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Accelerating  
Human Capital  
Development



# Accelerating Human Capital Development

It is the responsibility of the State to ensure the development of its people. Under the pillar Pagbabago, the Plan recognizes human development not just as a means to an end (i.e., human capital as a factor of production) but also an end in itself. Thus, in the next six years, individuals and people groups will have more options to develop their full potential. Better human development outcomes will be attained by reducing inequalities in the peoples' ability to stay healthy, be well-nourished, and continue learning throughout their lives. Inclusive strategies and other interventions will be directed at ensuring that all people, especially the poor and underserved, will have long, healthy, and productive lives; lifelong learning opportunities; and improved income-earning ability. The region shall continue to provide its people opportunities to become productive citizens through quality technical education and skills development and relevant courses in higher education. To ensure that graduates meet the industry standards with employable skills, mandatory Competency and Certification Programs will be continually implemented. Such efforts will support the region's investment for quality human resources for the labor market both domestically and globally. The skills development program should include returning migrants and their families to ensure equality of employment opportunities. Human development training will complement the acquired skills and learning of the overseas workers as they reintegrate in the Philippine society.

## Human Capital Development as Means to an End

### Assessment

#### Technical–Vocational Education and Training

For the period 2011-2016, enrolment in technical-vocational education and training in school/ institution-based was generally higher than those in the community-based centers. In 2015, total enrolment in technical-vocational education and training was highest at 88,666, with almost fifty-five (55) percent enrolled in community-based programs and forty-one (41) in schools and technical-vocational institutions. One of the reasons for the decrease in enrolment in TVET institutions was the migration

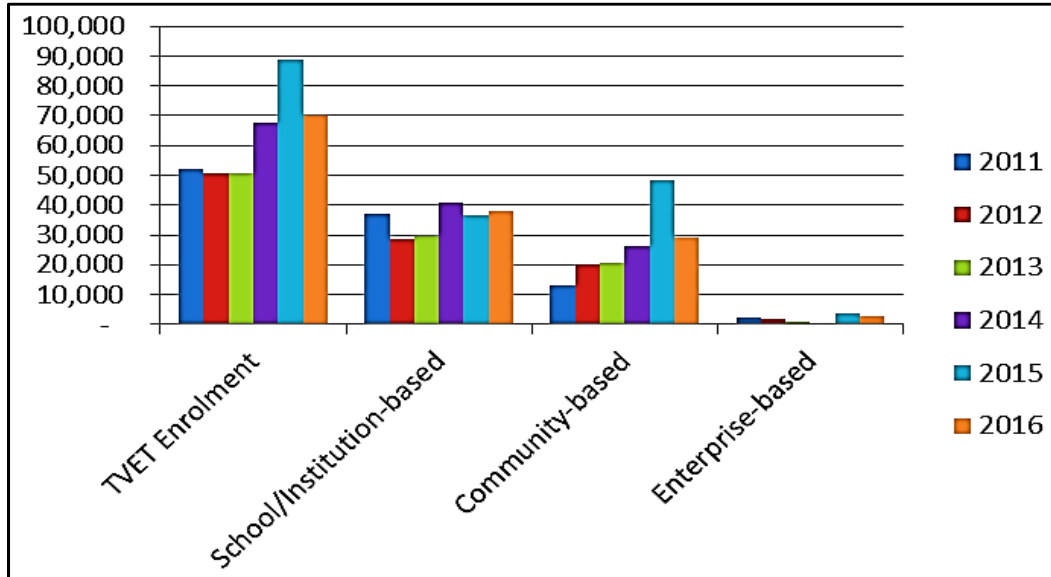
of programs and the high cost incurred on the process of migration. Scholarship grants (under TWSP, STEP and BUB) and programs being offered free encouraged high enrolment in community-based programs. The weak linkage with the industries caused a decrease in the enrolment in enterprise-based centers.

A high rate of graduates was recorded at more than eighty percent (80%) during the period of assessment and certification rate of graduates of skills training and would-be skilled workers who took the assessment test showed an increasing trend during the

period. PESFA and TWSP scholarships for technical-vocational education and training were regularly granted and the number of slots increased, particularly that of PESFA in 2011 to 2015, while an intermittent trend

for the TWSP was noted. The total number of TVET instructors trained during the period exceeded its target by almost twenty percent (20%).

