at the time of hospital confinement.

Moreover, PhilHealth issued Circular No. 2018-0017 on Expansion of Primary Care Benefit (PCB) to cover formal economy, lifetime members, and senior citizens in PhilHealth-accredited health facilities¹⁷ (both public and private) (*refer to Chapter 11 for other benefit packages for vulnerable groups*).

¹³ Civil Registration and Vital Statistics

¹⁴ DOH FY 2018 Budget Folio

¹⁵ Fatima, K., & Syed, N. I. (2018). *Dengvaxia controversy: Impact on vaccine hesitancy*

¹⁶ *The Philippines Health System Review*, Vol. 8, No. 2, 2018

¹⁷ Prior the issuance of this circular, PCB only covers for the less privileged population.

PhilHealth also launched the Medical Detoxification Package worth PHP10,000 for the treatment of users of illegal drugs. This package is available in all PhilHealth accredited government hospitals and DOH-licensed drug abuse treatment and rehabilitation centers. It covers screening diagnostics, medicines, and professional fees.

Based on PhilHealth report, compliance of government facilities to the No Balance Billing increased from 73 percent in 2017 to 82 percent in 2018. But even with the expansion of PhilHealth coverage and benefits, out-of-pocket health expenditure was still high at 54.5 percent in 2017 while PhilHealth's Support Value¹⁸ was at 48 percent. This suggests that the benefit packages should include other essential medicines.

Health and nutrition information systems were in place but fragmented. Various health information systems in place— such as the National Telehealth Service Program, Hospital Operations and Management Information System, Clinic Information System, Online National Electronic Injury Surveillance System, Enhanced FHSIS, among others—must be harmonized, integrated, and made interoperable. There is also a need to improve the quality, timeliness, and reliability of health and nutrition survey and administrative data. Data and information from the private healthcare providers need to be gathered to ensure proper decision making on health programs and interventions.

Ensuring lifelong learning opportunities for all

Table 10.2 Accomplishments versus Targets in Ensuring Lifelong Learning Opportunities for All

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Sector Outcome B: Lifelong learning opportunities for all ensured						
Mean years of schooling increased ^b	2014	8.9	N/A	N/A	N/A	-
Functional Literacy Rate increased (%)	2013	90.3	TBD	N/A	N/A	- (FLEMMS to be administered in 2019)
Subsector Outcome 1: Quality, accessible, relevant, and liberating basic education for all achieved						
Net Enrolment Rate increased (%)						
Kinder	2015	74.65	83.37	86.28	89.19	83.13
Elementary	2015	91.05	92.74	93.31	93.87	95.53
Junior High School	2015	68.15	71.27	72.32	73.36	81.24
Senior High School	TBD	TBD	TBD	TBD	TBD	48.50
Completion Rate increased (%)						
Elementary	2015	83.43	86.25	87.18	88.12	
Junior High School	2015	73.97	77.15	77.48	77.82	
Proportion of students performing at moving towards mastery, closely approximating mastery or mastered increased (%)						
Elementary	2015	64.93	68.41	69.91	71.40	
Junior High School	2015	14.37	16.78	17.59	18.39	
Proportion of students at low mastery reduced (%)						
Junior High School	2015	14.88	11.51	11.31	11.11	

¹⁸ PhilHealth's Support Value is the average PhilHealth benefit payment over average actual hospitalization cost.

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Subsector Outcome 2.1: Quality of higher education and technical education and research for equity and global competitiveness improved						
Government expenditure for higher education research, development, and innovation as a percentage of GDP increased (%)	2015	0.17	None	None	None	0.10
Certification rate of TVET graduates increased (%) ^c	2016	91.3	85	86	86	92.4
Aggregate Outputs						
Percentage of students awarded scholarships, grants, and other financial assistance increased (%)	2015	5	6.50	7.50	8.50	48.77
Percentage of tertiary graduates in science, engineering, manufacturing and construction increased (%)	2015	26	31	33	35	37.40
Percentage of Expanded Tertiary Education Equivalency and Accreditation Program graduates increased (%)	2015	50	53	55	56	61.33
Number of curricula and programs developed/revised based on multi-disciplinal platforms that foster 21st century competencies increased (cumulative)	2015	72	80	85	90	106
Number of patents, licenses, and royalties issued to HEIs increased (cumulative)	2015	231	320	365	400	for collection from IPO
Number of researchers and scientists increased (cumulative)	2015	841	1,425	1,720	2,013	no submission from DOST yet
Number of graduate education graduates (MA/PhD) engaged in original research of creative work increased	2015	6,500	7,665	8,250	8,830	8,375
Number of innovation hubs established within HEIs increased (cumulative)	2015	81	104	116	127	71
Number of HEIs engaged in local and global partnerships and collaborations increased (cumulative)	2015	44	65	70	80	75

^a Actual data as of December 2015, or most recent available data. May not necessarily be year-end values

^b Average number of years of education received by people ages 25 years and older, converted from education attainment levels using official durations of each level (Source: Human Development Report)

^c According to TESDA, the certification rate was conservatively targeted due to: (a) average growth rate from 1995-2016 is 8.0 percent, while an annual average increase of 1.33 percent was observed during the previous PDP 2011-2016; (b) persons undertaking assessment and certification do not only come from TVET programs but also include those that were assessed following the principle of recognition of prior learning; and (c) a number of new training regulations with the new competency assessment tools are being promulgated in 2017.

The year 2018 saw the completion of the first batch of K to 12 graduates. At the start of School Year (SY) 2017-2018, approximately 1.2 million Grade 12 learners were enrolled in Department of Education (DepEd), private, and state universities and colleges (SUC)/local universities or colleges (LUC) Senior High School Programs, of which 61 percent were enrolled in the Academic Track and its various strands, 38 percent in the Technical-Vocational Livelihood (TVL) Track, and the rest in the Sports and the Arts and Design Tracks. Of these Grade 12 enrollees, 97 percent graduated in 2018.¹⁹ This represents a new generation ready to pursue further studies in college, receive higher-level skills training, or enter the labor force. For SY 2018-2019, approximately 1.3 million Grade 12 enrollees are expected to graduate in 2019, with nearly 63 and 36 percent enrolled in the Academic and TVL Tracks, respectively.

