



Kingdom of Cambodia
Nation Religion King

Ministry of Education, Youth and Sport



Master Plan
for Technical Education
at Upper Secondary Level
(2015-2019)

February 2015



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Table of Contents

Contents	i
Abbreviations/Acronyms	iv
Preface	vi
Chapter 1 Introduction	1
Chapter 2 Background	2
2.1 School Facilities, Equipment and Infrastructure.....	3
2.2 Student Enrollment	4
2.3 Human Resources (Teachers).....	4
2.4 Current Situation Analysis.....	5
2.5 Resource Mobilization and Stakeholder Participation	5
2.6 Legislative Support and Strategies for Technical Education	5
Chapter 3 Vision, Mission, Goals and Strategies.....	8
3.1 Vision.....	8
3.2 Mission.....	8
3.3 Goals	8
3.4 Strategies.....	8
Chapter 4 Strategies and Sub-Strategies.....	9
4.1 Strategy 1 Establishment of Legislative Framework to Support General and Technical Education System	10
1.1 Establishment of Legislative Framework	10
1.2 Establishment of Management and Support Mechanism for Technical Education	11
1.3 Establishment of Research and Development	11
4.2 Strategy 2 Establishment of General and Technical Education System	12
2.1 Upgrade of Technical Education System	13
2.2 Expansion and Strengthening of General Technical High Schools	13
2.3 Operation and Support for General and Technical High Schools	14

4.3 Strategy 3	Development and Revision of Technical Education	
	Curricula and Textbooks	15
3.1	Development Technical Education Curricula and Textbooks	15
3.2	Development Technical Education Teaching and Learning Framework.....	15
3.3	Regular Revision of Innovative Technical Education Curricula According to Social Changes.....	15
4.4 Strategy 4	Establishment of Technical Education Facilities and Installation of Equipment	17
4.1	Construction of Classrooms, Workshops and Laboratories	17
4.2	Installation of Technical Education Facilities and Equipment according to the Standard of each Trade.....	17
4.5 Strategy 5	Training of Technical Education Teachers and Promotion of Teacher Qualification and Competency.....	18
5.1	Enhancement of Competence and Qualification of Technical Education Teacher and Managerial Staff	18
5.2	Development of Training Programs for Technical Education Teachers	18
5.3	Development of an Appraisal System for Technical Education Teachers	19
4.6 Strategy 6	Accreditation and Quality Assurance of Technical Education ..	20
6.1	Establishment Accreditation and Quality Assurance System for Technical Education.....	20
6.2	Accreditation and Student's Qualification	20
6.3	Development of Monitoring and Evaluation System of GTHS.....	21
4.7 Strategy 7	Establishment Plan for Sustainability of Technical Education ..	22
7.1	Promotion of Industry-School-Government Cooperation	22
7.2	Promotion of Entrepreneurship and Competitiveness	22
7.3	Plan to Raise Budget.....	23
7.4	Development and Implementation of Bridging Programs	23

4.8 Strategy 8	Gender Mainstreaming	24
8.1	Provision of Infrastructure for Gender Equity	25
8.2	Promotion of Gender Equity in Technical Education.....	25
8.3	Development and Strengthening Competency on Gender Mainstreaming	25
Chapter 5	Priority Strategies and Monitoring the Master Plan Implementation	26
5.1	Priority Strategies	26
5.2	Monitoring and Evaluation of Master Plan Implementation	31
Chapter 6	Conclusions.....	32

List of Appendixes

Appendix 1	Results of SWOT Analysis	33
Appendix 2	Student Perception Survey	39
Appendix 3	Analysis Report Using IPA (Importance Performance Analysis) Method.....	42
Appendix 4	SWOT Analysis Results on Gender Equity	52
Appendix 5	Action Plan Matrix of Master Plan for Technical Education at Upper Secondary Level	54

Abbreviations/Acronyms

ASEAN	Association of South- East Asian Nations
CRITE	Cambodia Research Institute of Technical Education
CSUK	Chea Sim University of Kamchaymear
DACUM	Developing a Curriculum
DCD	Department of Curriculum Development
DGSE	Department of General Secondary Education
DC	Department of Construction
DNFE	Department of Non-Formal Education
DPSA	Department of Property and State Assets
Dept	Department
DP	Department of Planning
DPe	Department of Personnel
DPs	Development Partners
ESP	Education Strategic Plan
GTHSs	General and Technical High Schools
ICT	Information and Communications Technology
ITK	Institute of Technology of Kampong Chheuteal
IPA	Importance Performance Analysis
ITC	Institute of Technology of Cambodia
KOICA	Korea International Cooperation Agency
MoEYS	Ministry of Education, Youth and Sport
NA	Not Applicable
NCDG	National Curriculum Development Guideline
NGO	Non-Governmental Organization
NIE	National Institute of Education
NPIC	National Polytechnic Institute of Cambodia
NTTI	National Technical Training Institute
NU	Norton University
ODA	Official Development Aid
PB	Program Budgeting

PLACA	Prek Leap National College of Agriculture
POE	Provincial Offices of Education
R&D	Research and Development
RGC	Royal Government of Cambodia
RULE	Royal University of Law and Economic
SWOT	Strength, Weakness, Opportunity and Threats
SY	School Year
TE	Technical Education
TTD	Teacher Training Department
TVET	Technical Vocational Education and Training
USD	United States Dollar
UST	Union School of Technology
VOD	Vocational Orientation Department

Preface

The Royal Government of Cambodia has the ambition to make the transition from a lower-middle income country to an upper-middle income country by 2030 and a developed country by 2050. To achieve this objective the Royal Government of Cambodia (RGC) has to develop technical skills for Cambodian youth in order to increase employment opportunity for them and so as to compete with other countries economically when the ASEAN Economic Community will be established at the end of 2015.

The RGC has developed strategies for capacity and human resource development to improve the quality of education; one of which is through prioritizing technical education at upper secondary level. To implement these strategies, all parties need to work together to address challenges and to respond to any remaining loopholes such as building infrastructure and both public and private institutions, small and medium enterprises and to build human resources especially in the field of Technical and Vocational Education and Training to push economic growth of the country and region.

Developing technical skills (hard and soft skills) for youth is crucial for us to develop suitable and necessary skills among youth and make sure they have adequate skills which include physical, mental and intellectual ability and morality, values, skills and expertise in order to become good citizens in and also contribute to the country by formulating the economy of the family, community and nation in line with the Four Pillars of Technical Education : **Learning to do, Doing to learn, Earning to live and Living to serve.**

The Ministry of Education, Youth and Sport (MoEYS) would like to deeply thank Vocational Orientation Department officials, education staff, KOICA and Korean experts who are involved in developing the Master Plan for Technical Education at Upper Secondary Level. This document is crucial to enhance productivity, efficiency and quality of technical education at upper secondary school level in Cambodia.

The MoEYS strongly hopes that all concerned institutions, general and technical high schools, national and international organizations, private sector and all stakeholders will contribute to, cooperate and support the implementation of the Master Plan for Technical Education at Upper Secondary Level with successful results.

Phnom Penh 27 February 2015
Minister, the Ministry of Education, Youth and Sport



Dr. HANG CHUON NARON

CHAPTER 1

INTRODUCTION

Globalization is bringing nations closer together in all fields that require the participation of relevant stakeholders in the sustainable development of the youth's skills. ASEAN integration 2015 will allow Cambodia to have access to the youth's skill development by delivering Technical Vocational Education and Training (TVET) and enable Cambodia to stand shoulder-to-shoulder with other ASEAN members in terms of labor force. Technical education, which derives partially from TVET, plays a key role in considerable changes in Cambodian workforces.

Regarding the aforementioned context, the Ministry of Education, Youth and Sport (MoEYS) has paid more attention to technical education in order to provide technical skills for youth. The MoEYS has also exceptionally cooperated with KOICA to develop the Master Plan for Technical Education at Upper Secondary Level, curricula for accounting, agriculture, electricity, electronics and mechanics, and textbooks for each trade.

Furthermore, in alignment with Education Strategic Plan (ESP) 2014-2018, The MoEYS pushes strategies and implementation of Technical Education focusing mainly on vocational orientation, life skills programs and career guidance for students at lower secondary schools. Through providing life skills and technical skills for students at upper secondary level, it will help support their family economies and the national economy as a whole and encourage students to continue lifelong education.

The Master Plan for Technical Education at Upper Secondary level includes eight strategies consisting of twenty four sub-strategies as follows: Legislative Framework to Back Up General and Technical Education System, Establishment of General and Technical Education System, Development of Technical Education Curricula and Textbook, Establishment of Technical Education Facilities and Installation of Equipment, Training of Technical Education Teachers and promotion of Technical Education Teacher's Qualification and competency, Accreditation and Quality Assurance of Technical Education, Establishment plan for Sustainability of Technical Education and Gender Mainstreaming.

CHAPTER 2

BACKGROUND

In accordance with the constitution of the Kingdom of Cambodia, Education Law, Cambodia Millennium Development Goals, National Strategic Development Plan and Rectangular Strategy of the Kingdom of Cambodia, the Royal Government of Cambodia has issued strategies on capacity building and human resources development to improve the quality of technical education at upper secondary level.

The MoEYS has established Education Strategic Plan (ESP) 2014-2018 integrating Technical Education into secondary level curriculum and ensured implementation of the strategies in providing education service, and technical skills to students so that they can compete on the world stage in the realm employment and improve family and nation economies like other countries in the region. The MoEYS' strategy on technical education is to enhance and expand technical education services to citizens for sustainable development and poverty reduction.

The MoEYS (ESP 2014-2018) has formulated policy to give greater emphasis to expanding technical education and opportunities for secondary education through the continued and improved partnership among Royal Government of Cambodia (RGC), development partners, private sector, non-governmental organizations, communities and parents.

Currently, the MoEYS' programs encompass two streams, general and technical education stream as education programs at General and Technical High Schools (GTHSs) in three provinces by linking schools to work and professional development for life-long learning. So far these GTHSs have operated various trades such as animal husbandry, agronomy, electronics, electricity, mechanics and accounting in the three provinces as follows:

- Kampong Chheuteal High School has started operating 4 trades: Electricity, Electronics, Agronomy and Animal husbandry since 2003
- Samdech AkKa Moha Sena Padei Techor Hun Sen Rota Khsach Kandal GTHS has started the technical education stream with 2 trades: Electricity, Electronic since 2012
- Preah Bat Samdech Preah Borom Neat Norodom Sihamoni GTHS has started the technical education stream with 2 trades: Electricity and Agronomy since 2013.

The MoEYS issued the national guidelines for developing and operating the technical education program in July 2014 to regulate it countrywide. In order to manage the functional

flow of Technical Education (TE) from the national to sub-national levels, the MoEYS established the Master Plan for Technical Education at Upper Secondary Level, in cooperation with KOICA, in 2014. According to the Master Plan, the MoEYS intends to expand General and Technical High Schools in at least seven provinces /municipality by 2018.

In order to successfully enhance the quality of education and expand GTHSs, the MoEYS must develop the Master Plan for Technical Education at Upper Secondary Level which reflects current situation, challenges, opportunities and solution based on social context. The labor market analysis and SWOT analysis which were conducted in 2014 (Appendix 1), indicates that the technical education system of Cambodia faces a number of major challenges as follows:

- Insufficient facilities and equipment
- Low enrollment and graduation rate
- Difficulty in recruiting of competent teachers
- Lack of effectiveness of quality assurance system of technical education
- Ineffective school-company cooperation.

2.1 School Facilities, Equipment and Infrastructure

School facilities are considered to be very important factors to success of the program. Those facilities are classrooms, laboratories, dormitories, workshops, administrative buildings etc. A large plot of land will be required. The physical facilities are to be used for students to relate theory to practice so that they can develop in-depth knowledge of a subject and to prepare students for the work place situation. Moreover necessary infrastructure used for supporting learning and studying should be developed such as tap water, electricity, dormitories, playgrounds, school buildings, etc. Results of SWOT analysis of managing technical education at upper secondary school showed, some of General and Technical High Schools have difficulty in constructing facilities and providing equipment required for teaching and learning skills, knowledge and attitude.

Under the Master Plan, installation and management of experimental equipment will be prepared for all trades. Also, the standard of equipment for each trade will be set to ensure that students gain an adequate level of skills for each trade upon graduation and that all the equipment is diligently used, well managed and maintained properly. Many schools still lack those facilities and equipment.

2.2 Student Enrollment

In Cambodia, only about 30 percent of TVET enrollments are for long term courses [of more than one year's duration]. Enrollments fall well below the annual labor market demand for technically trained youth. Nationwide, 75,000 students were enrolled in TVET courses in 2013, the latest year for which TVET data is available. 68 percent of these students (51,000) were enrolled in certificate courses. Of the certificate-level courses, 60 percent were in agriculture-related subjects and the rest in a variety of areas including sewing, cooking and mechanics.

In academic year 2014-2015, so far 950 students have enrolled in technical education stream at GTHSs in three provinces. Moreover, the socio-cultural stigma attached to technical education in Cambodia and associated reluctance to go for technical education stream rather than general education stream could be another major deterrent to scaling up technical education.