**Figure 14: Enrolment, 2011-2016**



Source of data: TESDA XII

Among the TVET programs, the top qualifications with highest number of enrollees include Automotive Servicing NC I and NCII, Cookery NC II, Housekeeping NC II, Computer Hardware Servicing NC II, Electrical Installation and Maintenance, Food and Beverage Services NC II, Driving NC II, Agricultural Crop Production NC II and Shielded Metal Arc Welding NC II. The sectors with highest enrolment include Tourism (Hotel and Restaurant); Agriculture and Fishery; Automotive and Land Transportation, Health, Social and Other Community Development Services

and Information and Communication Technology. Lowest enrolments are in Barangay Health Services NC II, Tour Guiding NCII, Pharmacy Services NC II, Programming NC IV and Electronic Products Assembly Servicing NC II.

Through the TVET Guidance and Placement Offices (TGPOs), graduates were assisted in seeking job opportunities. As of 2016, the TGPOs tracked a total of 5,115 who were employed in different establishments in the region.

Table 28: TVET Accomplishments, Region XII, 2011-2015

INDICATORS	ACCOMPLISHMENTS					
	2011	2012	2013	2014	2015	2016
<b>No. of registered Institution-Based Programs</b>	122	135	64	82	123	73
<b>No. of compliance audited and evaluated TVET programs</b>	26	163	420	377	399	146
<b>TVET Enrollment</b>	52,303	50,710	50,789	67,801	88,666	69,989
<b>School/Institution-based</b>	36,846	28,628	29,652	40,951	36,627	38,243
<b>Community-based</b>	13,245	20,095	20,467	26,400	48,525	29,143
<b>Enterprise-based</b>	2,212	1,987	670	450	3,514	2,603
<b>Number of TVET Graduates</b>	43,332	41,701	40,824	56,877	77,883	64,627
<b>School/Institution-based</b>	28,694	28,628	21,420	33,101	28,470	34,425
<b>Community-based</b>	12,645	20,095	18,868	23,366	45,904	27,557
<b>Enterprise-based</b>	1,993	1,843	536	410	3,509	2,645
<b>Number of Scholarship Slots</b>						
<b>PESFA</b>	869	1,535	1,298	1,590	2,040	-
<b>TWSP</b>	1,915	4,215	7,487	3,611	5,879	3,989
<b>Assessment and Certification</b>						
<b>No. of Persons Assessed</b>	29,842	37,033	37,969	38,619	44,040	38,796
<b>No. of Persons Certified</b>	24,226	30,645	31,575	33,635	39,223	35,198
<b>Certification Rate (%)</b>	81	83	83	87	89	91
<b>Capability-building Program</b>						
<b>No. of Trainers Trained</b>	215	222	403	266	123	110
<b>Number of TVET Graduates</b>	43,332	41,701	40,824	56,877	77,883	64,627
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Source of data: TESDA XII

## Higher Education

Enrolment and graduation rates across disciplines in two higher education institutions (USM and CCSPC) showed increases during the assessment periods. Of the total enrolment and graduates from the main campus of USM, the College of Business, Development Economics and Management, College of Education and College of Agriculture consistently produced the highest number of graduates during the

period of assessment while the least both in enrolment and graduates is from the Institute of Sports, PE and Recreation. For CCSPC, the highest graduates were those enrolled in BS in Secondary Education while the least are those in Agriculture Technology.

The increase in enrolment in advance education (post graduate studies) showed that more graduates have the desire and drive to grow professionally for better job

opportunities. Enrollees in post-graduate studies come from the academe, both private and public and from various government offices, as well. Likewise, instructors who serve the universities and colleges are well-

equipped having masters and doctorate degrees in various areas of specialization. This makes them more proficient, effective and efficient in their respective fields of instruction.

**Table 29: Higher Education Accomplishments, Region XII, 2011-2016**

INDICATORS	2011	2012	2013	2014	2015	2016
<b>Enrollment across disciplines *</b>	30,858	33,108	35,064	39,337	42,764	-
<b>No. of graduates across disciplines*</b>	11,673	14,647	18,134	20,013	21,821	23,374
<b>Higher Education Faculty with</b>						
<b>Master's Degree</b>		1,149	1,940	2,118	1,916	
<b>Doctorate Degree</b>		188	394	431	396	
<b>No. of scholarship slots*</b>	459	386	1,326	13,444	19,398	23,459
<b>No. of HEIs</b>						
<b>Public SUCs</b>	5	5	5	5	5	5
<b>LUC</b>	-	-	1	1	1	1
<b>Private</b>	87	87		94	95	95
<b>Passing Percentage in Licensure Examinations across all disciplines (%)</b>		25.58	31.35	30.12	30.19	31.38

\* LUC-Local Government Unit College

Source of data: CHED XII

As to the scholarships granted to deserving students in various colleges and universities, a decreasing number of slots were recorded in USM. However, sponsors of these scholarships from various national line agencies and local government units and officials are maintained.