¹⁹ Computed using DepEd EBEIS Enrollment data as of November 28, 2017 as reported in 2017 SER

Table 10.1 Number of Grade 12 Graduates in 2018, by Track

ACADEMIC	TVL	SPORTS	ARTS AND DESIGN	TOTAL
734,627	462,210	2,089	4,499	1,203,425

Source: DepEd EBEIS, Based on End-of-School-Year Cut-off, 15 June 201820

Senior high school enrollment as well as *Balik-Aral* enrollees increased. DepEd data showed a slight increase in the number of total senior high school enrollees for SY 2018-2019 compared to SY 2017-2018, increasing from 2,733,460 to 2,832,811 (3.6% growth or 99,351 additional learners). Despite this increase, interventions must be strengthened in order to address the number of dropouts and to further increase the percentage of graduates.²¹

Nonetheless, since 2016, there has been a marked increase in the number of *Balik-Aral* enrollees—school leavers who have re-entered formal education—owing in part to the potential of the Senior High School Program. In 2018, 251,436 (107,010 in elementary and 144,426 in secondary) learners have returned to school.

Basic education enrollment targets have mostly been met. Enrollment rates in basic education continued to increase and mostly exceeded the 2018 targets. The elementary net enrollment rate (NER) was at 95.53 percent compared to the target of 92.74, while junior high school NER was at 81.24 percent compared to the target of 71.27. The NER for kindergarten nearly met the target, with 83.13 percent versus the 83.37 target.

While the latest available data for basic education show that the sector is on track to achieve end-of-plan targets, perennial difficulties in implementing programs designed to improve the access and quality of basic education programs still need to be addressed. The implementation of the K to 12 Program has been hampered by the shortage of qualified teachers possessing the needed specializations, as there are mismatches between teacher specialization and subjects they teach. There were also delays in the delivery of basic education facilities, teaching, and learning materials, caused by delays in procurement.

Given the uneven quality of basic education across schools and locations, there is much catching up to do to meet the K-12 standards. In particular, students and teachers have noted that the new curriculum may be “too ambitious” vis-à-vis allotted time and is seemingly designed for advanced learners (e.g., science high school curriculum) in an urban setting.²² Reforms thus have to be continued and evenly paced out to ensure that learners reap the maximum benefits of the enhanced basic education program.

Access to tertiary education was expanded. Free higher education in 112 SUCs and 78 LUCs²³ has been officially implemented in academic year (AY) 2018-2019, taking off from the Free Tuition Policy among SUCs in AY 2017-2018. Tertiary Education Subsidy (TES) for students in higher education was also rolled out in October 2018. As a result, preliminary data from the Commission on Higher Education (CHED) reflected an increase in the percentage of students awarded scholarships, grants, and other financial assistance (from 17.16% in 2017 to 48.77% in 2018).

²⁰ Preliminary data.

²¹ Using the data on cohort graduating in 2018 (2006 Grade 1 entrants), typical cohort progression showed that only 43 of 100 entrants graduated. DepEd's 2016 data (as reported in the 2017 Socioeconomic Report) showed that 1,537,046 learners were enrolled in Grade 11. Of this cohort, only 78.3 percent or 1,203,425 completed Grade 12 in 2018.

²² Philippine Institute for Development Studies (PIDS). (2018). “Process Evaluation of Senior High School Implementation”

²³ Only 78 out of 107 LUCs were deemed eligible for AY 2018-2019 because only these LUCs have undergone institutional and program evaluation by CHED as of 2017. LUCs are given two years to comply with all other institutional and program requirements to be part of RA 10931. Failure to do so will result in their exclusion from the list of LUCs under RA 10931. In this regard, students who will be enrolling in the 29 ineligible LUCs will be paying for their tuition and other school fees.

In TVET, the number of enrollees and graduates increased (from 2.29 million enrollees and 2.06 million graduates in 2017 to 2.38 million enrollees and 2.25 million graduates in 2018) due to higher budgetary support for scholarships in 2018. Data also show that certification rate of TVET graduates remained high at 92.4 percent in 2018 vis-à-vis its target of 85 percent. While the percentage of the Expanded Tertiary Equivalency Education and Accreditation Program graduates decreased from 66.65 percent in 2017 to 61.33 percent in 2018, it still surpassed its target of 56 percent.

The Tertiary Education Subsidy Program and the Short-term Student Loan Program were both provided under the Universal Access to Quality Tertiary Education Act of 2017 (RA 10931), the Implementing Rules and Regulations for which was issued in February 2018. TES application, however, only opened from September to October 2018, so many prospective beneficiaries had yet to receive the grant. Nonetheless, beneficiaries under the Expanded Student Grants-in-Aid Program for Poverty Alleviation have been automatically subsumed under TES and were already receiving stipends. On the other hand, the guidelines for the Short-term Student Loan Program were still being formulated. The issuance of such guidelines must be fast-tracked so that the program can be implemented as early as possible in 2019, as targeted.

Support programs for higher education institutions are being continued to boost faculty, research and development, and internationalization. The Philippine-California Advanced Research Institutes (PCARI) Project has provided support to 170 grantees, 44 research and development (R&D) projects, 480 R&D personnel, and enabled trainings and research collaborations in 25 higher education institutions (HEIs) with five leading research University of California campuses.²⁴ CHED's five-year K to 12 Transition Program, which started in 2016, has also supported 9,302 faculty scholars for graduate and/or postgraduate studies locally and abroad as of 2017, while the 2018 budget shall fund continuing scholars as well as 543 new grantees. Further, 130 Philippine HEIs have developed 773 institutional linkages with top foreign HEIs as of December 2018.²⁵ All these are expected to enhance faculty and research capacities of HEIs.