2.3 Human Resource (Teachers)

The MoEYS has paid more attention to train technical teachers to be competent and qualified resources, to develop manpower to match both the labor market needs and the government policy, and to improve national competitiveness by providing technical education in specific trades or skills. One of the main problems in attracting qualified candidates is the continued low status of the teaching profession across the country. University graduates majoring in technology or engineering do not want to work as technical teacher in public sector. Teachers' salaries are 60% of what other professionals with education and skills qualifications receive. Qualified candidates prefer to work in the private rather than the public sector.

However, the survey of teacher education perception (Appendix 2) targeting 398 engineering students who have currently studied at ITC, NPIC, NTTI and Norton University showed around 97% of respondents agreed to the necessity of technical education at upper secondary level in Cambodia. Fortunately above 70% of respondents expressed willingness to be technical education teacher for reasons as follows:

- Preferences for teachers (31%)
- Passion for teaching (19%)
- Being a government official (16%)
- Making a living (9%)
- No reason (26%)

In order to deliver quality training service, attract those students who want to be a teacher and ensure teacher qualification, prioritized activities should be taken into account such as providing an incentive system for technical education teachers who voluntarily choose to work in remote GTHSs and building teacher dormitories equipped with facilities and consuming tools.

2.4 Current Situation Analysis

Cambodia is experiencing a rapid expansion of its labor force, especially young people. The country stands out as one of the most youthful countries in the Asia-Pacific region, with 60 percent of the population below the age of 24 years. However, this aspect can be seen also as a demographic window of opportunity, whereby the large youth cohort entering the labor market with fewer dependents (i.e. children and elderly family members) to support, will prospectively remain active for the next 30 or 40 years.

The results of SWOT analysis of successful implementation Technical Education in Cambodia (KOICA, 2014) show that the current technical education program in Cambodia lacks both a strong quality framework and quality inputs. For example, there is neither an accreditation system nor a school quality assurance system. Furthermore the linkage between the school system and labor market is very limited. A school administrative and financial management system has yet to be developed.

2.5 Resource Mobilization and Stakeholder Participation

The Royal Government of Cambodia has allocated budget for the MoEYS to enhance the quality of education. In order to mobilize resources to support technical education and participation from development partners and stakeholders, the MoEYS has recently reformed the budget process for GTHSs. Each GTHS has been allocated 50,000,000 Riel per year per school, 600,000 Riel per student to run the program for sustainable operation and 40,000 Riel per student for internship (Prakas508, 2013).

The MoEYS certainly needs the involvement and support (both technical and financial) from development partners and all stakeholders for successful implementation of the Technical Education Programs at Upper Secondary Level in Cambodia.

2.6 Legislative Support and Strategies for Technical Education

The MoEYS has formulated various legal frameworks and policies to support technical education service, enhance the quality of education and encourage the establishment and implementation of general and technical high schools. The legal frameworks and policies are the following:

- 1 Education Law 2007 basically aimed to develop high-skilled human resources of the nation by providing lifelong education for learners, promote quality education and identify the right and obligations of educational personnel. It also covers technical and vocational education and training.
- 2 The Education Strategy Plan 2014-2018 formulated to implement technical education service at upper secondary level with concrete policy action and strategies. The main policy action and outcome indicator relevant to technical education are as follows:
 - Prepare a master plan for technical education development in 2014
 - Prepare a teacher framework for technical education teacher who teaching in GTHS by 2014
 - Prepare regulations and mechanism for expanding GTHS in 2015
 - Prepare Technical Education curriculum and curriculum standards responsive to community needs by 2016
 - Prepare good governance principles for general secondary education and GTHS by 2014
 - Increase the number of GTHSs to 7 by 2018
 - Boost student enrollment in GTHS from 610 in SY 2012-2013 to 2000 in SY 2017-2018.
- 3 Policy on technical education (MoEYS, 2013) was developed to strengthen and expand technical education services to a wider student community for sustainable development and poverty reduction. The goals of the policy are as follows:
 - Develop secondary institution to be fully technical education institutions
 - Improve the capacity of teachers with real technical skills
 - Develop technical education skills to meet labor market needs and respond to Cambodia's social context
 - Provide opportunity to high school students to have the option of pursuing technical education
 - Develop quality technical capacity skills of high school students
 - Mobilize community resources, development partners, and the private sector to develop technical education.
- 4 Reform strategy for managing education staff has been formulated by the Ministry of Education, Youth and Sport

- Implement policy to improve living condition
- Study principles of salary and bonuses payment for civil servants
- Implement principles in order that education staff can have a pay rise on a regular and automatic basis and promotion opportunities
- Assess supply and demand for education staff at both nation and sub-national levels
- Improve effectiveness of management- level promotion
- Strengthen the implementation of the principles for workplace transfer for education staff.

CHAPTER 3

VISION, MISSION, GOALS AND STRATEGIES

3.1 Vision

Students of General and Technical High Schools acquire excellent knowledge, technical skills and moral values to meet labor market demands and to continue life-long learning.

3.2 Mission

To orientate, promote and provide technical education services at upper secondary level in cooperation with stakeholders and development partners.

3.3 Goals

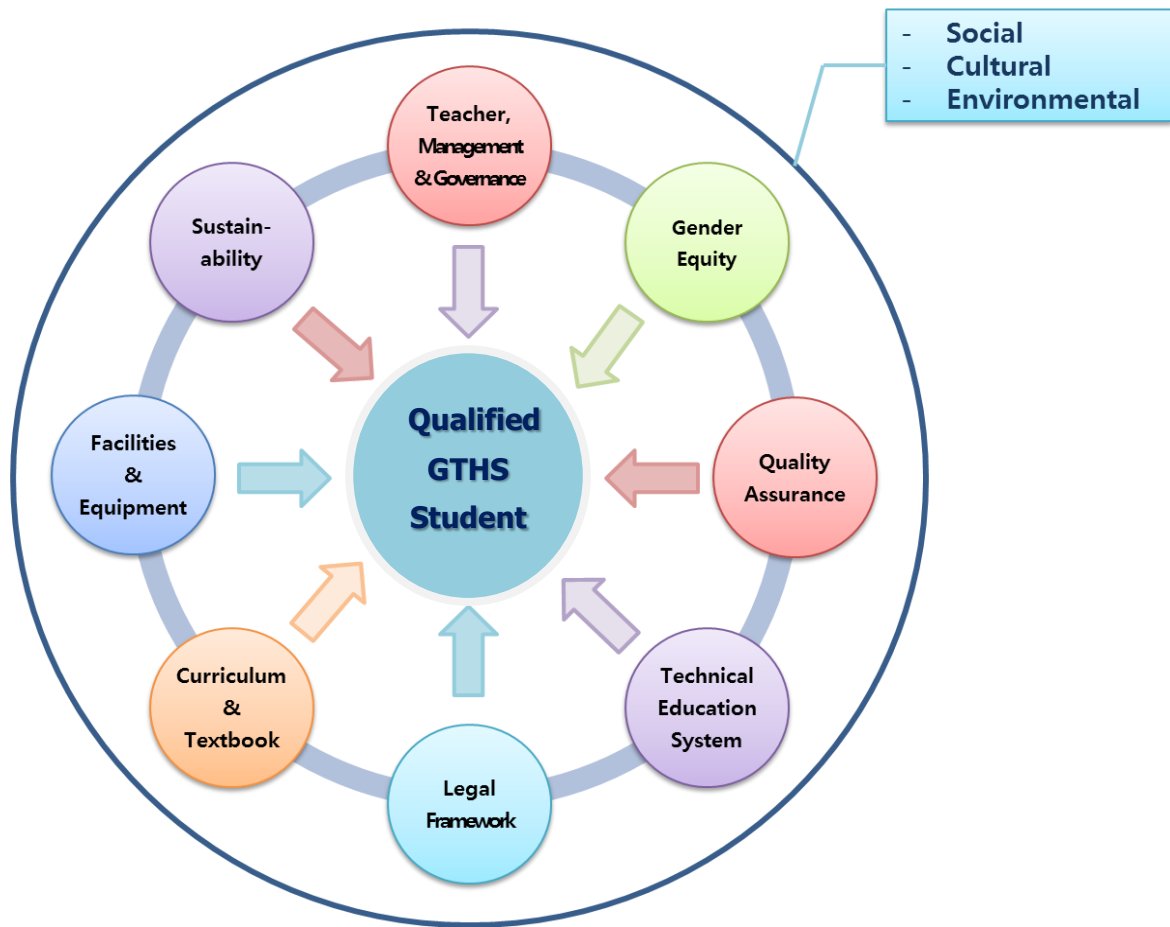
- 3.3.1 Establish technical education system at upper secondary level
- 3.3.2 Establish standards for technical education curricula
- 3.3.3 Establish and expand standardized General and Technical High Schools in every province/city
- 3.3.4 Increase enrollment rates in technical education stream so that more young people in Cambodia can be equipped with the right skills, find decent jobs and contribute to nation's economic development

3.4 Strategies

- 3.4.1 Establishment of Legislative Framework to Support General and Technical Education System
- 3.4.2 Establishment of General and Technical Education System
- 3.4.3 Development and Revision of Technical Education Curricula and Textbooks
- 3.4.4 Establishment of Technical Education Facilities and Installation of Equipment
- 3.4.5 Training of Technical Education Teachers and Promotion of Technical Education Teacher's Qualification and Competency
- 3.4.6 Accreditation and Quality Assurance of Technical Education
- 3.4.7 Establishment Plan for Sustainability of Technical Education
- 3.4.8 Gender Mainstreaming

CHAPTER 4

STRATEGIES AND SUB-STRATEGIES



[Fig 4-1] Structure of the Strategies

The development of general and technical education system at upper secondary level focuses heavily on student achievements which require supportive elements including legal framework to back up the general and technical education system to reach a common goal of curricula and textbooks. The management, good governance and teacher training have to be established to ensure students competence in technical skills. Likewise facilities and equipment are to be used for practicing and experimenting following the guidelines of curricula and textbooks. To this end, sustainability of technical education should be at the heart of every process. Furthermore, with respect to promoting gender equity in technical education, competency should be a top priority irrespective of gender at all trades. And quality assurance is intended to deliver quality training taking into account social, cultural and environmental changes.

Strategy 1 Establishment of Legislative Framework to Support General and Technical Education System

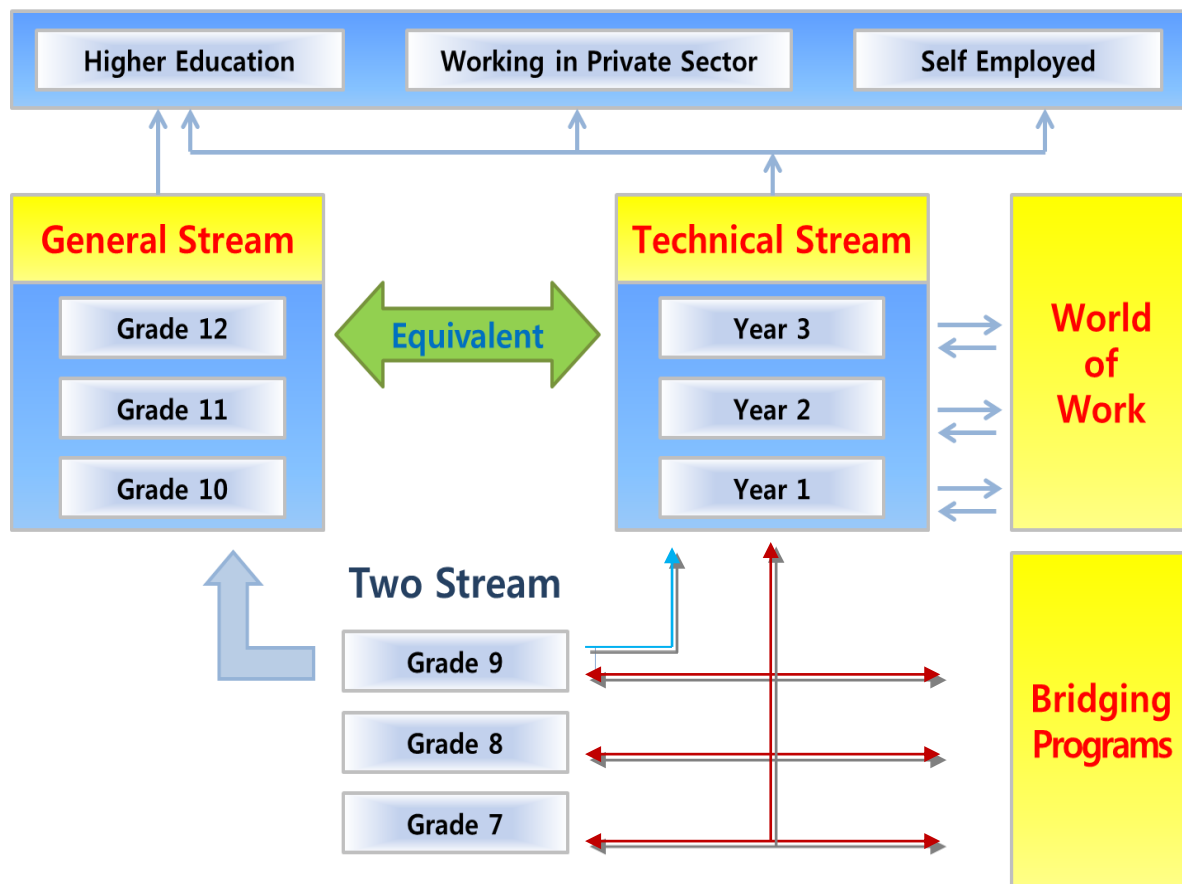
Sub-strategy 1.1	Establishment of Legislative Framework
Objective	<ul style="list-style-type: none"> - To support and promote Technical Education with quality, safety, innovation, entrepreneurship and cooperation, and ensure gender equality
Output	<ul style="list-style-type: none"> - Prakas on the establishment of General and Technical Education system - Prakas on establishing criteria of General and Technical High School - Prakas on TE examination line - Guidelines on the leadership and management of General and Technical High School - Guideline for establishing criteria for Technical Education teachers - Guideline on the Implementation of Technical Curricula - Guideline on Cooperation between GTHSs and private sector - Guideline on duty and school safety - Guideline on inspection - Guideline on regulation of Technical Education Teachers in class - Regulation on incentive for Technical Education Teachers
Source of funding	MoEYS and DPs
Responsible unit	VOD
Time frame	2015-2016