Regarding the performance in the licensure examinations of the state colleges and universities, highest rating was in

Social Works and lowest ratings were in Civil Engineering and Bachelor in Secondary Education for CCSPC while that of USM, highest ratings were in Mechanical Engineering, BS in Electronics Communication and BS in Nutrition and Dietetics and the lowest was in BTE-elementary level. There is still a need to improve the performance of graduates in the licensure examinations.

## Challenges in Industry

The following are the challenges that need to be addressed.

- Mismatch in education sector outputs with manpower requirements of an agri-industrial economy due to the weak linkage between the industry sector, academe, and other stakeholders.
- Need for a strong collaboration among education sector agencies such as: DepEd, CHED, and TESDA in the implementation of the K-12 curricula.
- Inequitable distribution of slots for scholarship programs.
- Need for Training Centers for the out-of-school youth.
- Need for expanded training programs for women, persons with disabilities

- (PWDs) and senior Citizens.
- Need for Training for Entrepreneurship and Family Enterprises.
- Need for support funds for the provision of skills training programs for surfacing personalities involved in drugs and inmates and their families.
- Untapped skills of returning migrants due to lack of employment opportunities

- for them and inadequate reintegration program support.
- On Technical-Vocational and Higher Education:
  - Low performance in the licensure examinations across disciplines
  - Irrelevant courses not responsive to the needs of industries and manpower requirements of the region

## Priority Strategy

The priority strategies to address the challenges are the following:

- Conducting studies on matching education sector outputs with the manpower requirements of Region XII's agri-industrial economy.
- Reviewing and developing curricula that are more relevant and responsive to the manpower needs of industries in the region.
- Strengthening academe-industry linkages and collaboration
- Establishing stronger collaboration

- among education agencies.
- Establishing provincial training centers to cater to young boys and girls dropping out from school.
- Supporting Project Duterte and strengthen collaboration with NGAs concerned with drug dependents and inmates
- Expanding community-based training programs for women, PWDs, senior citizens and returning migrants.
- Integrating entrepreneurship training to institution-based, enterprise-based and community-based programs

## Targets

The targets shall support the foundation for inclusive growth, high-trust society and a globally competitive knowledge economy with the outcome on increased returns to human capital. The objectives

of the interventions would be to invest in human capital development and match skills and training to meet the demand of businesses and the private sector.

*Table 30 Number of Persons Assessed and Certified, Region XII, 2017-2022*

INDICATOR	BASE YEAR	ANNUAL PLAN TARGETS					
	2015	2017	2018	2019	2020	2021	2022
No. of persons assessed	44,040	44,040	46,242	48,554	50,981	53,531	56,207
No. of persons certified	39,223	37,434	39,445	41,457	43,468	45,479	49,502

Source of data: TESDA XII

# Human Development as an End to Itself

Basic education is the foundation of every school age child towards shaping his/her future as a productive citizen. Hence, schools must be made accessible even in far-flung areas. Considering the importance of instructional materials and learning resources in the learners' growth, the development of curriculum materials shall be pursued to be utilized in the next five years and beyond. The lack of classrooms and teachers which are vital in the learning process shall be addressed to ensure the quality education of the school children. To hone the skills and inclinations of the young, fund support shall be increased for schools implementing special curricular programs such as the special Education for the differently-abled and those in the secondary with special talents in the arts and sports, as well as, those who are inclined to pursue science, engineering, and mathematics.

To ensure that all school-age children are given equal opportunities to basic education, the alternative Learning System (ALS) shall be strengthened and other learning modes shall be delivered for the

marginalized learners in special situations. With the expansion of the Conditional Cash Transfer, poor students aged 18 and above and have completed Grade 10 will be assisted to proceed to Grades 11 and 12 or the senior high school. One strategy for increasing the survival and completion rates of school children is to ensure their physical and mental health and nutrition status. Healthy children can learn their lessons fast and participate well in school activities.