Learning mobility and labor force competitiveness are being pursued as the country institutionalizes the Philippine Qualifications Framework and reference it with the ASEAN Qualifications Reference Framework (AQRF). The Philippine Qualifications Framework (PQF) Act (RA 10968) was signed into law in January 2018. The law institutionalizes the PQF, a quality-assured national system which shall describe the levels of educational qualifications and set the standards for qualification outcomes. It also expands the composition of the PQF-National Coordinating Committee to include representatives from the economic and industry sector to ensure alignment of education standards with industry requirements.²⁶

The DepEd, CHED, Technical Education and Skills Development Authority (TESDA), Department of Labor and Employment (DOLE), and Professional Regulation Commission (PRC) are currently benchmarking the PQF with the AQRF, the region's common reference framework that allows ASEAN Member States to compare education qualifications with one another. On May 16, 2018, the Philippines submitted draft referencing reports to the AQRF committee for peer-review process.

Special TVET programs are being continued to cater to the socially excluded, displaced, and marginalized. Affirmative action programs to target drug-dependent surrenderees, inmates, returning overseas Filipinos (OFs), and poor communities are being provided.

²⁴ Data are as of November 2018; the PCARI Project aims to develop the capability of selected HEIs to undertake high-end research and to mobilize and translate knowledge into technological innovations. It focuses on addressing vital societal issues such as health, food security, energy, environmental quality, disaster mitigation, and others.

²⁵ Breakdown per Region: America- 105 linkages with 16 Philippine HEIs; Europe- 134 Linkages with 18 Philippine HEIs; Middle East & Africa - 13 Linkages with seven Philippine HEIs; ASEAN- 198 Linkages with 59 Philippine HEIs; Asia Pacific- 443 Linkages with 59 Philippine HEIs.

²⁶ The Implementing Rules and Regulations of the PQF Law have been drafted and have undergone consultations from stakeholders. It will be officially published upon approval of the PQF-National Coordinating Committee.

Table 10.3 Special TVET programs and number of beneficiaries covered

PROGRAM	NUMBER OF BENEFICIARIES (CUMULATIVE)	COVERED PERIOD
Skills Training for Drug-Dependent Surrenders	20,550	2016 to October 2018
Skills Training for Inmates and Dependents	23,330	2016 to October 2018
Reintegration Program for OFs	16,431	2017 to September 2018
Onsite Skills Assessment for OFs		2014 to November 2018
Assessed	2,681	
Certified	2,159	
Mobile Training Laboratories	Equipment deployed to identified ten poorest provinces nationwide Of the ten provinces, five have ongoing program implementation	As of October 2018

Restrictions in the entry of training centers and participation of higher education faculty and trainers in the country have been eased. The 11th Foreign Investment Negative List (FINL), issued through Executive Order No. 65, s. 2018, now allows 100 percent foreign participation in teaching at higher education levels, provided the subject being taught is not a professional subject (i.e., included in a government board or bar examination). Foreigners are now also allowed in training centers that are engaged in short-term high level skills development that do not form part of the formal education system.

Increasing income-earning ability

Consistent with the country's steady economic performance, the overall employment situation achieved modest gains with respect to achieving the government's annual targets and in meeting the decent work agenda.

Table 10.3 Accomplishments versus Targets in Increasing Income-earning Ability

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Sector Outcome: Income-earning ability increased						
Percentage of youth Not in Education, Employment or Training decreased (% cumulative)	2015	22.7	19.5-21.5	18.5-20.5	17.5-19.5	19.9
Subsector Outcome 1: Employability improved						
Duration of school-to-work transition of college graduates decreased (years)	2008	2	TBD	TBD	TBD	
Duration of school-to-work transition of high school graduates decreased (years)	2008	4	TBD	TBD	TBD	
Percentage of discouraged workers decreased (%)	2014	12.50	12.00	11.50	11.00	11.50
Number of higher education graduates engaged in job collaboration increased (cumulative)	2015	440,000	525,000	570,000	615,000	
Percentage of females with advanced degrees employed increased (% cumulative)	2015	12.7	15	16	18	
Labor force participation rate of women increased (%)	2015	49.3	49.70	50.10	50.50	46.60

INDICATOR	BASELINE ^a		TARGETS			
	YEAR	VALUE	2018	2019	2020	ACTUAL 2018
Subsector Outcome 2: Productivity improved						
Labor productivity in industry sector increased (% growth)	2015	-4.2	3.0-4.0	3.0-4.0	3.0-4.0	0.36

^a Actual data as of December 2015, or most recent available data. May not necessarily be year-end values

There have been improvements in the employability of the working age population. The share of discouraged jobseekers in total unemployment rate continued to decline. Further reflecting the attractiveness of the labor market for jobseekers (both new entrants and incumbent), the proportion of discouraged jobseekers decreased to 11.5 percent of the total unemployed in 2018, although still 0.5 percentage points above the annual Philippine Development Plan target.

The number of unproductive and economically unutilized youths was further reduced in 2018.²⁷ The target of reducing the share of the youth at-risk was met in 2018. The 19.9 percent share of the youth not in employment nor in education in the total youth population fell within the target range of 19.5-21.5 percent.

Meanwhile, qualified Overseas Filipino Workers (OFWs) benefitted from licensure examinations and orientation seminars. In its annual conduct of Special Professional Licensure Examination (SPLE) in the Middle East and other countries, PRC reported a total of 4,532 examinees who took the exam in August 2018 compared with 4,114 examinees for full-year 2017. The program supports qualified OFWs in enhancing their employability and competitiveness by giving OFWs access to licensure board examinations while residing and working abroad, without having to return to the Philippines.²⁸ To further ensure the smooth and orderly conduct of the examinations, the Commission issued Resolution No. 2017-1037 fixing the dates and places of the SPLE for OFWs in the Middle East and other countries (Oman, Singapore, Hong Kong and Bangkok, Thailand).

