Appendix 8

Reports on Competitive Grant Projects (June 2017)

Bukig National Agricultural and Technical School (BNATS)

1. Summary of the Project

BNATS is located in the agricultural community of Aparri municipality in Cagayan province. The school has a total land area of 79.8 ha situated on rolling hills suitable for diversified farming. BNATS is also a TESDA-accredited training and assessment center for agriculture and home economics courses. For School Year (SY) 2016/2017, BNATS offered General Academic Strand (GAS) and TVL track for SHS. Enrollment is shown below.

Track	Strand/Specialization	No. of students for SY 2016/2017	
		Grade 11	Grade 12
Academic Track	General Academic Strand	18	-
TVL Track (Home Economics)	Cookery NC II Bread and Pastry Production NC II Food and Beverages Services NC II	42	-
TVL Track (Agri-Fishery Arts)	Pest Management NC II Organic Agriculture NC II	15	4
	Slaughtering Operations NC II Artificial Insemination (Ruminants) NC II	29	8
	Total	104	12

BNATS implemented the project "Agri-Production: A Developmental Project Enhancing Senior High School Program." The school established a production farm planted with cassava and other crops. Teachers utilized the production farm as instructional learning area, with SHS students obtaining sufficient hands-on experience through practicum and developing their competencies in Agricultural Crops Production. BNATS was benchmarked by other schools preparing for SHS full implementation, and continues to share its good practices with other SHS. The school also conducted skills training and assessment for tech-voc teachers from all over the Philippines, as part of the DepEd training program for teachers.

2. Rationale /background

BNATS previously had limited its instructional areas to agriculture courses. The school thus planned the establishment of a 20 ha cassava farm to provide instructional and practicum area for Crops Agriculture (CA) students. The anticipated higher enrollment after full implementation of SHS Program in SY 2016/2017 highlighted the need for additional resources to provide students with work immersion opportunities and to sustain the school practicum. For example, the school planned to use cassava as forage crops for animal production courses and as ingredients in food courses. BNATS proposed the acquisition of a farm tractor for clearing second-growth forests since tilling is not efficient using small farm implements. The school counterpart will provide labor costs and other input for establishing he farm within school premises.

3. Project input

BNATS received a 45 HP farm tractor, complete with trailing harrow and disc plow implements. Included in the tractor unit was a basic tool set containing a 10T hydraulic jack, washer, Allen wrench set, grease gun, pliers, screw drivers, open wrenches and spare parts like male coupler, oil filter, oils seals and O-rings. The supplier conducted a training at BNATS for proper use and maintenance of the tractor upon delivery, even though BNATS have 3 staff formally trained in operating farm tractors. The school was also provided copies of the parts catalogue and engine manual for operation and maintenance.

4. Summary of procurement process

Out of four companies invited to submit quotations, appropriate quotations were submitted by two companies which satisfied BNATS' farm tractor specifications. The company which quoted the lower price (PHP 1,000,000) was selected. The tractor was delivered to BNATS on 21 August 2015. A summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
1	Agriculture	7/10 (4)	7/30	8/21	8/24	8/24	8/24	1,000,000
							Total	1,000,000

5. Evaluation of achievement of Project Purpose and Output

The project purpose was achieved, with CA students in SY 2015/2016 developing their competencies in Agricultural Crops Production NC I and acquiring hands-on experience through practicum at the school's cassava farm. Except for one drop-out, all other students obtained passing grades for the subject.

For Output 1 "BNATS establishes and maintains a 20 ha cassava farm as the students' practicum field," BNATS established a 12 ha production farm planted with cassava, corn, rice, and other crops. The school plans to gradually expand the farm to the targeted 20 ha until SY 2018/2019, identifying a total budget of PHP 200,000.00 to fund the farm expansion. Apart from shouldering labor costs and other inputs for establishing the farm, BNATS also constructed a tractor garage using school funds and implemented a maintenance plan for the tractor.

Output 2, "CA teachers develop and implement session plan, which ensures enough of the practicum in the cassava field for the CA students," was accomplished. Agriculture teachers developed and implemented a session plan covering 310 hours of practicum for competencies in supporting horticultural crop work, nursery work, agronomic crop work and irrigation work for SY 2015/2016. BNATS upgraded its CA offerings in SY 2016/2017, offering Pest Management NC II in Grade 11 and Organic Agriculture NC II in Grade 12. Session plans with identified practicum hours were also developed for these courses. 80% of Pest Management students and

100% of Organic Agriculture students obtained passing grades for the course.

6. Results/Impact

CA students participated in farm activities during practicum, obtaining exposure in use of farm machinery and operating the tractor. By mechanizing previously grueling tasks like land preparation, teachers observed increased student interest in agriculture. BNATS also acquired a cassava granulator and a reaper using school funds to further mechanize its farm operations.

The school also widened its network of industry partners through the project. Hearing the school plan of tilling a 20ha cassava field, a technician from the agro-industrial firm San Miguel Foods, Inc. (SMFI) visited the school and provided technical advice in establishing the cassava farm. The school also partnered with Saranay Multi-Purpose Cooperative (MPC), a cassava assembler and partner of SMFI, in marketing their cassava products. The organization also donated cassava cuttings to the school.

From June 2015 to March 2017, the school was benchmarked for its good SHS practices by 353 schools, as well as by DepEd region/division offices and other organizations. BNATS also conducted several batches of skills training for tech-voc teachers, attended by 156 teacher trainees.

7. Issues and concerns

The first cassava harvest was in August 2016, with the school holding a Harvest Festival to cap the school's first harvest season for the newly established farm. The harvested volume was lower than expected due to losses sustained from extreme weather events like drought in 2015 and Typhoon Lawin in 2016. In its School Improvement Plan, BNATS identified funds for expansion of the production farm to 20 ha until end of SY 2018/2019. Apart from cassava, the school identified other projects like Napier grass production, organic farming, widening/gravelling of school-to-farm roads, and improvement of the school herbarium to further improve the school's agricultural facilities. Ensuring the school is able to operate a farm with modern facilities is important, as this helps raise additional resources needed for the SHS program. The school's second harvest season is scheduled for May 2017.

Bataan School of Fisheries (BSF)

1. Summary of the Project

BSF is located in a coastal area in the municipality of Orion in Bataan province. The school was established in 1965 and currently has a total land area of 14.8 ha, inclusive of 3 ha brackish water fishponds, a 2.8 ha mangrove forest, and a 6 ha fishing laboratory along Manila Bay. For SHS full implementation, BSF offers Science, Technology, Engineering and Mathematics (STEM) strand, General Academic strand, and Technical-Vocational Livelihood (TVL) strand.

In keeping with their vision to become a premier training facility for fishery technology and entrepreneurship, BSF has 3 specializations under the TVL strand related to fisheries:

Aquaculture, Fish Capture, and Food/Fish Processing, in addition to Garments Technology, Food Technology, and Computer Technology. BSF also offers a college consortium course in Bachelor of Science in Fisheries in partnership with Bataan Peninsula State University. The number of SHS students for SY 2016/2017 is shown below.

Track	Academic Strand / TVL Specialization	No. of students 2016/2017	
		Grade 11	Grade 12
Academic	General Academic Strand	58	-
	STEM Strand	36	-
TVL (Agri-Fishery Arts)	Fisheries Technology – Aquaculture	12	1
	Fisheries Technology – Fish Capture	12	1
	Fisheries Tech. –Food/Fish Processing	14	4
TVL (Home Economics)	Garments Technology	37	18
	Food Technology	26	8
TVL (ICT*)	Computer Technology	43	-
	Total	238	32

*Information & Communications Technology

BSF implemented two projects: (1) Food/Fish Processing and Packaging for Fisheries Technology-Food/Fish Processing (FFP) and (2) Bangus Grow-out and Tilapia Hatchery for Fisheries Technology-Aquaculture (FTA) . These were aimed at upgrading the facilities and equipment of the food processing laboratory and the aquaculture laboratory respectively, thereby improving the quality of education offered in fisheries technology courses. For the Food/Fish Processing and Packaging project, acquiring industry standard packaging equipment and additional kitchen equipment would enable FFP students to gain competencies in packaging processed fish by vacuum, ordinary poly packing, bottling and canning, as well as hands-on experience in using modern equipment and actual product marketing. For the aquaculture project Bangus Grow-out and Tilapia Hatchery, procuring additional facilities and equipment for the school hatchery and grow-out ponds will allow students to develop their competencies in preparing and maintaining aquaculture facilities, operating nursery, and performing fish grow-out operations. The hands-on activities will also provide experience in managing aquaculture projects.

2. Rationale /background

The school planned the food processing and aquaculture projects to improve facilities for fisheries offerings, enabling BSF to provide quality education to students. Through upgraded laboratory facilities and equipment for the school hatchery, fishponds, and food processing workshops, students will develop their competencies in aquaculture and food/fish processing and packaging. Other schools and organizations will also benchmark the SHS program of BSF and learn from the school's good practices.

3. Project input

Equipment procured for the food/fish processing project included vacuum sealer, shrink wrap

machine, can sealer, heat sealer, labeling machine, refrigerator, oven, pressure cooker, sausage stuffer, food processor, blender, digital weighing scale and brix refractometer. For aquaculture, the school nursery and grow-out ponds were upgraded with additional aquaculture equipment like paddle wheel aerators, regenerative blower, canister filter, pump, aquarium fish tanks, fry hatching barrels, marine engine, generator, and welding machine. Measuring instruments and other laboratory equipment like turbidity meter, dissolved oxygen meter, soil pH meter, salinity refractometer, pH meter and microscopes were also procured. As per contract requirement, suppliers conducted basic orientation to school staff on the proper use and maintenance of delivered equipment and provided the requisite product manuals for the school's reference. All the equipment/facilities were delivered and installed in the school laboratories.

4. Summary of procurement process

The equipment/facilities procured for the school were 28 items in five lots (17 items in three lots for Aquaculture such as hatchery tanks, paddle wheel aerator, microscope and pH meter, and 11 items in two lots for Food Processing such as can sealer, refrigerator, and oven). The summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
10	Aquaculture	7/16 (3)	8/3	9/3	9/3	9/11	9/14	287,882
11	Aquaculture	7/16(2), 8/10(1)	8/20	8/31	8/31	9/11	9/3	190,500
12	Food Processing	7/16(2)	8/3	8/27	8/27	9/11	8/28	99,464
13	Food Processing	7/16(4)	8/3	8/27	8/27	9/11	10/2	296,416
16	Aquaculture	7/16(2), 8/10(1), online (1)	8/20	8/27	8/27	9/11	8/28	98,900
							Total	973,162

5. Evaluation of achievement of Project Purpose and Output

(1) Food/Fish Processing and Packaging

FFP students for SY 2015/2016 and SY 2016/2017 developed their competencies in packaging processed fish and acquired hands-on experience in using modern packaging equipment. Students also developed entrepreneurship skills by selling their products. All FPP students had passing grades for both SY 2015/2016 and SY 2016/2017. It was confirmed that Output 1 "equipment in food laboratory is updated and maintained" was achieved. Output 2 "FFP teachers develop and implement session plans, which ensures enough time of the practicum by using the facilities in the food laboratory for the FFP students" was also achieved in school year 2015/2016. Starting school year 2016-2017, DepEd mandated the use of Curriculum Guides as primary material for instruction, and Daily Lesson Log (DLL) for instructional planning. Core

competencies in packaging processed fish are still included in the lessons, as well as entrepreneurial and marketing competencies. FFP students continue to use the food laboratory facilities for practicum, and still engage in marketing processed fish products. It was also confirmed that Output 3, "FFP students experience selling their products in the market", was achieved until September 2016, at which point Grade 12 students stopped marketing activities to prepare for and undergo work immersion.

(2) Bangus Grow-out and Tilapia Hatchery

FTA students for SY 2015/2016 and SY 2016/2017 developed competencies in preparing and maintaining aquaculture facilities, operating nursery, and performing fish grow-out operations through hands-on aquaculture projects in the school hatchery and grow-out ponds. Apart from bangus and tilapia culture, students also had hands-on training in culture of carp, catfish, oyster, ornamental fish, mangrove red snapper, and seabass. Except for 3 students who dropped-out of school in SY 2015/2016, and 2 other drop-out cases in SY 2016/2017, all other FTA students obtained passing grades in Aquaculture NC II during project implementation.

It was confirmed that Output 1 "the aquacultural laboratory in BSF is updated and ready to be used for the practicum, and maintained properly" was achieved. Output 2 "the FTA teachers develop and implement session plans, which ensures enough time for the practicum by using the aquacultural facilities for the FTA students" was achieved in SY 2015/2016. Core competencies in preparing and maintaining aquaculture facilities, operating nursery and performing fish grow-out operations are still included in the lessons for SY 2016/2017, even as the session plans previously used have now been replaced by DLLs for instructional planning.FTA students continue to use upgraded aquaculture facilities for hands-on activities in operating an aquaculture project. BSF also remains to be a TESDA-accredited training and assessment center for aquaculture.

6. Results/Impact

By improving the school's aquaculture and food processing facilities and equipment and allowing more hours for practicum in their instructional plans, BSF ensured students have quality and sufficient hands-on training needed for mastery of competencies in aquaculture and food processing. Students have a 100% passing rate their fisheries specialization subject and TESDA assessment.

The improved facilities and upgraded equipment has also allowed the school to operate additional fisheries projects with LGU partners and accept more opportunities for conducting training and assessment in fisheries courses. These activities have given BSF a wider platform to advocate fisheries as a viable career choice for SHS students. The school was benchmarked by 39 schools from June 2015 to March 2017, apart from conducting training sessions and assessments in different fisheries courses.

7. Issues and concerns

The percentage of Grade 11 students enrolling in fisheries from among the total student population is low at only 16%. BSF plans to intensify its advocacy of making fisheries a more attractive course by involving parents more in career guidance, recognizing the influence parents have on students' career choices. Given the full implementation of Grade 12 nationwide in SY 2017/2018, the school also foresees an additional degree of difficulty in finding work immersion venues as other schools will also be looking for suitable work immersion venues. BSF thus plans to continue aquaculture and fish/food processing projects within the school to provide additional Work Immersion venue for fisheries students.

Opol National Secondary Technical School (ONSTS)

1. Summary of the Project

ONSTS is located in the municipality of Opol in Misamis Oriental province. The school is located 10 km from the city of Cagayan de Oro, the regional center of Northern Mindanao. During SHS modeling and early implementation, the school offered courses in hotel and restaurant services and in electric power distribution line construction. The school also obtained membership in the Cagayan de Oro Hotel and Restaurant Association (COHARA) to facilitate the placement of their students for work immersion in member establishments. For SHS full implementation, ONSTS included course offerings in academic track, and additional TVL specializations in industrial arts and ICT. Enrolment in school in SY 2016/2017 is shown below.

Track	Academic Strand / TVL Specialization	No. of students SY 2016/2017	
		Grade 11	Grade 12
Academic	Humanities and Social Sciences Strand	45	-
	Accountancy, Business and Management Strand	31	-
TVL (ICT)	Technical Drafting NC II	24	-
TVL (Industrial Arts)	Shielded Metal Arc Welding NC II	54	-
	Electric Power Distribution Line Construction NC II	30	16
TVL (Home Economics)	Cookery NC II	93	24
	Food and Beverage Services (FBS) NC II	-	21
	Hairdressing NC II	33	-
	Total	310	61

ONSTS implemented two projects: (1) Additional Equipment for State of the Art (SOTA) building, and (2) Construction of Gas Tank House. These were aimed at upgrading the facilities and equipment of the cookery and FBS workshops of the SOTA building, thereby improving the quality of education offered for commercial cooking (CC) and FBS students. For the additional SOTA equipment project, upgrading the CC and FBS workshops to industry standards would improve instruction and enable students to obtain competencies in-demand in the industry. The project for Construction of Gas Tank House on the one hand, provides safety to teachers and SHS students who use the SOTA Building workshops.

2. Rational /background

Feedback from ONSTS industry partners maintain that SHS graduates in CC and FBS course will be more employable if they have a broader view of the work entailed in the hotel and

restaurant sector. SHS graduates who have competencies for preparing buffet and planning for catering for example, would have higher chances of getting employed compared to a worker who only knows how to prepare dishes. ONSTS proposed the upgrading of CC and FBS workshops with industry standard equipment to support enrichment of the Cookery NC II course with Commercial Cooking NC III competencies and to allow CC and FBS students more hands-on experience in using equipment usually used in the industry. The additional equipment will also address the issue of projected higher SHS enrollment in SY 2016/2017, as this ensures students have enough workshop equipment to allow for sufficient hands-on experience and practicum.

Safety is also a concern of the school, with the risky placement of gas tanks beside ovens and stoves within the workshops. ONSTS thus proposed the construction of a facility for housing gas tanks outside the workshop building to provide safety for teachers and students. This complies with safety standards and also discourages theft of gas tanks as these are housed in a secure facility.

3. Project input

ONSTS received kitchen equipment usually found in the industry including cooking equipment (ovens, cooktops, gas griddle, and gas fryer), stainless steel equipment (production tables, service trolleys and steel rack) and kitchen appliances (mixer, meat grinder, stuffer, sealer, hot bain marie, grillers, pressure cooker, juicer, blender, rice cooker, oven toaster, heat gun, band sealer, and food warmer). Air conditioning units, dining sets and cabinets were also procured for the workshops. The suppliers provided manuals for equipment, and ensured proper installation of all delivered equipment in the workshops. Construction materials for the gas tank house were also procured and delivered to the school as scheduled.

4. Summary of procurement process

The equipment procured for the school were 51 items in six lots (19 items in one lot for construction of gas tank house such as angle bar and screw, and 32 items in five lots for cookery and FBS course such as cabinet, refrigerator, juicer, blender, and griller). The summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
2	Construction	7/16(3)	8/3	8/10	8/10	8/26	8/26	16,520
4	Cookery / FBS	7/16(3)	8/3	8/26	8/26	8/26	9/2	74,000
5	Cookery / FBS	7/16(3)	8/3	8/26	8/26	8/26	8/26	232,900
6	Cookery / FBS	7/16(5)	8/5	8/25	8/25	8/26	8/26	207,335
14	Cookery	7/16(5)	8/14	8/26	8/26	8/26	8/28	307,355
15	Cookery	7/16(5)	8/3	8/18	9/2	9/2	9/3	198,100

	Total	1,036,210

Construction of the gas tank house was completed in September 2015, with the cost of labor shouldered by donations from parents and teachers. Ancillary fixtures like safety valves, pipes and fittings were also installed to connect the facility to the workshops and the cooking equipment within. The facility is protected and locked against tampering and damage.

5. Evaluation of achievement of Project Purpose and Output

For the project "Additional Equipment for the State-of-the-Art (SOTA) Building," the project purpose was attained with the upgraded SOTA equipment enabling ONSTS to offer additional Commercial Cooking NC III competencies to students. CC and FBS students were also able to experience sufficient hands-on experience using equipment commonly found in the industry and developed their competencies through practicum. All students passed their Cookery NC II and FBS NC II subjects for SY 2015/2016 and SY 2016/2017 and obtained adequate knowledge and skills for their specialization. It was confirmed that both Output 1 "the equipment is properly installed and maintained", and Output 2 "the session plan is prepared for each competency" were achieved.

For Construction of Gas Tank House, it was confirmed that both Output 1 "the gas tank house is constructed" and Output 2 "the gas tank house is maintained properly" were achieved. ONSTS ensured safety of the teachers and SHS students who study in the SOTA building.

6. Results/Impact

The sufficiently equipped workshops for both CC and FBS allowed students to have more practicum, as less time is spent waiting for their turn to use equipment. One student commented that "I have confidence to go to work immersion, as I had much time for practicum." The equipment procured for the workshops are also to be found in the industry, which gave students a better idea of what to expect in the workplace. One student who had work immersion at a hotel in Cagayan de Oro commented there was only one piece of equipment he was not familiar with upon being assigned in the hotel kitchen. Because of additional competencies in commercial cooking, the student was also allowed to immerse in other kitchen operations similar to the responsibilities of a chef. The student was highly evaluated during work immersion and received a job offer after SHS graduation. For SY 2015/2016, ONSTS graduates had a 51% employment rate.

According to one teacher in cookery course, teachers are also motivated by the additional equipment, as they are able to upgrade their skills to include higher level competencies in commercial cooking. From June 2015 to March 2017, the school has accepted benchmarking from 58 schools (the number of the industries/organization which benchmarked the school is not reported).

7. Issues and concerns

Having obtained the required facilities and with the recent accreditation of one teaching staff for commercial cooking, ONSTS continues its pursuit of accreditation from TESDA as an assessment center for Commercial Cooking NC III. For its course offerings, ONSTS will continue to offer an enriched Cookery NC II course with the additional competencies of Commercial Cooking NC III in Grade 11 and Grade 12. ONSTS will focus on improving school facilities and properly maintaining equipment, while also upgrading the qualification levels of teacher-trainers. This will entail additional costs, some of which may be sourced through partnerships with industry sector and LGU.

The school is also concerned by the increasing number of enrollees. Bigger class sizes in the future will constrain existing facilities and affect the quality of instruction if additional facilities are not provided. The full implementation of Grade 12 will also increase the demand for work immersion venues and industries may not be able to absorb all students for immersion in the industry.

Iligan City National School of Fisheries (ICNSF)

1. Summary of the Project

ICNSF is located in Iligan City, Lanao del Norte province. Among other DepEd schools in the city, ICNSF pioneered registration to TESDA for its fisheries program. The school is an accredited assessment center for Aquaculture NC II, as well as Electrical Installation and Maintenance (EIM) NC II, Food Processing NC II, Bread and Pastry Production NC II and Cookery NC II. Originally conceived as a fisheries school, ICNSF diversified its offerings to include “allied” courses in industrial arts and home economics, gaining a good reputation as a tech-voc school and TESDA training and assessment center. The school has 10 teachers who are qualified TESDA assessors.

Several workshops and facilities have been constructed for the school’s tech-voc offerings – including 3 ha of fishponds for fish grow out operations in aquaculture, and a hatchery laboratory measuring 8 m x 8 m. The sprawling school grounds are not fully secured with proper enclosures however, with reported cases of fish stock theft in the past. This, in addition to high cost of feeds and other input in hatchery operations, led ICNSF to allow private individuals to use the small school hatchery such that aquaculture students could have a facility to use for instruction. The hatchery is small however, and conditions are cramped within the limited space when students conduct practicum. Aquaculture students are deployed to private companies and the Bureau of Fisheries and Aquatic Resources (BFAR) to improve students’ competencies and as part of their industry immersion. Since there are limited industrial facilities in the aquaculture sector located within Iligan City, the cost of attending industry immersion and additional training can be prohibitive for some students.

For SHS full implementation in SY 2016/2017, ICNSF decided to offer academic track in

addition to its TVL courses in industrial arts, home economics and agri-fishery arts. The number of students is shown in the table below.

Track	Academic Strand / TVL Specialization	No. of students SY 2016/17	
		Grade 11	Grade 12
Academic	General Academic Strand	15	-
TVL (Agri-fishery Arts)	Aquaculture NC II	10	-
TVL (Industrial Arts)	Shielded Metal Arc Welding NC II	66	5
	Electrical Installation and Maintenance NC II	9	4
TVL (Home Economics)	Cookery NC II Bread and Pastry Production NC II Food and Beverages Services NC II	64	4
	Total	164	13

ICNSF implemented the project "Multi-Species Hatchery" for Aquaculture (AQ) students. Through the construction of a well-designed hatchery facility complete with required aquaculture equipment, the project is meant to equip AQ students with practical skills and knowledge in operating aquaculture systems, especially in hatchery operations. Students are able to master competencies needed in operating aquaculture systems by allowing more hours of practicum and exposure in aquaculture operations.

2. Rationale /background

The school planned the construction of a hatchery laboratory to improve the quality of student practicum in aquaculture. During SHS modeling, ICNSF partnered with BFAR and other private companies to ensure students have sufficient practicum, as the school lacked appropriate facilities. These partners are far from the school however, and there are few industrial facilities related to aquaculture near the school. Students thus incur additional costs attending additional training and immersion outside the school. The new hatchery facility ensures AQ students have sufficient hands-on activities and are able to hone their skills within the school.

Hatchery operations are also more efficient when good hatchery design is coupled with procurement of required aquaculture equipment. With a higher fingerling survival rate, ICNSF hopes for better returns for the school. Funds generated from sales of fingerlings will be used for continued operation of the hatchery by ICSNF, and defray costs of student work immersion.

3. Project input

ICNSF received a fully equipped hatchery facility constructed within the school premises. The hatchery has 5 brood stock tanks measuring 5 m x 1.5 m each, 2 hatchery tanks measuring 10 m x 3 m each, a store room, and a motor house. The hatchery has gravel pathways and is enclosed with a sturdy perimeter fence using steel pipes, interlink wire and barbed wire to discourage theft. The hatchery was also installed with a pressure tank set, an electric motor pump, a submersible pump with air blower, and a generator set. A laptop computer and a projector were also procured, to facilitate instruction. The building plans and equipment manuals were turned over to the school by the contractor and suppliers, for proper maintenance and operation of the facility.

4. Summary of procurement process

The project had a 'construction' component to be contracted through bidding process. In addition, procurement of equipment for the school includes six items in two lots, including a laptop computer, projector, pressure tank, electronic motor pump, submersible pump and generator set. The summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
3	ICT	7/16(3)	8/3	8/27	8/26	8/27	8/27	45,985.00*
18	Aquaculture	2/1 (5)	2/13	2/19	2/19	2/19	2/19	71,955.00
—	Construction	Bidding	(See below)					909,469.82
**The total amount of Lot 3 is PHP 137,955, which includes equipment for RAHS.*							Total	1,027,409.82

The process of the hatchery laboratory construction was conducted compliant to DepEd's bidding procedures, thus ICNSF followed government procurement policies in bidding out the construction component of the project. From July 2015 to September 2015, the school Bids and Awards Committee (BAC) and a Technical Working Group composed of teachers and school officials finalized the bid documents for the hatchery construction in preparation for posting the invitation to bid on the Philippine Government Electronic Procurement System (PhilGEPS) website. This includes the detailed plan of construction, budget and payment conditions.

The invitation to bid was issued by ICNSF in September 2015, making available to all interested companies relevant information about the project and inviting companies to submit their bids. One company purchased the bidding documents. On the scheduled opening of bids however, no bids were submitted. The BAC declared a failure of bidding due to non-appearance of bidders. According to one contractor who did not participate in the bidding, the 'Approved Budget for the Contract' (ABC) was deemed below a profitable line. After the failure of the first bidding, the JPT had a discussion with the school and agreed not to change the ABC. A change in design was made by ICNSF, from reinforced concrete pathways to gravel pathways, to reduce the project cost. The BAC and the TWG revised the hatchery design and the bidding documents for the second round of bidding, and on October 2015, ICNSF posted the invitation to bid on PhilGEPS. Three companies purchased the bidding documents for the second round of bidding, with two bids submitted to the BAC before the bid submission deadline. In November 2015, ICNSF conducted the following activities accordingly; opening of bids (Nov. 6th), evaluation and qualification (Nov. 9th), contract awarding (Nov. 18th), and pre-implementation meeting (Nov. 19th).

The winning bidder began construction activities in November 23rd, 2015 and submitted a project completion report to ICNSF on January 18th, 2016. Subsequently, the principal and AQ teachers conducted three rounds of inspections to ensure the contractor complied with

conditions specified in the contract and before payment could be processed by the JPT. Final inspection was done on February 23rd, 2016 - and on February 24th, construction was completed and ICNSF issued a certificate of completion to the contractor.

5. Evaluation of achievement of Project Purpose and Output

Output 1, "the aquacultural facilities are established and ready to be used for the practicum" and Output 2, "the AQ teachers develop and implement session plans, which ensures enough time of practicum of koi and tilapia hatchery operation for the students" were accomplished. During the second semester of SY 2016/17, AQ students used the ICNSF hatchery for practicum, with the AQ teacher utilizing instructional plans with identified ample hours for practicum. Grade 11 AQ students undertook hands-on activities in the ICNSF hatchery, wherein students prepared and maintained the facilities, stocked koi and tilapia in the fish nursery, performed feeding, monitored water quality and fish health, and harvested koi and tilapia fingerlings with proper post-harvest handling. Proceeds ensure continued hatchery operations and proper maintenance of the facilities. AQ students were equipped with practical skills and knowledge in operating aquaculture systems, especially for hatchery operation, with 100% passing obtaining passing grades for the subject.