Health begins from conception and the nutritional status of pregnant mothers is equally important with both the physical and mental condition of the unborn child. Thus, the health sector aims to reduce the prevalence of malnutrition among children and lactating mothers and shall continue to implement programs that will reduce MMR and IMR. The sector shall also continue providing health services for the populace, particularly the disadvantaged sectors in the region and would endeavor to address the lack of health manpower and improvement/upgrading of hospitals and their facilities.

## Assessment

### Basic Education

In the elementary level, while participation rate was high, an erratic trend was noted from 2013-2014 and in 2015, PR increased by more than 5 percent. Completion rate from 2013-2015 showed an improvement and in 2015 a very significant increase of more than 20 percent from the previous year was recorded. Similarly, a significant increase was also noted in the survival rate of elementary pupils in 2015. School leaver rate remained high from 2011-2014 but in 2015, LR was only 1.4 percent.

While in 2011-2012, results in National Achievement Test (NAT) was low, the performance of elementary pupils exhibited an improvement with an initial gain of 5.06 percent.



**Table 31: Basic Education Accomplishments, Region XII, 2011-2015**

INDICATORS	ACCOMPLISHMENTS				
	2011	2012	2013	2014	2015
<b>Net Enrolment Rate</b>					
<b>Elementary</b>	84.13	85.83	83.99	83.01	88.12
<b>Secondary</b>	51.93	50.31	50.09	50.03	53.24
<b>Completion Rate</b>					
<b>Elementary</b>	63.33	65.85	66.00	73.53	93.23
<b>Secondary</b>	72.34	74.45	71.76	74.17	85.52
<b>Cohort Survival Rate</b>					
<b>Elementary</b>	65.03	63.36	67.44	74.91	93.91
<b>Secondary</b>	76.77	69.21	75.14	77.13	86.72
<b>School Leaver Rate</b>					
<b>Elementary</b>	8.90	8.59	7.94	5.82	1.40
<b>Secondary</b>	8.70	9.61	9.34	8.53	4.72
<b>NAT (Passing Rate)</b>					
<b>Elementary</b>	48.70	47.98	73.42	76.32	77.66
<b>Secondary</b>	72.60	71.51	50.56	54.02	54.41

Source of data: Sources of data: Updated RDP 2013-2016, RDRs (XII) 2011-2015

In the secondary level, an increase of 14.07 percent was noted in participation rate in 2011-2016. However, despite this increase, targets were not met and that more than 40 percent of school-age youth are not in the secondary schools. Completion and Cohort Survival Rates also failed to meet the targets showed an increase in 2015 but did not meet the targets from 2011-2013 and 2011-2014, respectively. In 2011, performance of the secondary in the NAT was high at more than 70 percent but from 2012-2015, results showed a decreasing trend to as low as 54 percent. Some prevailing reasons for the non-attainment of targets include: unaccounted enrolment in schools without permit to operate; learners who are working are constrained by time; accessibility of schools (distance from homes); early marriage; lack of interest, illness and disability; problems with school records and birth certificates.

## Health and Nutrition

During the period 2011-2016, incidence of maternal mortality rate (MMR) was highest at 87.88 percent in 2012 but recorded a decline of 72.43 percent in 2015. Infant mortality rate (IMR) was also high in 2012 at 8.41 percent but decreased to 6.63 percent in 2015. The MMR and IMR rates remain high because records show that only a little more than fifty percent of pregnant mothers make regular pre-and post-natal visits. Also, there was a low turn-out of the immunization rate of both children and mothers during the period. The ratio between hospital manpower to population posted a shortfall of physicians and nurses in the region. While there are hospitals located in some major areas, hospital beds are still inadequate and do not meet the needs of the population.

The health condition of the population is also determined by the nutrition status of every member of the family. Malnutrition rate among 0-71 months old pre-school

children based on OPT Plus decreased from 10.54 percent in 2010 to 6.6 percent in 2015. But in terms of magnitude, this condition is still alarming since there are those who are severely underweight and about 18 percent are overweight. The high MMR and IMR rates are attributed to inability of pregnant mothers to have regular pre-and post-natal

visits. Pregnant and lactating mothers who are nutritionally at risk have are vulnerable to pregnancy-related complications or at risk of delivering low birth weight infants. Also, there was a low turn-out of the immunization rate of both children and mothers during the period.