In 2018, 791,948 OFW aspirants participated in mass-based and online pre-employment seminars. Pre-departure orientation seminars were provided to 571,970 OFW aspirants and post-arrival orientation seminars were conducted for 48,986 OFWs. Pre-departure orientation seminars were also held for 21,189 Filipino emigrants and for 7,776 exchange visitor program participants. Orientation seminars targeting specific sectors such as spouses/partners of foreign nationals and the youth are also being carried out. On the other hand, the participation for the Community Education Program, an information campaign on migration, increased to 2,742 for the first nine months of 2018 from 1,214 for full-year 2017. These programs are expected to help Filipinos make informed decisions regarding overseas employment or permanent residence abroad.

Growth in labor productivity and labor force participation rate (LFPR) remain a challenge. Labor productivity growth²⁹ in the industry and services sector slowed down in 2018. Labor productivity in industry registered at 0.36³⁰ percent, while labor productivity growth in the services sector grew by 3.9 percent. Both fell short of the annual target of raising labor productivity growth rates within the range of 3.0-4.0 percent for the industry sector and 4.0-5.0 percent for services.

The number of economically active persons also fell in 2018. Labor force participation rate in 2018 declined to 60.9 percent from 61.2 percent in 2017. Majority of those who dropped out of the labor force cited schooling, temporary illness or disability, or were awaiting results of previous job application. Meanwhile, the share of female LFPR for the period inched up to 46.6 percent,³¹ yet still fell short of the government's annual target of raising labor force participation rate of women to 49.7 percent.

²⁷ From 21.7 percent in 2017

²⁸ Executive Order No. 835, s. 2009

²⁹ Preliminary estimates for full-year 2018 were derived by the NEDA Staff.

³⁰ Preliminary data; NEDA Staff estimates only.

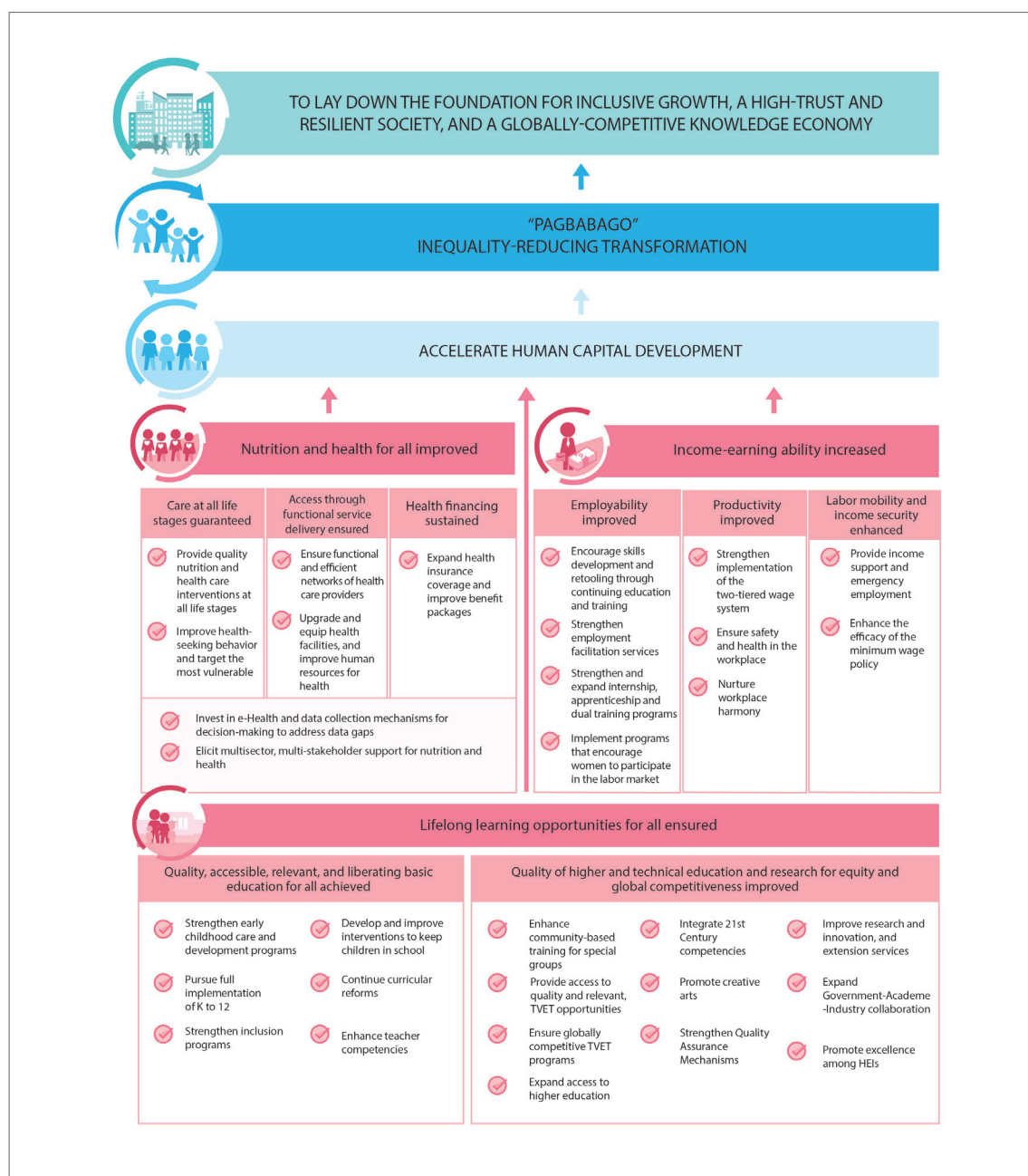
³¹ From 46.2 percent in 2017.

Moving Forward

The overall human capital development landscape in the country is expected to improve given the passage of landmark legislative measures aimed at easing the people's access to various nutrition, health, education, and labor programs of the government.