6. Results/Impact

Apart from tilapia and koi, several ornamental fishes including gold fish, guppy, and molly have been stocked in the hatchery laboratory. Social media is used for marketing and students have experienced selling fingerlings to customers. ICNSF students continue operating the hatchery even during summer break to obtain more experience with actual hatchery operations, as well as to address the local demand for fingerlings. The school is able to sustain continued and efficient hatchery operations, and even able to improve the facilities by installing net roofing for the entire hatchery. The nets minimize exposure of fish stock to direct sunlight and keeps predators like birds out of the facility. The school also continues to invest in teachers' training to strengthen the fisheries program. In January 2017, 3 teachers attended skills enhancement training for aquaculture conducted by the BFAR.

Since the project started in June 2015, the school has accepted benchmarking from 5 schools, including a fisheries school. The school's head teacher for technical vocational department was also appointed as one of the trainers for the DepED Regional Mass Training of Teachers for SHS in May 2016. During the training, ICNSF shared with 505 SHS teachers of TVL subjects from 364 secondary schools in the Northern Mindanao region the school's good practices for SHS modeling and early implementation, with emphasis on improving fisheries program offering and ancillary TVL courses.

7. Issues and concerns

In SY 2014/2015, ICNSF students obtained mean percentage scores below the national average in all 5 subject areas of the National Achievement Test (NAT), with the lowest scores in Science,

Math and English. The school has prioritized these two concerns in the School Improvement Plan, identifying teachers' limited contact time with students and quality of instruction as the factors. ICNSF also cited students' lack of basic skills which should have been mastered in elementary level as another key factor to address, as students are promoted to high school without having the required skills like reading comprehension and numeracy.

ICNSF is also challenged with incidences of student drop-outs. In SY 2014/2015, there were 78 students who dropped out before the school year ended, with 21.7% being SHS students. Of the total, 48.7% cited financial difficulties as the reason for dropping out. The school constantly looks for partners who can provide "scholarships" to students, such as the LGU. The financial assistance helps dissuade students from dropping out.

Rogongon Agricultural High School (RAHS)

1. Summary of the Project

RAHS is located in the Indigenous Peoples (IP) community of Barangay Rogongon, Iligan City in Lanao del Norte province, within the mountainous ancestral domain of the Bayug Higaonon ethno-linguistic group. The school is situated 33 km from the city urban areas, with few opportunities for local employment. Land resources are abundant however, as the Bayug Higaonon ancestral domain covers 31,000 ha of land. RAHS consequently focused their SHS course offerings on agriculture specializations supporting agro-forestry. This was to showcase agriculture as a viable career and a good livelihood source, in a community which did not view agriculture as a worthy career. Most of the SHS enrollees during modeling and early implementation are adult community members who wanted to obtain competencies in agriculture through attending SHS, and who were enjoined to cultivate their own demonstration farm (at least 1 ha) outside the school. The students planted their own farms to short-term crops, medium-term crops and progressing to permanent long-term crops. In such a way, the school focuses on 'practicum' rather than lectures. These activities are supervised by teachers and allow students to have more hands-on activities for mastering their competencies in agriculture, as well as demonstrate how agroforestry can provide a sustainable livelihood.

In 2013, SHS students and local farmers organized themselves into a duly registered community association, the "SHS Farmers and Entrepreneurs Association." During SHS modeling and early implementation, RAHS and the association partnered with government agencies like DOLE, DENR, DA, FIDA, DTI, TESDA, and Iligan City LGU, as well as private companies like Nestle, to strengthen the school's SHS program. RAHS opted to offer Agricultural Crops Production NC III beginning SY 2015/16 as the course offers competencies which are in line with the agro-forestry focus of the school. The number of SHS students for SY 2016/17 is shown below.

Track	Strand / Specialization	No. of students 2016/2017	
		Grade 11	Grade 12
Technical Vocational Livelihood	Agricultural Crops Production NC III	14	4
	Total	14	4

RAHS implemented the project "Agri-Production: A Developmental Project enhancing Senior High School Program" with the aim of equipping SHS students with competencies to enable establishment of their own sustainable farms using agro-forestry methods.

2. Rationale /background

The school designed their CGP to upgrade tools and equipment in the agriculture workshops as needed for offering Agricultural Crop Production NC III (ACP). With the procurement of proper tools and equipment, students are able to develop their agriculture competencies more. SHS students will also no longer have to borrow equipment from the RAHS junior high school students. Basic tools and equipment suitable for local use were thus requested, and these were not necessarily high-technology. ACP students will also utilize the procured tools and equipment for establishing their demonstration farms.

3. Project input

The project procured equipment for ACP student's practicum and farm activities as per specifications made by ACP teachers, as well as laptops and projectors for instruction. These tools and equipment include hand tractors with implements, brush cutters, knapsack and power sprayers, wheel barrows, and step ladders. Measuring equipment like weighing scales, long tapes, and soil testers, and personal protective equipment like rubber boots, gloves, goggles, and rain coats were also procured. Additional sets of hand tools were also purchased, which included horticultural implements for cutting (pruning shears, bolos, pruning saws) and digging (post hole diggers, shovels, hand trowels, pick mattocks).

4. Summary of procurement process

The equipment procured for the school were 34 items in four lots, composed of agricultural tools and implements for practicum, personal protective equipment, and 2 laptop computers and projectors for instruction. The summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
3	ICT	7/16（3）	8/3	8/27	8/26*2	8/27	8/27	91,970 *1
7	Agriculture	7/16（3）	8/5	8/27	8/26*2	8/27	9/2	503,798
8	Agriculture	7/16（4）	8/5	8/27	8/27	8/27	9/2	227,750
9	Agriculture	7/16（2）, 7/27（1）	8/10	11/20	11/20	10/16*3	11/29	48,788
							Total	872,306

*1: The total amount of Lot 3 is PHP 137,955, which includes equipment for ICNSF.
*2: Inspection at the store before delivering.
*3: Delivery takes a long time as the supplier is located in Manila. JPT conducted inspection at the Project Office before supplier delivered to the school.

The supplier conducted training for teachers on proper use and basic maintenance of mechanized equipment before delivery to the school. Demonstration was also done upon delivery of the equipment to RAHS. The tools and equipment are currently housed in a secure equipment room in the recently constructed SHS building funded by DepEd. A maintenance plan is implemented by ACP teachers and students to ensure proper maintenance of the tools and equipment, and this is updated every school year.

5. Evaluation of achievement of Project Purpose and Output

It was confirmed that both Output 1 "agricultural equipment is installed and maintained properly" and Output 2 "the ACP teachers make lesson log weekly which includes enough time of practicum for the students" were achieved. Apart from those who dropped out, all ACP students in SY 2015/16 and SY 2016/17 obtained passing grades for their subject specialization. ACP students were equipped with competencies to establish model farms of sustainable farming by using agroforestry method in their respective demonstration farms outside the school.

6. Results/Impact

The traditional farming practices of the IP community rely on manual labor and hand tools for cultivating the land. The hand tractors and other mechanized equipment used by ACP students for practicum activities in their demonstration farms raised community members' interest in the ACP course offered by RAHS. The well maintained ACP project also encouraged additional funding from government agencies like DENR and DA for implementation of different projects supporting the SHS program of the school.

After attending training in Japan, the school principal encouraged ACP students to undertake their own Project Study. In December 2015, a falcata nursery was thus established by SHS students outside the school, with supervision of ACP teachers. Being the only nursery serving the area without having to travel to the city center, the nursery was visited by other farmers and earned additional income for the students through sales of falcata seedlings. Other farmers in the community who helped in establishing the nursery were paid in kind (falcata seedlings) so they can also begin their own agroforestry farms. With help from other agencies and organizations, an abaca nursery was also established, and an abaca processing facility constructed for the community. The ACP students are now offering their services to entrepreneurs who need assistance in setting up their own agroforestry farms. The school also started offering Horticulture NC II through Community Based Training (CBT) in June 2016. The 28 CBT trainees are community members who are not attending formal education, are not enrolled in the SHS program, and are interested in obtaining skills for establishing their own agro-forestry farms. SHS students assist agriculture teachers during CBT sessions, sharing their knowledge

and advocating agroforestry as a good source of income.

From June 2015 to March 2016, the school has accepted benchmarking from 2 schools and 8 industries/organizations. Additionally, the school head was designated as a resource person for a series of regional and national DepEd trainings for SHS principals and TVL specialization teachers in 2015 and 2016, in which good practices learned from SHS modeling and early implementation were shared.

7. Issues and concerns

The low enrolment in SHS has prompted the school to conduct more advocacy activities for convincing students to proceed to Grade 11 and complete their high school education. In addition, there is a high incidence of dropping out, both in JHS and SHS. Of the 10 students who enrolled in Grade 11 for SY 2015/16, only four enrolled and completed Grade 12 in SY 2016/17. In the school Improvement Plan, the school has provided Very High Priority to improving basic literacy skills and numeracy level, and improving nutritional status, as these are key issues that affect performance of students in school as well as decision to drop out and discontinue studies.

Tagum National Trade School (TNTS)

1. Summary of the Project

TNTS is the only public technical vocational school in Tagum City, located in the Davao del Norte province of Davao region. The school provides secondary education as 'Tagum National Trade School' public high school from 7:00 AM to 4:00 PM during school days, as well as post-secondary education as 'Tagum City Trade School' from 4:00 PM to 9:00 PM. TNTS is an accredited assessment center for Automotive Servicing NC II and gets an estimated annual income of PHP 600,000 - 700,000 from conducting training and assessments.

During modeling and early implementation of SHS, some students conducted work immersion 55 km away in Davao City as only a few partner companies can absorb SHS trainees within Tagum City. In the case of Automotive Servicing NC II students, the school also had to pay partner institutions for student practicum on certain core competencies because the school lacked industry standard equipment. Enrolment for SHS in SY 2016/2017 is shown below.

Track	Strand / Specialization	No. of students 2016/2017	
		Grade 11	Grade 12
TVL (Industrial Arts)	Automotive Servicing NC II	225	10
	Electronics Products Assembly Servicing NC II	37	4
	Electrical Installation and Maintenance NC II	64	-
	Domestic Refrigeration and Air Conditioning NC II	28	-
TVL (Agri-Fishery Arts)	Food Processing NC II	15	11
TVL (ICT)	Technical Drafting NC II Animation NC II	55	1
	Computer Systems Servicing NC II	146	-

	Computer Programming NC III (Java & Oracle)	42	-
TVL (Home Economics)	Cookery NC II Food and Beverage Services NC II Housekeeping NC II	155	-
	Dressmaking NC II Tailoring NC II	14	-
	Total	781	26

TNTS implemented the project "Curriculum Innovation on Automotive Servicing NC II" which aimed to improve the automotive laboratory. The project entailed setting-up a facility that simulates the working environment in a commercial auto-shop, complete with industry standard equipment. Teachers of Automotive Technology (AT) then drafted and implemented a Session Plan which ensures students have enough practicum for diagnosing and repairing vehicles. By using the facility for practicum, AT students develop their core competencies in Automotive Servicing NC II specialization, and acquire hands-on experience in operating an automotive shop. By design, the project provides free automotive service to the community.

2. Rationale /background

TNTS proposed the CGP to address the school's lack of specialized equipment in the automotive workshop. With the increasing electronic innovations introduced in modern vehicles, specialized equipment like computerized alignment systems and diagnostic scanners are a necessity in automotive shops. TNTS is unable to procure such equipment due to resource constraints, affecting students' mastery of competencies. Through acquisition of specialized equipment, teachers can provide quality instruction of the required competencies of Automotive Services NC II. Upgrading the automotive workshop to approximate conditions at commercial automotive shops also enables students to offer automotive services to the community, ensuring enough hours of practicum and allowing for a "work immersion" venue as needed. With the projected increase of SHS students requiring immersion in SY 2017/2018, the school's automotive service facility could also cater to the needs of other SHS offering automotive courses.

3. Project input

The project procured a four-post vehicle lift, a computerized wheel aligner, a wheel balancer, and a diagnostic scanner for the school. TNTS constructed a special automotive facility where the equipment was installed, and also acquired an air compressor to power shop tools and equipment.

4. Summary of procurement process

Four items were procured for the school in one lot, which includes a vehicle lift, wheel aligner, diagnostic scanner, and wheel balancer. The winning supplier conducted training to TNTS teachers and students for proper use and maintenance of the specialized equipment. Technical assistance was also provided by the supplier in ensuring proper installation of the vehicle lift. A summary of the procurement is shown below.

Lot	Specialization	Request for Quotation (Number of companies)	Purchase Order	Delivery	Inspection by		Payment	Amount (PHP)
					School	JPT		
17	Automotive	8/28(5)	9/24	10/9	10/9	10/9	10/9	750,000
							Total	750,000

After delivery of the equipment, TNTS expanded the existing automotive laboratory where the equipment will be installed and housed. The supplier collaborated with TNTS to ensure the workshop has the required ceiling height and flooring thickness for proper installation of the vehicle lift. The facility was completed on 25 February 2016, and the school held a turnover ceremony the next day attended by stakeholders such as TESDA, Tagum City local government, and industry partners. The school then procured an air compressor to power shop tools and equipment, and this was delivered in September 2016. TNTS held a launching ceremony for the upgraded workshop, also named as Free Automotive Services of TNTS (F.A.S.T.), on 14 September 2016. The activity was attended by LGU, other government agencies, industry representatives, and Parents Teachers Association. The FAST facility started accepting customers in September 2016.

5. Evaluation of achievement of Project Purpose and Output

The AT students developed their core competencies for Automotive Servicing NC II and acquired hands-on experience in operating an automotive shop. For SY 2016/2017, the FAST facility operated by AT students and teachers provided diagnosis and repair services and routine maintenance of TNTS staff vehicles and walk-in customers. The school developed 5-grade customer feedback forms, which were returned by customers with “satisfactory” ratings or better. Except for AT students who dropped out of SHS in SY 2016/2017, all AT students in Grade 11 and Grade 12 obtaining passing grades for the specialization.

Output 1 “automotive service laboratory in TNTS is improved and maintained properly” was achieved. TNTS drafted a maintenance plan and implemented a maintenance schedule which ensured the FAST facility was properly maintained. An annual maintenance budget of PHP 10,000 was also approved by the school for the FAST facility which ensured proper maintenance of specialized equipment. Output 2 “AT teachers develop and implement session plan, which ensures enough time of practicum of diagnosing and repairing vehicle for the AT students” and Output 3 “AT students provides free automotive service to the community as practicum” were also achieved in SY 2016/2017.

6. Results/Impact

Teachers have noticed students to be more engaged when given sufficient practicum operating equipment usually found in commercial automotive servicing shops. For SY 2016/2017, Grade 11Automotive Servicing NC II students have a 91% passing rate. Additionally, the school does

not have to pay PHP350 fee per student for students' use of automotive equipment in commercial shops. Operating the automotive shop within the school also ensures a ready work immersion venue for Grade 12 students in SY 2017/2018. The upgraded service facility also gives SHS students a platform for displaying their skills, which helps TNTS in obtaining more partners for training and possible employment of SHS graduates.

TNTS continues to be a model for other SHS offering technical vocational track. From June 2015 to March 2017, 112 DepEd schools and 10 private schools benchmarked TNTS for good practices in SHS implementation. Participants were school heads, teachers and DepEd officials from all over Mindanao.

7. Issues and concerns

TNTS acknowledged the need to hire full-time personnel to manage the automotive facility and now it is in the recruitment process. Even as teachers and students work together for diagnostic and repair works, permanent staff need to be around when customers come in for consultation. Vehicle repair turnaround time also needs to be improved if the school wants to retain customers and attract new ones.

Date of Progress Report: 31-Mar-17

Project Name: Agri-Production: A Developmental Project enhancing Senior High School Program in BNATS
School: Bukig National Agricultural and Technical School (BNATS)
Overall goal: BNATS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.
Project Purpose: The CA students develop their competencies of Agricultural Crops Production NC I (*1) and acquire hands-on experience in agriculture.
Target: SHS students taking specialization of Crops (Agriculture) (CA)

Output	Activity	Person in Charge	Schedule	2015 07	08	09	10	11	12	2016 01	02	03	04	05	06	07	08	09	10	11	12	2017 01	02	03	Achievement	Next step to be taken
1. BNATS establishes and maintains a 20 ha cassava farm as the students' practicum field.	1-1. BNATS procures a 4-wheel drive tractor with support of JICA-team.	Principal / JICA-team	Plan																						A 4WD farm tractor (45 HP) was delivered to BNATS by Ford Tractor Philippines Inc.	-
			Actual																							
	1-2. The tractor supplier/manufacturer conducts training to the teachers on proper usage of the tractor.	Supplier of the tractor/ Principal	Plan																						Ford Tractor Philippines Inc. conducted training for teachers on proper use and basic maintenance of tractor.	-
			Actual																							
	1-3. The BNATS teachers conduct initial tilling by the 95 HP tractor (rented from a company).	Principal, Teachers,	Plan																						BNATS hired a 95 HP farm tractor for initial tilling of 2 ha cleared portion of cassava farm.	-
			Actual																							
	1-4. The BNATS teachers conduct second tilling by the procured tractor (45 HP).	Teachers	Plan																						Land preparation was completed and initial 2 ha is ready for planting cassava.	-
			Actual																							
	1-5. Maintenance plan for the tractor is made by the teachers.	Principal, Teachers,	Plan																						Maintenance plan for the school tractor was finalized.	-
			Actual																							
	1-6. BNATS establishes a tractor garage near the field.	Teachers	Plan																						Tractor garage was constructed using school MOOE.	-
			Actual																							
2. The CA teachers develop and implement Session Plan, which ensures enough time of the practicum in the cassava field for the CA students.	2-1. Principal and the CA teachers discuss on the curriculum of Agricultural Crops Production to find out the contents which should be taught by practicum.	Principal Teachers	Plan																						Principal and CA teachers discussed competencies of Agricultural Crops Production needing practicum.	-
			Actual																							
	2-2. The CA teachers develop Session Plan of each core competency of Agricultural Crops Production NC I based on the discussion in Activity 2-1.	Teachers	Plan																						In SY 2015/16, Session Plan for Agricultural Crops Production NC I was implemented. In SY 2016/17, CA offerings upgraded to Pest Management NC II in Grade 11 and Organic Agriculture NC II in Grade 12, with new Session Plans drafted by CA teachers.	-
			Actual																							
	2-3. The CA teachers implement the Session Plans accordingly.	Teachers	Plan																						Session Plans are implemented accordingly in SY 2015/16 and SY 2016/17, with emphasis on hands-on activities for developing students' competencies.	Continue with activities for cassava farm, and share best practices with other schools.
			Actual																							

Notes and Additional Remarks:

*1 Core Competencies of Agricultural Crops Production NC I: 'Support horticultural crop work, Support nursery work, Support agronomic crop work and Support irrigation work'
2. As of March 2017, a 12 ha cassava farm was established by BNATS to be used as a demonstration area and experimental farm for agriculture students and trainees. Other crops are also cultivated in the school's production farms, including rice and corn. Using proceeds from cassava farm, school also plans to pursue napier grass production to reduce feed costs in animal production course, an herbarium and organic vegetable production.
3. First cassava harvest done in August 2016 with Harvest Festival conducted in October 2016. Volume of harvest lower than expected due to damages sustained from extreme weather events like drought of 2015 and Typhoon Lawin. Second harvest is scheduled for May 2017.
4. Some disc plows were chipped and damaged through heavy usage in land clearing. School plans to identify maintenance budget for tractor and implements for SY 2017/18.
5. BNATS maintains target of 20 ha planted to cassava by SY 2018/19. Development of new areas will be more gradual, as additional resources needed to clear forested areas in the school.

Project Design Matrix **Date: March 2017**

School name: **Project name:**

Bukig National Agricultural and Technical School (BNATS)

Agri-Production: A Developmental Project enhancing Senior High School Program in BNATS

Project Period (Implemantion): July 2015 - May 2016

Target: SHS students taking specialization of Crops (Agriculture) (CA)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal				
BNATS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.	1. At least 3 schools come to benchmark BNATS. 2. BNAT holds at least 3 training for other schools and for community.		From Jun. 2015-Mar. 2017, 354 schools benchmarked good practices of BNATS. The school also conducted 5 batches of skills training for teachers of DepEd schools in Cagayan Region offering TVL specializations.	
Project Purpose				
The CA students develop their competencies of Agricultural Crops Production NC I (*1) and acquire hands-on experience in agriculture.	The teachers in CA course evaluate that 80% of the students are equipped with practical skills and knowledge on farming through the semester assessment.	Semester Assessment	Except for one student who dropped out, all CA students passed their Agricultural Crops Production NC I subject in SY 2015/16.	
Output				The CA students come to school and attend the lessons and participate in practicum.
1. BNATS establishes and maintains a 20 ha cassava farm as the students' practicum field.	1. 20 ha cassava farm is properly tilled. 2. Maintenance plan for the tractor is set up.	1. Observation 2. Tractor garage, Maintenance plan for the tractor	BNATS cleared and established a 12 ha production farm planted to cassava, constructed a tractor garage using school funds, and implemented a maintenance plan for the farm tractor.	
2. The CA teachers develop and implement Session Plan, which ensures enough time of the practicum in the cassava field for the CA students.	1. The CA teachers include 300 hours of the farm practicum in total in the Session Plans of Agricultural Crops Production NC I. 2. The CA teachers provide lessons/practicums to the students in accordance with the Session Plans.	1. Session Plan of 'Support horticultural crop work, nursery work, agronomic crop work and irrigation work'. 2. Interview with the CA teachers	in SY 2015/16, CA teacher developed and implemented Session Plan covering 310 hours of practicum covering competencies for supporting horticultural crop work, nursery work, agronomic crop work and irrigation work.	
Activity	**Input**			
1-1. BNATS procures a 4-wheel drive tractor with support of JICA-team.	School side: - farmland (20ha) - Tractor garage - Procure other related materials for the project - Operational expenses for using and maintaining the tractor (including engine oil, water and fuel) - Professionals for operating the tractor - Labor cost in land preparation, furrowing, planting and harvesting. - Inspection of goods to ensure all conditions of the contract are met - Provide supervision/instruction to students during practicum - Professionals on agricultural crops production to teach skills and knowledge to students - Farm laborers to help in the establishment and maintenance of cassava farm - Other miscellaneous expenses	Japanese side: - A tractor (45HP) - Monitor the project and evaluate implementation - Technical Assistance	1-1. A 4WD farm tractor (45 HP) was delivered to BNATS by Ford Tractor Philippines Inc. (FTPI)	
1-2. The tractor supplier/manufacturer conducts training to the teachers on proper usage of the tractor.			1-2. FTPI conducted training for teachers on proper use and basic maintenance of tractor.	
1-3. The BNATS teachers conduct initial tilling by the 95 HP tractor (rented from a company).			1-3. BNATS rented a 95 HP tractor for initial land preparation.	
1-4. The BNATS teachers conduct second tilling by the procured tractor (45 HP).			1-4. BNATS used the school's 45 HP tractor for land preparation.	
1-5. Maintenance plan for the tractor is made by the teachers.			1-5. Maintenance plan is implemented by the school. BNATS also updated the maintenance plan for SY 2016/17.	
1-6. BNATS establishes a tractor garage near the field.			1-6. BNATS constructed a garage to house the tractor.	**Pre-conditions**
2-1. Principal and the CA teachers discuss on the curriculum of Agricultural Crops Production to find out the contents which should be taught by practicum.			2. The session plan for core competencies of supporting horticultural crop work, nursery work, agronomic crop work and irrigation work was used for Grade 11 Agricultural Crop Production NC I students in SY 2015/16. For SY 2016/15, CA offerings upgraded to Pest Management NC II in Grade 11 and Organic Agriculture NC II in Grade 12. CA teachers maintain similar emphasis on practicum and hands-on activities for developing students' competencies.	SHS programme (K to 12) is continue to be pursued by the government.
2-2. The CA teachers develop Session Plan of each core competency of Agricultural Crops Production NC I based on the discussion in Activity 2-1.				
2-3. The CA teachers implement the Session Plans accordingly.				

*1 Core Competencies of Agricultural Crops Production NC I: 'Support horticultural crop work, Support nursery work, Support agronomic crop work and Support irrigation work'

Date of Progress Report: 31-Mar-17

Project Name: Food/Fish Processing and Packaging
School: Bataan School of Fisheries (BSF)
Overall goal: BSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to other schools and the community.
Project Purpose: The FFP students develop their competencies of Fish Products Packaging NC II (*) and acquire hands-on experience in using modern equipment, and develop entrepreneurship by selling the products.
Target: School teachers, Senior High School students in specialization of Fisheries Technology (Fish/Food Processing) (FFP)

Output	Activity	Person in Charge	Schedule	2015						2016												2017			Achievement	Next step to be taken
				7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
1. The equipment in food laboratory is updated and maintained properly.	1-1. BSF/JICA-team procures the equipment listed in ANNEX-3 and install them in the food laboratory.	Principal / JICA-team	Plan																						Equipment listed in Annex 3 were delivered and installed in the food processing laboratory.	-
			Actual																							
	1-2. BSF (or the supplier providing the tools and equipment) conducts training for teachers on proper usage of tools and equipment. `	Supplier of the equipment/ Principal	Plan																						Proper use of equipment was demonstrated by suppliers.	-
			Actual																							
	1-3. Principal and the FFP teachers develop a maintenance plan of the food laboratory.	Principal, Teachers,	Plan																						Maintenance plan was developed for each equipment, indicating maintenance activities, person/s responsible and schedule.	-
			Actual																							
	1-4. Principal shares the maintenance plan with the teachers and school staffs in FFP course.	Principal, Teachers, School Officials	Plan																						Maintenance plan was adopted by FFP teachers and BSF staff. School used same maintenance plan for SY 2016/17.	-
			Actual																							
2. The FFP teachers develop and implement Session Plans, which ensure enough time of the practicum by using the facilities in the food laboratory for the FFP students.	2-1. Principal and the FFP teachers discuss on the curriculum of FFP to find out the contents which should be taught by practicum.	Principal Teachers	Plan																						BSF reviewed curriculum and identified competencies needing practicum in SY 2015/16. With new Curriculum Guides and Daily Lesson Log format mandated for adoption in SY 2016/17, BSF retained practicum requirements in the new instructional plans.	-
			Actual																							
	2-2. The FTA teachers develop Session Plans of each competency of Fish Products Packaging NC II based on the discussion in Activity 2-1.	Teachers	Plan																						In SY 2015/16, Session Plans were developed for packaging processed fish by vacuum/poly packing and bottling. In SY 2016/17, DLLs for the same competencies were prepared with reference to FFP Curriculum Guide.	-
			Actual																							
	2-3. The FFP teachers implement the Session Plan accordingly.	Teachers	Plan																						FFP teachers implemented Session Plans in SY 205/16, and DLLs in SY 2016/17. Both instructional plans include practicum for fish products packaging competencies.	Continue using instructional plans accordingly.
			Actual																							
3. The FFP students experience to sell their products in actual market.	3-1. The FFP teachers develop Sales Plan, which includes lesson/practicum for the students to sell the products and to operate accounting.	Teachers	Plan																						Teachers developed a book of sales account to show students the profits in selling products. The same was implemented in SY 2016/17.	-
			Actual																							
	3-2. FFP teachers find market/ customer to sell the products.	Teachers	Plan																						Teachers identified customers within the locality as direct consumers of processed fish products. For SY 2016-2017, Personal Entrepreneurial Competencies (PECS) and Marketing are also included in lessons.	-
			Actual																							
	3-3. BSF sells products to the market/direct consumers.	Teachers	Plan																						Students conduct actual marketing and selling of fish as practicum.	Continue marketing of products.
			Actual																							

Notes / Additional Remarks:

* Core competencies of Fish Products Packaging NC II: Packaging processed fish by Vacuum/polypacking, Bottling and Canning.
**BSF continues production of smoked soft-boned-bangus and deboned bangus in SY 2016/17. Grade 12 students however, discontinued these activities in Sept. 2016 to prepare for Work Immersion.