Sub-strategy 1.2	Establishment of Management and Support Mechanism for Technical Education
Objective	<ul style="list-style-type: none"> - To efficiently strengthen management structure of technical education with stakeholders' participation
Output	<ul style="list-style-type: none"> - Industry-school cooperation committee - Student Career Guidance committee - Quality assurance of Technical Education committee - Committee in charge of monitoring and evaluating TE teacher - Curriculum Development committee for each Trade
Source of funding	MoEYS
Responsible unit	VOD, concerned department and DPs
Time frame	2015-2017

Sub-strategy 1.3	Establishment of Research and Development
Objective	<ul style="list-style-type: none"> - To strengthen TE adapting to scientific and technological changes - To establish Research and Development in Technical Education field for the implementation of relevant policy
Output	<ul style="list-style-type: none"> - Renaming Vocational Orientation Department (VOD) as Technical Education Department (TED) in 2015 - Expanding and strengthening training for TE teachers - Researching on Technical Education in Cambodia
Source of funding	MoEYS and DPs
Responsible unit	VOD and DPs
Time frame	2018-2019

Strategy 2 Establishment of General and Technical Education System

General and Technical Education System



The formal education system mainly consists of general education stream and technical education stream. A two-stream system of general and technical education has been implementing in General and Technical High Schools. To sign up for technical education courses, students must have passed [completed] lower secondary education. The technical education stream is usually three years in duration which starts at upper secondary school level (years 1, Year 2 and Year 3). The GTHS aims to educate competent skilled workers equipped with sound vocational awareness and professional knowledge to respond to the rapid changes in an information-oriented industrial society.

Sub-strategy 2.1	Upgrade of Technical Education System
Objective	- To develop technical education system through the establishment of technical education structure and technical education standard
Output	<ul style="list-style-type: none"> - Establishment of the structure of technical education through setting a standard for facilities and technical education curricula - Establishment of the school standard (facilities, technical education program, equipment, workshops, teachers, etc.)
Source of funding	MoEYS and DPs
Responsible unit	VOD, DCD and DPs
Time frame	2015-2018

Sub-strategy 2.2	Expansion and Strengthening of General and Technical High Schools
Objective	<ul style="list-style-type: none"> - To expand GTHSs to other potential provinces. - To increase enrollment in GTHSs - To provide vocational orientation service and career counseling
Output	<ul style="list-style-type: none"> - One GTHS in every city/province - An increase in TE enrollment rate - Vocational Orientation and Career counseling service in every GTHS
Source of funding	MoEYS and DPs
Responsible unit	VOD, POE and DPs
Time frame	2015-2016

Sub-strategy 2.3	Operation and Support of General and Technical High School
Objective	<ul style="list-style-type: none"> - To provide operational budget for GTHSs - To provide TE Teacher and Assistant Teachers for each trade
Output	<ul style="list-style-type: none"> - Operational budget for GTHSs - Attracting many experienced TE teachers and assistant teachers for each trade in GTHSs.
Source of funding	MoEYS and DPs
Responsible unit	VOD, POE, GTHS and DPs
Time frame	2015-2018

Strategy 3 Development and Revision of Technical Education Curricula and Textbooks

Sub-strategy 3.1	Development and Revision of Technical Education Curricula and Textbooks
Objective	To develop TE curricula and textbooks meeting on labor market demand
Output	<ul style="list-style-type: none"> - Curricula for the following trades: Mechanics, Electricity, Electronics, Agronomy, Accounting and other trades meeting market demand - TE Textbooks for each subject trade for year 1, 2 and 3
Source of funding	DPs
Responsible unit	VOD and DPs
Time frame	2015-2016

Sub-strategy 3.2	Development of Technical Education Teaching and Learning Framework
Objective	- To develop TE teaching and learning framework
Output	<ul style="list-style-type: none"> - Proper TE teaching and learning Framework related to learning of theory, practice and assessment of study result - TE textbooks for each trade
Source of funding	MoEYS and DPs
Responsible unit	VOD, concerned departments and DPs
Time frame	2016-2017

Sub-strategy 3.3	Regular Revision for innovative Technical Education Curricula according to Social Changes
Objective	To revise TE curricula meeting labor market demands and social changes

Output	<ul style="list-style-type: none"> - Curricula that addresses needs and relevant factors - Legal process on information gathering about the management of GTHS and labor market trend
Source of funding	MoEYS and DPs
Responsible unit	VOD and concern departments
Time frame	2016

Strategy 4 Establishment of Technical Education Facilities and Installation of Equipment

Sub-strategy 4.1	Construction of Classrooms, Workshops and Laboratories
Objective	To construct classrooms, workshops and laboratories according to TE standard
Output	<ul style="list-style-type: none"> - Classrooms, workshops and laboratories according to TE standard - Manuals and safety measures for operating facilities and equipment to ensure safety during practice in GTHSs
Source of funding	MoEYS and DPs
Responsible unit	VOD and concern departments
Time frame	2016-2017

Sub-strategy 4.2	Installation of Technical Education Facilities and Equipment according to the Standards of each Trade
Objective	To ensure that facilities and equipment meet the standard for each trade
Output	<ul style="list-style-type: none"> - Ensuring that students are provided with adequate materials for practice in each trade - Establishing national standards for TE facilities and equipment for each trade - Maintaining and revising manuals for facilities and equipment
Source of funding	MoEYS and DPs
Responsible unit	VOD, GTHS and DPs
Time frame	2016-2018

Strategy 5 Training of Technical Education Teachers and Promotion of Technical Education Teacher's Qualification and Competency

Sub-strategy 5.1	Enhancement of Competence and Qualification of Technical Education Teacher and Managerial Staff
Objective	<ul style="list-style-type: none"> - To train TE teachers and managerial staff to be competent and qualified - To enhance the competencies of TE teachers and managerial staffs
Output	<ul style="list-style-type: none"> - Competent administrative staff with effective management skills - TE teachers with qualification and competence based on teaching and learning principles - Enough qualified TE teachers for each trade
Source of funding	MoEYS and DPs
Responsible unit	VOD and concern departments
Time frame	2018

Sub-strategy 5.2	Development of Training Programs for Technical Education Teachers
Objective	<ul style="list-style-type: none"> - To develop TE training programs and train TE teachers in-depth skills for each trade
Output	<ul style="list-style-type: none"> - TE training programs that link to enterprise - Manual for training program - Creative teaching methodology and learning method
Source of funding	MoEYS, GTHSs and DPs
Responsible unit	VOD and concerned departments
Time frame	2018

Sub-strategy 5.3	Development of an Appraisal System for Technical Education Teachers
Objective	<ul style="list-style-type: none"> - To establish an appraisal system to encourage outstanding TE graduates from universities to work at GTHSs - To encourage outstanding graduates with grade A and B to work as TE teachers - To attract technical teachers and competent and qualified candidates from private sector to teach at GTHSs under contract or through examination
Output	<ul style="list-style-type: none"> - An Appraisal system for TE teachers - TE teachers with proper qualifications
Source of funding	MoEYS and DPs
Responsible unit	VOD
Time frame	2018

Strategy 6 Accreditation and Quality Assurance of Technical Education

Sub-strategy 6.1	Establish Accreditation and Quality Assurance System for Technical Education
Objective	To enhance harmonization between policies, decision and other legislative framework related to implementation
Output	<ul style="list-style-type: none"> - Structural system ensuring TE quality of GTHSs from school level to national level - Legislative framework defining roles and responsibilities of relevant committees/ national and sub-national organization
Source of funding	MoEYS and DPs
Responsible unit	VOD, POE and GTHSs
Time frame	2017

Sub-strategy 6.2	Accreditation and Student's Qualification
Objective	<ul style="list-style-type: none"> - To provide opportunities and enhance competence for technical students in order to pursue higher education or work - To improve social and cultural recognition of Technical Education in order to draw participation from teachers and students
Output	<ul style="list-style-type: none"> - TE qualification recognized by all stakeholders - Annual fair of students' achievements - Supporting system to encourage students' club activities - Reward system to encourage technical students to enter higher education institution
Source of funding	MoEYS
Responsible unit	VOD, concerned departments and GTHSs
Time frame	2017-2019

Sub-strategy 6.3	Development of Monitoring and Evaluation System of GTHSs
Objective	<ul style="list-style-type: none"> - To develop internal and external monitoring and evaluation tools for GTHSs <p>To conduct regular monitoring and evaluation according to the management structure of TE</p>
Output	<ul style="list-style-type: none"> - Clear monitoring and evaluation tools - Guideline for monitoring and evaluation tools - Report on monitoring and evaluation by relevant stakeholders
Source of funding	<ul style="list-style-type: none"> - MoEYS and DPs
Responsible unit	VOD and GTHSs
Time frame	2016-2019

Strategy 7 Establishment Plan for Sustainability of Technical Education

Sub-strategy 7.1	Promotion of Industry-School-Government Cooperation
Objective	<ul style="list-style-type: none"> - To promote cooperation between enterprises, GTHSs and local authorities - To provide career guidance service for students
Output	<ul style="list-style-type: none"> - Agreement (Memorandum of Understanding) on internship program between GTHSs and private sector - Increase in employment integration for TE graduates in private sector - Private companies contributing to offering scholarship TE students - Sharing of equipment and materials between GTHSs and private sector
Source of funding	MoEYS, Private sector and DPs
Responsible unit	VOD and GTHSs
Time frame	2016-2019

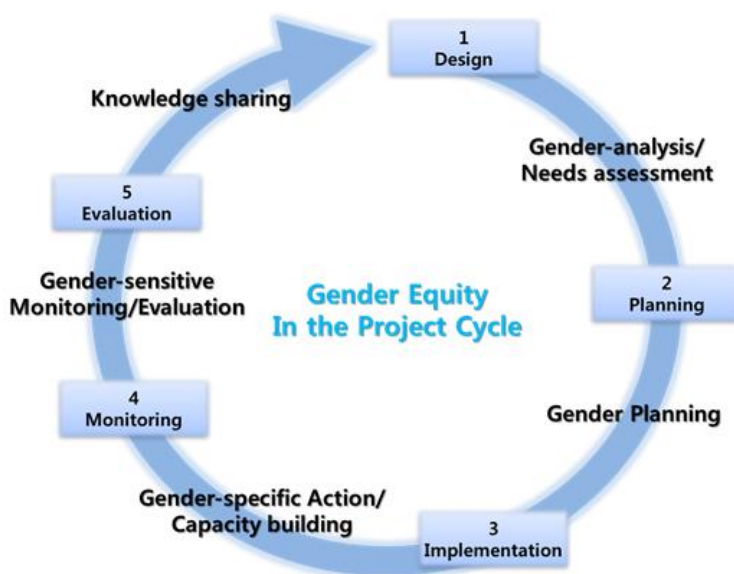
Sub-strategy 7.2	Promotion of Entrepreneurship and Competitiveness
Objective	<ul style="list-style-type: none"> - To promote entrepreneurship programs and enhance competition at GTHSs - To instill the student with skill to become autonomous
Output	<ul style="list-style-type: none"> - Entrepreneurship competition and business project - Student's fair - Supporting system for school enterprise and entrepreneurship fund - Participation in skill competition at local, national, regional, and world levels.
Source of funding	MoEYS and DPs
Responsible unit	VOD and GTHSs
Time frame	2018

Sub-strategy 7.3	Plan to Raise Budget
Objective	To raise funds for the sustainable operation of GTHSs
Output	<ul style="list-style-type: none"> - Business development plan for GTHSs - School enterprise - International cooperation for Technical Education
Source of funding	MoEYS, NGO and DPs
Responsible unit	VOD and GTHSs
Time frame	2015-2019

Sub-strategy 7.4	Development and Implementation of Bridging Programs
Objective	To encourage and enroll drop-out students in TE stream
Output	<ul style="list-style-type: none"> - Expansion and strengthening of bridging program to draw drop-out students to enroll in TE - Scholarship programs for poor students - Increase in technical education students - Increase in skilled and qualified workers
Source of funding	MoEYS and DPs
Responsible unit	VOD and concerned departments
Time frame	2017-2019

Strategy 8 Gender Mainstreaming

Gender mainstreaming is a globally accepted approach to achieving gender equality. It makes women's as well as men's concerns and experiences integral to the design, implementation, monitoring, and evaluation of all policies and programs. As women became an increasingly important factor in education strategies, gender is considered a cross-cutting issue. So gender equality, women's empowerment and gender mainstreaming are the most important key words that we must keep in mind when developing education policy and programs. For this reason, SWOT analysis (Appendix 4) was conducted to develop and strengthen competency on gender equality.