To sustain the reforms introduced in the previous years, address recurring and new challenges, and lay down the groundwork necessary for the implementation of recently enacted laws, the government will have to rollout strategies designed to facilitate the development of the country's human capital.

Figure 10.1 Strategic Framework to Accelerate Human Capital Development



To improve nutrition and health for all

Strive to bring back trust in immunization and increase public awareness of diseases. The public needs to be educated on the safety of important vaccines through various media to correct misconceptions, overcome the confusion and fear among the public, and regain the trust of the parents in immunization. Awareness is also essential to disease prevention and treatment of communicable and non-communicable diseases. Thus, it is important to strengthen health promotion and education, including integration of such health information in the school curricula and in the activities of the communities.

In addition, there is a need to intensify public engagement in the implementation of existing policies, programs, and activities on prevention and control of communicable and NCDs such as counselling and screening for HIV, TB, and NCDs (CVD, cancer, diabetes, etc.), smoking bans, disease surveillance, among others.

In this regard, health workers and personnel in barangay health stations, rural health units, and other health facilities need to enhance their capacity for health promotion.

Ensure full implementation of RPRH Law provisions on reducing total fertility rate. Full implementation and budgetary support to the RPRH Law and EO 12, s. 2017 in order to attain “wanted” fertility levels would boost economic growth.³² Priority must be given to ensuring the availability of trained and competent FP service providers and FP commodities in service delivery points across the country. Non-government actors must be tapped for the continuous implementation of collaborative interventions, such as You-for-You Teen Trail (communication campaign to prevent early sex among teens), Sexually Healthy and Personally Effective Trainings, and Parent-Teen Talk, to reduce incidence of teenage pregnancy, keep the youth in school or training, and reduce unmet need for family planning. These actions will improve human capital of the youth and encourage women to join the productive labor market.

Strict implementation of nutrition-related programs and improve planning and monitoring and evaluation (M&E) on nutrition. To address malnutrition problem in the country, there is a need to: (a) strengthen school health and nutrition programs; (b) improve targeting, coordination, management, and local mobilization and of nutrition-related programs; (c) enhance and streamline the system for planning and M&E of the PPAN 2017-2022, including system for tracking services in the first 1,000 days and monitoring of physical and financial commitments of sector and LGUs; and (d) intensify the implementation of nutrition-specific programs especially in the first 1,000 days of life. Nutrition programs include Infant and Young Child Feeding (IYCF) Integrated Management of Acute Malnutrition, National Dietary Supplementation Program, Micronutrient Supplementation, Mandatory Food Fortification, Nutrition in Emergencies, Overweight and Obesity Management and Prevention Program, and the National Nutrition Promotion Program for Behavior Change that focus on nutrition education programs delivered at the community such as the mothers’ classes under the umbrella of the IYCF: Promote Good Nutrition Program and Family Development Sessions.

Implement operational improvements in the health care system. To improve responsiveness, the government needs to (a) strengthen programs like the DOH Human Resources for Health Deployment and the Health Facilities Enhancement programs; (b) streamline and fast-track the procurement process and improve transparency in identifying targets in constructing and rehabilitating health facilities; and (c) efficiently utilize the budget for construction and rehabilitation of public health facilities.

³² *Philippine Development Plan 2017-2022 (Chapter 13)*

Moreover, government must ensure that service delivery networks (SDNs) are functional and accessible. To address the issue on weak referral system or no effective gatekeeping at the primary care level, the government must ensure implementation of the UHC Act provision on improving the SDNs, such as granting incentives to functional province-wide or city-wide health systems. This strategy requires the allocation of the needed budget to rollout the components of the law. Management of health facilities should likewise be streamlined to ease the people's access to SDNs.

Ensure interoperability of various health information system and improve health and nutrition data processing mechanisms. To address the continued gaps in health and nutrition information system, the following strategies are suggested: (a) strengthen the existing administrative health and nutrition data collection systems, such as DOH's Field Health Services Information System and National Nutrition Council's *Operation Timbang Plus* (see Box Article 10.1 on the Philippine Food and Nutrition Surveillance System); (b) strengthen the capacity of Philippine Statistics Authority in providing technical assistance on processing health and nutrition-related surveys and administrative-based data; and (c) enhance the internal capacity of the DOH in managing health information system and producing high quality health studies and researches that will guide policy and decision making.

Reform the provider payment system and improve the implementation of the existing programs to reduce out-of-pocket health expenditure (refer to Chapter 11).

Ensure effective human resource development and management among health workers and professionals across the country. The implementation of the Magna Carta for Public Health Workers needs to be revisited to address disparities in salary and benefits among health workers and professionals in national government and in LGUs. Likewise, there is a need to ensure full implementation of UHC Act, particularly the provision on training and scholarship programs for health workers and health-related undergraduate and graduate students, with return service agreement; and on securing permanent employment and competitive salaries for health workers and professionals.

Box Article 10.1 Philippine Food and Nutrition Surveillance System

The Philippine Food and Nutrition Surveillance System (PFNSS) is the system that collects and pools data on the nutritional status of population groups and the determinants of—or the factors that influence—the state of nutrition of these groups. The System serves as a tool to generate and analyze data for a comprehensive assessment of the country's nutrition situation; monitor and evaluate the effectiveness and efficiency of nutrition and related programs; and provide early warning on impending food and nutrition problem or crisis. The PFNSS also aims to promote the prompt use of information for a stronger nutrition dimension in macroeconomic and sectoral policies, plans, and programs and to strengthen the institutional capacity of those involved in the system.

The framework looks at nutritional status as a function of food consumption and food utilization. Food consumption is determined by care practices as well as factors related to the availability of safe and nutritious food, food distribution, as well as purchasing power or economic access to food. Food utilization, on the other hand, is determined by health and sanitation. Food availability, distribution, and purchasing power, as well as health and sanitation are further influenced by the socio-economic and political environment. The Early Warning System for Food and Nutrition Security and *Operation Timbang Plus* are some of its components.