Project Design Matrix 1/2 **Date: March 31, 2017**

School name: **Project name:**

Bataan School of Fisheries (BSF)	Food/Fish Processing and Packaging

Project Period (Implementation): July 2015 - May 2016

Target: School teachers, Senior High School students in specialization of Fisheries Technology (Fish/Food Processing) (FFP)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal			Since June 2015, 39 schools benchmarked BSF, including a fisheries school and a maritime training institute. BSF also conducted 6 trainings and assessments in Food Processing for students of other schools, and trainees from the community and industry.	
BSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to other schools and the community.	1. At least 3 schools come to benchmark BSF. 2. BSF holds at least 3 training for other schools and for community.			
Project Purpose				
The FFP students develop their competencies of Fish Products Packaging NC II (*) and acquire hands-on experience in using modern equipment, and develop entrepreneurship by selling the products.	1. The teachers in FFP course evaluate that 80% of the students are equipped with practical skills and knowledge in the field of Fish Products Packaging through the semester assessment, and 2. The FFP students are involved in the activity of selling the fish products.	1. Semester Assessment 2. Interview with the FFP teachers	1. Students conducted practicum for packaging processed fish and marketing finished products. 2. All FFP students passed their semester assessments and have obtained competencies in Fish Products Packaging.	
Output				
1. The equipment in food laboratory is updated and maintained properly.	1. The equipment listed in ANNEX-3 are installed in the food laboratory. 2. Maintenance plan of the food laboratory is set and shared with all the teachers and school staffs in FFP course.	1. Observation 2. Maintenance plan	Equipment installed in laboratory for food processing, with maintenance plan implemented by school staff, laboratory teachers and students/trainees. The maintenance plan is updated yearly by FFP teachers.	FFP students come to school and attend the lessons / practicum.
2. The FFP teachers develop and implement Session Plans, which ensure enough time of the practicum by using the facilities in the food laboratory for the FFP students.	1. The FFP teachers include at least 50% of the total instruction hours of the practicum in the food laboratory in Session Plan of "Packaging processed fish by vacuum/poly packing, bottling and canning", and, 2. The FFP teachers provide lessons/practicums to the students in accordance with the Session Plans.	1. Session Plan 2. Interview with the FFP teachers	In SY 2015/16, FFP teachers developed Session Plans with 70% of total instruction hours devoted to hands-on activities for developing competencies in packaging processed fish by vacuum/poly packing, and bottling. In total, students conducted 300 practicum hours for the course.	
3. The FFP students experience to sell their products in actual market.	The FFP teachers provide at least 18 hours practicum for the students to sell the product and do the accounting.	Interview with the FFP teachers	Marketing also included in the Session Plan for FFP, with 50 hours practicum for marketing finished fish products.	
Activity	**Input**			
1-1. BSF/JICA-team procures the equipment listed in ANNEX-3 and install them in the food laboratory.	School side: - Food laboratory for conducting practicum - Operational expenses including raw materials, electricity and labor cost - Accredited trainers in food processing sector to teach skills and knowledge to students - Provide supervision/instruction to students during practicum - Inspection of tools and equipment to ensure all conditions of the contract are met - School personnel assigned to monitor the project	Japanese side: - Tools and Equipment listed in ANNEX-3 - Monitor the project and evaluate implementation - Technical Assistance	1-1. Donated equipment installed in the laboratory for instructional purposes.	
1-2. BSF (or the supplier providing the tools and equipment) conducts training for teachers on proper usage of tools and equipment. `			1-2. Proper use of equipment was demonstrated by suppliers.	
1-3. Principal and the FFP teachers develop a maintenance plan of the food laboratory.			1-3. Maintenance plan is drafted by FFP teachers and approved by the principal.	
1-4. Principal shares the maintenance plan with the teachers and school staffs in FFP course.			1-4. Maintenance plan is shared with school staff and implemented.	
2-1. Principal and the FFP teachers discuss on the curriculum of FFP to find out the contents which should be taught by practicum.			2-1. School decided to add more hours for practicum in the core comptencies of packaging processed food by vacuum or ordinary poly packing and bottling.	**Pre-conditions**
2-2. The FTA teachers develop Session Plans of each competency of Fish Products Packaging NC II based on the discussion in Activity 2-1.			2-2. FFP teachers drafted Session Plan identifying 300 hours of practicum to complement classroom lessons.	SHS programme (K to 12) is continue to be pursued by the government.
2-3. The FFP teachers implement the Session Plan accordingly.			2-3. The Session Plan is implemented in SY 2015/16. For SY 2016/17, DepEd mandated use of Daily Leasson Logs (DLL).	
3-1. The FFP teachers develop Sales Plan, which includes lesson/practicum for the students to sell the products and to operate accounting.			3-1. FFP students received instruction on marketing of processed food products, with 50 hours practicum.	
3-2. FFP teachers find market/ customer to sell the products.			3-2. FFP teachers identified Overseas Filipino Workers (OFWs) and the LGU as main customers, along with school personnel.	
3-3. BSF sells products to the market/direct consumers.			3-3. Students marketed processed food products in SY 2015/16 and in SY 2016/17.	

* Core competency of Fish Products Packaging NC II: Packaging processed fish by Vacuum/polypacking, Bottling and Canning

Date of Progress Report: 31-Mar-17

Project Name: Bangus Grow-out and Tilapia Hatchery
School: Bataan School of Fisheries (BSF)
Overall goal: BSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to other schools and the community.
Project Purpose: The FTA students develop their competencies of Aquaculture NC II (*1) and acquire hands-on experience in managing an aquaculture project.
Target: School teachers, SHS students in specialization of Fisheries Technology (Aquaculture) (FTA)

Output	Activity	Person in Charge	Schedule	2015						2016												2017			Achievement	Next step to be taken
				7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
1. The aquacultural laboratory in BSF is updated and ready to be used for the practicum, and maintained properly.	1-1. BSF/JICA-team installs additional upgraded equipment and set up aquacultural facilities in the laboratory.	Principal / JICA-team	Plan																						Equipment listed in Annex 3 were delivered and installed in the aquaculture laboratory, hatchery and fishponds.	-
			Actual																							
	1-2. BSF (or the supplier for the aquacultural facilities) conducts training for the FTA teachers on operation and management of the aquaculture facilities.	Supplier of the equipment/ Principal	Plan																						Proper use of equipment was demonstrated by suppliers.	-
			Actual																							
	1-3. Principal and the FTA teachers develop a maintenance plan of the aquacultural facilities.	Principal, Teachers,	Plan																						Maintenance plan was developed for each equipment, indicating maintenance activities and schedule.	-
			Actual																							
	1-4. Principal shares the maintenance plan with the teachers and school staffs in FTA course.	Principal, Teachers, School Officials	Plan																						Maintenance plan was adopted by FTA teachers and BSF staff. The same plan is used in SY 2016/17.	-
			Actual																							
2. The FTA teachers develop and implement Session Plans, which ensure enough time of the practicum by using the aquacultural facilities for the FTA students.	2-1. Principal and the FTA teachers discuss on the curriculum of Aquaculture to find out the contents which should be taught by practicum.	Principal Teachers	Plan																						BSF reviewed AQ curriculum and identified competencies needing practicum in SY 2015/16. With new Curriculum Guides and Daily Lesson Log (DLL) format mandated for adoption in SY 2016/17, BSF retained practicum requirements in the new instructional plans.	-
			Actual																							
	2-2. The FTA teachers develop Session Plans of each competency of Aquaculture NC II based on the discussion in Activity 2-1.	Teachers	Plan																						In SY 2015/16, Session Plans were developed for AQ course. In SY 2016/17, DLLs for the same competencies were prepared with reference to DepEd's AQ Curriculum Guide.	-
			Actual																							
	2-3. The FTA teachers implement the Session Plans accordingly.	Teachers	Plan																						FTA teachers implemented Session Plans in SY 205/16, and DLLs in SY 2016/17. Both instructional plans include practicum for AQ students.	-
			Actual																							

Notes / Additional Remarks:

*1 Core competencies of Aquaculture NC II: Conducting pre-operations aquaculture activities, Preparing and maintaining aquaculture facilities, Operating nursery, and Performing fish or shrimp grow-out operations.
2. In SY 2015/2016, BSF aquaculture facilities cultured milkfish, tilapia, red carp, catfish, oyster, mudcrab and ornamental fish.
3. In SY 2016/2017, SHS students also trained in seabass and mangrove red snapper culture.

Project Design Matrix 2/2 **Date: March 31, 2017**

School name: **Project name:**

Bataan School of Fisheries (BSF)	Bangus Grow-out and Tilapia Hatchery

Project Period (Implementation) : July 2015 - May 2016

Target: School teachers, SHS students in specialization of Fisheries Technology (Aquaculture) (FTA)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal				
BSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to other schools and the community.	1. At least 3 schools come to benchmark BSF. 2. BSF holds at least 3 training for other schools and for community.	School records	Since June 2015, 39 schools benchmarked BSF, including a fisheries school and a maritime training institute. 7 trainings and assessments in Aquaculture were also conducted for for students of other schools, and trainees from the community and industry.	
Project Purpose				
The FTA students develop their competencies of Aquaculture NC II (*1) and acquire hands-on experience in managing an aquaculture project.	The teachers in FTA course evaluate that 80% of the students are equipped with practical skills and knowledge to manage the aquaculture project through the semester assessment.	Semester Assessment	All students passed their semester assessments and acquired aquaculture competencies. FTA students in SY 2015/16 and SY 2016/17 obtained hands-on experience in managing aquaculture projects and engaged in culture of milkfish, tilapia, red carp, catfish, oyster, mudcrab, ornamental fish, seabass and mangrove red snapper in the upgraded school nursery and fishponds.	
Output				
1. The aquacultural laboratory in BSF is updated and ready to be used for the practicum, and maintained properly.	1. The equipment listed in ANNEX-3 are installed and the aquacultural facilities are properly set up. 2. Maintenance plan of the aquacultural facilities is set and shared with all the teachers and school staffs in FTA course.	1. Observation 2. Maintenance plan	Equipment installed in aquaculture facilities, with proper upkeep ensured through implementation of a maintenance plan. In SY 2016/17, the same maintenance plan was used by BSF.	FTA students come to school and attend the lessons/ practicum.
2. The FTA teachers develop and implement Session Plans, which ensure enough time of the practicum by using the aquacultural facilities for the FTA students.	1. The FTA teachers include at least 50% of the total instruction hours of the practicum by using the aquacultural facilities in Session Plan of "Preparing and maintaining aquaculture facilities" and "Operating Nursery." 2. The FTA teachers provide lessons/practicums to the students in accordance with the Session Plans.	1. Session Plan of "Preparing and maintaining aquaculture facilities" and "Operating Nursery" of Aquaculture NC II (*2) 2. Interview with the FTA teachers	In SY 2015/16, FTA teachers developed Session Plans devoting 53% of the total instruction hours to practicum in preparing and maintaining aquaculture facilities, and operating nursery. A total of 192 practicum hours was included in the Session Plans.	
Activity	**Input**			**Pre-conditions**
1-1. BSF/JICA-team installs additional upgraded equipment and set up aquacultural facilities in the laboratory.	School side: - Aquaculture laboratory for conducting practicum - Operational expenses including electricity and labor cost - Accredited trainers in Aquaculture to teach skills and knowledge to students - Provide supervision/instruction to students during practicum - Inspection of goods to ensure all conditions of the contract are met - School personnel assigned to monitor the project - School staffs in charge of maintenance of aquacultural facilities	Japanese side: - Equipment listed in ANNEX-3 - Monitor the project and evaluate implementation - Technical Assistance	1-1. Upgraded equipment installed in aquaculture facilities.	SHS programme (K to 12) is continue to be pursued by the government.
1-2. BSF (or the supplier for the aquacultural facilities) conducts training for the FTA teachers on operation and management of the aquaculture facilities.			1-2. Teachers oriented on proper use and basic maintenance of aquaculture equipment and facilities.	
1-3. Principal and the FTA teachers develop a maintenance plan of the aquacultural facilities.			1-3. A maintenance plan is drafted for donated equipment and facilities.	
1-4. Principal shares the maintenance plan with the teachers and school staffs in FTA course.			1-4.Maintenance plan is implemented by teachers, school staff, and students.	
2-1. Principal and the FTA teachers discuss on the curriculum of Aquaculture to find out the contents which should be taught by practicum.			2-1. School added more hours for practicum in preparing and maintaining aquaculture facilities and operating nursery.	
2-2. The FTA teachers develop Session Plans of each competency of Aquaculture NC II based on the discussion in Activity 2-1.			2-2. FTA teachers drafted Session Plan requiring more hours for practicum at the nursery and ponds.	
2-3. The FTA teachers implement the Session Plans accordingly.			2-3. The FTA teachers implemented a Session Plan requiring students to do more practicum.	

*1 Core competencies of Aquaculture NC II: Conducting pre-operations aquaculture activities, Preparing and maintaining aquaculture facilities, Operating nursery, and Performing fish or shrimp grow-out operations.

*2 Session Plan: The teachers in the school make a Session Plan for each core competency of NC.

Date of Progress Report: 31-Mar-17

Project Name: Additional Equipments for the State-of-the-Art (SOTA) Building
School: Opol National Secondary Technical School (ONSTS)
Overall goal: ONSTS becomes a model for other Senior High Schools (SHSs) offering technical vocational track and shares its best practices to other schools.
Project Purpose: SOTA equipment are improved enough to offer CC NC III, and each CC/FBS student is equipped with practical knowledge and skills through the practicum in the SOTA building.
Target: SHS students studying in the curriculum of Commercial Cooking NC III (CC) and Food and Beverage Services NC II (FBS)

Output	Activity	Person in Charge	Schedule	2015 JUL	AUG	SEP	OCT	NOV	DEC	2016 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017 JAN	FEB	MAR	Achievement	Next step to be taken
1. The equipment listed in ANNEX-3 (necessary equipment for offering Commercial Cooking NC III) are properly installed and maintained.	1-1. ONSTS/JICA-team will procure equipments listed in ANNEX-3 and install them in SOTA.	Principal / JICA-team	Plan																						Requested equipment were delivered and received by Shop-In-Charge in Aug. 2015 and Sep. 2015, enabling CC/FBS teachers to enrich offering with Commercial Cooking NC III competencies.	-
			Actual																							
	1-2. The school principal and the CC/FBS teachers will develop a maintenance plan for the equipments in the SOTA building.	Principal, Teachers	Plan																						Developed year-round maintenance plan for the equipment with corresponding personnel responsible	-
			Actual																							
	1-3. The CC/FBS teachers and school staff maintain the SOTA facilities in accordance with the maintenance plan.	Teachers, School Officials	Plan																						Daily/Weekly /Monthly maintenance conducted by school personnel/students assigned for maintaining the equipment. Similar maintenance plan followed in SY 2016/17.	Maintain the equipment properly.
			Actual																							
2. The Session Plan is prepared for one week for each competency in CC/FBS to give enough time to prepare instructional materials for practicum of students and maximize the use of equipment / facilities.	2-1. The school principal and the CC/FBS teachers will discuss on the curriculum of CC and FBS respectively to find out the contents which should be taught by practicum.	Principal Teachers	Plan																						School indicated all core competencies for CC/FBS courses as requiring practicum. In SY 2016/17, school	
			Actual																							
	2-2. The CC/FBS teachers develop Session Plan every week, based on the discussion in Activity 2-1.	Principal Teachers	Plan																						Session plans were developed based on the Training Regulations for CC/FBS. For SY 2016/17, Daily Lesson Log (DLL) are used, with similar requirements for practicum.	
			Actual																							
	2-3. The CC/FBS teachers will implement the Session Plans accordingly.	Teachers	Plan																						Session Plans used for CC/FBS in SY 2015/16 reflect 605 hours spent for practicum and 216 hours for lectures. In SY 2016/17, teachers prepared DLLs covering the same competencies.	Monitoring the lessons.
			Actual																							

Notes / Additional Remarks:

ONSTS continued to enrich CC/FBS offering with Commercial Cooking NC III competencies in SY 2016/17.

Project Design Matrix 1/2 **Date Mar.31, 2017**

School name: Project name:

Opol National Secondary Technical School (ONSTS)	Additional Equipments for the State-of-the-Art (SOTA) Building

Project Period (Implementation) : July 2015 - May 2016

Target: SHS students studying in the curriculum of Commercial Cooking NC III (CC) and Food and Beverage Services NC II (FBS)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal				
ONSTS becomes a model for other Senior High Schools (SHSs) offering technical vocational track and shares its best practices to other schools.	DepEd Officials in the Division/Teachers in the Region have visited for benchmarking at ONSTS.	Attendance/Logbook of Visitors	Since June 2015, 635 DepEd officials and teachers from schools in Northern Mindanao, and 92 school officials and teachers from outside the region benchmarked ONSTS.	
Project Purpose				
SOTA equipment are improved enough to offer CC NC III, and each CC/FBS student is equipped with practical knowledge and skills through the practicum in the SOTA building.	1. ONSTS is acredited by TESDA as an assessment center of CC NC III. 2. Ninety percent (90%) of the students are equipped with practical skills and knowledge through the semestral institutional assessment.	1. Accreditation by TESDA 2. Semestral Institutional Assessment	School shouldered cost for upgrading qualification level of teacher-trainer in Commercial Cooking NC III and able to submit application for TESDA accreditation. Institutional Assessment in SY 2015/16 shows CC/FBS students are 100% are equipped with practical skills and knowledge.	TESDA does not change the requirement for the school to become an assesment center of Commercial Cooking NC III.
Output				
1. The equipment listed in ANNEX-3 (necessary equipment for offering Commercial Cooking NC III) are properly installed and maintained.		1. Observation 2. Maintenance plan	Maintenance schedule is implemented by shop teachers with help of school staff and students. Laboratory facilities and equipment are maintained in good working condition, even during school breaks.	
2. The Session Plan is prepared for one week for each competency in CC/FBS to give enough time to prepare instructional materials for practicum of students and maximize the use of equipment / facilities.	Reflected in the weekly Session Plan of teachers for the CC/FBS specialization is the one (1) hour lecture and two (2) hours practicum everyday.	Preparation of Session Plan a week before the actual shop activities.	SY 2015/16 Session Plans for CC/FBS reflect a combined total of 605 hours for practicum and 216 hours for lectures for the specilaization subjects. In SY 2016/17, Daily Lesson Log (DLL) is used.	
Activity	**Input**			**Pre-conditions**
1-1. ONSTS/JICA-team will procure equipments listed in ANNEX-3 and install them in SOTA.	School side: - SOTA Building - Operational expenses including electricity and labor cost for the project - Accredited trainers in CC and FBS to teach skills and knowledge to students - Provide supervision/instruction to students during practicum - Inspection of goods to ensure that all conditions of the contract are met - School personnel assigned to monitor the project - Staffs for proper maintenance of the facilities	Japanese side: - Tools and Equipments listed in the proposal - Monitor the project and evaluate implementation - Technical Assistance	Equipment worth PHP 1.036 million is installed in the ONSTS workshops and used for instruction.	
1-2. The school principal and the CC/FBS teachers will develop a maintenance plan for the equipments in the SOTA building.			Tools and equipment are maintained through a maintenance plan implemented by teachers, school staff and students.	
1-3. The CC/FBS teachers and school staff maintain the SOTA facilities in accordance with the maintenance plan.				
2-1. The school principal and the CC/FBS teachers will discuss on the curriculum of CC and FBS respectively to find out the contents which should be taught by practicum.			School principal and the CC/FBS teachers ensured all core competencies for CC/FBS have hours for practicum. In SY 2016/17, CC/FBS teachers started using DLL for instructional planning, with same practicum requirements.	
2-2. The CC/FBS teachers develop Session Plan every week, based on the discussion in Activity 2-1.			Teachers implemented Session Plans for CC/FBS courses in SY 2015/16, utilizing equipment installed in the ONSTS workshops. In SY 2016/17, DLL instructional plans used by CC/FBS teachers reflected similar requirement for student practicum.	
2-3. The CC/FBS teachers will implement the Session Plans accordingly.				

Weekly session plan for one (1) week are prepared and this is submitted to the Department Chairman every Monday.

Date of Progress Report: 31-Mar-17

Project Name: Construction of Gas Tank House
School: Opol National Secondary Technical School (ONSTS)
Overall goal: ONSTS becomes a model for other Senior High Schools (SHSs) offering technical vocational track and shares its best practices to other schools.
Project Purpose: ONSTS provides safety to the teachers and SHS students who learn in the State of the Art (SOTA) Building.
Target: SHS students, Teachers

Output	Activity	Person in Charge	Schedule	2015 JUL	AUG	SEP	OCT	NOV	DEC	2016 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017 JAN	FEB	MAR	Achievement	Next step to be taken
1. The gas tank house is constructed.	1-1. ONSTS/JICA-team procure necessary materials to construct a gas tank house as listed in ANNEX III .	Principal/ JICA-team	Plan																						Materials were delivered by the supplier	
			Actual																							
	1-2. The principal make a contract of the consruction of the gas tank house with constructors.	Principal, Teachers	Plan																						School obtained contractors' estimates on construction of gas-tank house. PTA was then enjoined by school to shoulder cost of labor.	
			Actual																							
	1-3. The contractors establish the gas tank house.	Principal, Teachers, School Officials	Plan																						Gas tank house was constructed, with accessories such as pipes, fittings, valves and safety devices compliant with industry standards.	
			Actual																							
2. The gas tank house is maintained properly.	2-1. Principal and the teachers discuss on way of maintenance of the gas tank house.	Principal Teachers	Plan																						Principal and teachers discussed proper maintenance of facility and drafted maintenance plan for upkeep of gas tank house for SY 2015/16. Workshop teachers, students and the school's Civil Technology teacher, are in-charge for maintenance.	Maintain the facility
			Actual																							
	2-2. Principal and the teachers develop a maintenance plan and allocate a person in charge of the maintenance.	Teachers	Plan																							
			Actual																							
	2-3. The maintenance plan is shared among the stakeholders (teachers, students and other school officials).	Teachers	Plan																						Maintenance plan implemented by teachers, school staff and students. The same plan is used in SY 2016/17.	Monitoring
			Actual																							

Notes / Additional Remarks:

The PTA paid for the cost of installing pipe fittings which connect the gas tank outside the laboratory and kitchen oven inside the laboratory.

Overview of the Project (PDM) 2/2

Date: March 31, 2017

School name: **Opol National Secondary Technical School (ONSTS)**

Project name: **Construction of Gas Tank House**

Duration: July 2015 - May 2016

Target: SHS students, Teachers

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal				
ONSTS becomes a model for other Senior High Schools (SHSs) offering technical vocational track and shares its best practices to other schools.	DepEd Officials in the Division/Teachers in the Region have visited for benchmarking at ONSTS.	Attendance/ Logbook of Visitors	Since June 2015, 635 DepEd officials and teachers from schools in Northern Mindanao, and 92 school officials and teachers from outside the region benchmarked ONSTS. conducted at ONSTS. Trainings also conducted for DepEd Misamis Oriental Division Office.	Benchmarking / training & center for other teachers in the province.
Project Purpose				
ONSTS provides safety to the teachers and SHS students who learn in the State of the Art (SOTA) Building.	Gas tanks are moved to outside of the SOTA.	Observation	Safety of students and teachers is addressed. LPG cylinders are moved to the gas tank house located outside the SOTA, compliant to industry safety requirements, and providing better access for replacing tanks.	
Output				
1. The gas tank house is constructed.	The gas tank house is completely constructed, with installation of tank gadgets: Safety Valves, Pipes and Fittings	Observation	The gas tank house is constructed, complete with installation of ancillary fixtures like safety valves, pipes and fittings. The facility is protected and locked against tampering and damage.	
2. The gas tank house is maintained properly.	A maintenance plan of the gas tank house is set and implemented by the teachers and students.	Maintenance plan	A maintenance plan of the gas tank house is set and implemented by the teachers and students.	
Activity	**Input**			**Pre-conditions**
1-1. ONSTS/JICA-team procure necessary materials to construct a gas tank house as listed in ANNEX III .	School side: - Land for construction of gas tank house * Installation of additional tank house gadgets such as pipes, fittings, regulator and tank safety device - Operational expenses - Inspection of goods to ensure all conditions of the contract are met - Staffs for proper maintenance of the facilities	Japanese side: - Tools and Equipment listed in the proposal for construction of gas tank house - Monitor the project and evaluate implementation	Procurement of materials worth PHP 16, 520.00 for construction of gas tank house completed by JICA Team and ONSTS.	
1-2. The principal make a contract of the consruction of the gas tank house with constructors.			Contractor was engaged by the school to construct gas tank house, using a design for outdoor LPG cylinder installation compliant to safety requirements.	
1-3. The contractors establish the gas tank house.			The gas tank house is constructed, complete with installation of ancillary fixtures like safety valves, pipes and fittings. The facility is protected and locked against tampering and damage.	
2-1. Principal and the teachers discuss on way of maintenance of the gas tank house.			Teachers, with guidance of Principal, drafted a maintenance plan to ensure facility remains in good working condition.	
2-2. Principal and the teachers develop a maintenance plan and allocate a person in charge of the maintenance.			Workshop teachers, together with the students and the school's Civil Technology teachers, are in-charge of implementing the maintenance plan.	
2-3. The maintenance plan is shared among the stakeholders (teachers, students and other school officials).			The gas tank house is maintained in good working condition, and is still in use for SY 2016-2017.	

Date of Progress Report: 31-Mar-17

Project Name: ICNSF Multi-Species Hatchery
School: Iligan City National School of Fisheries (ICNSF)
Overall goal: ICNSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.
Project Purpose: The AQ students are equipped with practical skills and knowledge in operating aquaculture system (especially for hatchery operation).
Target: SHS students in specialization of Aquaculture (AQ)

Output	Activity	Person in Charge	Schedule	2015 JUL	AUG	SEP	OCT	NOV	DEC	2016 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017 JAN	FEB	MAR	Achievement	Next step to be taken
1. The aquacultural facilities in ICNSF are established and ready to be used for the practicum.	1-1. ICNSF leads a bidding process consistent with DepEd procurement procedures for the construction of the aquacultural facilities (breeding and hatchery tanks) and selects a contractor.	AQ teachers Principal	Plan	■	■																				Hatchery construction was finished on Feb. 24, 2016. The facilities were used by students for practicum and hand-on acitivities in SY 2016/2017.	The AQ teachers will maintain the facilities during summer vacation.
			Actual			■	■	■																		
	1-2. The constructor establishes the aquacultural facilities under supervision of the principal and the AQ teachers.	Contractor Principal	Plan						■	■																
			Actual					■	■	■	■															
	1-3. ICNSF/JICA-team procure the equipment listed in ANNEX-3 to the school.	Principal / JICA-team	Plan						■	■															Equipment worth PHP 117, 940.00 accepted by the school. Aquaculture equipment were installed in the hatchery.	-
			Actual			■					■														
	1-4. Principal and the AQ teachers develop a maintenance plan of the aquacultural facilities.	Principal, Teachers, School Officials	Plan			■	■	■																	ICNSF drafted a maintenance schedule for hatchery facilities and equipment. SMAW and Aquaculture teachers are designated as hatchery technicians.	To revise Maintenance Plan when needed
			Actual		■	■	■								■										
2. The AQ teachers develop and implement Session Plans, which ensure enough time of the practicum of koi and tilapia hatchery operation for the AQ students.	2-1. Principal and the AQ teachers discuss on the curriculum of Aquaculture to find out the contents which should be taught by practicum.	Principal, Teachers	Plan			■	■	■																	Principal & AQ teacher identified practicum hours for all comptencies of Aquaculture course.	To implement & revise when needed
			Actual			■	■																			
	2-2. The AQ teachers develop a Session Plan of Operating Nursery based on the discussion in Activity 2-1.	Teachers	Plan				■	■																	Session plan for operating fish nursery has 148 hours practicum. In SY 2016/17, AQ teachers ensured practicum hours are still included in Daily Lesson Logs.	-
			Actual		■	■	■	■												■						
	2-3. The AQ teachers implement lessons/practicum in accordance with the Session Plan.	Teachers	Plan					■	■	■	■	■													For SY 2015/16, AQ Teacher covered part of the Session Plan. In SY 2016/17, AQ classes were offered starting 2nd semester, with practicum in the hatchery.	-
			Actual							■	■	■								■	■	■	■	■		
	2-4. ICNSF provides opportunity for the further training for AQ teachers in order to improve their instruction of practicum.	Principal	Plan										■	■											In January 2017, 3 teachers attended skills enhancement training for aquaculture by the Bureau of Fisheries and Aquatic Resources.	
			Actual																			■			

Notes / Additional Remarks:

The aquaculture facility is constructed, with on-going production of fingerlings by AQ students. Hatchery operations provides AQ students with ample practicum starting 2nd semester SY 2016/17. Under supervision by teachers, students operate and maintain the hatchery and its facilities, tallying fingerling sales for both koi and tilapia. Proceeds are channeled back to the hatchery operations, to fund feed purchase and continued hatchery operations. Net roofing was also procured to minimize exposure of fish stock to direct sunlight and predators.