[Fig 4-3] Integrating gender equity in the project cycle

In order to ensure gender equity in Cambodia, they will soar on wings like eagles; they will run and not grow weary, they Cambodia's technical education sector, the followings should be considered:

- Foreground the participation of women in technical education
- Determine the task distribution and employment educational staff with appropriate skills and competencies
- Create programs that ensure equity and support gender balance
- Encourage construction and management of dormitory
- Provide opportunities for vulnerable young people and students in remote areas to get technical education service

Sub-strategy 8.1	Provision of Infrastructure for Gender Equity
Objective	<ul style="list-style-type: none"> - To close gender gap in education enrollment - To build school facilities for students and teachers
Output	<ul style="list-style-type: none"> - Dormitories and toilets for female teachers and students - Counseling opportunities for female students
Source of funding	MoEYS and DPs
Responsible unit	VOD and DPs
Time frame	2015-2019

Sub-strategy 8.2	Promotion Gender Equity in Technical Education
Objective	<ul style="list-style-type: none"> - To provide Scholarship for vulnerable students - To increase the participation of female students and teachers in Technical Education by encouraging them to join social and school activities like training courses - To focus on gender issues in the development curricula and textbooks
Output	<ul style="list-style-type: none"> - Increased in the enrollment of vulnerable students especially female students - Consultation service for female students - Curricula and textbooks promoting gender equality
Source of funding	MoEYS and DPs
Responsible unit	VOD, DCD and GTHSs
Time frame	2015-2019

Sub-strategy 8.3	Development and Strengthening Competency on Gender Mainstreaming
Objective	To enhance competency of education staff, principals, teachers, and students on gender mainstreaming
Output	Promotion of programs for Gender Equity
Source of funding	MoEYS
Responsible unit	VOD
Time frame	2015-2019

CHAPTER5

PRIORITY STRATEGIES AND MONITORING OF MASTER PLAN IMPLEMENTATION

5.1 Priority Strategies

The results and findings of SWOT method and IPA method, and priority strategies for Technical Education in the period of 2015-2019 are as follows:

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
1. Establishment of Legislative Framework to Support General and Technical Education System	Legislative framework	Establishment of Legislative Framework					
	Expanding and strengthening General and Technical Education System		✓	✓			
	Establishing teaching norms for technical education						
	Management and support mechanism for technical education	Establishment of Management and Support Mechanism for Technical Education	✓	✓			
	Establishing guidelines on workshop Safety						
	Enhancing basic vocational competencies					✓	✓
	Research and Development	Establishment of Research and Development					
2. Establishment of General and Technical Education System	Establishment of technical education system	Upgrading of Technical Education System	✓	✓			
	Plan for enhancing technical education system						

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
	Implementation of other projects for strengthening competency of school development						
	Establishment qualification of GTHSs	Expansion and Strengthening of General Technical High Schools					
	Establishment of criteria for GTHSs principals and teachers						
	Strengthening of career development system		✓	✓	✓	✓	
	Enforcement activities for career development and job recruitment						
	Operation and support for general and technical high schools	Operation and Support of General and Technical High Schools					
	Enforcement of technical education activities		✓	✓	✓	✓	
	Strengthening and innovation of school management and education						
3. Development of Technical Education Curricula and	Technical education curricula and textbooks development	Development of Technical Education Curricula and	✓	✓			

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
Textbooks	Technical education curricula have to be used for General and Technical High Schools	Textbooks					
	Development of teaching / Learning framework for technical education	Development of Technical Education Teaching and Learning Framework		✓	✓		
	Development of various teaching methods						
	Development of assessment method	Regular Revision for Innovative Technical Education curricula according to social changes					
	Technical education curricula review and innovation responsive to social changes			✓			
4. Establishment of Technical Education Facilities and Installation of Equipment	Construction of Classroom and Workshops	Construction of Classrooms, Workshops and Laboratories		✓	✓		
	Provision of sub-facilities for practice workshop						
	Establishment of Equipment Standards for each Trade	Installation of Technical Education Facilities and Equipment according to the Standards of each trade					
	Installing, Managing and Using Experimental Equipment and Facilities			✓	✓	✓	

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
	Efficient management and operation of workshop						
	Safety management of workshop						
5. Training of Technical Teachers and promotion of Technical Education Teacher's qualification and Competency	Professional development for technical education teacher and managerial staff with advanced technical education	Enhancement of Competence of Technical Education Teachers and Managerial Staff					
	Development of curricular for technical subjects					✓	
	Implementation of other projects for strengthening competency of school development						
	Development of Training Programs for Technical Education Teachers	Development of Training Programs for Technical Education Teachers				✓	
	Empowering program for technical education teachers	Appraisal System for Technical Education Teachers					
	Operation of innovation team of teaching/learning method in class					✓	
	Plan for utilization of co-teachers from industry						
	Strengthening of career development system						

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
6. Accreditation and Quality Assurance of Technical Education	Development of internship program for technical education	Establishment of Accreditation and Quality Assurance System for Technical Education			✓		
	Enforcement activities for job recruitment						
	Accreditation and Student's Qualification	Accreditation and Student's Qualification	✓	✓			
	Development of technical education evaluation and monitoring system	Development of Monitoring and Evaluation System of GTHSS		✓	✓	✓	✓
7. Establishment Plan for Sustainability of Technical Education	Promotion of Industry-school-Government cooperation	Promotion of Industry-School-Government cooperation		✓	✓	✓	✓
	Promotion of entrepreneurship and competitiveness	Promotion of Entrepreneurship and Competitiveness				✓	
	Plan for enhancing technical education system						
	Plan for raising budget	Plan to Raise Budget				✓	
	Benefit creation plan for "self-budget" operation and management of school enterprise	Development and Implementation of Bridging Programs	✓	✓	✓	✓	✓
8. Gender Mainstreaming	Establishment of infrastructure for gender Equity	Provision of Infrastructure for Gender Equity	✓	✓	✓	✓	✓
	Promotion of gender equity in technical education	Promotion of Gender Equity in Technical Education	✓	✓	✓	✓	✓

Strategy	Analyzed Sub-Strategy	Final Sub-Strategy	Annual Implementation Plan				
			2015	2016	2017	2018	2019
	Development and strengthening of competency on gender mainstreaming	Development and Strengthening Competency on Gender Mainstreaming	✓	✓	✓	✓	✓

5.2 Monitoring and Evaluation of Master Plan Implementation

In order to successfully implement the Master Plan for Technical Education at Upper Secondary Level, it will be monitored and evaluated through the following:

- Strategies and sub-strategies included in the Master Plan
- Education indicators and targets set in the technical education policy and ESP (2014-2018)
- Resulting outputs benchmarked against existing targets which were previously set
- Changeable progress of activities contained in the Master Plan after implementation
- Action plans and necessary guidelines being issued to support implementation.

CHAPTER 6

CONCLUSIONS

The Master Plan for Technical Education at Upper Secondary Level has been carefully established, consisting of strategies and sub-strategies, establishment and operation of General and Technical High Schools, curriculum determination, requirements of qualified and competent teachers, equipment of teaching and learning ware, experimental materials, teaching and learning methods, while assuring the quality of services and approaches to public-private partnership for sustainability.

The master plan will be implemented at upper secondary school level through Technical Education Stream called the General and Technical High School.

In order to assure the quality of Technical Education and competencies of graduates, research in the field of Technical Education in Cambodia should be promoted. And training for Technical Teachers should be prioritized through active participation from stakeholders and support by Development Partners including the Republic of Korea.

Appendix 1

Results of SWOT Analysis

In order to analyze the current context and situation of Technical Education for each trade (i.e. mechanics, electricity, electronics, accounting, and agriculture) and to implement technical education successfully, the SWOT Analysis of TE was conducted by Cambodian Working Group which is composed of technical teachers, officials of MoEYS and skilled industry workers during DACUM workshop in Cambodia from June 27th, 2014 to August 1st, 2014.

More detailed information is as follows:

1. Period & Participants of DACUM workshop

	Mechanics	Electronics	Agriculture	Accounting	Electricity
Period	June 30 to July 4	July 7 to July 11	July 7 to July 11	July 14 to July 18	July 21 to July 25
Participants	VOD (1) DCD (1) NPIC (1) CSUK (1) ITC (1) Private sector (1) Korean Expert (2)	VOD (1) Teacher (3) CSUK (1) Korean Expert (2)	VOD (1) Teacher (2) CSUK (1) PLNCA (1) Korean Expert (2)	VOD (1) DCD (1) RULE (3) Teacher (1) CSUK (1) Korean Expert (2)	DCD (1) Teacher (4) UST (1) CSUK (1) Private sector (1) Korean Expert (2)

2. Methodology : Brainstorming

3. Results of SWOT Analysis :

➤ Mechanics

■ **Strength** of Cambodia for successful TE

- ▶ What are the good points that Cambodia already has for successful TE?
 - Technical policy
 - will to implement Technical Education
 - Government support
 - Core development partners
 - National Training Board(NTB)
 - State-owned institutions
 - Science subject(like math, physics, mechanics at high school)

S

■ **Weakness** of Cambodia for successful TE

- ▶ What are the things that Cambodia needs to implement good TE in the future?
 - Lack of technical teachers
 - Lack of adequate curriculum
 - Textbook
 - Financial issues
 - Materials
 - Low practical skill of teachers
 - Lack of equipment or materials
 - Insufficiency of competent technicians
 - Insufficiency of competent teachers

W

O

- School, Interest, Information
- Training program needs to more focus on practice than theory.
- Potential business sector is increasing
- Industrial factory
- Low labor cost
- People are aware of benefits of acquiring skills and knowledge.

■ **Opportunity**

- ▶ What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?

T

- Fierce Competition from other countries in the region
- Migration of skilled workers
- Low salary
- Inflow of foreign workforce
- Increase of factories in neighboring countries

■ **Threats**

- ▶ What threatens pilot schools and others to implement successful TE in Cambodia?

➤ Electricity

■ **Strength** of Cambodia for successful TE

- ▶ What are the good points that Cambodia already has for successful TE?

- Technical schools are in process of enhancement
- will to implement Technical Education
- Strong will of government to implement TE
- Teaching and learning activities
- Large youth population
- Smart and enthusiastic students
- Growing number of students

S

■ **Weakness** of Cambodia for successful TE

- ▶ What are the things that Cambodia needs to implement good TE in the future?

- More resources are needed
- Lack of facilities and equipment
- Insufficiency of financial and technical support
- Technical textbooks
- Teaching materials
- Lack of information on TE
- Curriculum not responding to labor market demand
- Insufficient schools

W

O

- Cooperation with Korea
- ASEAN integration
- Increase in ODA funds
- Cooperation with community
- Creation of job for community
- Increase in companies and factories
- Economy strategies Developed by government
- Support from the government
- Access to internet to get information
- Improvement of the quality of education
- Inflow of foreign workforce

■ **Opportunity**

- ▶ What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?

T

- Stiff competition with workers from other countries
- Insufficient infrastructure and facilities
- Unemployment of graduates
- No policy to support TE
- Insufficient support of community

■ **Threats**

- ▶ What threatens pilot schools and others to implement successful TE in Cambodia?

➤ Electronics

■ **Strength** of Cambodia for successful TE

- ▶ What are the good points that Cambodia already has for successful TE?
 - Students' capability to learn
 - Strong confidence in TE
 - Plan to adopt a standard curriculum
 - Standard wage rates in the ASEAN region
 - Increase of investment in TE
 - Installation of VOD
 - Plan to provide standard equipment
 - Improvement of life quality
 - Support from MoEYS

S

■ **Weakness** of Cambodia for successful TE

- ▶ What are the things that Cambodia needs to implement good TE in the future?
 - Poor experience in TE
 - Absence of Standard curriculum
 - Deterioration of facilities
 - Lack of financial support
 - Curriculum not meeting labor market demand
 - Insufficient schools
 - No NCS
 - Small pool of teachers

W

O

- Members of ASEAN
- Increase in international trade
- Experience of TE in the private sector
- Strong relationship with foreign countries
- Change of culture
- Creation of new jobs
- Ongoing development and growing economy
- Increase of workers at managerial level
- Strong will of the government for TE

■ **Opportunity**

- ▶ What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?

T

- Difficulty in getting a job in the electronics field
- Companies are located in remote areas
- Lack of foreign investment
- Poor salary for teachers
- Preference for general education
- Narrow market segment

■ **Threats**

- ▶ What threatens pilot schools and others to implement successful TE in Cambodia?

➤ Accounting

■ **Strength** of Cambodia for successful TE

- ▶ What are the good points that Cambodia already has for a successful TE?

- Enough buildings
- Motivated students are enrolled in TE
- Existing education system, government law, policies and programs

S

■ **Weakness** of Cambodia for successful TE

- ▶ What are the things that Cambodia needs to implement good TE in the future?