To ensure lifelong learning opportunities for all

Strengthen the monitoring of senior high school (SHS) implementation to allow for timely troubleshooting and necessary changes in SHS policy and program design, when warranted. Mechanisms and resources must be made available to ensure compliance to standards in schools. Internal guidelines and procedures should be harmonized and streamlined to facilitate the procurement of facilities, equipment, and teaching and learning materials and ensure timely delivery of such to schools.

Improve teacher hiring processes and strengthen in-service training. To improve the supply of teachers in basic education, teacher hiring guidelines must be reviewed to ensure that needed specializations are filled by teachers with corresponding specializations and qualifications. To improve curriculum delivery, there is a need to strengthen in-service training for teachers, particularly senior high school teachers who do not have education degrees and training on classroom management and pedagogical approaches. Teachers with secondary education degrees should also be trained on SHS teaching methodologies. Government may also consider waiving the Training Methodology Certificate qualification and assessment fees to ease the burden on TVL teachers pursuing these qualifications and encourage them to improve their teaching skills.

Continue the curriculum review at the secondary level. Review the SHS curriculum, taking into consideration the current perception of teachers and students that the allotted time may not be enough to cover the whole course, especially if it is designed around the capacities of advanced learners. Review of the junior high school curriculum should be undertaken to ensure that Grade 10 completers are prepared for senior high school and to reduce the perception of SHS being too advanced or overloaded. Work immersion program review should be done to ensure that competencies learned in the classroom are adequately applied in actual working conditions, especially for the TVL track. The timing of the National Certificate (NC) II assessment and certification in the TVL Track should also be reviewed with the aim of ensuring that learners are not disincentivized to complete Grade 12 by the early possession of NC certificates.

Provide more options and opportunities for high school level learners to keep them in school. The SHS program should be made more affordable, accessible, and more responsive to the needs and demands of learners, communities, and industry. Besides reducing costs to learners, it should be endeavored that all SHS tracks and major strands be fully available at least at the provincial level. Additionally, alternative delivery modes geared to address SHS dropouts and their particular needs should be designed and implemented.

Ensure harmonization of grants and sustainable design of the long-term student loan program as mandated by the Unified Student Financial Assistance System for Tertiary Education (UniFAST) Law. As several government agencies provide scholarships and grants-in-aid programs, there is a need to harmonize such for better targeting and allocation of resources to ensure sustainability of the implementation of the Universal Access to Quality Tertiary Education Act. On this note, it is crucial to ensure that the design of the long-term student loan program will factor in affordability, viability, and risk management, especially in setting interest rates and repayment thresholds. Support interventions such as career guidance and financial counseling may also be needed to ensure good scholastic performance of scholars/grantees and high repayment collection of student-loan beneficiaries.

Strengthen the monitoring and regulation of higher education institutions to ensure the sustainability of implementing the Universal Access to Quality Tertiary Education Act. As the implementation of the law has just started, its overall impact remains to be seen. Implementation and quality issues will largely depend on the SUCs and LUCs. Adequate monitoring is crucial in ensuring that quality of education will not be sacrificed even as the aim is to expand access to tertiary education. Monitoring should cover the following: (a) tuition and other school fees being charged by SUCs, LUCs, HEIs and TVET institutions (TVIs) to the government; (b) stricter quality assurance in HEIs, especially those enjoying government

subsidies; and (c) per-student normative cost budgeting. A permanent UniFAST secretariat and regional staff who will coordinate these activities will be vital in monitoring the sustainability and effectiveness of the Universal Access to Quality Tertiary Education Act.

In the long-term, a robust tracer and impact evaluation studies will be useful to aid key decision makers not only in planning and budgeting for the subsequent years of implementation of the law, but in coming up with interventions to better address inequities in educational outcomes.

Upgrade curriculum standards and training regulations in tertiary education. In view of the full implementation of the K to 12 Program and the Fourth Industrial Revolution (FIRE), there is a need to update the higher education curriculum given the changes in the basic education system and emerging needs of the industry (*see also Box 10.2*). Further, the higher and technical education subsector needs to formulate and upgrade its curricular standards and training offerings to take advantage of lucrative job opportunities created by emerging fields (e.g., Data Science, Nanotechnology, Machine Learning, Green/Renewable Energy Engineering). The TVET sector needs to formulate standards and promote TVET programs (diploma courses) that cultivate higher-order thinking skills.

For TVET, separate and faster mechanisms will be instituted by TESDA to hasten the development of competency standards and training regulations of rapidly-changing jobs.³³ Aside from intensifying involvement of industries in competency assessments, enterprise-based training will continue to be promoted as a dominant mode of TVET delivery as it results to higher employability and productivity.³⁴

Examine the education and TVET sector preparation to take advantage of the rise of frontier technologies. Career guidance being offered by educational institutions should also be in line with the rapidly evolving demands of the labor market. This will require enhancing quality of career guidance programs considering student's interests, abilities, aptitudes, and preferences, while offering insights on the reality of labor markets. Moreover, there is a need to enhance information dissemination on financial assistance programs for students aiming for post-secondary education.

Strengthen advocacy for TVET. Majority of Filipinos consider TVET as a second option, only next to attaining a college degree. There is a need to publicize TVET benefits to society, particularly to parents, acknowledging the latter's primary influence in the educational decision of their children.

Align the country's TVET standards with international standards. To improve the perception of TVET, the quality of TVET needs to be upgraded to be at par with international standards. International qualifications referencing and benchmarking will be regularly done to keep the Philippine TVET sector appraised and challenged. Assistance will also be expanded to enable TVIs upgrade their facilities, learning methodologies, course offerings, trainers, and training managers.³⁵ Further, there is a need to ensure that there are corresponding and efficient equivalencies and recognitions system through the PQF for TVET graduates and TVL SHS graduates, should they pursue higher education through ladderized education.