Project Design Matrix

Date: Mar. 31, 2017

School name: Iligan City National School of Fisheries (ICNSF)

Project name: ICNSF Multi-Species Hatchery

Project Period (Implementation): July 2015 - March 2017

Target: SHS students in specialization of Aquaculture (AQ)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Accomplishments	Important Assumptions
Overall Goal				
ICNSF becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.	Bula National School of Fisheries, Baliangao School of Fisheries and other schools come to benchmark ICNSF practices.	Attendance Sheet	Benchmarked by 4 Iligan City schools and 1 fisheries school. Good practices for SHS modeling and early implementation were also shared by TVL head teacher during Regional Mass Training of Teachers (MTOT), where 505 SHS teachers from 364 secondary schools in the Northern Mindanao region listened to ICSNF presentation on SHS program and improvement of fisheries course.	
Project Purpose				
The AQ students are equipped with practical skills and knowledge in operating aquaculture system (especially for hatchery operation).	The AQ teachers/trainers evaluate that 80% of the students are equipped with practical skills and knowledge in operating aquaculture system (especially for hatchery operation) by the quarterly examination.	Quarterly Examination	Grade 11 Aquaculture classes offered in 2nd Semester	
Output				
1. The aquacultural facilities in ICNSF are established and ready to be used for the practicum.	1. The aquaculture facilities are properly constructed. 2. Maintenance plan of the aquacultural facilities is set and recognized among all the teachers in AQ course.	1. Observation 2. Maintenance plan / Interview with AQ teachers	ICNSF drafted a maintenance schedule for hatchery facilities and equipment. SMAW and Aquaculture Teacher are designated as hatchery technicians, under supervision of TVL Department Head.	AQ students are retained in ICNSF (do not drop-out from the school).
2. The AQ teachers develop and implement Session Plans, which ensure enough time of the practicum of koi and tilapia hatchery operation for the AQ students.	1. The AQ teachers include at least 80 hours of the practicum of koi and tilapia hatchery operation in the Session Plan of 'Operating Nursery' (which is required 240 nominal lesson hours in total by DepEd). 2. The AQ teachers provide practicum in accordance with the Session Plan.	Session Plan of Operating Nursery	Session plan drafted by AQ teacher includes 148 hours of practicum for nursery operations. Aquaculture students enrolled in Grade 11 will start classes in Aquacultute starting 2nd Semester of SY 2016-2017.	
Activity	**Input**			
1-1. ICNSF leads a bidding process consistent with DepEd procurement procedures for the construction of the aquacultural facilities (breeding and hatchery tanks) and selects a contractor.	School side: - Broodstock ponds and production ponds - Land for construction of the aquacultural facilities (breeding tanks and nursery tanks) - Operational expenses including electricity and labor cost for the project - Accredited trainers in Aquaculture to teach skills and knowledge to students - Provide supervision/instruction to students during practicum - Inspection of goods to ensure all conditions of the contract are met - School personnel assigned to monitor the project - Staffs for proper maintenance of aquacultural faculties	Japanese side: - Materials and labor cost for construction of the aquaculture facilities - Other equipment listed in ANNEX-3 of the proposal - Monitor the project and evaluate implementation - Technical Assistance	Hatchery constructed, with tools and equipment installed in the facility. School also procured nets for roofing, covering half of the tank areas.	
1-2. The constructor establishes the aquacultural facilities under supervision of the principal and the AQ teachers.			The hatchery is operational, producing fingerlings for sale and for use in the school ponds.	
1-3. ICNSF/JICA-team procure the equipment listed in ANNEX-3 to the school.			Equipment is turned over to the school, and installed in the school hatchery facility after construction was completed.	
1-4. Principal and the AQ teachers develop a maintenance plan of the aquacultural facilities.			Maintenance plan is implemented by designated hatchery technicians, under supervision of TVL Department Head.	
2-1. Principal and the AQ teachers discuss on the curriculum of Aquaculture to find out the contents which should be taught by practicum.			Session Plan drafted by AQ teachers, and approved by the Principal.	**Pre-conditions**
2-2. The AQ teachers develop a Session Plan of Operating Nursery based on the discussion in Activity 2-1.			Session Plan indicates 148 hours of practicum for nursery opeartions.	
2-3. The AQ teachers implement lessons/practicum in accordance with the Session Plan.			For SY 2015/16, AQ Teacher covered part of the lesson based on the Session Plan. Aquaculture classes were offered again in 2nd semester of SY 2016/17, with students conducting hands-on activities and undertaking actual hatchery operations.	
2-4. ICNSF provides opportunity for the further training for AQ teachers in order to improve their instruction of practicum.			In SY 2016/17, ICNSF sent 3 teachers to attend skills enhancement training implemented by BFAR (Bureau of Fisheries and Aquatic Resources) to strengthen the school's fisheries program.	

Date of Progress Report: 31-Mar-17

Project Name: Agroforestry for Sustainable Livelihood
School: Rogongon Agricultural High School (RAHS)
Overall goal: RAHS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.
Project Purpose: The ACP students are equipped with competencies to establish a model of sustainable farm by using agroforestry method in their respective places in the community-own land.
Target: SHS students in specialization of Agricultural Crop Production NC III (ACP)

Output	Activity	Person in Charge		Schedule 2015 JUL	AUG	SEP	OCT	NOV	DEC	2016 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017 JAN	FEB	MAR	Achievement	Next step to be taken
1. The agricultural equipment listed in the ANNEX-3 is installed in RAHS and maintained properly.	1-1 RAHS/JICA-team procure equipment listed in ANNEX-3 and install them in appropriate place.	Principal / JICA-team	Plan		■																				The tools and equipment are procured by JICA in September 2015. The tools are stored in the school workshop, then transferred to the DepED-funded SHS building constructed in March 2016.	-
			Actual		■	■						■														
	1-2. The supplier of the equipment conduct training for the ACP teachers on proper operation and basic maintenance of the equipment.	Supplier of the equipment	Plan		■																				Tools and equipment worth PHP 872,306.00 delivered to RAHS, with training of ACP teacher on proper operation and basic maintenance of tools and equipment, as required by school.	-
			Actual		■			■																	
	1-3. The ACP teachers and the principal develop a maintenance plan of the equipment.	Principal, Teachers	Plan		■	■	■																		A maintenance schedule is drafted by ACP teachers for the hand tractors, brush cutters, power knapsack sprayers, hand tools and other equipment.The same plan is used in SY 2016/17.	Revise maintenance schedule as needed.
			Actual				■																			
	1-4. The ACP teachers, school staff, and students maintain the equipment appropriately in accordance with the maintenance plan.	Principal, Teachers, School Officials	Plan				■	■	■	■	■	■	■	■	■										The tools and equipment are kept in good working condition by teachers and students by following maintenance schedule.	Continue implementation of maintenance schedule.
			Actual					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
2. The ACP teachers make Lesson Log (*1) weekly, which includes enough time of practicum (including agroforestry method) for the students.	2-1. Principal and the ACP teachers discuss on the new Curriculum Guide of ACP NC III provided by DepEd and decide the contents should be taught in practicum,.	Principal Teachers	Plan	■	■																				Principal and the ACP teachers ensure practicum hours for core competencies of ACP III. Agroforestry is integrated in the lessons.	
			Actual	■	■																					
	2-2. Based on the discussion of activity 2-1, the ACP teachers develop Lesson Log and indicate specific hours of practicum (6 hrs out of 10 hrs a week schedule of ACP).	Teachers	Plan			■	■	■	■	■	■	■													For SY 2015-2016, ACP III students had 173 hours for practicum conducted in demonstration farms. Instruction on-going for SY 2016-2017.	
			Actual			■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		
	2-3. The ACP teachers conduct lesson/practicum according to the Lesson Log.	Teachers	Plan			■	■	■	■	■	■	■													School continues to conduct ACP III classes for SY 2016/17 for both Grade 11 and 12, requiring teachers to submit Lesson Log.	
			Actual			■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		
	2-4. The ACP teachers integrate the concept/method of agroforestry and sustainable livelihood with the curriculum.	Teachers	Plan			■	■	■	■	■	■	■													Agroforestry and sustainable livelihood concepts are integrated into the ACP III curriculum. For SY 2016/17, Grade 12 students also assist ACP teachers in trainings for community on agro-forestry and sustainable livelihood.	
			Actual			■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		
	2-5. The ACP teachers indicate the specific lesson/practicum hours of the concepts of agroforestry and sustainable livelihood in their Lesson Log.	Teachers	Plan			■	■	■	■	■	■	■													Learning outcomes related to agroforestry and sustainable livelihood are taught to ACP students for SY 2015/16.	
			Actual			■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		
	2-6. The principal supervise the instruction regularly.	Principal	Plan			■	■	■	■	■	■	■													The school principal regularly supervises teachers and the conduct of classes.	
			Actual			■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		
	2-7. The ACP teachers monitor ACP students' agroforestry farm.	Teachers	Plan			■	■	■	■	■	■	■													Students maintain agroforestry farms and also participate in government programs (e.g. DENR's National Greening Program, and the City Agricultural Office/PhilFIDA's abaca program) as farm owners.	Sustain the activity
			Actual				■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■		

Notes / Additional Remarks:

The students established the biggest nursery in the barangay, propagating falcata seedlings which they planted in their own farms. The falcata seedlings are also sold to other farmers in the community, generating extra income for the students. Community members have also helped with nursery activities like bagging, with some opting to take payment in the form of falcata seedlings. The students manage the nursery by themselves with help from the school and ACP teachers. Abaca seedlings are also produced in the nursery, with students using different methods of propagation. In Dec. 2016, a Mini-Abaca Processing Plant was established in partnership with Philippine Fiber Industry Development Authority (Phil FIDA) and the Ecosystems Work for Essential Benefits (ECOWEB) ORGANIZATION. RAHS and the local farmers are planning to establish an abaca plantation in the community.

Project Design Matrix **Date : Mar. 31, 2017**

School name: Project name:

Rogongon Agricultural High School (RAHS)	Agroforestry for Sustainable Livelihood

Project Period (Implementation) July 2015 - May 2016

Target: SHS students in specialization of Agricultural Crop Production NC III (ACP)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal				
RAHS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.	The principal give a presentation on the school's experience to the other schools through conferences among regional schools and by visiting the other schools.	Schedule / record of the principal	The school head shared RAHS best practices as a resource speaker in 6 trainings for the DepED National Educators Academy of the Philippines (NEAP) School Head Development Program for SHS Principals in Region 9 and 10, and as a content expert in agri-crops for DepEd national and regional skills trainings for TVL teachers.	
Project Purpose				
The ACP students are equipped with competencies to establish a model of sustainable farm by using agroforestry method in their respective places in the community-own land.	The ACP teachers evaluate 90 % of the students are equipped with practical skills and knowledge to develop their own farms by using agroforestry method through the quarterly assessment in the school.	Quarterly assessment	For SY 2015/16, five students finished the requirements for Grade 11 ACP course. All are equipped with practical skills and knowledge and have developed their own demonstration farms using agroforestry concepts. In SY 2016/17, all Grade 11 ACP students obtained passing grades for the ACP specialization.	ACP students attend school lessons / practicum regularly.
Output				
1. The agricultural equipment listed in the ANNEX-3 is installed in RAHS and maintained properly.	1. The needed equipment provided by JICA-team are properly installed. 2. Maintenance plan of the equipment in workshop laboratory is set and recognized among the teachers and students in ACP course.	1. Observation 2. Maintenance plan / Interview with the ACP teachers	Tools and equipment provided by JICA are properly installed in the SHS Building. Maintenance plan is utilized by teachers and students for ensuring tools and equipment are in good working condition.	
2. The ACP teachers make Lesson Log (*1) weekly, which includes enough time of practicum (including agroforestry method) for the students.	1. Lesson Log is made by the ACP teachers every week. 2. Lesson Log includes practicum hours of at least 60% of the total hours of specialization subject or 6hrs out of 10 hrs a week schedule. 3. Lesson Log includes the lesson/practicum about the concept/method of 'agroforestry' and 'sustainable livelihood'. (*2)	Lesson Log (Weekly)	Lesson Log is prepared by ACP teachers every week. For SY 2015/16, ACP III students had 173 hours for practicum (60% of total instruction hours). Hands-on activities are conducted in demonstration farms of students, which showcases agroforestry and sustainable livelihood. In SY 2016/17, Grade 12 students assisted ACP teachers in Community Based Trainings conducted for community members at ACP student's demonstration farms.	

Activity	Input		Achievements	Pre- conditions
1-1 RAHS/JICA-team procure equipment listed in ANNEX-3 and install them in appropriate place.	School side: - Accredited trainers in ACP to teach skills and knowledge to students - Land for tools and equipment - Operational expenses - Provide supervision/instruction to students during learning process - Inspection of goods to ensure all conditions of the contract are met - School personnel assigned to monitor the project - Staffs for proper maintenance of the tools and equipment - Facilitation for the establishment of demonstration farms in the school and SHS student's respective farms	Japanese side: - Equipment listed in Annex-3 of the MOU - Monitor the project and evaluate implementation - Technical Assistance	The tools and equipment are procured by JICA in August 2015. The tools are stored in the school workshop, then transferred to the DepED-funded SHS building established in March 2016.	Laboratory Workshop/ State of the Art Building (which is under construction by the school) is established.
1-2. The supplier of the equipment conduct training for the ACP teachers on proper operation and basic maintenance of the equipment.			Tools and equipment worth PHP 872,306.00 delivered to RAHS, with training of ACP teacher on proper operation and basic maintenance of tools and equipment.	
1-3. The ACP teachers and the principal develop a maintenance plan of the equipment.			A maintenance schedule is drafted by ACP teachers for the hand tractors, brush cutters, power knapsack sprayers, hand tools and other equipment.	
1-4. The ACP teachers, school staff, and students maintain the equipment appropriately in accordance with the maintenance plan.			The tools and equipment are kept in good working condition by teachers and students by following maintenance schedule.	
2-1. Principal and the ACP teachers discuss on the new Curriculum Guide of ACP NC III provided by DepEd and decide the contents should be taught in practicum,.			Principal and the ACP teachers ensure students have practicum hours for core competencies of ACP III.	
2-2. Based on the discussion of activity 2-1, the ACP teachers develop Lesson Log and indicate specific hours of practicum (6 hrs out of 10 hrs a week schedule of ACP).			For SY 2015-2016, ACP III students had 173 hours for practicum conducted in demonstration farms. Instruction on-going for SY 2016-2017.	
2-3. The ACP teachers conduct lesson/practicum according to the Lesson Log.			School continues to conduct ACP III classes for SY 2016/17, requiring teachers to submit Lesson Log.	
2-4. The ACP teachers integrate the concept/method of agroforestry and sustainable livelihood with the curriculum.			Agroforestry and sustainable livelihood concepts are integrated into the ACP III curriculum. For SY 2016/17, Grade 12 students assist ACP teachers in trainings for community on agro-forestry and sustainable livelihood.	
2-5. The ACP teachers indicate the specific lesson/practicum hours of the concepts of agroforestry and sustainable livelihood in their Lesson			Learning outcomes related to agroforestry and sustainable livelihood are taught to ACP students for SY 2015-2016.	
2-6. The principal supervise the instruction regularly.			The school principal regularly supervises teachers and the conduct of classes.	
2-7. The ACP teachers monitor ACP students' agroforestry farm.			Students maintain agroforestry farms and also participate in government programs (e.g. DENR's National Greening Program, and the City Agricultural Office/PhilFIDA's abaca program) as farm owners.	

*1 Lesson Log: RAHS teachers make a Lesson Log as a lesson plan every week. The log may include the number of hours that the students may perform hands-on activities and concepts of agroforestry.

*2 Agroforestry and Sustainable Livelihood are not included in the original curriculum of Agriculture Crop Production NC III. The principal integrated these concepts and methods with the original curriculum because the school is located in mountainous area unsuitable to monoculture and plantation method. Agroforestry is not a subject like Agri Crop Prod NC III but a program that is to be integrated in the subject ACP. It is suitable because of the topography of the area. The area does permit monocropping. While integrating agroforestry in the conduct of ACP, students / community can acquire sustainable livelihood.

Date of Progress Report: 31-Mar-17

Project Name: Curriculum Innovation on Automotive Serving NC Ⅱ
School: Tagum National Trade School (TNTS)
Overall goal: TNTS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.
Project Purpose: The AT students develop their core competencies for Automotive Servicing NC II (*1) and acquire hands-on experience in operating an automotive shop.
Target: SHS students taking specialization in Automotive Technology (AT)

Output	Activity		Schedule (2015: JUL AUG SEP OCT NOV DEC; 2016: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC; 2017: JAN FEB MAR)	Achievement	Next step to be taken
1. The automotive service laboratory in TNTS is improved and maintained properly.	1.1 TNTS/JICA-team procure additional facilities listed in ANNEX-3 and temporarily store them in the safe and secure area while awaiting construction of the extension of automotive workshop laboratory.	Plan		The automotive equipment was delivered in October 2015 and temporarily stored in a secure area of the TNTS workshop laboratory. TNTS drafted plans for extension of automotive workshop which will house equipment.	-
		Actual			
	1.2 TNTS procure materials for the construction of 8 meters x 12 meters extension of the automotive workshop laboratory.	Plan		Construction was completed on Feb. 25, 2016.	-
		Actual			
	1.3 TNTS construct an 8 meters x 12 meters extension building of automotive workshop laboratorty.	Plan		Construction was completed on Feb. 25, 2016.	-
		Actual			
	1.4 Supplier install the automotive equipment in the newly constructed extension building of automotive workshop laboratory.	Plan		The equipment is installed in the automotive shop. The school held the turnover ceremony on Feb. 26, 2016	-
		Actual			
	1.5 The supplier of the facilities conducts training for the AT teachers on proper operation and basic maintenance.	Plan		TNTS and supplier prepared training plan for training conducted on March 21-22, 2016 for 5 Automotive teachers and 29 students (10 for G11 and 19 for G12).	-
		Actual			
	1-6. The AT teachers and principal develop a maintenance plan of the facilities.	Plan		AT Teachers drafted a maintenance plan for the automotive facility for SY 2016-2017.	-
		Actual			
	1.7 The AT teachers and school staff maintain the facilities safely in accordance with the maintenance plan. Prepare status report to easily monitor the condition of the equipment.	Plan		Automotive facility, including tools and equipment, are maintained. Annual reports to monitor the condition of tools and equipment.	-
		Actual			
2. The AT teachers develop and implement Session Plan, which ensures enough time of practicum of diagnosing and repairing vehicle for the AT students.	2-1. Principal and the AT teachers discuss on the curriculum of Automotive Servicing NC II to find out the contents which should be taught by practicum.	Plan		Principal and the AT teachers discuss on the curriculum of Automotive Servicing NC II to find out the contents which should be taught by practicum.	-
		Actual			
	2-2. The AT teachers develop Session Plan of each core competency of Automotive Servicing NC II based on the discussion in Activity 2-1.	Plan	From next school year (June, 2016)	The AT teachers develop Session Plan of each core competency of Automotive Servicing NC II based on the discussion in Activity 2-1.	-
		Actual			
	2-3. The AT teachers implement the Session Plans accordingly.	Plan	From next school year (June, 2016)	For SY 2016/17, Automotive Servicing has highest number of enrollees for Grade 11. Teachers are using the Session Plans for automotive classes.	-
		Actual			
3. The AT students provide free automotive service to the community as practicum.	3-1. Principal and the AT teachers set the practicum hours for providing free automotive services to the community in Session Plan of 'Steering System' particularly 'analyze front-end geometry failure, service steering system, perform wheel balancing and conduct wheel alignment'.	Plan		Practicum hours identified for providing free automotive services to the community .	-
		Actual			
	3-2. The AT teachers provide the AT students with necessary lessons/practicum for providing automotive services to the community.	Plan		Identified potential clients in the community and procured air compressor to power shop tools and equipment. The school prioritized provision of free services to government agencies and LGUs.	Continue lessons and practicum activities for automotive classes.
		Actual			
	3-3. Principal and the AT teachers inform that the AT students provide the community with free services of diagnosing and repairing vehicle.	Plan	From next school year (June, 2016)	Launching ceremony of Free Automotive Services of TNTS (F.A.S.T.) held on Sept. 14, 2016, attended by LGU, other government agencies, industry representatives, and Parents Teachers Association.	Continue promotion of FAST among stakeholders.
		Actual			
	3-4. The AT teachers implement practicum of providing free automotive services (5 students will be in one group to provide service).	Plan	From next school year (June, 2016)	The FAST is operational and serves as a venue for school-based immersion of automotive students.	Continue provision of services to the community.
		Actual			

Notes and Additional Remarks:

TNTS generates some income by being an assessment center for AT NC II, and through post-secondary course offerings. School's income helps in the maintenance of its facilities. Previously, TNTS paid PHP 350 per student to owners of commercial automotive shops for students training, to fully complement classroom instruction. The school can now offer the same training for students within the school because of modern shop equipment procured.

Project Design Matrix **Date: Mar. 31, 2017**

School name: Project name:

Tagum National Trade School (TNTS)	Curriculum Innovation on Automotive Serving NCII

Project Period (Implementation): July 2015 - March 2017

Target: SHS students taking specialization in Automotive Technology (AT)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Achievements	Important Assumptions
Overall Goal TNTS becomes a model for the other Senior High School (SHS) offering technical vocational track and shares its best practices to the other schools.	School heads and teachers of public and private schools from divisions/regions come to benchmark TNTS practices.	Record of the number of school heads/teachers from other regions who have visited TNTS.	Since June 2015, 122 DepEd schools and private schools in Mindanao benchmarked TNTS. Participants are school heads, teachers, and students. The principal also assists the Tagum City division office as SHS Coordinator, and shares good practices with other schools.	
Project Purpose The AT students develop their core competencies for Automotive Servicing NC II (*1) and acquire hands-on experience in operating an automotive shop.	1. The teachers in AT course evaluate that 80% of the students are equipped with practical skills and knowledge by using the procured facilities through the semester assessment. 2. 75% of the clients of free automotive service are satisfied with the students service with marking higher than 3 in 5-grade questionnaire in the feedback form.	1. Semester assessment 2. Feedback form from the clients who availed free automotive service	Except for drop-out cases, all AT students in SHS achieved passing grades for Automotive Servicing NC II in SY 2016/17. Free Automotive Services in TNTS (FAST) is being offered to the community beginning Sept. 2016. Using feedback forms, customers who availed of free automotive service rated the service as "satisfactory" or better.	
Output 1. The automotive service laboratory in TNTS is improved and maintained properly.	1. The facilities listed in ANNEX-3 are installed in the laboratory. 2. Maintenance plan of the facilities in the laboratory is set and shared with all the teachers in AT course.	1. Observation 2. Maintenance plan / Interview with the AT teachers	A maintenance plan for the automotive facility was implemented in SY 2016/17. An annual maintenance budget of PHP 10,000 was also approved by the school to fund maintenance activities.	AT students come to school and attend the lessons/ practicum.
2. The AT teachers develop and implement Session Plan, which ensures enough time of practicum of diagnosing and repairing vehicle for the AT students.	Session Plans of the core competencies of Automotive Serving NC II include at least 300 hours practicum in total.	Session Plans of 'Servicing automotive battery, ignition system, starting system, charging system, engine mechanical system, clutch system, differential and front axle, steering system, brake system and suspension system'; 'Test and repair wiring/lighting system'; 'Perform under chassis preventive maintenance'; and 'Overhauling of manual transmission'	Session plan in use for Automotive Servicing NC II indicates more than 400 hours of practicum.	
3. The AT students provide free automotive service to the community as practicum.	1. Session Plan of Steering System includes at least 40 hours of practicum of providing free automotive services to the community. 2. At least 5 clients come to school for the free automotive service in 2015/2016.	1. Session Plan of 'Steering System' 2. Service Records	Session plan for Automotive Servicing NC II indicates 40 instruction hours for core comptency of servicing manual steering system.	

Activity	Input			Pre-conditions
1.1 TNTS/JICA-team procure additional facilities listed in ANNEX-3 and install them in the automotive service laboratory.	School side: - Laboratory - Operational expenses for using and maintaining the facilities - Yearly upgrading/training of teachers to update their skills and knowledge to ensure/maintain quality service - Necessary costs to operate the project for the community - Inspection of goods to ensure all conditions of the contract are met - Provide supervision/instruction to students during practicum - Professionals on the field of the project to teach skills and knowledge to students - Other miscellaneous expenses (Necessary supplies/parts to complete needed repair of vehicles will be provided by the clients)	Japanese side: - Procure facilities listed in ANNEX-3 - Monitor the project and evaluate implementation - Technical Assistance	TNTS/JICA team delivered the automotive equipment to the school.	SHS programme (K to 12) continues to be pursued by the government.
1.2 TNTS procure materials for the construction of 8 meters x 12 meters extension of the automotive workshop laboratory.			TNTS utilized own funds to procure materials for construction of automotive workshop laboratory extension.	
1.3 TNTS construct an 8 meters x 12 meters extension building of automotive workshop laboratory to house the automotive equipment.			Construction was completed on Feb. 2016. The automotive shop is designed to offer similar services as commercial automotive shops.	
1.4 Supplier install the automotive equipment in the newly constructed extension building of automotive workshop laboratory.			The equipment is installed in the newly constructed automotive shop. The school held the turnover ceremony on Feb. 26, 2016.	
1.5 The supplier of the facilities conducts training for the AT teachers on proper operation and basic maintenance.			AT teachers and students trained by supplier on proper operation and basic maintenance of equipment.	
1-6. The AT teachers and principal develop a maintenance plan of the facilities.			A maintenance plan is implemented by teachers and students for SY 2016/17.	
1-7. The AT teachers and school staffs maintain the facilities safely in accordance with the maintenance plan.				
2-1. Principal and the AT teachers discuss on the curriculum of Automotive Servicing NC II to find out the contents which should be taught by practicum.			School ensured all Automotive Servicing NC II core competencies will require practicum hours.	
2-2. The AT teachers develop Session Plan of each core competency of Automotive Servicing NC II based on the discussion in Activity 2-1.			Session plan for Automotive Servicing is used by teachers for SY 2016/17	
2-3. The AT teachers implement the Session Plans accordingly.				
3-1. Principal and the AT teachers set the practicum hours for providing free automotive services to the community in Session Plan of 'Steering System' particularly 'analyze front-end geometry failure, service steering system, perform wheel balancing and conduct wheel alignment'.			Teachers allot 40 instruction hours for servicing manual steering system.	
3-2. The AT teachers provide the AT students with necessary lessons/practicum for providing automotive services to the community.			206 students in Grade 11 and 10 students in Grade 12 passed the requirements for Automotive Servicing NC II subject in SY 2016/17.	
3-3. Principal and the AT teachers inform that the AT students provide the community with free services of diagnosing and repairing vehicle.			TNTS held launching ceremony of Free Automotive Services of TNTS (F.A.S.T.) on Sept. 14, 2016, attended by LGU, other government agencies, industry representatives, and Parents Teachers Association.	
3-4. The AT teachers implement practicum of providing free automotive services (5 students will be in one group to provide service).			The FAST is operational and serves as a venue for school-based immersion of automotive students.	