- Incompetent teachers
- Lack of teachers
- Lack of standard curriculum
- No educational materials, textbooks
- Lack of curriculum developers
- Weak cooperation between the public and private sectors
- Difficulty in supporting from family

W

O

T

- Abundant workers
- Lack of skilled workers
- Companies' needs
- Technical transfer from ASEAN
- Large market
- Increase in investment
- Reduction of immigration
- Increase in entrepreneurs

■ **Opportunity**

- ▶ What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?

- Low industrial growth rate
- Lack of financial support from the government
- Inflow from ASEAN members
- Low salary
- Difference between practice and theory

■ **Threats**

- ▶ What threatens pilot schools and others to implement successful TE in Cambodia?

➤ Agriculture

■ **Strength** of Cambodia for successful TE

- What are the good points that Cambodia already has for successful TE?

- Effective school management
- Implementation
- Relevant policies, law and system
- Cooperation with the Agricultural industry
- Government policies to create a dual school system
- Access to TVET system

S

■ **Weakness** of Cambodia for successful TE

- What are the things that Cambodia needs to implement good TE in the future?

- Insufficient budget & materials
- Curriculum is not standardized.
- Curriculum does not meet labor market demand.
- Curriculum is not developed yet.
- Inadequate general guideline for TVET
- Unclear national guideline for TVET
- Limited awareness of TE
- Limited human resources

W

O

- Contribution to economic growth
- Equal access to TE
-

■ **Opportunity**

- What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?

T

- Lack of awareness of TE
- No national committees for consultation on curriculum development
- Limited budget for TE
- Limited awareness of TVET
- Insufficient working place
- Lack of community involvement in academic institutions

■ **Threats**

- What threatens pilot schools and others to implement successful TE in Cambodia?

Appendix 2

Student Perception Survey

1. Overview:

General information: Conducted in March 2014

- Four targeted Schools: National Polytechnic Institute of Cambodia (NPIC), National Technical Training Institute (NTTI), Institute of Technology of Cambodia (ITC), and Norton University (NU)
- Total participating students: 398 (56 females)
- Five covered majors: Information Technology (IT), Electricity, Electronics, Mechanics, and Construction

2. Purpose :

The main aim of the survey is to explore the perception of the four-targeted school students willing to work as technical education teachers at upper secondary school level in Cambodia.

The specific objectives of the survey are the followings:

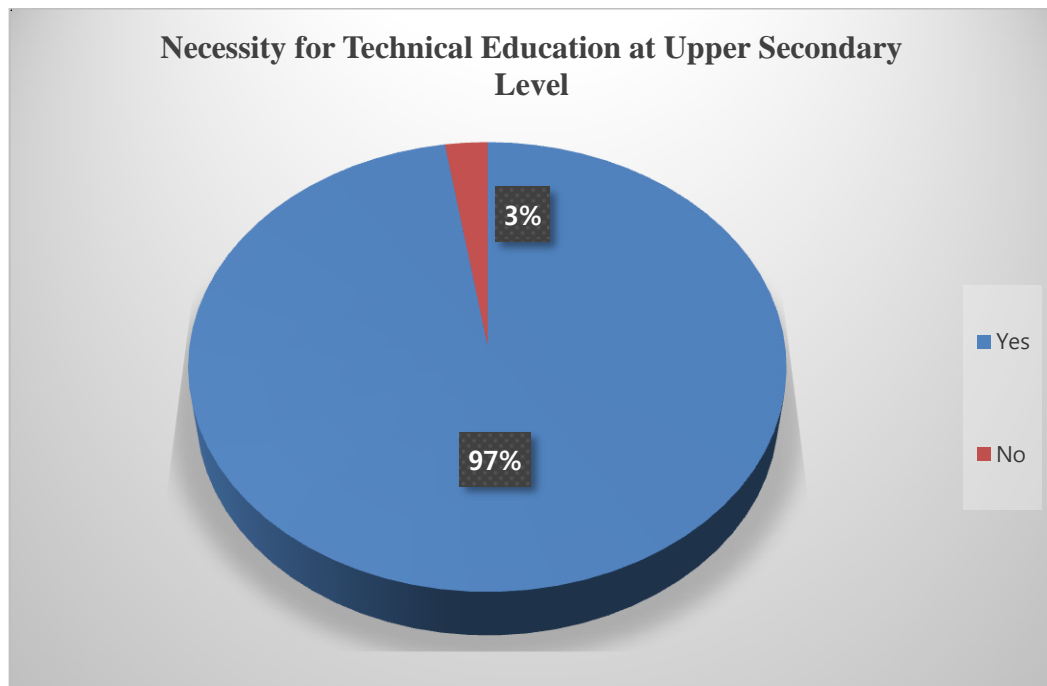
- Identify the reasons why they want or don't want to be technical education teachers at upper secondary school level
- Determine the obstacles to teaching
- Classify students' academic backgrounds by their majors before being teachers
- Identify the students' workplace preferences

3. Methodologies: Questionnaire Survey

- Four selected institutions in Phnom Penh, Cambodia, consisting of 398 students -of whom 56 were female.
- Students were associates or bachelor's degree-seeking undergraduate.
- The survey was undertaken using questionnaires to be filled by 398 students in order to collect primary data; and secondary data are collected through web-sites and documentations.
- Qualitative and quantitative data were used for document analysis.

4. Results:

- Necessity for Technical Education at Upper Secondary School Level: Yes (388), No (10)

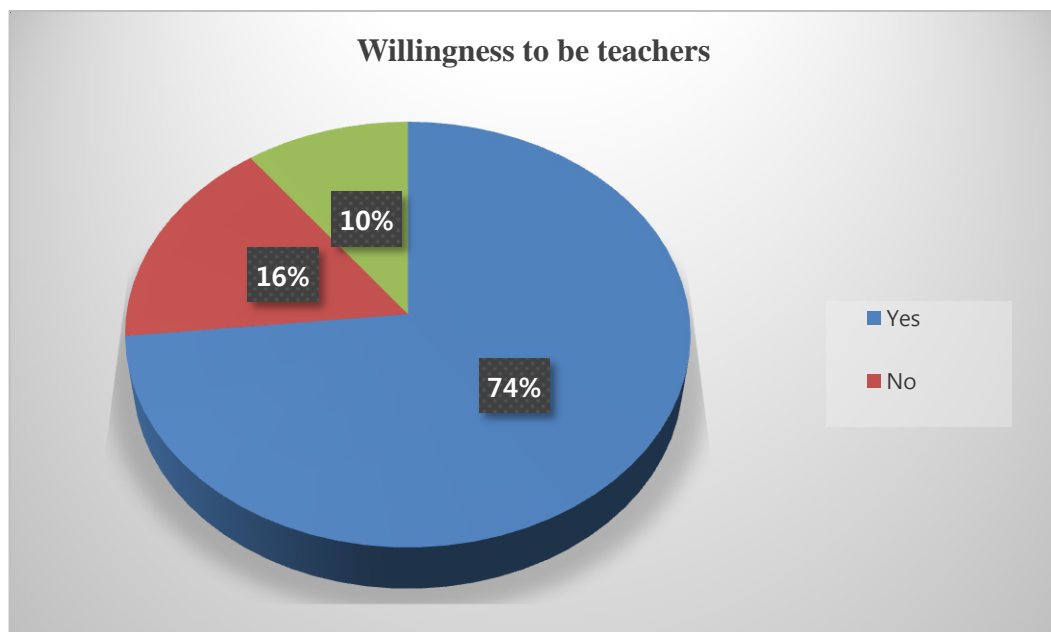


(Figure

Appendix 2.1: Necessity for TE at Upper Secondary Schools)

Source: Survey result

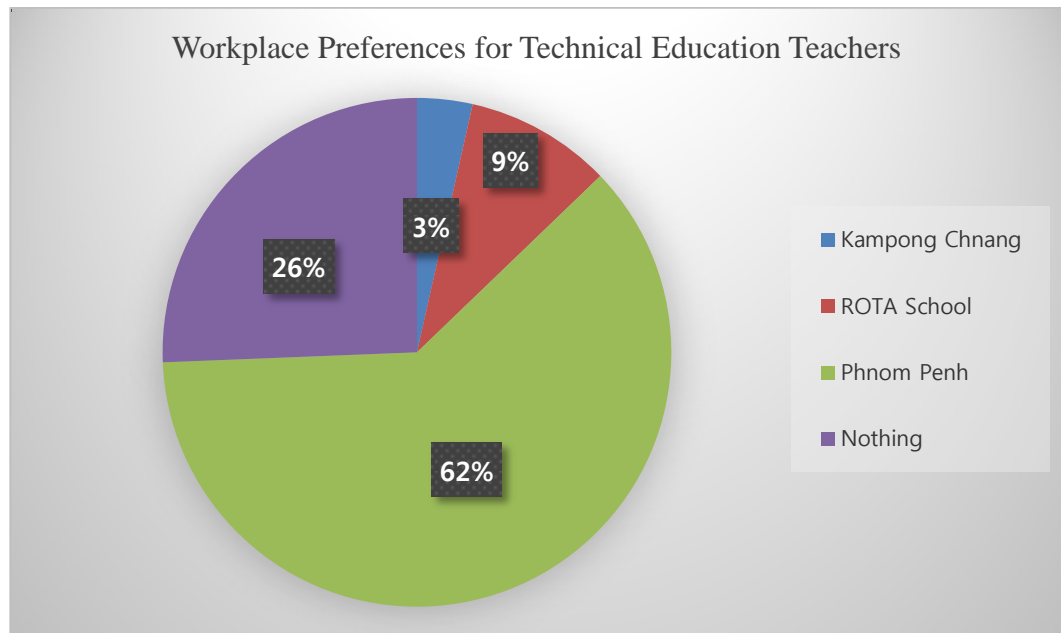
- Willingness to Be Technical Education Teachers at Upper Secondary School Level: Yes (292), No (65), Not sure (41)



(Figure Appendix 2.2: Willingness to be teachers)

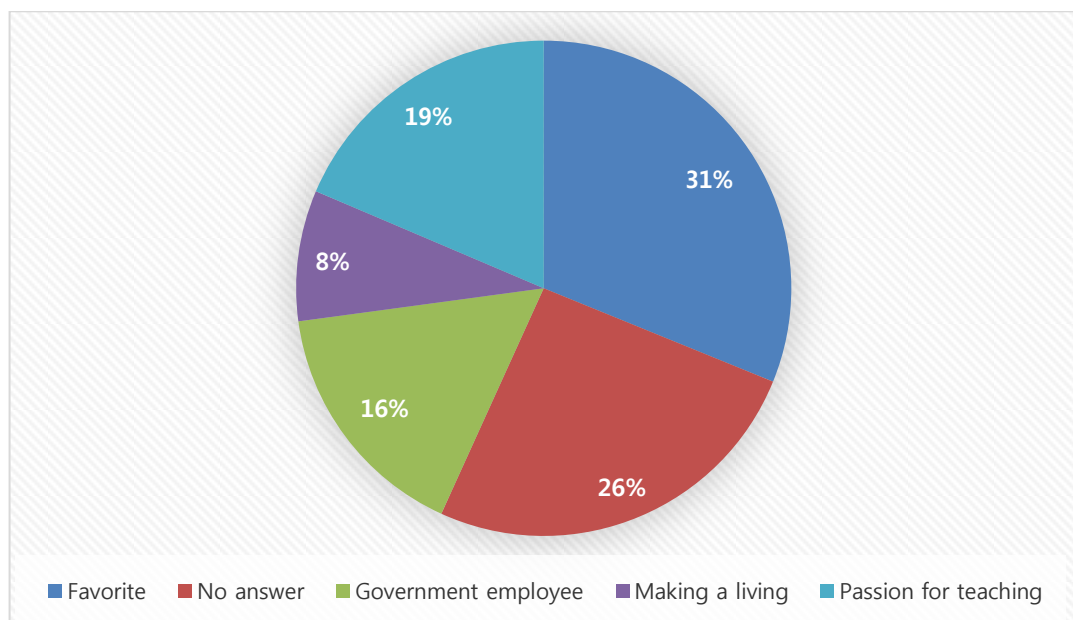
Source: Survey result

- Workplace Preference for Technical Education Teachers: Kampong Chhnang (14), ROTA (37), Nothing (102), Phnom Penh (245)



(Figure Appendix 2.3: Workplace preferences for TE teachers) Source: Survey result

- Reasons to be Teachers: Favorite job (124), No answer (102), Government employee (64), Making a living (34), and Passion for teaching (74)



(Figure Appendix 2.4: Reasons to be TE teachers)

Source: Survey result

Appendix 3

Analysis Report Using IPA (Importance-Performance Analysis) Method

In order to analyze the priority of each strategy and sub-strategy for the Master Plan for Technical Education at Upper Secondary Level in Cambodia, IPA method was conducted.

The results of IPA showed that analyzed strategies and sub-strategies for the establishment of the Master Plan for Technical Education at Upper Secondary Level were well perceived by relevant organizations and technical teachers.