**Table 32: Health Accomplishments, Region XII, 2011-2016**

INDICATORS	TARGETS 2016	ACCOMPLISHMENTS				
		2011	2012	2013	2014	2015
<b>Maternal mortality ratio (per 100,000 live births)</b>	52.00	70.86	87.88	70.86	59.57	72.43
<b>Infant mortality rate (per 1,000 live births)</b>	17.00	4.57	8.41	4.57	6.71	6.63
<b>Under five mortality rate (per 1,000 live births)</b>	26.67	6.75	12.06	6.75	10.1	8.48
<b>Prevalence of underweight children 0-71 months old (%)</b>	10.5	9.31	8.29		7.78	6.6
<b>Contraceptive prevalence rate - all methods (%)</b>	80	52.44	49.89	57.16	61.84	68.47
<b>National Health Insurance Program Enrolment (NHTS-PR)</b>		1,221,485	1,244,522	2,678,445	8,986,825	9,876,641
<b>NHI Sponsored Beneficiaries</b>		4,436,305	4,918,251	2,749,666	6,416,305	5,505,830
<b>NHI Program Coverage Rate (%)</b>	100					
<b>Malaria morbidity</b>	0			No Data	2.66	3.72
<b>Malaria Mortality</b>	0	3.68	1.29	No Data	0	0.02
<b>Percent of fully immunized children (%)</b>	95	81.18	79.29	81.43	77.39	61.52
<b>Proportion of births attended by health professionals</b>		67.48	73.52	79.99	79.30	83.5
<b>Proportions of birth delivered in facility</b>		57.09	64.80	75.97	75.31	79.67
<b>Pre-natal services coverage</b>		45.06	46.61	60.77	62.29	58.09
<b>Post-natal services coverage</b>		59.40	63.64	No Data	60.24	61.25
<b>Fully Immunized Mother - TT2+ (%)</b>	80%	54.19	52.77	66.27	65.0	34.79
<b>Number of couples provided with information on responsible parenthood and Family Planning through RFPF classes</b>	38,409		38,391	32,616	24,769	20,043
<b>Hospital bed to population</b>	1:1000	1:1017	1: 972	No Data	No Data	No Data
<b>Hospital manpower to population ratio</b>						
Physician	1:20,000	1:61101	1:56068	No Data	No Data	No Data
Nurse		1:16495	1:11574	No Data	No Data	No Data
Midwife		1:4966	1:4698	No Data	No Data	No Data
Sanitary Inspector	1:20,000	1:51645	1:52015	No Data	No Data	No Data
Dentist	1:50,000	1:85063	1:86344	No Data	No Data	No Data
<b>Tb case detection - all forms (%)</b>	70.00	86.27	81.18	93	97	114
<b>TB cure rate increased (%)</b>	85.00	84.58	83.11	85%	90	91
<b>Household with sanitary toilets</b>		80.47	81.24	68.55	82	79.98
<b>Household with access to Safe water supply</b>		90.85	91.02	78.75	94.17	91.59

\*5% reduction every year from the baseline

\*ratio is for total hospital beds, not categorized by level, standard ratio is 1:1000

Sources of Data: Updated RDP 2013-2016; RDR XII 2011-2015

## Challenges

### Low access to basic education

- Low participation rate particularly in the secondary level
- Lack of classrooms, teachers, instructional/learning materials and other school facilities (library, canteen, laboratory, computer rooms and shop rooms - Tech-Voc schools, sanitary toilets, clinics)

### Inadequate medical facilities

- Lack of hospital beds, wheelchairs, ambulances, supply of medicines in health centers, barangay health stations
- Outdated medical instruments and dilapidated government hospital buildings and offices for various service units such as nurse stations, dietary section and CSRs
- Unsafe hospital waste Management and insufficient water testing facilities

### Lack of trained health and medical practitioners such as:

- Physicians, nurses, midwives, medical technologist, sanitary inspectors, and personnel for family planning
- Professionals for management of drug users/dependents, and psychosis patients