*1 Curriculum Innovation: TNTS will revise their curriculum with more practicum including provision of the automotive service to the community, which provides the AT students with more opportunity to gain hands-on experience in learning. This is called 'Curriculum Innovation'.

*2 Core competencies of Automotive Servicing NC II: Servicing automotive battery, ignition system, starting system, charging system, engine mechanical system, clutch system, differential and front axle, steering system, brake system and suspension system; test and repair wiring/lighting system; perform under chassis preventive maintenance; and overhauling of manual transmission

Appendix 9

List of Interviewed Companies

No.	Company Nama	Location	Name of Representative	Date of Visit	Visitors from JPT	Accompanied by	Sector (Industry)	Hiring of SHS graduates	Identified gaps/Required skills	Existing Partnership	Future Partnerships
1	Marikina Hotel	Marikina City		2014/3/6	Ishii/Ishida/Suzuki	RESPSCI	Hotel and Restaurants			Accepting students for work immersion and hiring graduates from RESPSCI	
2	Japanese Chamber of Commerce and Industry of the Philippines, Inc. (JCCI-PI)	Makati City	Mr. Nobuo Fujii (Vice President)	2014/3/10, 5/29	Ishii/Ishida/Suzuki	N/A	Chamber of Commerce	N/A		Carrying articles about the Project in Newsletter "p-Business"	Donation of equipment from member companies (570 companies), Industry immersion by students and teachers
3	Rohm Semiconductor	Cavite	Mr. Jose N. Gregorio Jr. (Senior Department Manager, HR)	2014/3/11	Ishii	SPRCNHS	Semiconductor	Yes	Math, Communication skills, Team work	Accepting students for work immersion and hiring graduates from SPRCNHS, Introducing SPRCNHS to locators of People's Technology	Partnership with Machinery Course of SPRCNHS, Partnership with association of semiconductor industry
4	Wheatberry	Quezon City	Ms. Vivian (Manager)	2014/3/11	Ishida/Suzuki	DARSSTHS	Confectionery maker, Restaurant business			Accepting students for work immersion from DARSSTHS	
5	The Lounge	Quezon City	Ms. Armenia M. Santos (Manager)	2014/3/11	Ishida/Suzuki	DARSSTHS	Restaurant business	Yes		Accepting students for work immersion and hiring graduates from DARSSTHS	
6	First Philippine Industry Park (FPIP)		Mr. Shigeo Fukuda (FPIP Senior Vice-President International Sales and Marketing)	2014/3/12	Ishida	SPRCNHS	Industrial Park operation	Yes	5S, reporting and consultation skills	Nothing in particular	FPIP was planning to establish training center for its locators inside the complex
7	Toyota Motor Philippines Corporation			2014/3/12	Ishida	SPRCNHS	Automobile manufacturing	Yes		Accepting students for work immersion and hiring graduates from SPRCNHS	
8	JABEZ Tourism & Hospitality Training Center	Manila	Ms. Lyllian L. Fajardo	2014/3/12	Ishii/Suzuki	DARSSTHS	Human Resources Development	N/A		Assisting DARSSTHS students to obtain OJT opportunity at Great Eastern Hotel	
9	Honda Balintawak	Kalookan City	Mr. James Cyrus O. Auto (HR)	2014/3/13	Ishida/Suzuki	DARSSTHS	Automobile manufacturing	Yes	Repairing and paint application	Accepting students for work immersion from DARSSTHS	Accepting students of electricity, air-conditioning and welding courses for work immersion, Possible cooperation in industry immersion, curriculum development and donation of equipment upon official request
10	Far East Academy	Quezon City	Rommel M. Arzaga (Programme Director/Job Placement Officer)	2014/3/13	Ishii	N/A	Human Resources Development	N/A		DARSSTHS	
11	Laguna Technopark Inc. (Operator of Laguna Technopark – Mitsubishi Corporation being 25% shareholder)		Mr. Tadashi Nomura (Mitsubishi Corporation, Division Head, Metals / Industrial Finance Logistics and Development Division)	2014/3/13	Ishida	N/A	Industrial Park Operation	N/A		Nothing in particular	In general partnership development between companies (Japanese) and high schools is not easy. Cooperation in introduction of SHSs and other awareness building activities for locators
12	DSJP			2014/3/17	Ishii/Ishida/Suzuki	Tech-Voc Unit, STVS	Construction			Accepting students for work immersion from STVS	
13	Mactan Economic Zone Authority	Lapu-Lapu City	Mr. Pinagayao, Attn. Pableo (Office of the Zone Administrator)	2014/3/18	Ishii/Ishida/Suzuki	Tech-Voc Unit, STVS	Industrial Park Operation			Nothing in particular	Cooperation in presentation and PR to MEZ locators
14	Japanese Chamber of Commerce and Industry in Cebu	Cebu City	Mr. Hisao Yagi (NEC Telecom Software Philippines, Inc. Cebu-President), Mr. Ken Iwakami (Cebu Iwakami Corporation-Director/President), Mr. Motohisa Hino (TAMIYA-Vice President)	2014/3/18, 6/10	Ishii/Ishida/Suzuki	Tech-Voc Unit, STVS	Chamber of Commerce	N/A		Introduction of member companies, Participation in job-fair at STVS	

15	TSUNEISHI HEAVY INDUSTRIES (CEBU), INC	Balamban, Cebu	Mr. Shigeru Kamifuji (Factory Gen. Manager/Director),Ms. Ivy, Ms. Villegas (HR Manager)	2014/3/19	Ishii/Ishida/Suzuki	Tech-Voc Unit, STVS	Ship-building			Nothing in particular	Accepting students for work immersion from STVS (priority given to schools in Balamban)
16	METAPHIL	Cebu City	Mr. Elliezer Simega (Manager, Corporate Office)	2014/3/19	Ishii/Ishida/Suzuki	Tech-Voc Unit, STVS	Metal Works			Teacher training, accepting students for work immersion, donation of equipment for STVS	
17	Wellmade Motors & Development Corporation/ Chamber of Commerce in Mandaue City	Mandaue City	Mr. Philip N. Tan	2014/3/20	Ishii/Ishida/Suzuki	STVS	Metal Works		Integrity, Math, Analytical skills	Provision of equipment and teacher training for STVS	Review of curriculum, Teacher training during summer vacation
18	Izakaya Gokuu		Mr. Alan Duarte	2014/3/20	Ishii/Ishida/Suzuki	STVS	Restaurant business			Nothing in particular	Accepting students for work immersion from STVS
19	Izakaya Nonki	Mandaue City	Ms. Jing Machida	2014/3/20	Ishii/Ishida/Suzuki	STVS	Restaurant business			Nothing in particular	Not accepting students for work immersion
20	St. James Academy			2014/3/20	Ishii/Ishida/Suzuki	STVS	Technical college			Renting of welding equipment to STVS for free	
21	Department of Trade & Industry			2014/3/24	Ishii/Ishida/Suzuki	Tech-Voc Unit	N/A	N/A		Sharing of industry road maps formulated by Board of Investment (BOI)	Presentation to the Head Office of PEZA
22	TESDA, TESDA Women's Center			2014/3/25, 6/24	Ishii/Ishida/Suzuki	Tech-Voc Unit, DARSSTHS, RESPSCI	N/A	N/A		Participation in JCC	
23	CHED			2014/3/26	Ishii/Suzuki	Tech-Voc Unit	N/A	N/A		Participation in JCC	Promoting teacher training of agriculture and fishery courses, Collaboration in making adjustments in curriculum for 1st and 2nd year college students
24	Quezon City Councilor	Quezon City	Assistant staff of Councilor Alyson V. Medalla	2014/3/31	Ishida/Suzuki	Tech-Voc Unit	N/A	N/A		Drafting of ordinance for supporting SHS program	
25	Adopt A School Secretariat	Ortigas City	Ms. Elly Prado	2014/3/31	Ishii/Ishida/Suzuki	N/A	N/A	N/A		Nothing in particular	
26	Marufuku Japanese Restaurant	Ortigas City	Mr. Jae M. Guanio (Co-owner)	2014/4/1	Ishida	RESPSCI	Restaurant business		Manners in service trade	Nothing in particular	Accepting students for work immersion, Interested in participating in Adopt A School and other CSR activities
27	NISHIN METAL CORPORATION	Mandaluyong City	Mr. Yutaka Matsumoto (Senior Manager, Sales Marketing Department)	2014/4/2	Ishii/Ishida	N/A	Metal Works	Yes (except supervisor positions)	Fundamental math, Communication skills, Negotiation and presentation in English, Technical drawing skills, Quality control, Machinery skills, safety officer	Participation in Job Fair of SPRCNHS	Transfer of a warehouse to the vicinity of SPRCNHS
28	Association of Administrators in Hospitality, Hotel and Restaurant Management Educational Institute	Manila		2014/6/4	Ishii/Suzuki	N/A	Human Resources Development	N/A		Information sharing	
29	NEC Telecom Software Philippines, Inc.	Cebu City	Mr. Minoru Hirose	2014/6/11, 7/22, 3/20	Ishii/Ishida/Suzuki	STVS	Information and Communication	No		Support to inter-exchange program of STVS and Ichikawa Industrial HS	Provision of IT equipment to STVS
30	Uniquease Corporation	Makati City	Ms. Yachiyo Nakamura (General Manager)	2014/6/21, 7/8	Ishii/Ishida/Suzuki	DARSSTHS, RESPSCI, SPRCNHS	Restaurant business		Communication skills in English, Social skills	Lecture on restaurant management for a total of 9 teachers from DARSSTHS, RESPSCI, and SPRCNHS (July 8)	
31	UCC Ueshima Coffee Philippines	Pasig City	Mr. Shunta Koike (General Manager & Director)	2014/6/27, 8/28	Ishii/Suzuki	DARSSTHS, RESPSCI	Coffee making			Lecture on coffee-making for 25 students each at both DARSSTHS and RESPSCI (Aug. 26)	

32	Babcock Hitachi Philippines, Inc. (current MHPS (Philippines) Inc.)	Batangas	Mr. Hiroshi Fujii (President), Mr. Keiji Ueda (Senior Division Manager Procurement, Construction and PMTSC)	2014/7/7, 7/19	Ishii/Ishida	SPRCNHS	Metal Works		National Certificate, In-house training for newly hired	Factory immersion by 2 ILCs and 3 welding teachers of SPRCNHS (July 19), Participation in job-fair at SPRCNHS	Short-term teacher training at company's training center, Industry immersion by students
33	Colombo Plan Staff College for Technical Education	Ortigas City		2014/7/9	Ishii/Ishida	N/A	N/A	N/A		Nothing in particular	
34	Makoto Metal Technology, Inc.	Cebu City	Mr. Tomoyuki Yamaguchi (Assistant General Manager)	2014/7/22	Ishida	N/A	Metal Works (Production of Microscope)	Yes, but not hiring welders regularly	Obedience and honesty, Assisting in matching with optical industry	Nothing in particular	
35	Philippine Tonan Corporation	Lapu-Lapu City	Mr. Atsushi Itokawa (Managing Director)	2014/7/22	Ishida	N/A	Metal Works	Not hiring welders regularly		Nothing in particular	Industry immersion by students and teachers
36	NKC Manufacturing Philippines Corporation	Lapu-Lapu City	Mr. Jyunichi Ishida (President)	2014/7/22	Ishida	N/A	Metal Works	Yes, but not hiring welders regularly		Nothing in particular	Industry immersion by students and teachers
37	Muramoto Auto-Visual Philippines Inc	Lapu-Lapu City	Mr. Tadafumi Muramoto (President), Ms. Makiko Fukuda (General Affairs Dept. Manager)	2014/7/23	Ishida	N/A	Metal Works	Yes, but not hiring welders regularly	CAD skills but nothing particular expected from schools	Nothing in particular	Industry immersion by students and teachers
38	Ina Micro Opt Corporation	Lapu-Lapu City	Mr. Toshiharu Ogura (General Manager (Production Control/Accounting), Mr. Edgar Sevilla Jr.(General Manager (Production)	2014/7/24	Ishida	N/A	Metal Works (Production of Micrometers)			Nothing in particular	Accepting students for work immersion, Provision of equipment
39	Mitsubishi Steel Manufacturing (MSM) Cebu	Lapu-Lapu City	Mr. Shigeo Adachi (President & Director), Mr. Minoru Yoshitomi (Factory Manager)	2014/7/24	Ishida	N/A			Reading blue prints, fundamental skills in metal works, use of inspection tools	Nothing in particular	Accepting students for work immersion, Industry immersion of students and teachers
40	Phil Nippon Technical College			2014/7/30	Ishida	N/A	Human Resources Development	N/A		Nothing in particular	
41	Bureau of Local Employment, DOLE			2015/3/10	Ishii/Suzuki	N/A					
42	PESO	Quezon City		2015/3/17	Ishii/Suzuki	DARSSTHS					
43	SAGASS Consulting		Mr. Tanaka	2015/3/17	Through E-mail	N/A	Temporary staffing	Uncertain		Nothing in particular	
44	Dencom Consultancy & Manpower Services		Mr. Hideo Kushibiki	2015/3/18	Through E-mail	N/A	Temporary staffing	yes from	English Speaking and Reading skills	Nothing in particular	Nothing in particular
45	REERACOEN		Mr. Shima	2015/3/19	Through E-mail	N/A	Temporary staffing	No specific plan		Nothing in particular	
46	Job Fair	Quezon City		2015/3/20	Ishii/Suzuki	N/A					
47	Career Power Professional Management Services, Inc.	Santa Rosa		2015/3/23	Ishii/Suzuki	N/A	Temporary staffing			Accepting students for work immersion and hiring graduates from	
48	Global Integrated	Santa Rosa		2015/3/23	Ishii/Suzuki	N/A	Construction			Accepting students for work immersion from SPRCNHS	
49	Philippine Business for Education(PBEd)	Makati City	Ms. Love Basillote (Executive Director), Ms. Anna Bianca (Program Assistant)	2015/6/4	Ishida	N/A	N/A	N/A		Nothing in particular	SHS awareness building activities
50	K to 12 Plus Project	Taguig City	Dr. Alberto P. Fenix Jr. (Honorary President, PCCI), Mr. Andreas Meyn (Project Director, K to 12 Plus)	2015/6/5	Ishida/Yoneda	N/A	N/A	N/A		Exchange of opinions on work immersion for TVL tracks	Sharing of new curriculum of SPRCNHS

51	Japanese Chamber of Commerce in Mindanao (JCCM)	Davao City	Mr. Keisuke Nakao (President), Mr. Atsuto Fujimoto (Vice President) Mr. Takakazu Machida (Secreatry)	2015/6/13 2016/1/29	Ishida/Yoneda	N/A	Chamber of Commerce	N/A		Nothing in particular	Mediation in equipment donation from member companies, Accepting industry immersion
52	Nakashin Davao	Davao City	Mr. Keisuke Nakao (EVP/Managing Director)	2015/6/13 2016/1/29	Ishida/Yoneda	N/A	Food Processing	Yes	English and Math skills	Nothing in particular	Accepting industry immersion by students and teachers, Accepting students for work immersion
53	Tagum City Treasurer	Tagum City	Mr. Guzman (Treasurer)	2015/6/15	Ishida/Yoneda	TNTS	N/A	N/A		Nothing in particular	Issuance of city ordinance for providing incentives to the companies assisting SHSs, Assisting in dissemination of good practices
54	Quezon City Council	Quezon City	Councilor Medalla	2015/6/17	Ishida	DARSSTHS	N/A	N/A			Issuance of city ordinance for providing incentives to the companies assisting SHSs, Assisting in dissemination of good practices
55	10 companies (locators) of Mactan Economic Zone	Lapu-Lapu City	Philippine Economic Zone Authority in Mactan Economic Zone	2015/6/25	Ishida/Yoneda	DO Mandaue City, STVS	N/A	N/A		Presentation of K to 12 reform and progress of SHS preparation	
56	Philippine Economic Zone Authority in Laguna Technopark	Laguna Province	Ms. Sheila Marie Pidlaon	2015/7/23	Ishii	N/A	N/A	N/A			Exploring possibility of presenting K to 12 Reform and SHS program to locators
57	Agave Mexican Cantina	Eastwood		2015/8/3	Ishii	REPSCI	Restaurant business	Yes		Accepting 2nd batch SHS students for work immersion and hiring them after their graduation	
58	Diamond Star Agro Products, Inc	Taguig City, Carmen City	Mr. Tetsuji Yukawa (Technical Consultant)	2015/11/12	Suzuki/Yoneda	N/A	Fruits Production and Food Processing	No (hiring college graduates for official employees)		Nothing in particular	Exploring possibility of factory visit by students and teachers of TNTS in Carmen City
59	MFI Institute										
60	Quipper		Mr. Yuki Naotori (General Manager, Manila Office)	2016/1/22	Ishida	N/A	Education	N/A		Nothing in particular	

Appendix 10

Newsletter No.1 - 4

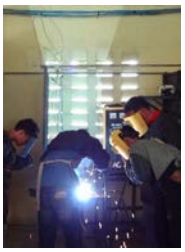
Project for Supporting Senior High School Modeling
In Selected Technical Vocational High Schools

August 2014 No. 1

Assist in delivering quality technical vocational education to foster better opportunities for youths...

Project for Supporting Senior High School Modeling in Selected Technical Vocational High Schools



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Japan International Cooperation Agency (JICA) started "the Project for Supporting Senior High School Modeling in Selected Technical Vocational High Schools" in February 2014 together with Department of Education (DepED) in the Philippines.

Background

The Government of the Philippines has made great efforts to improve its basic education. However the net enrollment rate of secondary education still remains 64.83% (SY2011-2012, NSO). Students' motivation to study will not go up because of limited access to quality education and fewer prospects for quality job opportunity.

The development of human resources to meet the industry needs is another challenge for the Government of the Philippines in the face of competition in the labor market among Asian countries. The graduates with the current 10-year basic education cycle are too young to legally join the labor force and they have not mastered the necessary competencies.
In order to enhance quality of education and to facilitate the transition to the labor market, the Government of the Philippines is pursuing K to 12 year initiative that will expand the country's education cycle from 10 years to a globally comparable 12 years and will enhance technical vocational (Tech-Voc) education to better link schooling with industry needs and employment.

Prior to the full implementation of K to 12 in 2016, Department of Education has developed the curriculum in cooperation with the Technical Education and Skills Development Authority (TESDA), the Commission on Higher Education (CHED) and other stakeholders, has implemented Senior High School (SHS) Modeling to identify the fine-tuned SHS program, and now reached its early implementation stage. In this context, JICA decided to assist in such a piloting effort and join in the thrust into the education reform of the Philippines.

Project Term

From February 2014 to June 2017

Technical Education in Japan

Secondary schools consist of a junior high school (3 years) and a senior high school (3 years) in Japan. Senior high schools are mainly classified into two categories: (1) general, and (2) specialized (formally called "vocational" or "Tech-Voc Track"). Specialized high schools consist of (a) Industrial, (b) Commercial, (c) Agricultural, (d) Fishery, (e) Home economics, (f) Nursing, and (g) ICT schools.

Specialized high school is intended to provide vocational education for those students who have chosen a particular vocational area as their future career. Specialized course starts in senior high schools (Grade 10). It is designed to provide students with fundamental knowledge and skills. It is considered as "the first educational step in fostering creative specialists of the future". Instruction in experiments and practical exercises including student's projects is emphasized in the schools.

Project Purpose and Expected Outputs

Overall Goal:
Activities, strategies and promising practices implemented in the SHS modeling will be shared to other Tech-Voc high schools including the K to 12 modeling Tech-Voc high school nationwide as a resource reference to develop/enhance their School Improvement Plans (SIP).

Project Purpose:
A mechanism is developed for Tech-Voc high school activities to ensure its effective implementation through collaboration with industries/firms including those from Japan.

Pilot Schools (4)

Output 1:
Mismatches/gaps between capacities/competencies of graduates and industry needs are identified at the pilot Tech-Voc high schools and addressed in their SIPs.

Main activities:
- Interview industry with regard to job/skills requirements.
- Provide support for the employment of graduates.

Output 2:
Pilot Schools became able to collaborate with industry/ firms (including Japanese firms) to improve school activities and to fill the identified gaps.

Main activities:
- Improve educational activities of the pilot schools, catering for the needs of society.

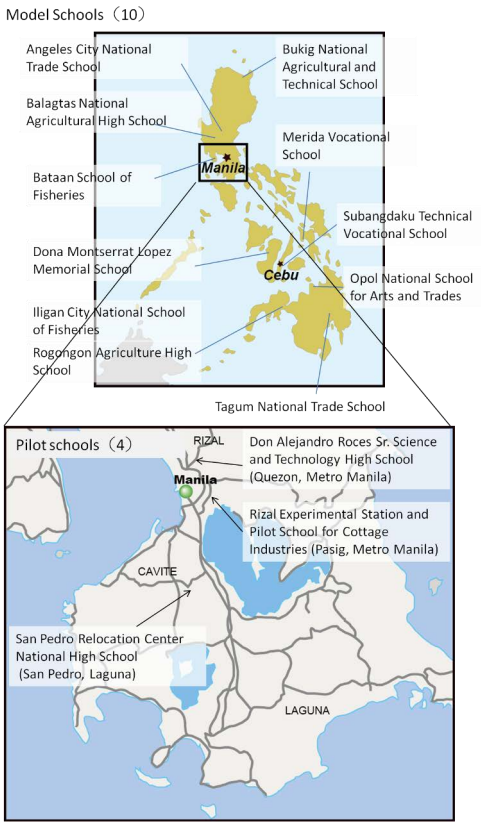
Model Schools (10)

Output 3:
SHS modeling Tech-Voc high schools, other than the four (4) pilot schools are informed of piloted activities / best practices for possible replication / adaptation / adoption.

Main activities:
- Hold a workshop to disseminate learning experience / best practices of the pilot schools.
- Provide the grants to the model schools to support their school improvement.

Target Schools

JICA Project Team primarily works with the following Tech-Voc high schools. The experiences and best practices gained in those schools are also shared to 280 Tech-Voc high schools including 10 model schools.



Rizal Experimental Station and Pilot School for Cottage Industries (Pasig City, Metro Manila)

Rizal Experimental Station and Pilot School for Cottage Industries (RESPSCI) has Hotel and Restaurant Management course for senior high school. In two years of high school, students learn Housekeeping, Food & Beverage Services and Bartending. They obtain related National Certificates accredited by TESDA, besides studying the core subjects such as Filipino and Mathematics.

As the first batch of senior high school, 22 students graduated this school at the end of March, 2014. As of June, 14 gradates found the job, two were self-employed and two went to college. Two other graduates are going to work abroad utilizing their skills and knowledge fostered in RESPSCI.

One of the graduates said, "Some of us are from families who can not afford to send us to college. However, the high school program offered by this school is free, so everyone can continue study.

In two years of our high school here, we could gain knowledge necessary to find a job in the future. Of course, there were difficulties as well, but we could learn how society worked and how the communication with others was important through our OJT experience at the firm."

RESPSCI offers many specializations such as Electrical Installation & Maintenance, Welding, and Garments for junior high school. They are planning to expand those specializations to high school gradually in order to meet the students' demands in 2016.

Don Alejandro Roces Sr. Science and Technology High School (Quezon City, Metro Manila)

Don Alejandro Roces Sr. Science and Technology High School (DARSSTHS) is offering the Automotive Technology Course and Hospitality & Tourism Course.

In Hospitality & Tourism Course, the students are learning about Bread & Pastry Production, Food & Beverage Services, Bartending, and Front Office. There are some opportunities for the students to attend the course at Philippine Women's University and Manila Montessori College International in order to enhance their skills and knowledge. OJT of those students are conducted taking advantage of DARSSTHS located near Tomas Morato, Quezon City, where many restaurants and hotels stand side by side.

The Wheatberry Bakery & Café in front of DARSSTHS accepted 9 OJT students from this school. Ms. Vivian, manager, said "The students are highly motivated to learn at our bakery and café. Through the OJT here, I am sure that they are now well prepared to be a member of world of work."

The students of Automotive Technology Course had OJT at Honda Cars Kalookan Inc. and Hyundai.

San Pedro Relocation Center National High School (San Pedro City, Laguna)

San Pedro Relocation Center National High School (SPRCNHS) has more than 6,000 students for its junior high school (from Grade 7 to Grade 10). This school has Automotive Technology, Garments, Electrical Technology, Welding, Technical Drafting, Culinary Art, Electronics Technology, Information Technology courses for senior high school.

192 students graduated this senior high school last April. 130 students were already employed, 11 students were self-employed and 49 students went to higher education as of June. The OJT during Grade 12 has made a great contribution in their finding employment.

For example, 8 students specialized Electrical Technology have undertaken OJT in Rohm Electronics Philippines Inc. manufacturing semi-conductor devices and electronic components in People's Technology Complex (PTC), Special Economic Zone in Cavite. In March, the Project Team together with the Industrial Linkage Coordinator of SPRCNHS visited Human Resources Division of Rohm Electronics to develop future collaboration between the company and the school. According to the manager, the OJT students were working hard, thus the OJT period was extended for the most students. He also advised that SPRCHNS should come to the meeting of Human Resources managers located in PTC to present the school profile and look for more partners. As the result of the HR meeting, some graduates were hired by the company located in PTC.

Outputs of the students of Technical Drafting

Subangdaku Technical Vocational School (Mandaue City, Cebu)

Subangdaku Technical Vocational School (STVS) offers Metal Works, Garments and Food Trade & Bread and Pastry Production for its senior high school.

Due to the Bohol Cebu Earthquake in October 2013, main school building has become unusable for schooling. Students are forced to take classes outside. To overcome the difficulty, the school administrator and teachers are trying to establish good linkages with private sector to enhance the quality learning environment for the students.

One of the partner companies, METAPHIL has supported this school for 7 years in many ways, such as providing training to teachers, OJT for students, and supply of consumables and equipment. Mr. Elliezer Simega, manager of corporate office, said, "Our company is counting on partner-schools such as STVS to supply reliable and competent workers. With the strong demand for welders not only in the Philippines, but abroad as well, and with the skills that the students have acquired, becoming world-class welders is not far from possible." The young staff of METAPHIL seem to be regarded as the role model of the students of STVS.

Outputs of the students of Bread & Pastry Production

UNIQUEASE Corporation is the Social Enterprise to create a job opportunity for youth and minimize the number of Children at Risk. The youths from vulnerable groups in society, work at UNIQUEASE restaurant.

After the presentation on Social Enterprise UNIQUEASE, and enjoyed healthy and delicious food, the teachers interviewed the two young staff of UNIQUEASE restaurant. The teachers were impressed by assertive communication of the two. They told that they learned many skills including communication skills at UNIQUEASE.

UNIQUEASE
Address: 2nd Floor, No. 7850, Makati Ave. corner Gen. Luna St., Makati City, Metro Manila, Philippines
Tel: +63-(0)2-519-6406
Website: http://www.uniquease.net/

Tips to promote Tech-Voc Education in Senior High School

To improve the Tech-Voc Education in Senior High School, Pilot Schools are conducting the following activities:

・Exploring partner companies in cooperation with student's parents, graduates and LGU (RESPSCI, DARSSTHS, and STVS).

・Accredited as School Based PESO and conducted Job Fair at school (SPRCNHS). All Pilot School make great efforts to assist employment of graduates.

・Introducing the school activities to locators of near industrial park through the cooperation with the administrator of industrial park (SPRCNHS).

The Project Team and Industrial Linkage Coordinators of Pilot Schools visited several companies and interviewed the managers to identify employee's competencies required in industries.

・Many companies require the communication skill. It means not only the ability to speak good English, but also ability to establish good relationship with supervisors and colleagues.

・In food related industries, sensitivity towards hygiene is very important.

To provide Tech-Voc Education to lead good employment, schools should pay attention to foster students' practical skills, at the same time, to foster positive and proper attitude on work.