More effective and feasible sub-strategies among them were selected using IPA. And the overview and results of IPA are as follows:

1. Target of Survey

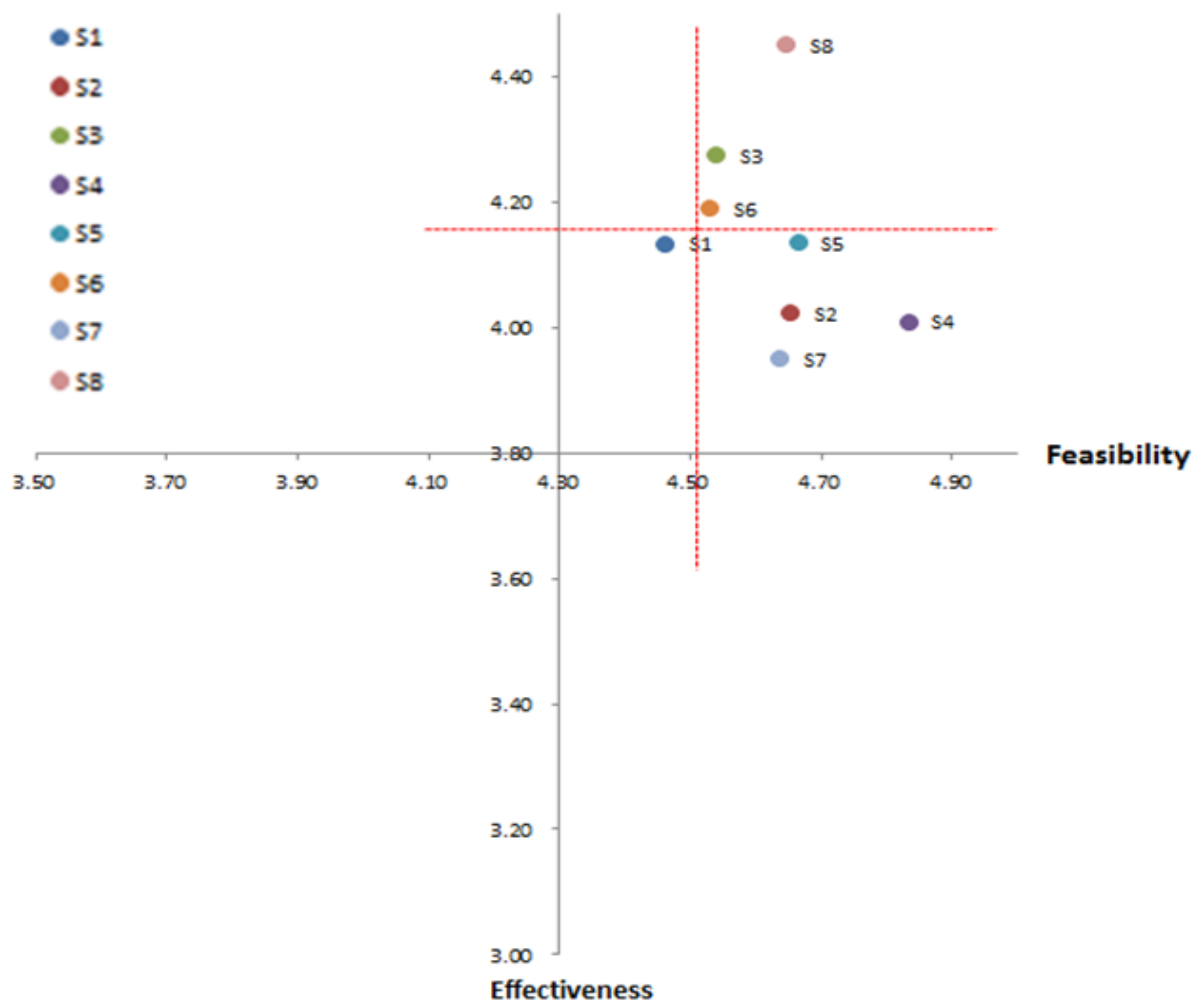
Organization	Number of Respondents	%	Remark
VOD	11	31	
PD	4	11	
TTD	5	14	
NIE	2	6	
Electrics teacher	8	23	
Accounting teacher	5	14	
Total	35	100	

2. Method of Survey : Questionnaire Survey

3. Period of Survey : 08/01/15 - 11/01/15

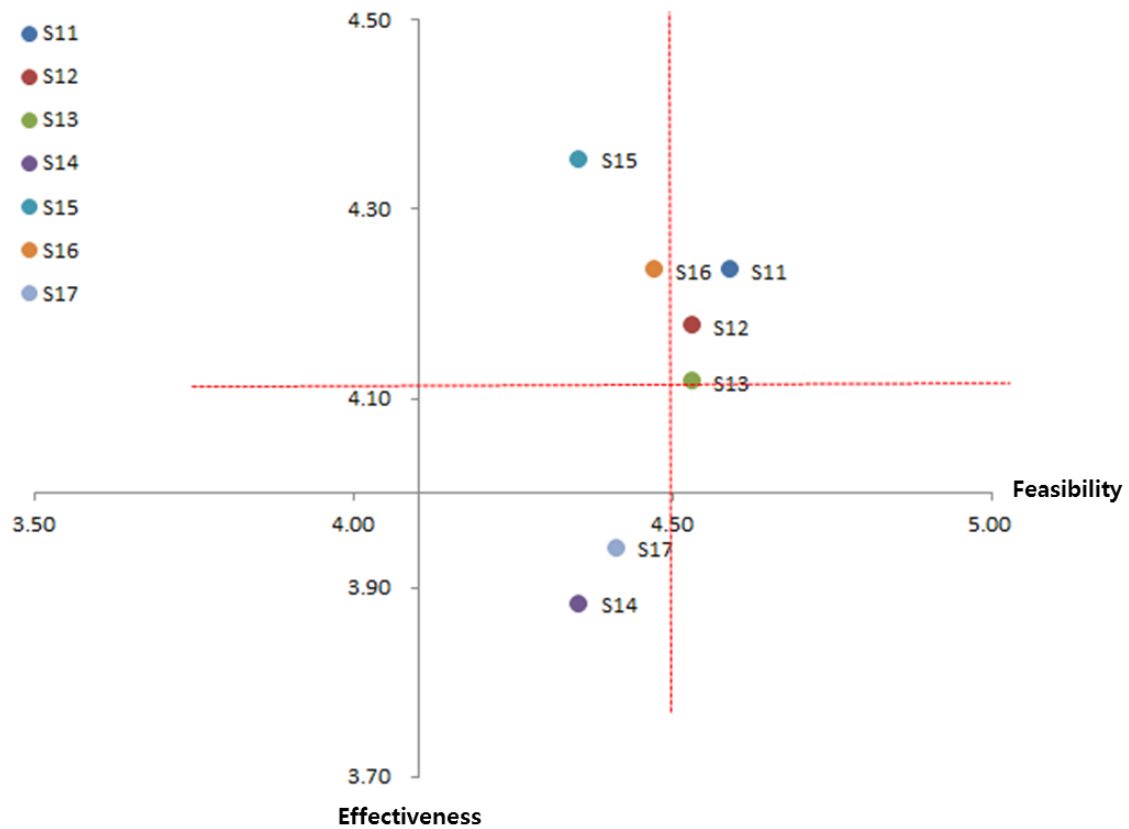
4. Analysis results are as follows:

Analysis Result on Priority Strategy for Enhancing the quality of Technical Education



- S1: Establishment of Legislative Framework to Support General and Technical Education System
- S2: Establishment of General and Technical Education System
- S3: Development and Revision of Technical education Curricula and Textbooks
- S4: Establishment of Technical Education Facilities and Installation of Equipment
- S5: Training of Technical Education Teachers and Promotion of Technical Education Teacher's qualification and Competency
- S6: Accreditation and Quality Assurance of Technical Education
- S7: Establishment Plan for sustainability of Technical Education
- S8: Gender Mainstreaming

Analysis Result on Priority for each sub-strategy of Strategy 1



S11: Legislative framework

S12: Expanding and strengthening general and technical education system

S13: Management and support mechanism for technical education

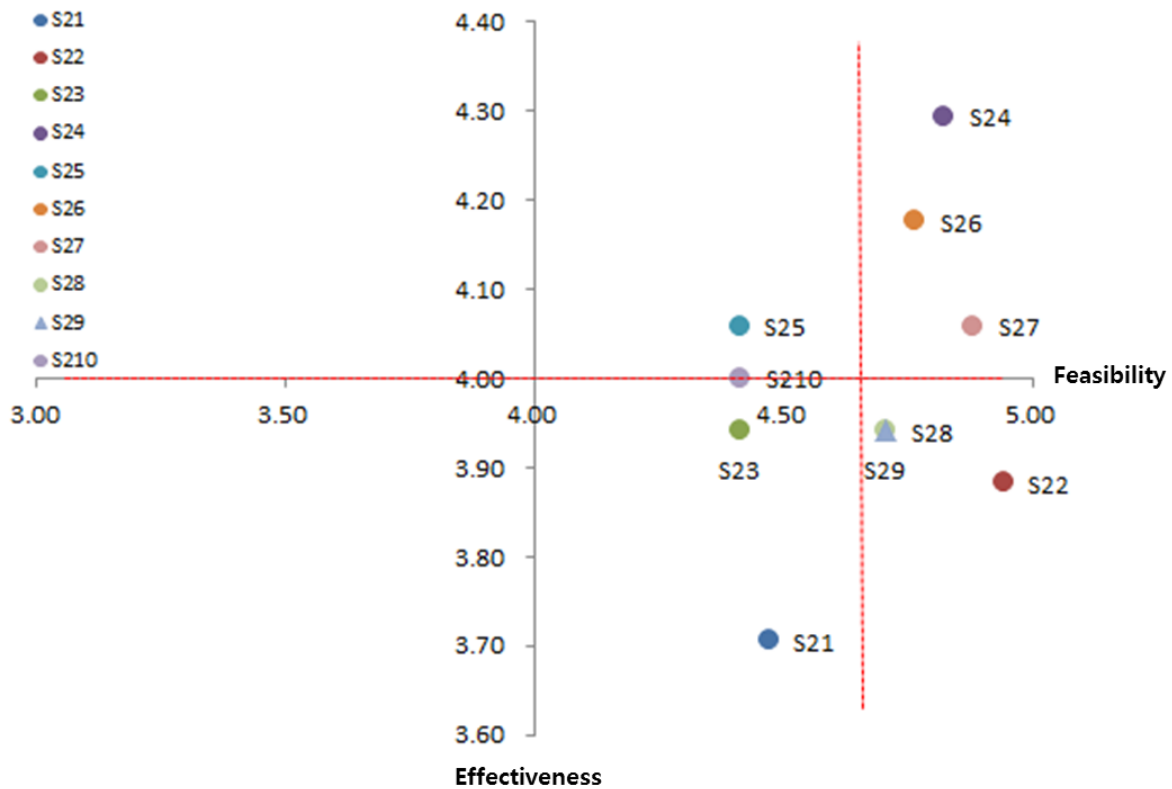
S14: Establishing teaching norms for technical education

S15: Establishing guidelines on workshop Safety

S16: Enhancing basic vocational competencies

S17: Research and Development

Analysis Result on Priority for each sub-strategy of Strategy 2



S21: Establishment of technical education system

S22: Establishment of qualification of GTHSs

S23: Establishment of criteria for GTHSs principals and teachers

S24: Operation and support for general and technical high schools

S25: Enforcement of technical education activities

S26: Strengthening of career development system

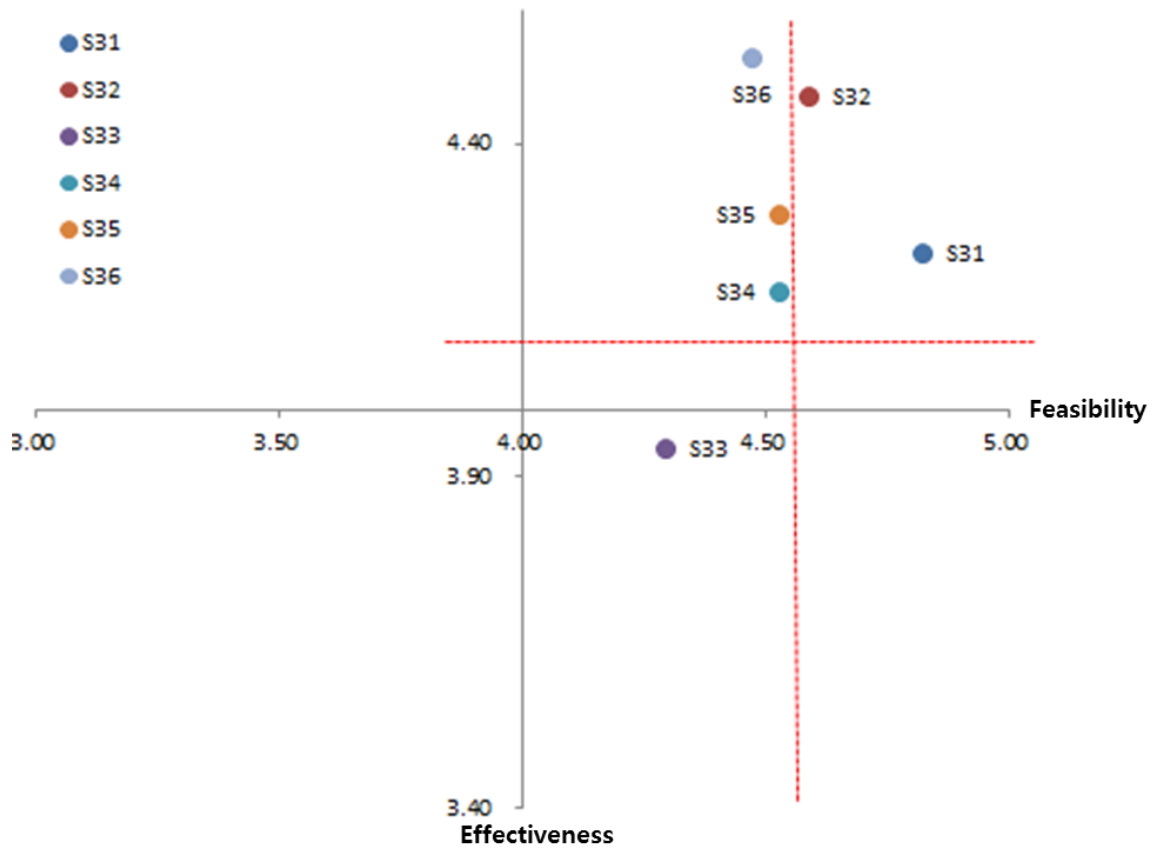
S27: Enforcement of activities for career development and job recruitment