Revisit policy and regulatory frameworks on internationalization of tertiary education. The 11th FINL, which enables the entry of international training centers and foreign trainers in the country, entails the need to formulate a TVET internationalization framework, which will subsequently serve as basis of policies and regulations allowing such mobility. Likewise, CHED's internationalization framework may also need to be updated. In particular, equivalencies and recognition systems, and employment visa policies must be efficient enough to attract international training centers, trainers, and higher education faculty in the country.

³³ TESDA. (2018). *National Technical and Education Skills Development Plan (NTESDP) 2018-2022: Vibrant Quality TVET*.

³⁴ Mapa, D., Almeda, J. and Albis, M. (2016), "Cost-Benefit Study of the Dual Training System (DTS) in the Philippines." School of Statistics, University of the Philippines Diliman.

³⁵ TESDA. (2018). *National Technical and Education Skills Development Plan (NTESDP) 2018-2022: Vibrant Quality TVET*.

Box Article 10.2 Preparing the Education System for the Fourth Industrial Revolution

Rapid technological innovation spurred by the Fourth Industrial Revolution (FIR) is transforming and altering industry skill requirements. Particularly, FIR is expected to cause challenges in preparing students for a constantly changing work environment.³⁶ It is imperative for graduates to possess the necessary competencies not only to address unemployment, underemployment, and job-skills mismatch, but also to ensure that the labor force can keep up with the demands of the industry and thrive in the changing world of work. This entails equipping learners with 21st century skills (a combination of foundational literacies,³⁷ competencies,³⁸ and character qualities³⁹) and the capacity to innovate.

Emerging international evidence suggests that socioemotional skills (soft skills, non-cognitive skills, or behavioral skills) are likewise increasingly becoming crucial to the types of jobs being created by the global economy. Higher levels of socioemotional skills are also correlated with a greater probability of being employed, having completed secondary education and pursuing tertiary education.⁴⁰

At present, the Philippines is on the right track in promoting lifelong learning as one of the key strategies in accelerating human capital development. However, more needs to be done to transform the education system into an environment that will "enable flexibility and modularity to produce learners that can work alongside machines rather than compete with them."⁴¹ The most promising models of education and training systems are when governments focus and invest on preparing children early, reforming continuously, and using data/information for improvement and accountability. For instance, many governments and the development community prioritize the following:⁴²

- a. Focusing on basic skills and early childhood development, and measuring and improving early reading;
- b. Providing continuous learning or retooling opportunities to workers to invest in relevant skills that make them benefit from, and remain immune to, possible disruptions spurred by technological advancements; and
- c. Using evidence from labor market returns to education to implement financial innovations that may fund education.

As the Philippines is still at its onset in integrating 21st century skills in the education system, the challenges will be on developing appropriate assessment tools, upgrading teaching and learning methods, and building a strong and competitive faculty that would be capable of fostering such competencies among learners.

To increase income-earning ability

The labor sector is poised to achieve most of its end-of-plan targets, with major gains in improving the quality of employment and reducing the national unemployment rate.

In the next two years, the government needs to invest further in the country's human capital needs to take advantage of opportunities brought by the rise in frontier technologies. In addition, Philippine Green Jobs Act of 2016 (RA 10771) has yet to be fully realized, with the operational and statistical framework needing to be set in place to monitor the generation of green enterprises and green jobs, towards a low-carbon and more resilient economy.

³⁶ Dadios, E. P., Culaba, A. B., Albert, J. G., Paqueo, V. B., Orbeta, A. C., Serafica, R. B., . . . Bairan, J. C. (2018, August). *Preparing the Philippines for the Fourth Industrial Revolution: A Scoping Study*. PIDS Discussion Paper Series (2018-11). Retrieved from <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1811.pdf>

³⁷ Foundational literacies are how students apply core skills to everyday tasks (i.e., literacy, numeracy, scientific literacy, ICT literacy, financial literacy, cultural and civic literacy).

³⁸ Competencies describe how students approach complex challenges (i.e., critical thinking/problem-solving, creativity, communication, collaboration/teamwork)

³⁹ Character qualities refer to how students approach their changing environment (i.e., curiosity, initiative, persistence/grit, adaptability, leadership, and social and cultural awareness)

⁴⁰ Acosta, Pablo Ariel; Igarashi, Takiko; Hamanaka, Rosechin Olfindo; Rutkowski, Jan Jerzy. 2017. *Developing socioemotional skills for the Philippines' labor market* (English). *Directions in development; human development*. Washington, D.C. : World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/333521498727263689/Developing-socioemotional-skills-for-the-Philippines-labor-market>

⁴¹ Dadios, E. P., Culaba, A. B., Albert, J. G., Paqueo, V. B., Orbeta, A. C., Serafica, R. B., . . . Bairan, J. C. (2018, August). *Preparing the Philippines for the Fourth Industrial Revolution: A Scoping Study*. PIDS Discussion Paper Series (2018-11). Retrieved from <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1811.pdf>

⁴² Patrinos, H. (2016). *The skills that matter in the race between education and technology*. Prepared for the 2016 Brookings Blum Roundtable.

There are challenges that have been around for some time, which the government would need to gradually address. These include limited economic participation of the elderly, persons with disability, and women; tightening work and migration conditions overseas; and slow pace of growth in real wage vis-a-vis labor productivity growth, all of which have impact on the domestic labor environment. Moreover, with the anticipated passage of the Tax Reform for Attracting Better and Higher Quality Opportunities (TRABAHO) Bill, the government needs to put in place safety nets to ensure that resulting displaced workers will be absorbed by the economy.

In response to the challenges cited, the following strategies to increase the income-earning ability of Filipinos must be implemented in the near term:

Continue to enhance the policy environment to encourage women to participate in the labor force. There is a need to examine the root causes of low female labor force participation rate.⁴³ Supportive institutions and mechanisms that will ease the burden of domestic duties and access to childcare should be considered. Among others, the full implementation of the RPRH Law and the recently enacted Expanded Maternity Leave Act of 2018⁴⁴ will significantly contribute to enhanced economic empowerment and increased labor force participation of women (*refer to Chapter 13*).