This issue is sometimes mentioned in technical high school in Japan, too. One of Japanese teachers commented, "the attitude will be fostered through enhancement of specialization. If students notice her/his skill can be utilized in society, s/he will gain her/his confidence and behave properly. It is very important for us, teachers to connect what they learn and their future job."

Let's visit industries surrounding your school to know the practical situation and realize the quality Tech-Voc Education to our students.

Activities & Schedule

The first Joint Coordination Committee (JCC) Meeting was held on 4 July 2014 to orient the concerned parties of the Project towards achieving the project purpose and expected outputs. The meeting was chaired by DepED Undersecretary, vice-chaired by Chief Representative of JICA Philippine Office, and attended by the officials of Bureau of Secondary Education and Tech-Voc Unit, the representatives from TESDA, CHED, and 4 Pilot Schools.

On 8 July, the first Industrial Immersion was conducted at UNIQUEASE Restaurant targeting the teachers teaching food-related subjects at Pilot Schools as shown in above left.

The industrial immersion for welding teachers of SPRCNHS was arranged on July 19. 3 teachers and 2 Industrial Linkage Coordinators from SPRCNHS visited Babcock-Hitachi Philippines Inc. (BHPI) in Bauan, Batangas. BHPI manufactures power boilers and industrial boilers, and also provides engineering services. While a basic of SMAW is being taught at SPRCNHS, at BHPI, various welding technologies including TIG and SAW are utilized. The teachers were very much impressed by sophisticated welding methods offered at BHPI. The Project Team will provide other opportunities to visit other industries in cooperation with Japanese companies in order to upgrade the teaching quality at Tech-Voc high schools.

The first Training in Japan titled "Technical Education in high schools in Japan" for two weeks is planned in October. The representatives of DepED Tech-Voc Unit and Pilot Schools will attend lectures on the policy and curriculum of technical education and visit technical schools to observe how lessons and assistance for employment are provided in Japan.

In March, towards the end of the first project year, the workshop will be held to share with the model schools the learning experiences / best practices attained at the Pilot Schools.

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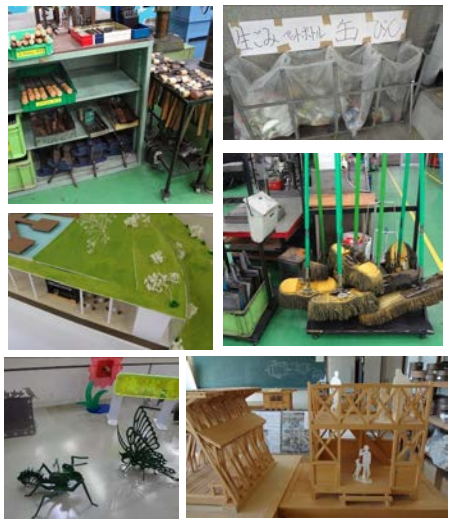
Project for Supporting Senior High School Modeling
In Selected Technical Vocational High Schools

March 2015 No. 2

Provide quality technical vocational education to foster better opportunities for youths...

Project Activities and Preparation for Senior High School Program from August 2014 to March 2015



One year has passed since the kick-off of the JICA Project for Supporting Senior High School Modeling in Selected Technical Vocational High School. This newsletter shares with you news about project activities and the preparation for the Senior High School (SHS) Program by the Government of the Philippines in the latter half of the project's first year (August 2014 to March 2015).

The Department of Education (DepED) has been preparing for the implementation of the K to 12 Program starting in the school year 2016 -2017. In September 2014, the "Public Senior High School Modelling Program Planning Workshop" was conducted to compare the current SHS program and the "K to 12 Curriculum" developed by the DepED and to identify the current situation and needs of schools.

The DepED division offices drafted an SHS implementation plan based on a survey of students' track preferences and an assessment of school capacity. The planning process also took into account the industry assessment conducted by division offices and individual schools. To accommodate all students who will become Grade 11 in June 2016, the DepED will also introduce a voucher system that will grant high school students who cannot be accommodated in public schools a tuition subsidy in a private school of their choice where they can complete their senior high school graduation.

The DepED is currently developing "A School Industry Linkage Officer's Handbook".

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Project for Supporting Senior High School Modeling In Selected Technical Vocational High Schools

The basic education in the Philippines consists of six years of primary and four years of secondary education, a total of 10 years. Graduates who have completed the current 10-year basic education cycle are too young to legally join the labor market and they have not mastered the necessary competencies.

In order to enhance the quality of education, the Government of the Philippines is pursuing the K to 12 Program which will expand the country's education cycle to a globally comparable 12 years. It is also expected to facilitate a smooth transition from education to the labor market.

Prior to the full implementation of the K to 12 Program in 2016, the DepED has implemented SHS Modeling to identify the fine-tuned SHS program. To support the modeling of technical vocational (Tech-Voc) education, the Japan International Cooperation Agency (JICA) launched the Project for Supporting Senior High School Modeling in Selected Technical Vocational High Schools in February 2014.

The project's purpose is "A mechanism is developed for Tech-Voc high school activities to ensure its effective implementation through collaboration with industries/firms including those from Japan." and it will be continued until June 2017.

Activities of Pilot Schools

The project activities started with a collaboration with four pilot schools: Don Alejandro Roces Sr. Science and Technology High School (DARSSTHS) in Quezon City, Rizal Experimental Station and Pilot School of Cottage Industries (RESPSCI) in Pasig City, San Pedro Relocation Center National High School (SPRCNHS) in San Pedro City, and Subangdaku Technical Vocational School (STVS) in Mandaue City. Those schools have conducted the following activities to enhance their relationship with industries.

Trade Fair and Job Fair

On August 28th, 2014, a trade fair was held at STVS to present their students' learning outcomes to the public, including the parents of the students. Some companies were also invited, including those offering industry immersions of STVS students, and those advised Industry Linkage Coordinators of STVS about gaps between the competencies of graduates and industry needs. Representatives from six companies attended the trade fair. STVS tried to promote their quality Tech-Voc education to industries through the trade fair.

SPRCNHS held a job fair on February 20th, 2015. The presentation was made based on Tech-Voc specializations to introduce the students' achievements. Human resource agencies were given a chance to get the students registered for their recruitment service.

Advertisement of recruitment agencies at SPRCNHS's Job Fair

Educational Activities' Improvement

DARSSTHS and RESPSCI offer a food and beverage service (FBS) course in SHS. To improve the readiness of students attending the FBS course, a "Coffee Brewing Seminar" was organized on August 26th, 2014, inviting experts from UCC Ueshima Coffee Philippines Inc. Twenty-five students per school attended the seminar and learned how to brew coffee using a paper filter as an introduction to coffee making.

STVS has started an exchange program with Ichikawa Technical High School (Chiba Prefecture, Japan). On January 28, 2015, a Skype Conference was held between STVS students and Ichikawa Technical High School students to introduce the school and their Tech-Voc education. NEC Telecom Software Philippines, INC. provided advice on an internet connection during the program. Based on interviews targeting companies located in Cebu, STVS found that their students need to enhance their communication skills. This exchange program is expected to motivate the students to express their ideas and speak in English.

Coffee Brewing Seminar

Sharing Experiences with Other Schools

A "Training Workshop for Industry Linkage School Coordinators (ILSCs)" was held on November 16-21, 2014 by the DepED in order to train participants in industry linkage coordination procedures, and to draft the guidelines on the School-Industry Linkage Program (SILP). Forty-one representatives from 20 schools participated. During the training workshop, Industry Linkage Coordinators (ILCs) from four pilot schools shared their experiences and an industry visit was conducted to seven companies, coordinated by SPRCNHS.

On February 12-14, principals of 280 schools with a Strengthened Technical-Vocational Education Program (STVEP) attended the Annual Workshop Conference. In the conference, the principals and ILCs of the pilot schools introduced following their practices to the other participants:

- LGU helps the pilot schools to identify potential companies for collaboration.
- To ensure the safety of students during practice, a pilot school should encourage parents to buy insurance.
- It is effective to provide good predeployment briefings to students.
- It is important that schools maintain good contacts with the concerned companies utilizing various events including a graduation ceremony.

Skype Conference between STVS and Ichikawa Technical High school

Model Schools

In addition to the four pilot schools, 10 Tech-Voc schools were designated as SHS modeling schools by the DepED in 2012. Four schools were located in Luzon, two in Visaya and four in Mindanao.

Prior to the activities at model schools in the project's second year (from May 2015 to April 2016), the Project Team visited those model schools and their DepED division offices to study how the preparation for SHS program was going in the respective area.

Common issues were found such as a lack of qualified teachers, a lack of appropriate facilities and equipment, and a high drop-out rate in SHS modeling. The practices and issues of each school were as follows:

Arts and Trade Schools

There are five arts and trade schools. While Angeles City National Trade School, Tagum National Trade School and Doña Monteserrat Lopez Memorial School are located in urban areas, Opol National Secondary Technical School and Merida Vocational School are located in smaller cities.

Industry immersion and employment of students are sometimes affected by the location of schools. For example, it is more difficult to develop partnerships with industry for Opol National Secondary Technical School than for schools located in a big city, since the number of companies is limited.

Merida Vocational School is now under repair due to damage caused by Typhoon Yolanda in November 2013.

Opol National Secondary Technical School

Agricultural Schools

Three model schools are agricultural schools. While Balagtas National Agricultural High School is located in an urban area, Bukig National Agricultural Technical School and Rogongon Agricultural High School are located in remote areas.

The schools located in remote areas have difficulty create opportunities for industry immersion and internships for students. To overcome the difficulty, Bukig National Agricultural Technical School sells products made by students on the bread and pastry course and utilizes the income as a subsidy for transportation fees for industry immersion and internship.

In Rogongon Agricultural High School, each student is encouraged to have to at least 1 ha farm to cultivate from Grade 7 to Grade 12 as laboratory farm within the community. The school supports students' production activities in order to demonstrate that agriculture could be a sustainable livelihood for the community.

Rogongon Agricultural High School

Fisheries Schools

Bataan School Fisheries and Iligan City National School of Fisheries are fishery schools.

Currently both schools provide multiple specializations other than those associated with fisheries. Bataan School Fisheries has established courses related to food processing and garments based on the needs of local communities and the nearby industrial park. Iligan City National School of Fisheries also has a food processing course. For students attending a fishery course, the school provides training in welding and encourages their students to obtain a related TESDA National Certificate.

Iligan City National School of Fisheries

A career guidance room in a Tech-Voc school in Japan. Information related to recruitment is provided by Public Employment Security Office and compiled here.

"Job Support Teacher" at public senior high school in Japan

In Japan, assistance with finding employment is one of the important roles of senior high schools, particularly technical high schools. A "Job Support Teacher" is assigned to about 90 % of prefectural (equivalent to "province" in the Philippines) Board of Education and these support teachers assist with the employment of graduates of senior high schools.

The Job Support Teachers (1) seek job posts for students, (2) provide students and parents with counseling, (3) help students practice interviews, and (4) improve students' behavior before joining a company. These supporters are not allocated to specific schools, but regularly visit several schools.

This system started around 10 years ago and its effects have just begun to be evaluated. However, it has been reported that the support teachers contribute to improving the employment rate.

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Technical Education in Japan

Training in Japan was conducted from October 19th to November 1st, 2014, providing insights from Japanese practices to improve Tech-Voc education in the Philippines. Eleven participants attended, including officers of DepED, and principals and ILCs of pilot schools.

In the first week of the training, lectures on the outline of Tech-Voc education in Japan and other countries, and school visits in Tokyo were provided. In the second week, the participants visited Kochi Prefecture to how technical education is conducted in the countryside and to generate the ideas on how to improve Tech-Voc education in the Philippines.

The participants pointed out the following practices that should be adopted in the Philippines:

【Educational contents】
- Before starting every lesson in a laboratory, the teacher should check which students are present, as well as their working clothes.
- Lessons in a laboratory: teachers can provide detailed instructions since one teacher handles less than 10 students.
- Students should keep tools and equipment tidy and clean laboratories.
- To ensure the safety of students, teachers should provide good instructions on how to wear working clothes and personal protective devices and how to use laboratory equipment. Buying insurance should be obligatory for all students engaging in laboratory work.

【Teachers】
- Schools should utilize human resources who are currently working in industry or who have retired. It makes lessons more practical.

【Assistance for employment】
- A career education started from primary school, practical lessons, industry immersion, internship and practices for interview are provided to students as assistance for employment.
- Senior high schools have a responsibility to offer career counseling and assistance for employment.

【Industry linkage】
- LGUs should promote Tech-Voc education and provide support to schools in establishing effective links to industry.

【Facility and equipment】
- The quantity of equipment should be appropriate to the number of students. Each student should have adequate opportunities to enhance his/her skills.

【Disaster prevention】
- Students on civil engineering courses should learn disaster prevention.
- Disaster drills are regularly conducted in schools in Japan.
- Schools should be designated as shelters in the case of emergencies.

Some pilot schools have already adopted some practices from Japan to improve their Tech-Voc education.

Visiting a Tech-Voc school in Japan

Schedule

The project's second year will start from May 2015 (the second year will be May 2015 to April 2016).

The Project Team continues its cooperation with pilot schools in regard to enhancement of industry links and graduate employment. Activities to improve Tech-Voc education at model schools will be started.

In October/November, the second training session in Japan will be scheduled. In the first year, the training program focused on practices of schools as regards industrial arts; the main theme of the second year will be agricultural and fisheries education.

Project for Supporting Senior High School (SHS) Program in Technical Vocational High Schools

February 2016 No. 3

Provide quality technical vocational education to foster better opportunities for youths...

Project Activities and Preparations for Senior High School Program from April to December 2015

Senior High School (SHS) curriculum consists of core subjects, applied track subjects, and specialized track subjects. The applied and specialized subjects that the students will take depend on the track they choose. The four tracks of the SHS are: (1) Academic, (2) Technical-Vocational, Livelihood (TVL), (3) Sports, and (4) Arts and Design. The TVL track is divided into 4 strands, (1) Home Economics, (2) ICT, (3)Agri-Fishery Arts, and (4) Industrial Arts.

Current Grade 10 students will continue studying in any of the above four tracks. Upon completion of a 12-year education, students will start working or continue studying at colleges.

Work immersion at companies will be available for technical and vocational track students. They will get work experience while studying. Companies may even hire the students after their graduation.

In addition to public schools, private schools offer SHS. There are 4,498 private schools cleared to offer SHS by DepEd. Private SHS students will also be given government assistance.

DepEd survey of preference of the current Grade 10 students shows that almost half or 48.9% (597,000) will take the TVL Track. The TVL Track students need to have hands-on experience in the SHS.

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Project for Supporting Senior High School (SHS) Program In Selected Technical Vocational High Schools

The basic education in the Philippines consists of six years of primary and four years of secondary education, a total of 10 years. Graduates who have completed the current 10-year basic education cycle are too young to legally join the labor market and they have not mastered the necessary competencies.

In order to enhance the quality of education, the Government of the Philippines is pursuing the K to 12 Program which will expand the country's education cycle to a globally comparable 12 years. It is also expected to facilitate a smooth transition from education to the labor market.

Prior to the full implementation of the K to 12 Program in 2016, the DepEd has implemented SHS Modeling to identify the fine-tuned SHS program. To support the modeling of technical vocational (Tech-Voc) education, the Japan International Cooperation Agency (JICA) launched the Project in February 2014. The Project is aiming at developing mechanism to ensure that Tech-Voc schools implement effective educational activities through collaboration with industries/firms.

The project title was changed to "Project for Supporting Senior High School (SHS) Program in Selected Technical Vocational High Schools" In October 2015, since the modeling program reached the early implementation stage. The Project will continue until June 2017.

Awareness-raising campaign of SHS for HR managers

Locators of Mactan Economic Zone participated in the conference

The Project has assisted DepEd Division Office of Mandaue City and two high schools with SHS program in organizing an awareness-raising conference of SHS. A half-day conference was held on June 26th, 2015 in Mactan Economic Zone where eventually 10 locators were able to attend. The two high schools that participated in the conference were Subangdaku Technical Vocational School (STVS) and Mandaue City Comprehensive National High School (MCCNHS).

The DepEd Division Office of Mandaue City explained K to 12 reform progress, listed the public schools within Mandaue City offering SHS in 2016 and specialization mapping while the principals of STVS and MCCNHS presented their experiences with industry linkage during the SHS modeling and early implementation phase.

The companies were eager to know about the new curriculum under K to 12 reform and raised questions such as the length and timing of work immersion. Some companies also expressed their willingness to send their experts to the schools to provide leading-edge skills to the students.

Setting up "Job Support Corner"

Promotion of "Job Support Corner" at four pilot schools

During the training in Japan in the 1st Project Year, "Job Support Room / Career Guidance Room" at technical high school in Japan was introduced to the participants. With the permission of the Labor bureau, high schools in Japan play the role of public employment security bureau and provide such services as receiving job offering information, and providing students with career counseling. The participants of the training in Japan were greatly impressed by the Job Support Room, and have explored the ways to adapt the scheme in the Philippines.

The Project Team assisted in setting up "Job Support Corner" in the four Pilot Schools intended to be a facility of supporting SHS students' career. At the Job Support Corner of the four school, students can access several websites including PHILJobNet (http://www.philjobnet.dole.gov.ph/) developed by Department of Labor and Employment (DOLE) and search information related to their future job under the supervision of a career guidance counselor and teachers.

The Project Team monitored and promoted the usage of Job Support Corner in December 2015.

Ship for South East Asian Youth Program (SSEAYP)

The participants learning how to fold towel from RESPSCI students

On November 12th, 40 participants of SSEAYP (sponsored by the Cabinet Office of Japan) visited one of the pilot schools, Rizal Experimental Station and Pilot School of Cottage Industries (RESPSCI) in Pasig City, Metro Manila.

SSEAYP provides the participating youths with the opportunity to live together on board the ship for about 43 days and visit some ASEAN countries as well as Japan. The activities in the countries visited include exchange with local youth, home stay, visit to various facilities and volunteer activities. It aims to promote mutual understanding and friendship between youths as well as to broaden the global perspective of the youths, and to cultivate the spirit of international cooperation.

The welcome ceremony was held in RESPSCI. A representative of the school introduced the school and the JICA Project conducted in the school. After the ceremony, the participants observed each booth in which the RESPSCI students introduced and demonstrated what they had studied in their courses. The students looked proud of their own skills and knowledge. Such kind of feeling (being proud of their own study) will motivate them to study as well as bring confidence to the students. SSEAYP provoked motivation to learn not only for the participants but also for the students in RESPSCI.

Activities of Model Schools

The Project Team provides grants to six model schools who submitted a proposal of small scale projects to implement in their educational activities, prior to selection of the grant recipients, The Project Team visited each school, and discussed the current situation/issues and how to solve them. Based on the discussions, the schools and the Project Team agreed on the project design matrix to fulfill their being a model of SHS after "K to 12" is fully implemented in June 2016. A Memorandum of Understanding was signed among the school, the Schools Division Superintendent of DepEd and the Project Team. The main activity and the status of each grant project are shown below (the number of students is based on interviews in July 2015):

Bukig National Agricultural Technical School (BNATS)

- Address: Apari, Cagayan Province
- No. of student: Grade 11: 18
  Grade 12: 20
- Courses under SHS program:
  Animal Production, Crop Agriculture, and Food Processing

Bukig National Agricultural Technical School owns hectares of land that are very suitable to deliver good agricultural education to its students. The Project grant was used to procure a tractor for tilling the field for the agricultural practicum, and cultivating 20 ha cassava farm. BNATS is exploring partnership with industries to develop cassava production, process and sales as a new local industry.

Bataan School of Fisheries (BSF)

- Address: Orion, Bataan province
- No. of students: Grade 11: 33
- Course under SHS program:
  Fish Tech, Garment, Fish Capture, Aquaculture, and Fish Processing

Bataan School of Fisheries is one of the best fisheries schools in the Philippines. The Project's grant was used for adding tanks in order to improve the efficiency of hatchery as well as the quality of aquaculture laboratory. As for facilities in a food processing laboratory, the school proposed to upgrade theirs to meet the needs of today's industry. Their smoked fish and other products are highly evaluated by local people. Improvement of facilities will enhance its quality of education to better contribute to the fishery sector in the Philippines.

Opol National Secondary Technical School (ONSTS)

- Address: Opol, Misamis Oriental Province
- No. of student: Grade 11: 81
  Grade 12: 54
- Courses under SHS program:
  Cookery, FBS, Electrical Power Distribution Line Construction

Opol National Secondary Technical School is one of the two technical vocational schools in the division of Misamis Oriental. By utilizing the Project grant, this school was equipped with the required facilities for Commercial Cooking NC III in order to ensure quality education with the large number of the students that will be enrolled in the next school year. They were also aware of students' safety and so they constructed a gas tank house outside the laboratory.

Iligan City National School of Fisheries (ICNSF)

- Address: Iligan, Lanao del Norte Province
- No. of students: Grade 11: 52
  Grade 12: 25
- Course under SHS program:
  Cookery / Bread and Pastry, Fish Capture, Aquaculture

Iligan City National School of Fisheries conducts work immersion for students in other cities along the coast. Although it promises them a better future, many students are suffering from the cost of transportation and lodging. To overcome these difficulties, the school decided to establish a large aquaculture laboratory in order to ensure that students can have practicum at the school and also receive financial support for the work immersion by income generation activities, for example by selling the fingerlings.

Rogongon Agricultural High School (RAHS)

- Address: Iligan, Lanao del Norte Province
- No. of students: Grade 11: 10
- Course under SHS Program:
  Agro Crop NC III

Rogongon Agricultural High School is located in the Bayug Higaonon ancestral domain, 33 kilometers from the city center. The school is aiming to make agriculture attractive for local community whose children often drop out from school because of poverty. Each student is given a one hectare demonstration farm for implementing agroforestry learned in the school. The Project grant was utilized to install agricultural facilities in the school. They will equip its students with competency in farming sustainable to enhance their quality of life.

Tagum National Trade School (TNTS)

- Address: Tagum, Davao del Norte Province
- No. of students: Grade 11: 38
  Grade 12: 46
- Course under SHS program:
  Automotive Technology, Technical Drafting, Consumer Electronics, Food Trade

Tagum National Trade School is the only technical-vocational high school among the five main public high school in Tagum City at the present. This school acquired automotive equipment by utilizing The Project's grant and will start an automotive service center for the community. It addresses students' need for hands-on learning and practicum; which is critical for mastery of core competencies.

Mobara Shoyo High School

"Project Study" at Technical High School in Japan

"Project Study" is a subject which some senior high schools including technical high schools set in their curriculum in Japan.

The project could be: (1) conducting study/research/experiment, (2) making some works, (3) involving practicum in industry situation and (4) acquiring vocational certificate. At the beginning, individual students or group of students are required to set the theme of the project based on their own interest or career view. Through conducting the project, students deepen their knowledge and skills, integrate what they have learnt, and enhance their problem solving skills. They are also given the opportunity to present the results of the project.

During the training in Japan, the participants learned some cases of "Project Study" such as developing new products from local resources, and conserving local marine creatures. They found that the project often involves local society or community.

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Technical Education in Japan (2nd batch)

From Oct 12 to 24, 2015, training in Japan was conducted under the title of "Technical Education in High Schools in Japan". 14 participants were invited to Japan: 2 officials from Department of Education, and 2 from each of the 6 model schools (a principal and teacher in charge of industry linkage) .

During the training, the participants attended lectures on education in Japan and on the Japanese technical education system. They also observed high schools and related institutions in Japan. They visited 1 technical high school, 2 high schools of fisheries, and 2 agricultural high schools in Chiba and Okinawa prefectures according to the participants' specializations.

Generally in the Philippines, students take practicum in their schools or in companies (the system is called 'work immersion'), and they learn how to apply the knowledge and skills they have acquired to actual situations. However, it has been difficult for the school to find industry partners. In addition, even though the companies accept the students for work immersion, they do not always set up appropriate conditions where the students can use the knowledge and skills obtained in the school.

Through the training in Japan, the participants found one clue towards solving the issue above: that is, Project Study. This employs a different educational style from work immersion because the students focus on learning the existing practice of the company.

In Project Study, students discuss how to apply their acquired knowledge and skills to daily life, and plan and implement one project a group. Many participants were impressed by the method (subject).

> *The Project study method... [and] serving the community along with the results of studies/projects and activities [were very impressive]. ... The realistic or industry type learning exposures would give more skills and confidence to the students.*
>
> *(Mr. Calabazaron, Principal, Bukig National Agricultural Technical School)*

Mr. Calabazaron, is currently working on a Competitive Gant Project, in which the school is provided with a tractor and plans to cultivate a 20 ha cassava farm. He mentioned that he would apply the Project Study method to his school and let the students discuss in groups how to utilize the harvested cassava in the school farm. The other participants also mentioned their plans to introduce the method to their schools. It is a new educational method for the students to apply their knowledge and skills in practical situations in the Philippines.

Tateyama Sogo High School

Appreciation Logo

JICA Project team and SPRCNHS organized a "logo design contest" with the students of drafting technology course in 2015. The logo was designed to show appreciation for partner industries for supporting the senior high school program. It symbolizes strong partnership, dedication and commitment, will be used by Regional Office in Laguna and its partners in its official communication, Memorandum of Agreement and other related documents.

Schedule

Major activities planned for March to April 2016 include the following activities:

- Monitor the execution of Competitive Grants
- Conduct awareness raising campaign of SHS for HR managers
- Facilitate experience sharing between Pilot Schools and Model Schools

Project for Supporting Senior High School (SHS) Program in Technical Vocational High Schools

February 2017 No. 4

Provide quality technical vocational education to foster better opportunities for youths...

Industry Summit conducted on November 7 to 9, 2016 in Metro Manila

The Department of Education (DepEd) in collaboration with the JICA Project for Supporting Senior High School (SHS) Program in Technical-Vocational High School" conducted the Industry Summit from November 7 to 9, 2016 in Metro Manila. It aimed to share the lessons learned on industry partnership and work immersion of JICA project partner schools with other STVEP schools. Participants included Chief of the Education Support Service Division or representatives from 11 DepEd Regional Offices and school heads of 255 STVEP schools.

The Industry Summit started with keynote address of Undersecretary Dina S. Ocampo followed by a presentation on DepEd Guidelines on industry partnerships by Atty. Tonisito M. C. Umali, Assistant Secretary, and introduction of JICA project by the Chief Advisor. In Session 1 "Sharing Experience by Partner School of the JICA Project", 4 pilot schools and 6 model schools presented their experience of SHS early implementation mainly focusing on quality improvement of Tech-Voc education, partnership development with industries, and appropriate career guidance for students.

On the second day, representatives of major industry sectors including electronics, tourism, automotive, and metal working were invited as speakers for Session 2. They introduced their experience to accommodate the work immersion of SHS students, their expectations of SHS and required competencies to be hired at companies.
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Project for Supporting Senior High School (SHS) Program in Selected Technical Vocational High Schools

K to 12 was fully implemented in June 2016 to expand 10 year basic education cycle of the Philippines to a globally comparable 12 years. It is also expected to facilitate a smooth transition from education to the labor market.

Prior to the full implementation of the K to 12 Program, the DepEd has implemented SHS Modeling to identify the fine-tuned SHS program. To support the modeling of technical-vocational (Tech-Voc) education, the Japan International Cooperation Agency (JICA) launched the Project in February 2014. The Project is aiming at developing mechanism to ensure that Tech-Voc schools implement effective educational activities through collaboration with industry / firms and open future paths for students.

The Project continues to support Tech-Voc education in selected SHS schools by its termination in June 2017.

Action Planning Workshop to develop and strengthen partnership for SHS

DepEd's direction for SHS

Awarding the certificate of appreciation

(Continued from page 1)

4 representatives shared the following comments with the audience; "students need to improve their basic mathematics and reading comprehension", "students are quite timid", "communication skill is important", and "longer duration of work immersion is needed."

In Session 3 in the afternoon, representatives of associations including die and mold, hotels, resort and restaurant, chamber of commerce and industry, and carriers and equipment vendors attended panel discussion. During the session, all associations explained that longer duration of work immersion can provide students with practical skills. While a representative of construction sector emphasized the importance of National Certificate (NC), communication skill is essential in tourism sector. One of the panelists commented that passion for work of students is the most important.