S28: Strengthening and innovation of school management and education

S29: Plan for enhancing technical education system

S10: Implementation of other projects for strengthening competency of school development

Analysis Result on Priority for each sub-strategy of Strategy 3



S31: Technical education curricula and textbook development

S32: Development of teaching / Learning framework for technical education

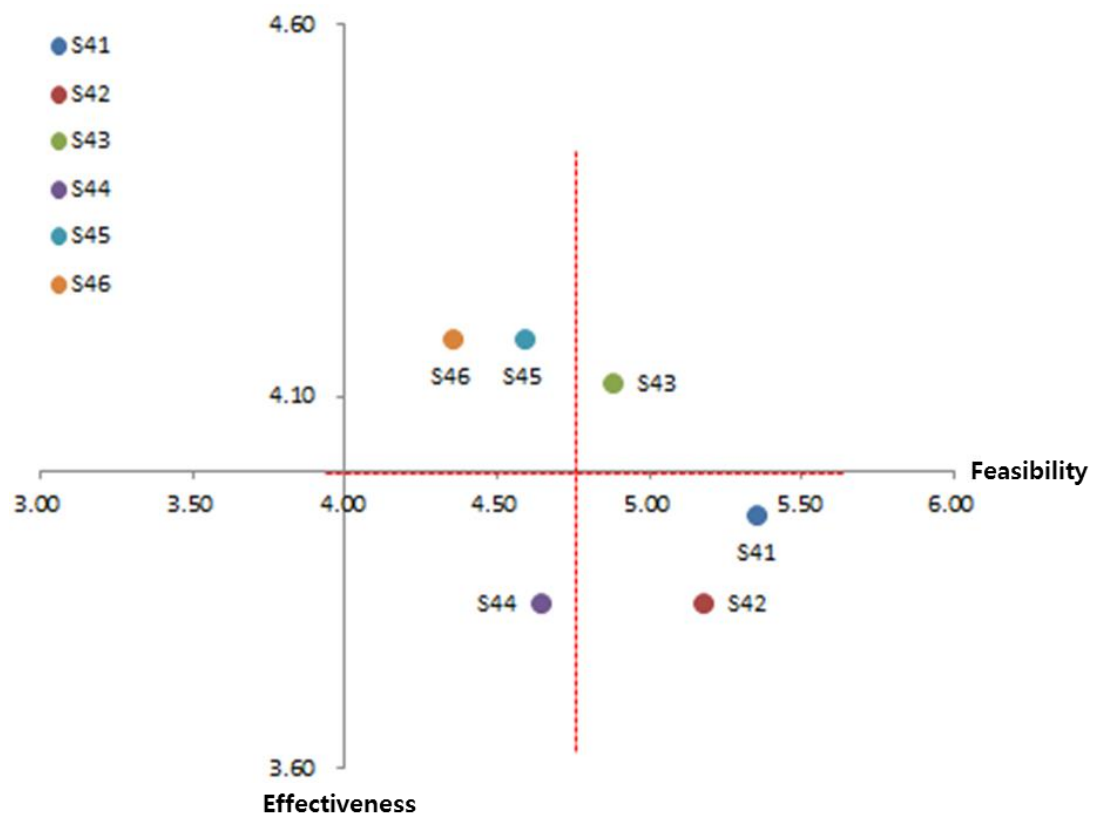
S33: Development of assessment method

S34: Technical education curricula review and innovation responsive to social changes

S35: Development of various teaching methods

S36: Technical education curricula have to be used for teachers at teacher training institutes

Analysis Result on Priority for each sub-strategy of Strategy 4



S41: Construction of classrooms and workshops

S42: Establishing equipment standards for each trade

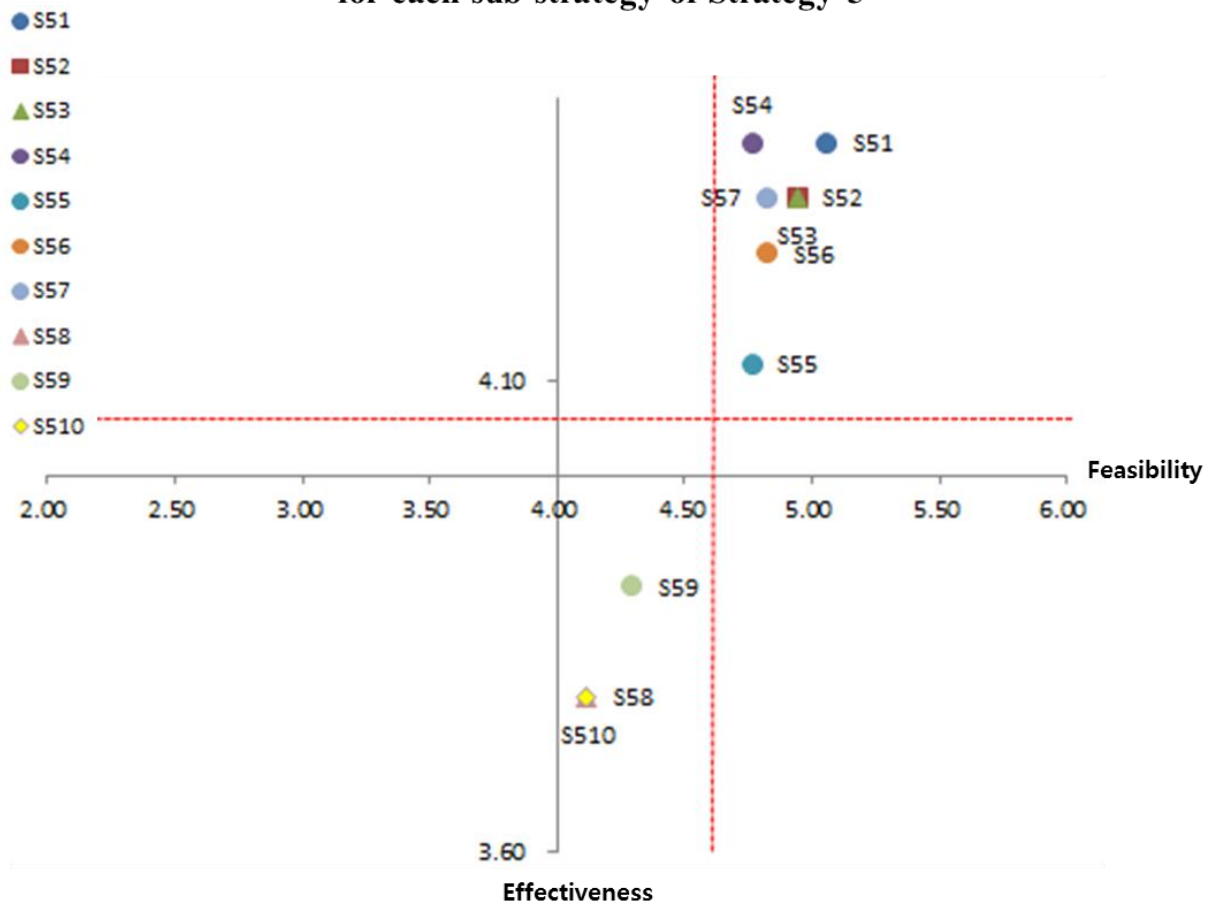
S43: Installing, managing and using experimental equipment and facilities

S44: Provision of sub-facilities for practice workshop

S45: Efficient management and operation of workshop

S46: Safety management of workshop

Analysis Result on Priority for each sub-strategy of Strategy 5



S51: Professional development for technical education teachers and management staff with advanced technical education

S52: Development of training programs for technical education teachers

S53: Empowering program for technical education teachers

S54: Development of curriculum for technical subjects

S55: Operation of innovation team of teaching/learning method in class

S56: Plan for utilization of co-teachers from industry

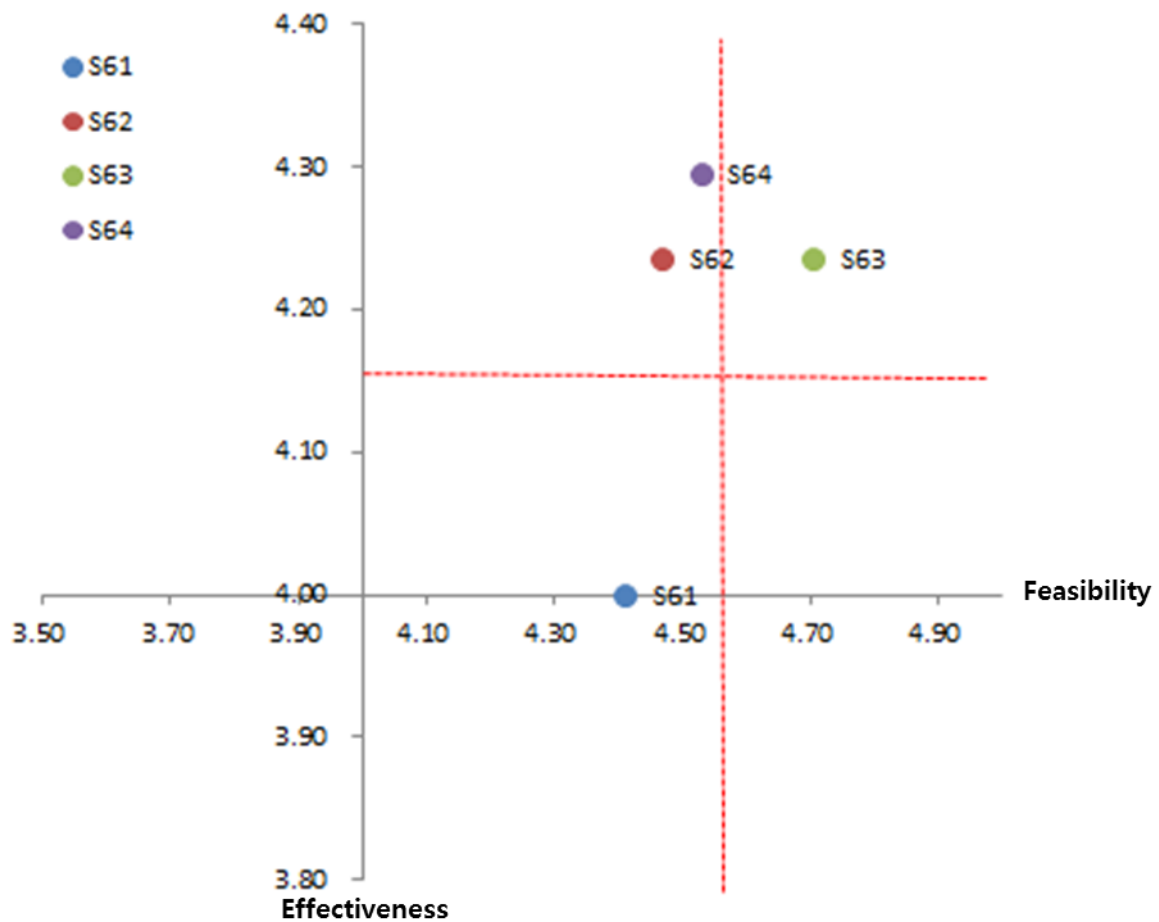
S57: Compulsory in-service training of technical teachers at teacher training institutes

S58: Plan for utilization of assistant teacher from industry

S59: Implementation of other projects for strengthening competency of school development