### Increasing and high incidence of the following:

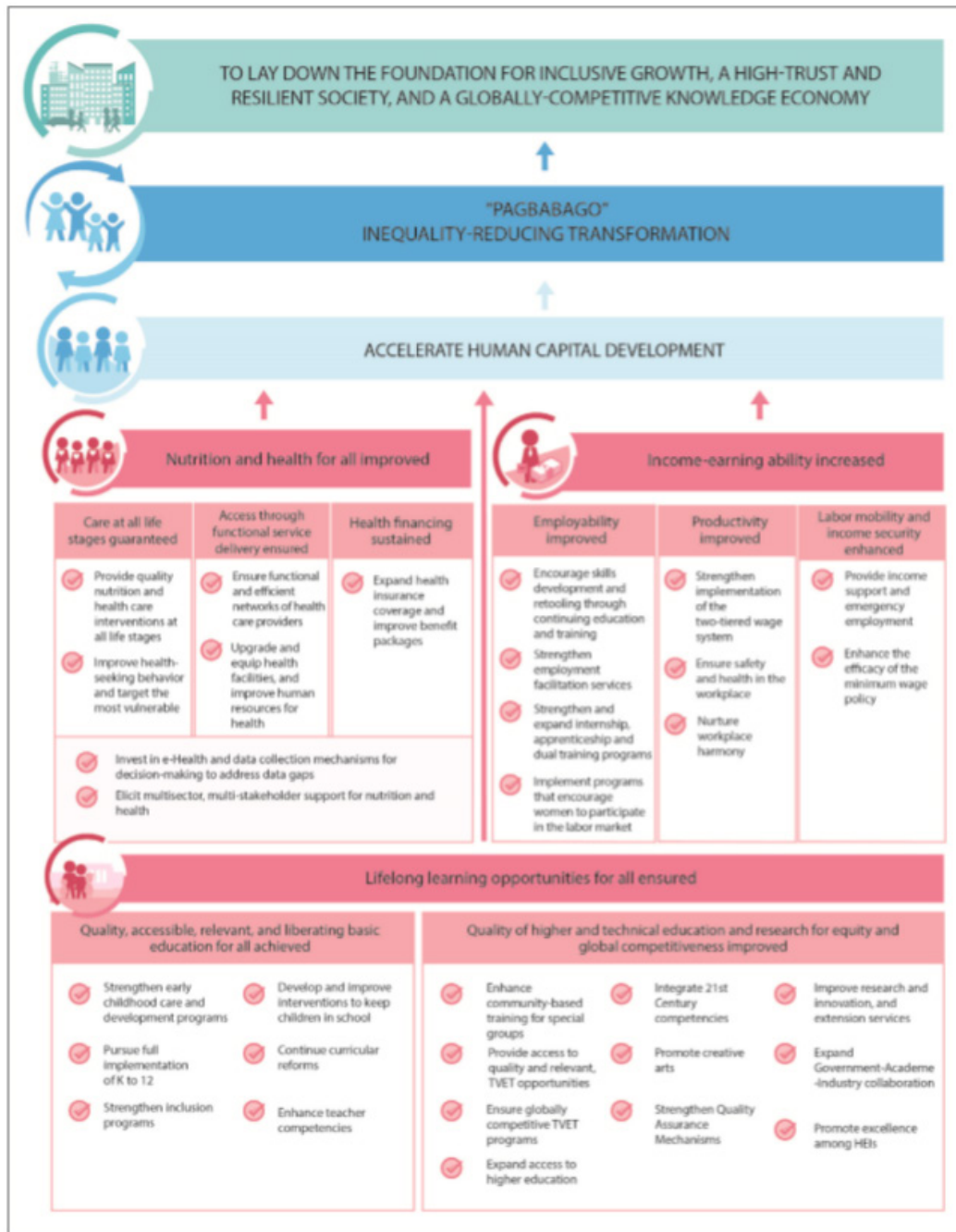
- Maternal mortality rate (MMR) and infant mortality rate (IMR)
- Malnutrition among 0-71 months old pre-school children based on OPT, pregnant and lactating mothers
- Chronic kidney diseases/lifestyle-related diseases, and animal bites

### Need for a strong collaboration among education sector agencies such as: DepEd, CHED, and TESDA in the implementation of the K-12 curricula.