Develop a comprehensive policy framework to reduce youth not in employment and not in education. There is a need for timely and well-targeted programs that will address the concern of economic underutilization of young people in the country. Existing programs and interventions need to be reviewed and intensified to ensure that it captures the low-income youth at risk. It will also require (a) minimizing the drop-out rate through maximizing alternative education delivery modes; (b) restructuring the academic curriculum designed for 21st century skills; and (c) strengthening linkages with the private sector to ensure better employment opportunities or providing entrepreneurship training or financing access for the youths with entrepreneurial talents.

Adopt a whole-of-government approach to improve programs on OF reintegration. The Comprehensive OFW Reintegration Program and the Assist WELL Program that prepare OFs for reintegration from the start of the migration cycle should be further strengthened. In particular, the government needs to improve access of OFs to employment facilitation services and create a registry for returned OFs (e.g., through PhilJobnet, PESO Employment Information System, and e-registration). Importantly, inter-agency coordination needs to be improved such that OFs are promptly referred to and assisted by the right agency for specific service requirements.

Expand bilateral and regional ties to diversify and explore prospective destination countries for OFs. The government should continue to pursue labor agreements with potential partner countries or emerging markets. As of December 2018, nine (9) bilateral labor agreements were signed and 17 draft labor cooperation agreements with countries in Asia, Europe, and Middle East are undergoing review. Labor cooperation agreements for specific category of workers such as household service workers and teachers are also being explored to provide ample protection to OFWs.

Improve the policy framework for productivity gain-sharing. Reforming the restrictive provisions of the Productivity Incentives Act is warranted to encourage the private sector to avail of productivity incentives. At the same time, productivity enhancement programs of the Regional Tripartite Wage and Productivity Boards need to be scaled up.

⁴³ There's an ongoing Re&D-funded study lead by the NEDA entitled, "Determinants of Female Labor Force Participation in the Philippines"

⁴⁴ RA 11210 or the 105-Day Expanded Maternity Leave Law was enacted on February 21, 2019.

Provide assistance for workers who may be adversely affected by the passage of the TRABAHO Bill. Sufficient resources must be in place to support affected workers through job search assistance and facilitation; skills development and re-training; and basic income support during job transition. The DOLE must strengthen its Job Displacement Monitoring System to keep track of the developments post-passage of the bill and to mitigate its impact effectively.

Enhance income protection of workers. The recently enacted Social Security System Act⁴⁵ has a provision on unemployment insurance benefits for private sector workers. These benefits are designed to give the displaced workers some financial cushion during episodes of involuntary separation from work. However, a more robust unemployment benefits system needs to be designed.

Cross-cutting Strategies

Strengthen Early Childhood Development (ECD) to improve health and education outcomes. Evidence shows that investments in ECD result in better health and education outcomes for children as they get older, contributing to the decrease in dropout rates, better academic performance, and greater earning potential. Given the number of government agencies currently implementing various interventions for the first 1000 days of life and the beginning of formal schooling at age five (kindergarten), it is imperative that coordination between these agencies be strengthened to reduce overlaps in these programs and address existing gaps in service coverage and resources.

Identify FIRE skills requirements. Given rapidly transforming skills demand and labor landscape spurred by FIRE, quickly identifying skills requirements and competencies needed by the industry (especially in advanced science, technology, engineering, arts, and math courses, emerging disciplines, and green economy requirements, among others) will be crucial. For instance, TESDA has partnered with the International Labour Organization to adopt a “skill needs anticipation approach” to meet the FIRE requirements.⁴⁶ This will enable the education sector to anticipate and keep up with emerging needs of the economy.

Strengthen integration of socioemotional skills in the education system. Studies show that those with the least risk of being automated are: cognitive tasks requiring judgment, problem solving, intuition, persuasion or creativity; and manual tasks requiring a high degree of situational flexibility and human interaction.⁴⁷ Given this, there is a need to ensure integration of the 21st century competencies⁴⁸ and socioemotional skills in the basic education and tertiary education curricula to ensure that graduates will be ready to compete, whether they enter the labor force or pursue further studies. The World Bank’s Human Capital Project and World Development Report 2019 emphasize the urgent need for governments to pursue this thrust as one of the key strategies in human capital development, since frontier skills are rapidly changing, placing premium on higher-order thinking skills.⁴⁹

⁴⁵ RA 11199 or the Social Security System Act of 2018 was enacted into law on February 7, 2019.

⁴⁶ TESDA. (2018). *National Technical and Education Skills Development Plan 2018-2022: Vibrant Quality TVET*.

⁴⁷ UN Department of Economic and Social Affairs. (2017). *Frontier Issues: The impact of the technological revolution on labour markets and income distribution*. Retrieved from <https://www.un.org/development/desa/dpad/publication/frontier-issues-artificial-intelligence-and-other-technologies-will-define-the-future-of-jobs-and-incomes/>

⁴⁸ Top ten 21st century skills include: complex problem solving; critical thinking; creativity; people management; coordinating with others; emotional intelligence; judgment and decision making; service orientation; negotiation; and cognitive flexibility. (Source: World Economic Forum. (2016). *Future of Jobs Report*.)

⁴⁹ World Bank. (2018). *Investing in People to Build Human Capital*. Retrieved from <https://www.worldbank.org/en/news/immersive-story/2018/08/03/investing-in-people-to-build-human-capital>

Strengthen government-academe-industry linkages. To pursue the above-mentioned strategies, collaboration among government, academe, and industry will be critical, specifically in the areas of promoting and refining work immersion programs; enhancing quality of instruction through faculty-industry exposure; and reviewing the education system curricula and implementing necessary reforms to address its responsiveness to emerging developments.