Day 2 was concluded by Action Planning Workshop to develop and strengthen partnership for SHS. Participants drafted School Improvement Projects of each school based on what was shared by JICA partner schools and industry representatives.

On Day 3, Director Jocelyn DR Andaya provided DepEd's policy direction for SHS, and Session 6 "Policy Direction of Related Agencies on SHS" was organized. Representatives of Department of Labor and Employment (DOLE), Technical Education and Skills Development Authority (TESDA) and PhilRice introduced their directions and related programs on SHS. A representative of Local School Board of Quezon City shared their good practices.

On the following pages, industries' expectations towards SHS, good practices of Quezon City Local School Board, and programs related to SHS by DOLE, TESDA and PhilRice are reported.

Companies' expectations towards SHS

Metal Industry: Rollmaster Machinery & Industrial Service Corp.

Formerly VL Industech, Rollmaster Machinery and Industrial Services Corporation fabricates machinery and metal-based products for various sectors like construction, agriculture and processed food and beverages. The company is the leading roll forming manufacturer in the county, with 35 years of experience in metal fabrication, machine building and engineering. (Company URL: http://rollmaster.mywebsite.net.ph/)

Rollmaster and sister company Globall Marketing & Construction Corporation (GMCC) signed a MOA with San Pedro Relocation Center National High School (SPRCNHS) for curriculum enhancement and immersion of teachers and students. Since 2014, a total of 37 students have completed the work immersion program. Ms. Candy Lanzuela, Managing Director of GMCC, noted most students performed well during work immersion and even fared better than on-the-job trainees from post-secondary schools. Some SPRCNHS graduates were employed by both companies after graduation because of their impressive performance during immersion.

Ms. Lanzuela implored participants in the summit to promote technical-vocational education as a viable career path and to make students aware that "higher skills means higher wages". The demand is very high for skilled workers, especially for qualifications like CNC machining, die and mold making, computer-aided design, and welding. She also mentioned the following values need to be developed in students before being deployed in the industry:

- Commitment towards work
- Maturity and strong sense of responsibility
- Appreciation for value of time (avoiding tardiness and advising supervisors of absences)

Tourism Industry: Cristina Villas Mountain Resort

Opened in 1980, the Cristina Villas Mountain Resort and Hotel is a popular destination for retreats and events in the resort town of Antipolo, Rizal. (Company URL: http://www.cristinavillasresort.com/)

The resort and its affiliate company, Femar Garden Resort and Convention Center, accepted SHS students from Rizal Experimental Station and Pilot School of Cottage Industries (RESPSCI) for work immersion. The students, who took up tourism qualifications, were exposed to different aspects of the resort's operations. The 200-hour training plan was crafted and co-implemented by both the school and the company, and students were given certificates for completing work immersion.

Ms. Olivia Putis, Assistant Manager, observed RESPSCI trainees to be very industrious and obedient, and displayed proficient technical skills. She stated trainees' communication skills need improvement however. She further said the following are required for SHS graduates seeking employment in the tourism industry:

- Good communication skills
- Improved work ethic and higher level of maturity
- Industry immersion of longer than 80 hours

Automotive industry: Toyota Motor Philippines Corporation

Toyota Motor Philippines Corporation is an automotive manufacturing company incorporated in 1988. It has the biggest share in automotive sales in the country. (Company URL: http://www.toyota.com.ph/)

The company signed a MOA with SPRCNHS in 2014 as a partner for the SHS Program. To date, 77 students who took up mechatronics, welding, automotive and electrical qualifications have been accepted for work immersion. The minimum training duration is five months, and covers not only technical skills but also soft skills. TMPC is looking into partnering with more schools for work immersion.

Ms. Samantha I. Alvar, Group Head for Recruitment Section, emphasized the importance of the following skills in the workplace:

- Ability to articulate and explain (communication skills)
- Emotional maturity
- Commitment to staying with the company in the long term (application readiness)

Open forum of Session 2

Electronics Industry: ROHM Electronics Philippines Inc.

ROHM Electronics Philippines Inc. is a semiconductor company that manufactures monolithic integrated circuits (ICs), transistors, diodes and resistor. (Company URL: http://www.rohm.com/web/global/)

In 2014, the company accepted 5 students from SPRCNHS for their work immersion. One of the students commented, "...the experience gave me an advanced idea and expectation of the field of work and helped discover and learn new set of skills in an advance technologies and environment." After the work immersion, all of them were hired, and since then they have worked for the company.

Based on the experience to accommodate SHS students, Mr. J. Gregorio, HR & OD Division Manager, gave his impressions on SHS students as "they are quite timid" and "they forget basic math and need to improve reading and comprehension." He stated that the following basic competencies are important besides specific competencies required in the electronics industry:

- Workplace communication
- Working in a team
- Problem solving & analysis
- Mathematical concepts
- Reading & comprehension

Presentation by Mr. J. Gregorio

Expectations of Industry Associations towards SHS

Session 3

Philippine Die and Mold Association (PDMA), Inc.

The PDMA has 127 member companies engaged in manufacturing dies, jigs and fixtures for metal stamping or metal forging, and molds for die casting, plastic injection, blow molding, forging, and encapsulation molds. The association advocates development of the Philippine die and mold industry and the upliftment of skilled workers.

Together with the Metalworking Industries Association of the Philippines (MIAP), PDMA signed a MOA with SPRCNHS in School Year 2014-2015 for the development of a machining course. MIAP and PDMA provided equipment and machinery to SPRCNHS and facilitated teacher training and immersion in the industry. The partnership also included provision of work immersion for SHS students among the MIAP and PDMA's member companies.

Mr. Philip C. Ang, President of PDMA, highlighted the importance of the following values and skills in the industry:

- Having a passion for work
- Being committed to learning
- Mastery of math skills
- Proficiency in computer-aided design (CAD) and using drafting software application

Panelists of Session 3

Laguna Chamber of Commerce and Industry

The Laguna Chamber of Commerce and Industry is a business organization advocating initiatives improving the viability of enterprise in the province.

Mr. Richard Albert I. Osmond, a member and also President of ICCP Group Foundation, Inc. (IGFI), the corporate foundation of the Investment and Capital Corporation of the Philippines, shared how the industry sector worked with the DepEd Division Office of Calamba City to enhance the curriculum for Science, Technology, Engineering and Mathematics (STEM) Strand featuring specialized tech-voc offerings. Through contextualization of classroom instruction material with manufacturing and safety concepts, and incorporating the mechatronics qualification in the curriculum, some of the competencies needed by industries are covered in school.

Before accepting students for immersion, Mr. Osmond mentioned companies need to have the following documents:

- Memorandum of Agreement (MOA)
- A defined training plan pre-agreed with the school
- Group insurance for students which covers immersion in the workplace

Bohol Association Hotels, Resort and Restaurants (BAHRR)

Composed of 80 member hotels, resorts and restaurants in Bohol, the Bohol Association Hotels, Resorts and Restaurants aims to improve hospitality services in the province and help boost tourism.

The association worked with DepEd Bohol to provide 100 hours training and immersion to 60 teachers within hotels and resorts in Panglao, Bohol. Using insights gained from the immersion, the teachers contextualized the content of the curriculum for tourism qualifications, ensuring a better fit between the competencies taught to students and requirements of the local tourism industry. Mr. Rommel Gonzales, President of BAHRR, believes "teachers cannot teach what they do not know" and that teacher immersion is important for exposure to industry standards.

Mr. Gonzales commented that good communication skills are the most important competency in the tourism sector, even more valued than having National Certificate (NC).

Association of Carriers & Equipment Lessors, Inc.

The Association of Carriers & Equipment Lessors, Inc. (ACEL) is an organization of construction companies and enterprises engaged in construction equipment services. One of ACEL's advocacies is the development of the construction industry's workforce through partnerships with government agencies and the private sector. (Association's URL: http://www.acel.com.ph/)

Ms. Abigail S. Mancilla, Co-chairperson of ACEL's Committee on Manpower and Development, emphasized the need for continuous training given the huge demand for skilled workers in the construction industry. ACEL works with TESDA for the development of a skills training program addressing the pressing need for skilled workers in the sector – and hopes to also partner with DepEd for the SHS program. As part of the association CSR, they donated equipment to Don Alejandro Roces Sr. Science-Technology High School in Quezon City, one of the pilot schools and an early implementer for the SHS Program.

Ms. Mancilla said National Certificates are required for skilled workers in the sector as per safety regulations observed in the industry. NC I is required for riggers, while NC II is needed for heavy equipment operators.

Awarding the certificate of appreciation

Good Practices of Quezon City Local School Board

With 46 secondary schools and over 36,000 incoming SHS students, the Quezon City (QC) local government unit, through the local school board (LSB), implemented the following measures in preparation for SHS full implementation:

- Creation of SHS Technical Working Group (TWG) composed of key representatives from DepEd division office, QC LGU, TESDA, CHED, private sector and the PTA federation
- Prepared a road map, with specific person/s responsible and definite deadlines identified, to guide the LSB in preparing for SHS full implementation
- Profiling of schools and students and scanning of existing businesses near schools
- Subsidized training for students, teachers, secondary school principals, division supervisors, and other education stakeholders
- Conducted advocacy activities to enlist the support of parents, industry representatives and key leaders in the community for SHS
- Allotted PHP 169 million for SHS supplies and equipment for FY 2014-2016 (apart from funds appropriated for land acquisition and school construction)
- Passing of local ordinances for institutionalizing "Career Advocacy Units" in public high schools and providing incentives for donations to QC public schools
- Contextualization of TVL curriculum to fit competencies with industry needs
- Provision of insurance to students undergoing work immersion
- Preparation of supplementary material for SHS students' Work Immersion

Ms. Susan Reyes-Baetiong, head of the LSB Secretariat, reminded participants of the importance of engaging the LGU and the necessity of partnering with industries, other government agencies and organizations for successful implementation of SHS. (QC LGU URL: http://quezoncity.gov.ph/)

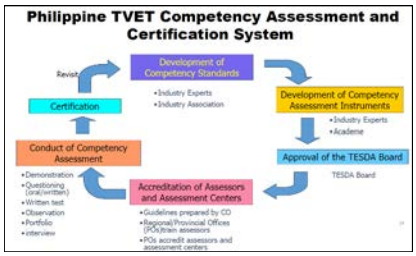
INITIATIVES OF QC LEGISLATIVE COUNCIL IN SUPPORT OF SHS

Ord. No. SP-2308, S-2014 "An Ordinance authorizing the QCPU to offer SHS education SY 2016-2017 until the end of SY 2020-2021 subject to the administrative issuances of relevant government agencies, thereby amending Ordinance No. SP-1030, series of 2001, entitled "An Ordinance providing the charter of the QCPU of 1998 as authorized by Ordinance No. SP-544,s-97 and amending the same."

Ord. No. SP-2367, s-2014 "An Ordinance Providing Incentives for Donations made in Favor of QC public schools."

Ord. No. SP-2400, s-2015 "An Ordinance Institutionalizing a Career Advocacy Units in All Public High Schools in Quezon City, Providing Guidelines Therefore and for Other Purposes.

TESDA's Policies and Programs related to SHS Program



The mandate of the Technical Education and Skills Development Authority (TESDA) is to manage technical vocational education and training (TVET) in the country, following a framework which is competency-based, assessment-driven and occupation-focused. (URL: http://www.tesda.gov.ph/). For the K-12 TVL track, TESDA's intention is to cover NC I and NC II of the Philippine Qualifications Framework (PQF). The most important TESDA policies related to SHS TVL track are:

- Training regulations (TR), which guide DepEd in crafting the TVL track curriculum
- National assessment and certification, which are required of TVL track specialization teachers and which students may take as proof of competency

Mr. Edward M. Dela Rosa, Chief TESD Specialist, outlined the training regulation contents, and expounded on competency assessment and certification system. Given TESDA's shortage of assessors and assessment centers, Mr. Dela Rosa recommended TVL teachers to take Trainers Methodology Level I, then undergo assessment and certification and apply as Competency Assessor. Schools should also strive to become accredited as either assessment centers or venues. He also announced Trainers Methodology Level II will be offered online by December 2016, accessible through the TESDA Online Program. (URL: http://e-tesda.gov.ph/)

PhilRice's Policies and Programs related to SHS Program

Representing the Department of Agriculture (DA) as a related agency, Mr. Jaime A. Manalo IV, Senior Science Research Specialist at the Philippine Rice Research Institute (PhilRice) presented the following initiatives related to SHS:

- *Infomediary Campaign*, a youth engagement initiative where students facilitate access to the latest technology in agriculture (URL: http://www.infomediary4d.com/)
- *Pinoy Rice Knowledge Bank*, an online portal on farming practices (URL: http://www.pinoyrkb.com/)
- *PhilRice Text Center*, an SMS-based consultation service for farmers also used by students
- *DA Summer Youth Internship Program*, implemented separately by DA regional offices
- *Agrilink*, annual international agribusiness exhibition and seminar supported by the DA and its attached agencies, and co-organized by over 30 agribusiness and food organizations
- Scholarships for children of farmers, fishermen and agriculture workers (Grants from the Agricultural Competitiveness Enhancement Fund or ACEF, implemented by CHED)

Mr. Manalo emphasized the importance of changing people's mindset for advocating the value of agriculture in society. He encouraged participants to engage parents in promoting agriculture as a viable career option for students, and presented data showing increase in enrollment in agriculture courses for some schools. Mr. Manalo also suggested schools to reinforce traditional methods of teaching agriculture with innovative "edutainment" methods (e.g. agri-games, farmer's testimony, using videos and pictures, and fieldwork), combining education and entertainment to keep students interested.

DOLE's Policies and Programs related to SHS Program

Ms. Dominique Rubia-Tutay, Director, Bureau of Local Employment-Department of Labor and Employment, prefaced her discussion of relevant DOLE policies and programs through an employment situationer showing almost half of the unemployed population as belonging to the youth. Even as unemployed youth are educated, they appear to lack pertinent skills/experience and certain socio-emotional skills/traits. The following initiatives by DOLE are related to SHS:

- *JobStart Philippines Program*, PESO-based program for at-risk youth, providing life skills and technical skills training and referrals for internship, employment or further training
- *Philippine Talent Map Initiative*, an online skills assessment, with results gathered to study trends and issues for workforce development. (URL: http://talentmap.ph/)
- *Career Guidance Advocacy Program*, implemented in partnership with DepEd, CHED, TESDA, Professional Regulation Commission and DOST, with added emphasis on engaging parents in the career guidance process
- *Labor Market Information (LMI) publications*, e.g. Career Information Pamphlets, JobsFit LMI report. (URL: http://ble.dole.gov.ph/default.asp)
- *Human Resource Development Roadmaps for 22 sectors*, on-going drafting of detailed plans to complement the strategic directions of DTI's industry roadmaps by developing industries' needed skills and ensuring talent availability

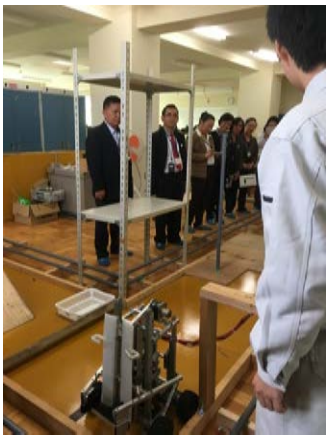
For policies supporting SHS, Director Tutay explained the provisions of DOLE Labor Advisory No. 08, Series of 2016, entitled, "Protection of Senior High School Students on K to 12 Work Immersion Program" issued on June 30, 2016. It determined conditions and prohibitions on work immersion for senior high school students, and specified certain activities per occupation and industry classification that are considered hazardous in accordance with DOLE Department Order No. 149, Series of 2016, entitled, "Guidelines in Assessing and Determining Hazardous Work in the Employment of Persons Below 18 Years of Age".

Technical Education in Japan

From October 16 to 29, training in Japan was conducted under the title of "Training Course for Enhancement of Technical Vocational High Schools" to obtain necessary insights how to improve Tech-Voc Education in the Philippines. While participants of the first and second batch were mainly principals and teachers of Tech-Voc senior high schools (SHS), educational administrative officers were invited to the program this year in order that Project outcomes be infused into the policies. The participants included 4 representatives from DepEd Central Office including the director of Bureau of Curriculum Development, 2 from Regional Offices and 8 from Division Offices.

In the first week of the program, the participants attended lectures on education in Japan and on the Japanese technical education system, and then visited Saitama Prefectural Education Center, Kawagoe Upper Secondary School, and Kawagoe Technical High School. In the second week, they visited Yamanashi Prefecture to attend a lecture on promotion of Tech-Voc education by Prefectural Board of Education and observe Hokuto High School, Norin High School and Nirasaki Technical High School. They also visited Yamanashi Hokuto Production Center and Yamanashi Prefectural Maglev Exhibition Center to understand local industries.

(Continue on page 8)



Students develop robots by utilizing their knowledge and skills (Saitama Prefectural Kawagoe High School)

Technical Education in Japan

Students grow flowers and sell them to the community (Yamanashi Prefectural Hokuto High School)

(Continued from page 7)

The participants were particularly interested in collaboration with external institutions and "Project Study" organized by each school. The following examples were introduced during the program.

Promotion of Tech-Voc education by collaboration with external institutions

Saitama Prefectural Board of Education conducts following projects to promote Tech-Voc education.

Global Project for Practical Vocational Education:
After acquiring fundamental and basic professional knowledge, technologies and skills though training courses in the prefecture, students developed new products overseas and in the prefecture with assistance from companies and sell the products at e-commerce sites. This project aims to equip people in industry with the capacities required for working independently in Japan and abroad.

Project for Learning from Professionals:
Private citizens who have excellent technical capacities and skills are dispatched to senior high schools to conduct practical lessons.

Project for Dispatching Career Advisor:
Private citizens who have experience in personnel affairs and labor management in business, those with the qualification of industrial counselor and those with an equivalent qualification are dispatched to senior high schools as career advisors.

Promotion of Employment Experience:
To develop sound attitudes to labor and careers, opportunities of internships and social service activities are provided.

Entrepreneurship Education Promotion Project:
Schools invite staff of companies promoting entrepreneurship education as a lecturer and conduct lessons on company research and career research.

"Project Study"

Technical high schools in Japan set "Project Study" as a part of their curriculum. It aims to deepen students knowledge and skills, integrate what they have learnt, and enhance their problems solving skills. The project could be: (1) conducting study / research / experiment, (2) making some works, (3) involving practicum in industry situation, and (4) acquiring vocational certificate.

In Yamanashi Prefectural Nirasaki Technical High School, some students develop eco cars and participate in "Honda Ecological Mileage Challenge" (competing for eco cars' mileage with a litter of fuel) . JICA program participants commented, "Students of automotive course in the Philippines learn car repair only, while students in Japan have experience to develop a car. Technical education in Japan provides students with exciting learning opportunities and hope for their future."

In the Philippines, SHS was newly established and Grade 11 students were enrolled in June 2016. Arrangement of work immersion for Grade 12 in SY 2017-2018 is one of the hot topics now. The purpose of Tech-Voc education, however is not limited to work immersion. Technical schools in Japan provide sufficient career guidance and almost all students are employed. Through the program, participants learned the importance to enhance employability of themselves by quality education, career guidance and support for employment.

Schedule

JICA Project Team is now preparing for "Roundtable Forum of DepEd Executive Committee Members and Industry Partners" co-hosted by External Partnership Service, DepEd and The Asia Foundation in February 2017, to discuss about SHS program.

The Project Team will monitor projects implemented by the Model Schools using Competitive Grants in the end of February.

The final evaluation of the Project is planed to be conducted by JICA HQ in April.

The Project will actively continue its activities by its termination in June 2017.

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Appendix 11

Newsletter Magazine

SHARING GOOD PRACTICES OF SHS EARLY IMPLEMENTATION

PROJECT FOR SUPPORTING SENIOR HIGH SCHOOL (SHS) PROGRAM IN TECHNICAL VOCATIONAL HIGH SCHOOLS

DepEd provided the list of schools to implement SHS modelling program through DepEd Order No. 36, s. 2012 and No. 71, s. 2012. The list included 30 schools. Out of 30 schools, 14 schools are Strengthened Technical-Vocational Education Program (STVEP) schools.

DepEd and JICA signed the Memorandum of Understanding on September 13, 2013 to implement a technical cooperation project called "Project for Supporting Senior High School (SHS) Program in Technical Vocational High Schools".

A team of Japanese experts were sent to the Philippines in February 2014 and started implementing the Project.

Out of 14 STVEP schools, 4 schools (Don Alejandro Roces Sr. Science and Technology High School, Quezon City, Rizal Experimental Station and Pilot Schools of Cottage Industries, Pasig City, San Pedro Relocation Center National High School, Laguna Province, Subangdaku Technical Vocational School, Mandaue City, Cebu) were designated as the pilot schools. The Project Team first started working with the 4 pilot schools in the 1st Project year (from February 2014).

In the 2nd Project year (from June 2015), the Project Team initiated the Competitive Grants Program targeting the 6 model schools featured in this Newsletter Magazine.

6 model schools have started the activities utilizing the Competitive Grants from the project. In the Competitive Grants Program, each school proposed a project which aims to improve educational activities in the school. The Project Team has supported the selected schools with a limit of PHP 1 million for each school.

Those 6 schools continued their early implementation of the SHS program in SY 2015-2016. The targeted 6 schools include:

Industrial Arts Schools : Opol National Secondary Technical School, Tagum National Trade School

Fisheries Schools : Bataan School of Fisheries, Iligan City National School of Fisheries

Agricultural Schools : Bukig National Agricultural and Technical School, Rogongon Agricultural High School

The Project Team visited the 6 model schools and discussed the current situation/ issues and how to solve the issues on their SHS education. Each model school decided the main issue to be solved. They developed a Project Design Matrix (PDM) in order to solve the main issue together with the Project Team. Those projects are expected to be models of SHS after 'K to 12' full implementation in 2016. Based on the PDM, Memorandum of Understanding was signed among the school, the Schools Division Superintendent of DepEd, and the Project Team. Then, procurement and construction works have started. Procurement work was completed and the schools are now ready to implement the planned activities.

This publication shares how these 6 schools have established their SHS program, and how they have endeavored to provide quality education to their students. The stories will provide you with some useful tips and hints for improving/offering SHS program in your school.

PROJECT FOR SUPPORTING SENIOR HIGH SCHOOL (SHS) PROGRAM IN TECHNICAL VOCATIONAL HIGH SCHOOLS (2014-2017)

SPECIAL ISSUE
March 2016

Location: Aparri, Cagayan Province
Region II

No. of students for SY 2015-2016 :
Grade 11: (14) Grade 12: (15)

Courses under SHS program:
Animal Production, Crop Agriculture, and Food Trades

"I started appreciating farming more, especially when I undergo work immersion"

45 HP Tractor
Mr. Renato Lozada, BNATS agriculture teacher and Assistant Partnership Focal Person (PFP, former Industry Linkage Coordinator), showcases use of farm machinery to agriculture teachers bench-marking best practices of the school for SHS implementation.

Bukig National Agricultural and Technical School (BNATS) is situated in agricultural land suitable to diversified farming. Based on the assessment made on its resources and potentials, the school has a tillable area of more than 35 hectares. With the help of the community and other partners, the school implemented plans to establish a 20 hectare farm for crop production.

As BNATS is an agricultural school, students are required to undergo actual field work to apply the theories that they have learned in the classroom. The school previously had only a small portion of the farm as demonstration area for rice production. The school's expanded offerings in agriculture require a bigger demonstration area to provide more hands-on-activities to students, particularly those specializing in crop production. This prompted the school to develop a wider demo space to serve as a training ground for students taking agriculture specializations.

Being recognized by Technical Education and Skills Development Authority (TESDA) as one of the agriculture training centers which conduct training programs for the community people including teachers from other schools, BNATS plays a vital role in promoting agriculture in the area. The school is challenged to further improve its facilities, including tools and equipment to support the hands-on activities of students and other community members who participate in the training programs offered by the school. This motivates and encourages more students to enroll in the field of agriculture.

Fredante Pagulayan, a student of Agri-Crop Production in BNATS said that, "After finishing Junior High School in BNATS, I wished to go to a university where I could have my college degree, but poverty hindered me so I took a short course at TESDA. A year had passed after my graduation but still, I couldn't find any job. Then I came to know that BNATS is going to model the SHS and one of its offerings is Agricultural Crop Production. I immediately returned to BNATS because I feel I'm equipped with basic skills in agriculture, having graduated in the same school. I started appreciating farming more, especially when I undergo work immersion. Farming is indeed a challenging job but enjoyable and rewarding."

"With the farm equipment provided to the school, I could say that farming is easier, enjoyable and rewarding. The 4-wheel drive tractor from JICA for example, increased productivity. I am one of those given an opportunity to operate the tractor," he added.

As of February 2016, the school has planted 7 hectares of cassava and 5 hectares of corn. Preparations are also on-going for additional 4 hectares for crop production. Corn was integrated in the area so that after harvest for 4 months, it will immediately be cropped rotated with cassava. This is to avoid cassava to be in its pre-harvest period during the typhoon season. These crop production processes have been taught to students during their field work.

The school intends to market the bulk of its processed cassava to cooperatives in Sta. Marcela, Apayao, which are cassava assemblers. The cassava will also be utilized as a supplement for feeds in the school's animal production. Students in Food Processing classes are also planning to use cassava for laboratory activities. The production of delicacies like cassava cakes may also be an avenue for development of entrepreneurial skills of students.

Demonstration Area
BNATS established a bigger area for SHS students' practicum, ensuring ample practical experience to complement theoretical learning.

Hands-on activities
A student practices cleft grafting on mango seedlings for horticulture class.

Brackishwater Fishponds
A venue for practicum and research on milkfish, tilapia, mudcrab, shrimp and oyster culture. BSF designated a portion of fish ponds for use of community members, to encourage interest in aquaculture and promote fisheries as a viable career.

Location: Orion, Bataan Province
Region III
No. of students for SY 2015-2016 :
Grade 11: (42)
Courses under SHS program:
Food Tech., Garment Tech.,
Fish Capture, Aquaculture, and
Fish Processing

Bataan School of Fisheries (BSF) is located along the coastal area of Orion, Bataan with a total land area of 14.8 hectares. School facilities include a 3-hectare brackishwater fishpond, a 2.8-hectare mangrove forest, and a 6 -hectare reservation area along Manila Bay utilized as fishing laboratory.

Known as one of the best fishery schools in the country today, BSF is determined to continuously provide quality technical-vocational (tech-voc) education programs to its students by upgrading school facilities, which include laboratory workshops, and tools and equipment in Aquaculture and Food Processing. Students use these facilities as their training ground to acquire the needed competencies in the field of fishery education.

The school is also a venue for benchmarking and immersion, being one of the tech-voc schools which modelled the SHS program. Students, teachers and practitioners from other fisheries schools visit BSF to undertake benchmarking and immersion activities in order to generate best practices, improved models, and learning experiences for possible adoption in their respective schools.

Acknowledging that fisheries courses are not as popular among students compared with other tech-voc specializations, BSF is trying to motivate SHS students to enroll in its fisheries courses. The school continuously upgrades its fisheries facilities, observing that fully-equipped workshops which meet the requirements of the modern fisheries sector for fish capture, aquaculture and processing draw the interest of students. There is a greater chance that more students will be attracted to take fisheries if laboratory facilities are well-equipped.

Apart from making fisheries courses more appealing, the school is primarily committed to ensuring all students who enroll in Grade 11 and Grade 12 are able to acquire the necessary competencies for either work placement, entrepreneurship, or higher education after graduating from high school. This requires investing resources in the development of partnerships and linkages, not just with industries but also with agencies like the Bureau of Fisheries and Aquatic Resources under the Department of Agriculture, and the local government unit.

"The assistance from partners is a big help in developing our Fisheries Technology students' competencies in Aquaculture and acquiring hands-on experience in managing an aquaculture project," Mr. Gerardo Batalla, Vocational School Administrator said. The facilities made the students more knowledgeable and more competent because they developed their skills through hands-on and practical activities, from the preparation of the fish ponds up to the harvesting stage of milkfish.