## Priority Strategy

- Improving access to education through the construction/rehabilitation/ improvement of school buildings, classrooms and other facilities
- Expansion of the implementation of Alternate Delivery Modes in secondary schools
- Harmonization of list of CCT beneficiaries with RHUs and DSWD
- Intensifying advocacy through production of IEC materials for Responsible Parenthood and Family Planning (RFPF) program, population and development (PopDev) and adolescent health and development (AHD)
- Improvement of existing dilapidated hospital buildings and upgrading of facilities and equipment

Figure 15: Strategic Framework for Accelerating Human Capital Development, 2017 – 2022



## Legislative Agenda

1. Creation of new and special teacher items with Salary Grade 14 to be deployed in hard-to-reach and conflicted affected areas.
2. Upgrade to Standard Salary Grade 14 for Multigrade teachers.
3. Establishment of Secondary Schools for Sports and Schools of the Arts in every provincial/city schools divisions
4. Expanded Senior High School Voucher Program for Out-of-School Youth and A&E Passers
5. Family Planning Commodities

## Results Matrix

This sector aims to improve the potential of the region's human resource by reducing inequalities in access to proper nutrition and educational opportunities. An increase in productive citizens in the region through enhanced health care access and quality

technical education and skills development along with relevant courses in higher levels of education, would support the region's human resource competitiveness in both local and global settings.

*Table 33: Results Matrix for Improve Health and Nutrition, Region XII, 2017-2022*

INDICATORS	BASELINE		ANNUAL PLAN TARGETS					
	YEAR	VALUE	2017	2018	2019	2020	2021	2022
<b>Societal Goal: To lay down the foundation for inclusive growth, a high trust and resilient society, and a globally-competitive knowledge economy</b>								
<b>Intermediate Goal: Accelerate human capital development</b>								
<b>Sector or Chapter Outcome 1: Nutrition and health for all improved</b>								
Maternal Mortality Rate decreased	2015	71.19	70	65	60	55	50	45
Infant Mortality Rate decreased	2015	5.97	5	5	4	3	2	1
Contraceptive prevalence rate decreased (all methods)	2015	9.32	8	7	6	5	4	3
Prenatal coverage increased	2015	58.09	60	62	64	66	68	70
Post-natal coverage increased	2015	61.25	62	64	66	68	70	72
Proportion of births attended by skilled attendants increased	2015	83.3	85	87	89	90	92	95
Proportion of facility-based deliveries increased	2015	79.71	85	88	90	92	95	95
Households with sanitary toilets increased	2015	81.41	83	85	87	89	91	93
Households with access to safe water supply increased	2015	91.22	92	93	94	95	96	98
Number of couples provided with information on responsible parenthood and family planning increased	2015	20,043	38,409	38,409	38,409	38,409	38,409	38,409

Source of data: DOH-CHD XII/POPCOM XII/NNC XII

*Table 34: Results Matrix to Ensure Lifelong Learning Opportunities for All, Region XII, 2017-2022*

INDICATOR	BASELINE		ANNUAL PLAN TARGETS					
	YEAR	VALUE	2017	2018	2019	2020	2021	2022
<b>Societal Goal: To lay down the foundation for inclusive growth, a high trust and resilient society, and a globally-competitive knowledge economy</b>								
<b>Intermediate Goal: Accelerate human capital development</b>								
<b>Sector or Chapter Outcome 2: Lifelong learning opportunities for all ensured</b>								
<b>Increased Net Enrolment Rate in elementary</b>	2016	87.72	89.72	92.00	94.48	96.17	98.00	99.96
<b>Increased Completion Rate in Elementary</b>	2016	85.35	87.06	88.8	90.58	92.39	94.24	96.12
<b>Increased Cohort Survival Rate in Elementary</b>	2016	86.88	88.62	90.39	92.2	94.04	95.92	97.84
<b>Decreased School Leaver Rate in Elementary</b>	2016	2.15	1.15	0	0	0	0	0
<b>Improved achievement rate in elementary</b>	2016	87.72	89.72	92.0	94.48	96.17	98	99.96
<b>Increased Net enrolment rate in secondary</b>	2016	59.00	66.00	72.00	80.00	86.00	93.00	94.86
<b>Increased Completion Rate in Elementary</b>	2016	74.46	75.95	77.47	79.02	80.6	82.21	83.85
<b>Increased Cohort Survival Rate in Secondary</b>	2016	79.93	80.51	82.12	83.76	85.44	87.15	88.89
<b>Decreased School Leaver Rate in Secondary</b>	2016	5.2	2.2	0	0	0	0	0
<b>Improved achievement rate in Secondary</b>	2016	59.0	66.0	72.0	80.0	86.0	93.0	94.86

Source of data: DepEd XII