"The students in Fish/Food Processing course for example, are not only developing their competencies in Fish Products Packaging while acquiring practical experience in the usage of modern equipment, they are also developing entrepreneurship skills by marketing workshop products," he added.

"I became interested in improving my skills in fisheries especially in food preservation," said Heidi Roque, Grade 11 student of BSF.

Carrenza Paguirigan, also Grade 11 student said, "Keeping updated with the innovative facilities and equipment in the food preservation laboratory made me more confident to enter the world of work."

"Knowledge without application is dead knowledge. The application of knowledge in fisheries through practical skills became more interesting and challenging," also said Grade 11 student Crenz Al Lexer.

Practicum at the hatchery
Aquaculture students use facilities designed by the Bureau of Fisheries and Aquatic Resources.

Double-chamber vacuum-sealing machine
Students use industry grade machines in packaging processed fish products.

Maintaining sanitary laboratory conditions
BSF teachers supervise laboratory activities during practicum activities.

Pressure packed hands-on activities
Mrs. Chua, Food Processing teacher, instructs students on proper pressure canning.

"Regular monitoring to ensure students are performing well"

Location: Opol, Misamis Oriental Prov. Region X

No. of students for SY 2015-2016 :
Grade 11: (69) Grade 12: (49)

Courses under SHS program:
Cookery, Food and Beverage Services, and Electrical Power Distribution Line Construction

Students undergoing work immersion in Luxe Hotel, Cagayan de Oro City
Grade 12 students with Mr. Pacamalan, ONSTS Principal and Ms. Pleños, Assistant Partnership Focal Person (PFP).

Opol National Secondary and Technical School (ONSTS) is situated in a second class municipality 10 kilometers away from Cagayan de Oro City. It is recognized as one of the best pilot public technical schools in the entire region.

The school plays an important role in the promotion of tech-voc education in the region, because of having sufficient facilities and equipment, and a pool of dedicated and qualified teachers. A thriving tourism industry in the Northern Mindanao region and the consistent high enrollment of students in tourism courses prompted ONSTS to upgrade its offerings in hotel and restaurant services, planning to add Commercial Cooking National Certificate (NC) III to its SHS program for SY 2016-2017. ONSTS has also been chosen as a training venue for Technology and Livelihood Education (TLE) teachers as part of the DepEd Division of Misamis Oriental's preparation for SHS full implementation.

The acquisition of industry standard workshop laboratories and facilities enabled ONSTS to consider upgrading its offerings in line with the local industry needs. Through the DepEd's STVEP and the school's partnerships with different organizations, ONSTS acquired not just the facilities, tools and equipment, but also the additional training for teachers necessary to offer a competitive tourism program. Having trained teachers, safe facilities and sufficient tools and equipment, helps ensure quality education as students will have sufficient hands-on activities to master competencies.

"This provision is in full support to the SHS modelling program which was initially implemented in SY 2012 -2013. The equipment donated for the State-of the-Art building by the JICA Project and the construction of the gas tank house, were all apt and essential for the security and safe training of the students," ONSTS Principal Anthony Pacamalan said. And in an encouraging example of unity and cooperation, the school PTA shouldered the labor cost for installing the school's gas tank house.

Pacamalan stressed that teachers and students are able to work more efficiently and effectively in the laboratory workshop because the tools and equipment are all working well. Students can also practice more regularly because they do not have to do shifting as tools and equipment are ample. They also face fewer risks as the facilities are compliant to industry standards.

Student also expressed their satisfaction in having good laboratories and workshops for hands-on activities. Rommel Borja, a student with Food and Beverage Services (FBS) NC II said, "Because of the standard training procedure that I have experienced in school, I never encountered difficulties during work immersion. I was able to acquire skills more easily on the study of theories and hands on activities. With that, I become more confident in my immersion at one of the best hotels in Cagayan de Oro City, the Luxe Hotel".

Grade 12 students are presently conducting their work immersion. Regular monitoring of the students is conducted by Ms. Vienez Pleños, the school's designated Assistant Partnership Focal Person (PFP, former Industry Linkage Coordinator), to ensure students are performing well. Students are given proper orientation, and industry partners follow the agreed training plan, thus honing students' competencies in an appropriate work environment. Monitoring is conducted using the school service vehicle, even as the principal's personal vehicle is used when immersion partners are located in far-flung areas. Industry partners gave positive feedback on the performance of ONSTS students in the workplace, with some partners extending employment offers after the work immersion. With the schools help, ONSTS graduates are able to consider good opportunities for employment.

The incoming full implementation of SHS in June 2016 finds ONSTS doing its best to deliver quality education with a pool of TESDA-certified teachers, and showcasing industry standard facilities appropriate for actual training.

Winning smiles of FBS students during practicum in the school workshop
ONSTS believes the vibrant tourism industry in the Northern Mindanao region will provide ample opportunities for SHS graduates with tourism sector qualifications, whether for employment, higher education or entrepreneurship.

"Providing good opportunities for students through aquaculture"

Location: Iligan, Lanao del Norte Province
Region X

No. of students for SY 2015-2016 :
Grade 11: (30) Grade 12: (18)

Courses under SHS program:
Cookery, Bread and Pastry Production, Aquaculture, Electrical Installation and Maintenance (EIM), and Shielded Metal Arc Welding (SMAW)

Koi in an outdoor water garden in Iligan City
ICNSF is hoping to attract more students in fisheries during full implementation of SHS in June 2016. The school plans to produce fingerlings as part of aquaculture students' practicum, including ornamental fishes like koi.

Iligan City National School of Fishery (ICNSF) is the only tech-voc high school in Iligan City to pioneer program registration to TESDA for its fisheries program, and it continues to provide opportunities to students through aquaculture. The school is an accredited assessment center for Aquaculture NC II as well as Electrical Installation and Maintenance (EIM) NC II, Food Processing NC II, Bread and Pastry Production NC II and Cookery NC II.

ICNSF has an aquaculture facility, an 8m×8m hatchery. The facility however is too small to conduct effective practicum for students. The school thus relies on work immersion in partnership with private companies and with the Bureau of Fisheries and Aquatic Resources.

The school thus proposed the project of establishing a larger aquaculture laboratory to ensure students have sufficient practicum within school premises. The school intends to give financial support to the students for immersion within the school hatchery through income generation activities, such as selling the fingerlings cultured in the school's hatchery.

Being a beneficiary school through JICA's Competitive Grants Program, ICNSF has made the project of constructing a multi-species hatchery come into realization.

"The hatchery facility made Aquaculture more attractive and tangible to students pursuing the qualification. Fish tanks as one of the facilities to be studied in Aquaculture will serve as avenue for students' hands-on activity/ practicum in hatchery operation for multi-species fish like koi, goldfish and tilapia," Valentino Navarrete, Assistant Partnership Focal Person (PFP) of ICNSF said.

With this multi-species hatchery, students will experience performing actual process in hatchery operation such as manual sexing of fish, conditioning, breeding, post breeding activity, feeding and growing of fry. They will also acquire knowledge in growing natural foods like zooplankton or daphnia. This facility is one medium in perking the interest of the youth to take up Aquaculture particularly those inclined in raising fish, be it for food or for ornamental purposes.

The project targets developing the entrepreneurial potential of the students and training them how to profit when venturing in such endeavor. The fry/fingerling production itself is a potential source of income, since it is sold in the market on a wholesale or retail basis. Proper record keeping is embedded in the students' practicum.

Proceeds from marketing fingerlings reared at the school hatchery will also help costs incurred for hatchery operations, including feeds and consumables. The hatchery activities will also defray work immersion costs for SHS students, as transportation and lodging expenses is prohibitive for most students.

ICNSF aims to continue being a benchmarking site for other schools and organizations in the future, showcasing how fisheries courses could be a profitable livelihood and viable career.

Multi-species hatchery for aquaculture students completed in February 2016
Hatchery facilities include brood stock and hatchery tanks, a store room, a motor house, perimeter fences for security, and fully functioning water and aeration system with a pressure tank set, electric pump, generator and submersible pump. Freshwater for the hatchery is sourced from Mimbalot Falls, located near the school.

Location: Iligan, Lanao del Norte Province
Region X

No. of students for SY 2015-2016 :
Grade 11: (5)

Course under SHS program:
Agricultural Crops Production NC III

Demonstration on use of hand tractor at Rogongon Agricultural High School
Mr. Richard Talaid, School Head, participates in the demonstration with suppliers.

Rogongon Agricultural High School (RAHS) is one of two agricultural high schools in Iligan City. The school is located in a mountainous area 33 kilometers away from the city center, and is located in the Bayug Higaonon ancestral domain. The school site was acquired through donation from the Indigenous Peoples (IP) community, of which several hectares are demonstration farms for abaca, banana, rubber, coffee and various crops. Mindful of the negative social and environmental impacts of monocropping in forests, RAHS promotes agroforestry to interest students in agriculture, with the goal of providing SHS students with options for higher education, entrepreneurship and employment after graduation from high school.

As a strategy to promote agriculture, RAHS encouraged its SHS students to establish their own one hectare demonstration farm. SHS graduates are also encouraged to become members of the local farmers association. The school expects its graduates to contribute to the agricultural development of the community in order to improve their quality of life. Hence, the teachers inculcate to the students the skills and knowledge in agroforestry and concepts of sustainable livelihood, by which students can develop their own farm without large amounts of financial capital for expensive machinery or farm inputs.

Having a high school in a remote area is a great challenge, not only because of location, but also because of the reluctance to consider agriculture as a profitable enterprise or a rewarding livelihood. Teachers were also initially lacking in the required training, and the school needed to procure basic tools and equipment to better promote agroforestry as a viable livelihood.

"We started by establishing the school's agroforestry farm, utilizing and developing the school's 6 hectare lot for the project," Richard Talaid, School Head of RAHS, said. The school also pursued partnerships with a range of organizations to strengthen its advocacy. Linkages with government agencies and private organizations like the Department of Environment and Natural Resources (DENR), the Philippine Fiber Industry Development Authority (FIDA), TESDA, Nestle Philippines, and the Iligan City Agriculture Office, enabled the school to provide their students with planting materials, additional farm implements, and training for both teachers and students. RAHS also upgraded its SHS program course offering in agriculture, in a bid to become the agricultural learning hub in the community.

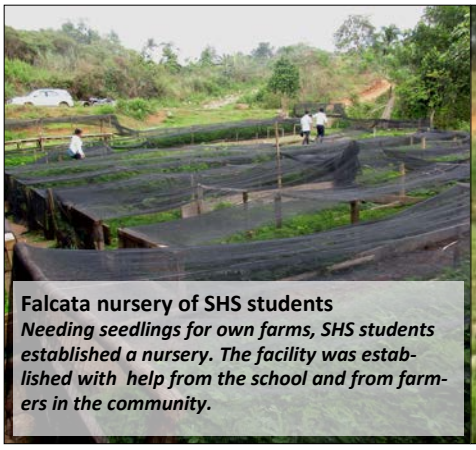
"Tools and equipment, like the hand tractor JICA procured, has attracted curious students and sparked their interest in local farming as these tools are fairly new to them and proving to be very valuable in making agricultural works less labor intensive compared to their old ways of farming," said Lilani Casas, Assistant Partnership Focal Person (PFP) of RAHS.

The school makes agriculture appealing to young people by making it socially relevant. Activities such as tree planting can be organized not only locally in Rogongon but can also be encouraged across the whole city of Iligan by partnering with other schools and government organizations.

Additionally, the school taps the entrepreneurial skills of the youth by providing consumers with environmentally sustainable agricultural products by using modern techniques in agricultural farming as taught in the SHS program.

Currently, a number of students have established and developed their own farms by planting abaca and falcata trees. These activities have involved SHS graduates and junior high school students, and their progress have been monitored and documented.

RAHS is optimistic that it will be a benchmark for other SHS offering tech-voc education and serves as a good model for similar high schools located in rural areas or disadvantaged communities.



Falcata nursery of SHS students
Needing seedlings for own farms, SHS students established a nursery. The facility was established with help from the school and from farmers in the community.

Student-farmer and entrepreneur
Grade 11 student displays a falcata seedling for sale to visitors. Local farmers are regular customers, even as some farmers work at the nursery in exchange for seedlings.

"SHS graduates in TNTS will become more skillful and competitive because of the additional competencies that they acquire"

Location: Tagum, Davao del Norte Province Region XI
No. of students for SY 2015-2016 :
Grade 11: (28) Grade 12: (46)
Courses under SHS program:
Automotive Technology, Technical Drafting, Consumer Electronics, Food Trade

TNTS Automotive Facility
Complete with four-post car lift, wheel alignment system, on-board diagnostics equipment and wheel balancer, the facility will offer free automotive services to the community to provide automotive students with hands-on activities similar to commercial automotive shops.

Tagum National Trade School (TNTS) is the only tech-voc high school among the five main public high schools in Tagum City and currently the only public secondary school in Tagum City to offer Automotive Servicing NC II and Small Engine/Motorcycle Servicing NC II. The school participated in the DepEd SHS modelling program and continued to be an early implementer of SHS.

TNTS, as modelling school for the SHS, also caters to students coming from other secondary schools in Region XI who opt to take the tech-voc track. Being a TESDA accredited and recognized trade school in Tagum City, it also serves as a venue for benchmarking of tech -voc students, teachers and other practitioners coming from all over the country. The school is also the venue for the conduct of competency assessment of tech-voc teachers who wish to be awarded with National Certification in their specific areas of specialization.

Given its multiple roles as a training center, a model for other schools offering the Technical-Vocational Livelihood Track, the school constantly looks for ways to upgrade its laboratory workshops to align with industry standards and latest technology in tools and equipment. Training of teachers to upgrade their professional competencies is likewise a priority for TNTS, ensuring that its faculty has acquired the necessary certification from TESDA to teach tech-voc courses.

Having qualified teachers and up-to-date workshops allows TNTS to offer practical training and laboratory activities with standards akin to that of the workplace. As one of the strengths of the school is on linkages and coordination, the school generates support from potential donors and relevant stakeholders/partners to augment the resources made available by the DepEd Central Office. DepEd provided intervention funds for the construction of laboratory workshops, purchase of tools and equipment, and the provision of capability building programs for teachers. The local school board has also provided TNTS with financial assistance for the construction of laboratory to complete the workshops needed to support the implementation of the SHS program.

For the school's automotive sector qualifications, TNTS is aiming to open an automotive facility in the school on par with commercial automotive shops, complete with automotive lift, the latest in on-board diagnostics, and even computerized wheel alignment. The facility will address students' need for ample opportunity for hands-on learning and practicum needed for mastery of competencies. The facility will serve as an incubation laboratory for students' work immersion through increased exposure to various types of diagnosis and repair, while providing experience in operating an automotive shop.

"The support we received from partners like JICA and the local government unit is a big factor for us to implement our proposed curriculum innovation on Automotive Servicing NC II," said Mario Gregorio, Principal of TNTS.

"The implementation of the proposed curriculum innovation in automotive would greatly improve the SHS program considering the students would be exposed to new equipment which is similar to industry setting. Work immersion program can be done in the school setting because the school offers services to the community particularly in terms of wheel alignment, wheel balance and car lift to expose students on activities similar to the workplace," he added. This approach by TNTS can be applied in other schools.

SHS graduates in TNTS will become more skillful and competitive because of the additional competencies that they acquire from the program. The automotive facility also gives TNTS more opportunities to forge linkages with industry partners, for the employment of SHS graduates.

Computerized wheel aligner with 8 CCD image sensor system for use of automotive students.

TNTS teachers appreciate newly-acquired equipment at the school automotive shop.

FEATURED INDUSTRY

CAGAYAN DE ORO HOTEL AND RESTAURANT ASSOCIATION (COHARA)

To facilitate the placement of SHS students in hotels and restaurants for work immersion, the **Opol National Secondary Technical School (ONSTS)** in Misamis Oriental became a member of the **Cagayan de Oro Hotel and Restaurant Association (COHARA)**, an organization of hotels and restaurants based in Cagayan de Oro City. COHARA was organized in 1996 through the initiative of the Department of Tourism, and is an affiliated chapter of the Hotel and Restaurant Association of the Philippines (HRAP).

As of February 2016, COHARA has facilitated the placement of a number of ONSTS students to its member hotels and restaurants as trainees. Some students have also been able to land jobs with the same companies after their graduation from SHS. Through membership in COHARA, the school not only ensures quality work immersion for its SHS students, but also gives SHS students opportunities for career advancement.

FEATURED PRODUCT

SMOKED SOFT-BONED BANGUS (Bataan School of Fisheries)


Smoked soft-boned bangus

Product Description

Bangus, or milk fish, is known for its delicate flavor, but may be challenging to eat because of its spiny anatomy. An effective way to process *bangus* and make it more attractive to consumers is to soften the spines by pressure cooking the fish, before smoking. The product formed is known as "smoked soft-boned *bangus*" or *tinapang bangus*.


Inside the BSF Smokehouse

The school constructed a smokehouse for curing, and uses vacuum packaging for its *tinapang bangus*. Since 1993, the smoked soft-boned *bangus* of **Bataan School of Fisheries (BSF)** has been a bestseller among overseas Filipino workers (OFWs) in Orion, Bataan. Sugarcane bagasse, the fibrous remains of the sugar cane after juice is extracted, is used by the school for smoking, to obtain a consistently mild and sweet smelling flavor for its product. OFWs purchase the vacuum-packed product as *pasalubong* when they return to their work stations in other countries. Employees of the local government unit and other government agencies in the area also make bulk orders of *tinapang bangus* as a gift for their visitors. The school shares the method for preparing this product during livelihood training for community members.

PROJECT FOR SUPPORTING SENIOR HIGH SCHOOL (SHS) PROGRAM IN TECHNICAL VOCATIONAL HIGH SCHOOLS

~ SPECIAL ISSUE NEWS MAGAZINE ~

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Appendix 12

DepEd Press Release

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF EDUCATION

"Knowledge without application is dead knowledge"

August 23, 2016

Bataan School of Fisheries (BSF) is located along the coastal area of Orion, Bataan with a total land area of 14.8 hectares. School facilities include a 3-hectare brackishwater fishpond, a 2.8-hectare mangrove forest, and a 6-hectare reservation area along Manila Bay utilized as fishing laboratory.

Known as one of the best fishery schools in the country today, BSF is determined to continuously provide quality technical-vocational (tech-voc) education programs to its students by upgrading school facilities, which include laboratory workshops, and tools and equipment in Aquaculture and Food Processing. Students use these facilities as their training ground to acquire the needed competencies in the field of fishery education.

The school is also a venue for benchmarking and immersion, being one of the tech-voc schools which modelled the SHS program. Students, teachers, and practitioners from other fisheries schools visit BSF to undertake benchmarking and immersion activities in order to generate best practices, improved models, and learning experiences for possible adoption in their respective schools.

Acknowledging that fisheries courses are not as popular among students as other tech-voc specializations, BSF is trying to motivate SHS students to enroll in its fisheries courses. The school continuously upgrades its fisheries facilities, observing that fully-equipped workshops which meet the requirements of the modern fisheries sector for fish capture, aquaculture and processing draw the interest of students. There is a greater chance that more students will be attracted to take fisheries if laboratory facilities are well-equipped.

Apart from making fisheries courses more appealing, the school is primarily committed to ensuring that all students who enroll in Grade 11 and Grade 12 are able to acquire the necessary competencies for either work placement, entrepreneurship, or higher education after graduating from high school. This requires investing resources in the development of partnerships and linkages, not just with industries but also with agencies like the Bureau of Fisheries and Aquatic Resources under the Department of Agriculture, and the local government unit.

"The assistance from partners is a big help in developing our Fisheries Technology students' competencies in Aquaculture and acquiring hands-on experience in managing an aquaculture project," Mr. Gerardo Batalla, Vocational School Administrator said. The facilities make the students more knowledgeable and more competent because they develop their skills through hands-on and practical activities, from the preparation of the fish ponds up to the harvesting stage of milkfish.

"The students in Fish/Food Processing course for example, are not only developing their competencies in Fish Products Packaging while acquiring practical experience in the usage of modern equipment; they are also developing entrepreneurship skills by marketing workshop products," he added.

"I became interested in improving my skills in fisheries especially in food preservation," said Heidi Roque, Grade 11 student of BSF.

Carrenza Paguirigan, also Grade 11 student said, "Keeping updated with the innovative facilities and equipment in the food preservation laboratory made me more confident to enter the world of work."

"Knowledge without application is dead knowledge. The application of knowledge in fisheries through practical skills became more interesting and challenging," also said Grade 11 student Crenz Al Lexer.

Japan International Cooperation Agency (JICA). Sharing Good Practices of SHS Early Implementation (Special Issue). March 2016.

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SHS Spotlight: Tagum National Trade School

September 2, 2016

Tagum National Trade School (TNTS) is the only tech-voc high school among the five main public high schools in Tagum City and currently the only public secondary school in Tagum City to offer Automotive Servicing NC II and Small Engine/Motorcycle Servicing NC II. The school participated in the DepEd SHS modelling program and continued to be an early implementer of SHS.

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Given its multiple roles as a training center and as a model for other schools offering the Technical-Vocational Livelihood Track, the school constantly looks for ways to upgrade its laboratory workshops and align them with industry standards and the latest technology in tools and equipment. Training of teachers to upgrade their professional competencies is likewise a priority for TNTS, ensuring that its faculty has acquired the necessary certification from TESDA to teach tech-voc courses.

Having qualified teachers and up-to-date workshops allow TNTS to offer practical training and laboratory activities with standards akin to that of the workplace. As one of the strengths of the school is on linkages and coordination, the school generates support from potential donors and relevant stakeholders/partners to augment the resources made available by the DepEd Central Office. DepEd provided intervention funds for the construction of laboratory workshops, purchase of tools and equipment, and the provision of capability building programs for teachers. The local school board has also provided TNTS with financial assistance for the construction of laboratory to complete the workshops needed to support the implementation of the SHS program.

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"The implementation of the proposed curriculum innovation in automotive would greatly improve the SHS program considering the students would be exposed to new equipment which is similar to industry setting. Work immersion program can be done in the school setting because the school offers services to the community particularly in terms of wheel alignment, wheel balance and car lift to expose students on activities similar to the workplace," he added. This approach by TNTS can be applied in other schools.

SHS graduates in TNTS will become more skillful and competitive because of the additional competencies that they acquire from the program. The automotive facility also gives TNTS more opportunities to forge linkages with industry partners, for the employment of SHS graduates.

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SHS spotlight: Bukig National Agricultural and Technical School

September 9, 2016

Bukig National Agricultural and Technical School (BNATS) is situated in an agricultural land suitable to diversified farming. Based on the assessment made on its resources and potentials, the school has a tillable area of more than 35 hectares. With the help of the community and other partners, the school implemented plans to establish a 20-hectare farm for crop production.

As BNATS is an agricultural school, students are required to undergo actual field work to apply the theories that they have learned in the classroom. The school previously had only a small portion of the farm as demonstration area for rice production. When its expanded offerings in agriculture required a bigger demonstration area to provide more hands-on-activities to students -- particularly those specializing in crop production -- the school promptly developed a wider demo space to serve as a training ground for students taking agriculture specializations.

Being recognized by Technical Education and Skills Development Authority (TESDA) as one of the agriculture training centers which conduct training programs for the community people including teachers from other schools, BNATS plays a vital role in promoting agriculture in the area. The school is challenged to further improve its facilities, including tools and equipment to support the hands-on activities of students and other community members who participate in the training programs offered by the school. This motivates and encourages more students to enroll in the field of agriculture.

Fredante Pagulayan, a student of Agri-Crop Production in BNATS said that, "After finishing Junior High School in BNATS, I wished to go to a university where I could have my college degree, but poverty hindered me so I took a short course at TESDA. A year had passed after my graduation but still, I couldn't find any job. Then I came to know that BNATS is going to model the SHS and one of its offerings is Agricultural Crop Production. I immediately returned to BNATS because I feel I'm equipped with basic skills in agriculture, having graduated in the same school. I started appreciating farming more, especially when I undergo work immersion. Farming is indeed a challenging job but enjoyable and rewarding."

"With the farm equipment provided to the school, I could say that farming is easier, enjoyable, and rewarding. The 4-wheel drive tractor from JICA for example, increased productivity. I am one of those given an opportunity to operate the tractor," he added.

As of February 2016, the school had planted seven hectares of cassava and five hectares of corn. Preparations are also on-going for additional four hectares for crop production. Corn was integrated in the area so that after harvest for four months, it will immediately be crop-rotated with cassava. This is to avoid cassava to be in its

pre-harvest period during the typhoon season. These crop production processes were taught to students during their field work.

The school intends to market the bulk of its processed cassava to cooperatives in Sta. Marcela, Apayao, which are cassava assemblers. The cassava will also be utilized as a supplement for feeds in the school's animal production. Students in Food Processing classes are also planning to use cassava for laboratory activities. The production of delicacies like cassava cakes may also be an avenue for development of entrepreneurial skills of students.

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REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF EDUCATION

SHS Spotlight: Opol National Secondary and Technical School

September 29, 2016

Opol National Secondary and Technical School (ONSTS) is situated in a second class municipality 10 kilometers away from Cagayan de Oro City. It is recognized as one of the best pilot public technical schools in the entire region. The school plays an important role in the promotion of tech-voc education in the region, because of having sufficient facilities and equipment, and a pool of dedicated and qualified teachers.

A thriving tourism industry in the Northern Mindanao region and the consistent high enrollment of students in Tourism courses prompted ONSTS to upgrade its offerings in Hotel and Restaurant Services, planning to add Commercial Cooking National Certificate (NC) III to its SHS program for SY 2016-2017. As part of the DepEd Division of Misamis Oriental's preparation for full SHS implementation, ONSTS has also been chosen as a training venue for Technology and Livelihood Education (TLE) teachers.

The acquisition of industry standard workshop laboratories and facilities enabled ONSTS to consider upgrading its offerings in line with the local industry needs. Through the DepEd's Strengthened Technical-Vocational Education Program (STVEP) and the school's partnerships with different organizations, ONSTS acquired not just the facilities, tools and equipment, but also the additional training for teachers necessary to offer a competitive tourism program. Having trained teachers, safe facilities, and sufficient tools and equipment helped ensure quality education as students will have sufficient hands-on activities to master competencies.

"This provision is in full support to the SHS modelling program which was initially implemented in SY 2012-2013. The equipment donated for the state-of-the-art building by the JICA Project and the construction of the gas tank house, were all apt and essential for the security and safe training of the students," ONSTS Principal Anthony Pacamalan said. In an encouraging example of unity and cooperation, the school PTA shouldered the labor cost for installing the school's gas tank house.

Pacamalan stressed that teachers and students are able to work more efficiently and effectively in the laboratory workshop because the tools and equipment are all working well. Students can also practice more regularly because they do not have to do shifting as tools and equipment are ample. They also face fewer risks as the facilities are compliant to industry standards.

Students also expressed their satisfaction in having good laboratories and workshops for hands-on activities.

Rommel Borja, a student with Food and Beverage Services (FBS) NC II said, "Because of the standard training procedure that I have gotten in school, I never encountered difficulties during work immersion. I was able to

acquire skills more easily on the study of theories and hands on activities. With that, I became more confident in my immersion at one of the best hotels in Cagayan de Oro City, the Luxe Hotel."

Regular monitoring of the students is conducted by Ms. Vienez Pleños, the school's designated Assistant Partnership Focal Person to ensure students are performing well. Students are given proper orientation, and industry partners follow the agreed training plan, thus honing students' competencies in an appropriate work environment. Monitoring is conducted using the school service vehicle, even as the principal's personal vehicle is used when immersion partners are located in far-flung areas. Industry partners gave positive feedback on the performance of ONSTS students in the workplace, with some partners extending employment offers after the work immersion. With the schools help, ONSTS graduates are able to consider good opportunities for employment.

The full implementation of SHS in June 2016 found ONSTS delivering quality education with a pool of TESDA-certified teachers, and showcasing industry standard facilities appropriate for actual training.

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