S510: Strengthening of career development system

Analysis Result on Priority for each sub-strategy of Strategy 6



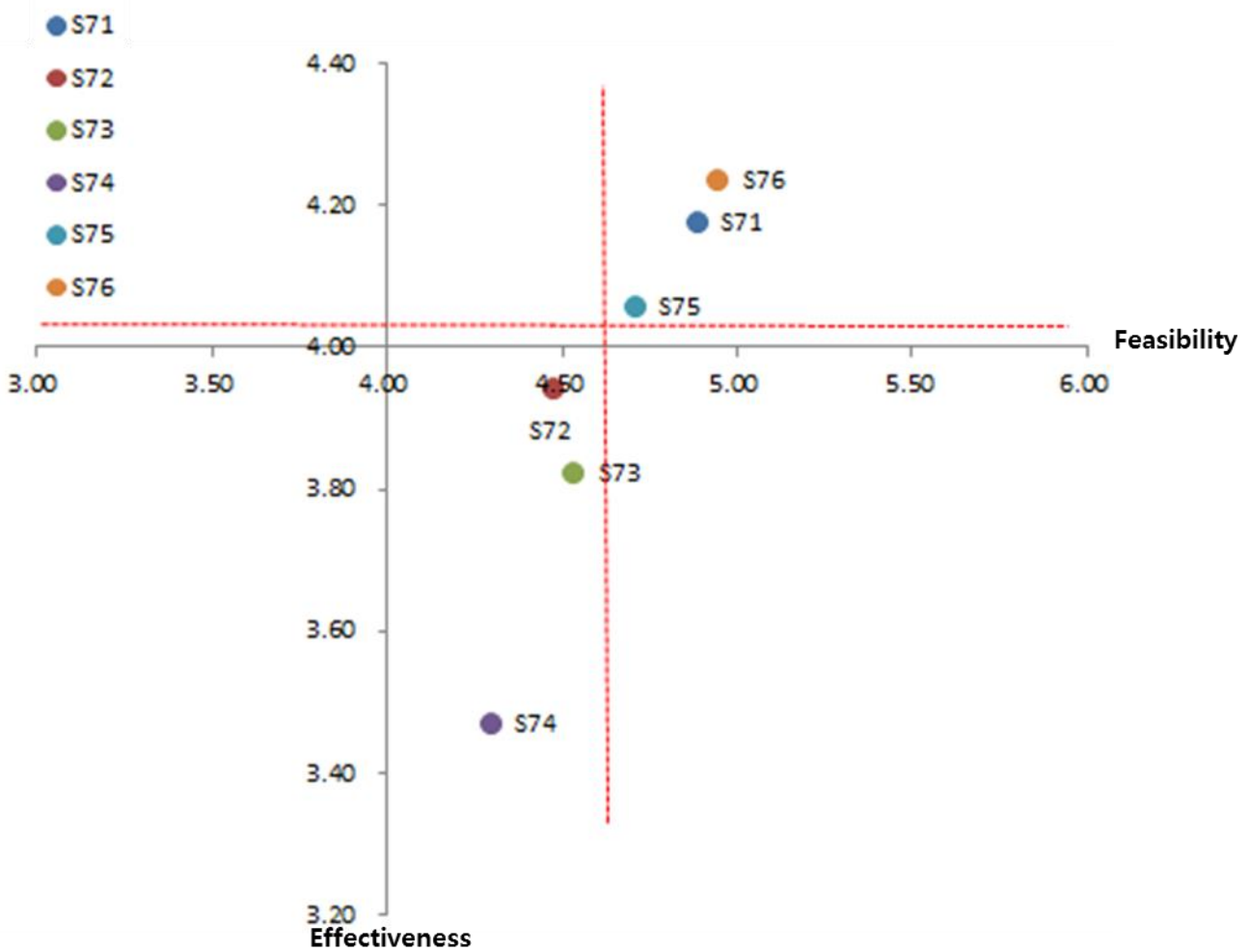
S61: Development of internship program for technical education

S62: Accreditation and Student's Qualification

S63: Developing Evaluation and Monitoring System of Technical Education

S64: Enforcement of Activities for Job Recruitment

Analysis Result on Priority for each sub-strategy of Strategy 7



S71: Promotion of Industry-School-Government cooperation

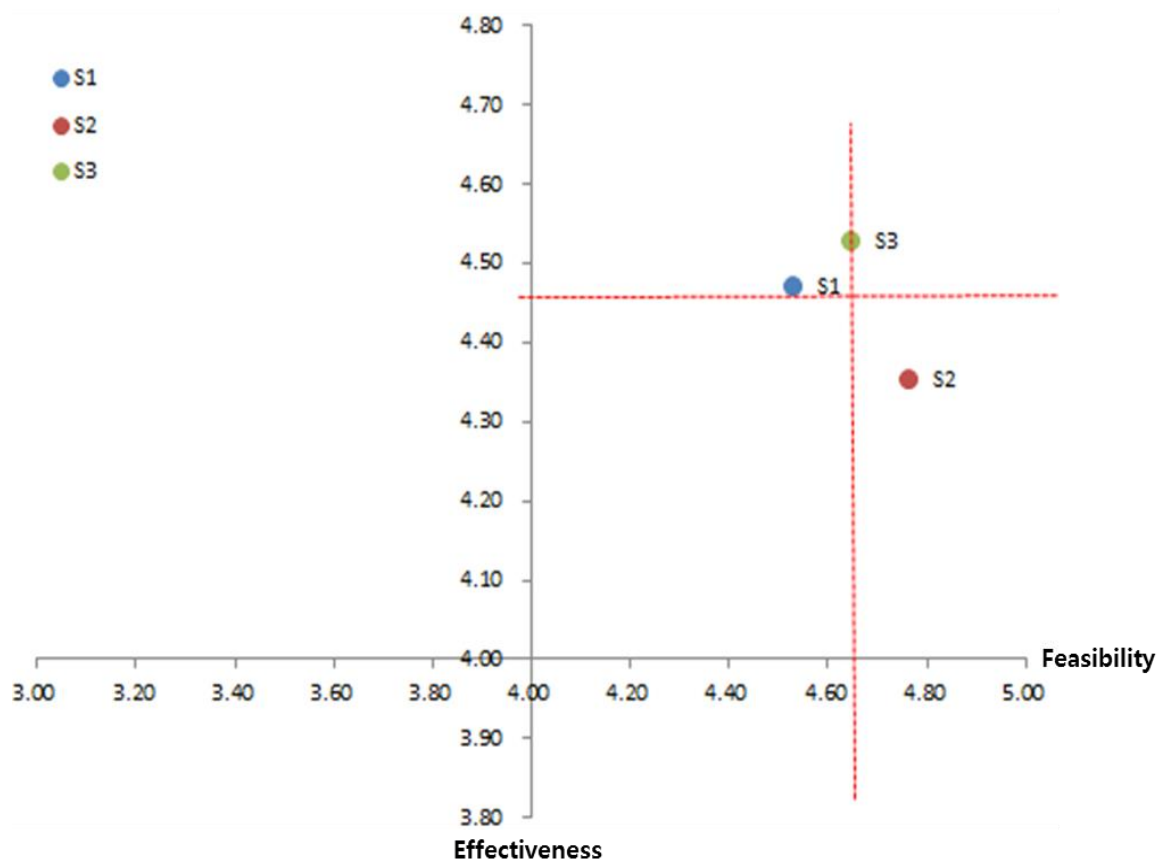
S72: Promotion of entrepreneurship and competitiveness

S73: Plan for raising budget

S74: Benefit creation plan for self-budget operation and management of school enterprises

S75: Plan for enhancing Technical Education System

Analysis Result on Priority for each sub-strategy of Strategy 8



S1. Establishment of infrastructure for gender Equity

S2. Promotion of gender equity in technical education

S3. Development and strengthening of competency on gender mainstreaming

SWOT Analysis on Gender Equity

1. Overview of Survey

- Period of survey Feb. 2nd to 22nd, 2014
- Three targeted schools: Preah Bat Samdech Preah BoromNeat Norodom Siha Moni General and Technical High School, Samdech Akka Moha Sena Padei Techor Hun Sen-Rota Khsach Kandal GTHS and Hun Sen Chumpouvoan High School
- Total participating students: 300 students (100 students per pilot school)

2. Purpose of the Study:

- The main aim of the survey was to analyze the current situation on gender equity in Cambodia in order to find out strategies and sub-strategies to encourage gender equality in General and Technical High schools.

3. Methodologies : Questionnaire Survey and in-depth interviews

4. Results :

■ Strength of Cambodia for successful TE

► What are the good points that Cambodian technical high schools already have for successful gender equality education in TE?

- Strong will of the government for gender related perspective: MoEYS (Gender Mainstreaming strategy 2011-2015), "Neary Rattanak" (2011-2015, MoWA)
- Relatively high ratio of female students in the agriculture field, potential educational environment of gender equality
- High ratio of young generation
- Students are smart and enthusiastic (open-minded towards gender equality)
- Existing education system
- Government law, policies, programs
- Cooperation with gender related international organizations and associations
- Interest in gender equality education in three schools

■ Weakness of Cambodia for successful TE

► What are the things that Cambodia needs to implement good TE in the future?

- Limited awareness of gender equality
- Limited human resources (lack of qualified female teachers to educate gender equality, female principals/teachers)
- Lack of facilities for female students (toilette, dormitory)
- Lack of scholarship for female students
- Lack of cooperation with government officials in gender equality
- No effective curriculum for gender equality in schools
- Lack of educational materials for gender equality (textbooks and illustration)
- No tool and equipment for female students
- Lack of female teachers participating in textbook writing project

	<ul style="list-style-type: none"> - High female dropout rates - Lack of financial support and interest in female students of parents and community) - Lack of experience in gender equality education - Lack of interest in education and social activity of female students
S	W
O	T
<ul style="list-style-type: none"> - Clear guidelines for gender equality - Developing gender curriculum - Potential business sector for women (ex. potential female entrepreneur in agriculture, etc.) - Good relationship with foreign countries (many NGOs) - Interest of the government in gender equality of TE (MoWA, MoEYS) - New culture among students - Cooperation with Korea - Increasing ODA fund from other countries - Rising demand for female workers - Social consensus that the empowerment of female farmers is needed - Rising interest of participation in programs to educate female farmers agricultural technique - Consensus of the necessity to teach female students proper agriculture - Expectation that the policy for women and partnership for gender equality development and cooperation by the government will be strengthened 	<ul style="list-style-type: none"> - Limited budget for gender equality education(lack of fund support from the government) - Limited awareness of gender equality - Limited cooperation with stakeholders - Lack of community involvement in gender equality (Lack of understanding of the real situation that Cambodian women are facing and of gender equality) - Small number of female workers engaged in decision-making process - Lack of parents' interest and support for daughters - Lack of dormitories for female students - Gap between the slogan of gender equality and the real situation of Cambodian women - No leisure to consider gender awareness (too busy trying to eke out a living) - Uncertainty of practical gender equality education - Lack of gender equality network
<p>■ Opportunity</p> <p>► What are the opportunities (friendly environments) for pilot-schools to implement successful TE in Cambodia?</p>	<p>■ Threats</p> <p>► What threatens the pilot schools and others to implement successful TE in Cambodia?</p>

Appendix 5

Action Plan Matrix of Master Plan for Technical Education at Upper Secondary Level

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 1: Establishment of Legislative Framework to Support General and Technical Education System					
Sub-strategy 1.1: Establishment of Legislative Framework					
1.1.1 Prakas on the Establishment of General and Technical Education System	1.1.1.1 Establish a managing and coordinating committee (national/ sub-national levels) for general and technical education system - Developing legislative framework - School-industry cooperation - Career counseling and development - Quality assurance of TE * Teacher, equipment and facility, leadership, gender mainstreaming, and school operation - Study and research on TE * Standard, criteria, and evaluation of GTHSs	Managing and Coordinating committee 5 working groups	2015 Q2	VOD, DGSE and DoL	N/A
	1.1.1.2 Establish a TE curriculum and textbook development committee	Committee	2015 Q2	VOD, DGSE and DoL	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
	1.1.1.3 Formulate prakas for the establishment of general and technical education system	Prakas on the establishment of GTHSs	2015 Q4	VOD, DGSE and DoL	N/A
	1.1.1.4 Establish standardized criteria for GTHSs	Prakas	2015 Q4	VOD and DoL	N/A
	1.1.1.5 Develop a long-term plan for the expansion of GTHSs - Number of schools - Ratio of students between general and technical stream, etc.	Plan	2018 Q4	VOD and DoP	\$30,000
1.1.2 Guideline on the leadership and management of GTHSs	1.1.2.1 Organize the school regulation of operation and management	Guideline	2015 Q4	VOD and DoL	N/A
	1.1.2.2 Establish the empowering framework of principals and Vice principals	Guideline	2015 Q4	VOD,DGSE and DoPe	N/A
1.1.3 Guideline on the qualification of technical education teachers	1.1.3.1 Study and research on qualification criteria for the TE teachers	Criteria report	2015 Q4	VOD,DoPe,DoL and NIE	\$10,000
	1.1.3.2 Organize the qualification framework for TE teachers	Guideline	2016 Q1	VOD, DoPe, and DoL	N/A
1.1.4 Guideline on the implementation of TE curriculum	1.1.4.1 Establish the guidelines on the TE curriculum development and develop standardized class rosters, syllabi and course evaluation sheets	Guideline class rosters, syllabi and course evaluation sheets	2016 Q1	VOD and DCD	\$5,000
1.1.5 Guideline on school-industry cooperation	1.1.5.1 Codify the guidelines on school-industry cooperation - Advantages for industrial sector	Guideline/MoU	2015 Q4	VOD	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
1.1.6 Regulation on school safety	1.1.6.1 Compile the regulation of educators duties for school safety	Regulation	2015 Q4	VOD, DGSE and DoPe	N/A
1.1.7 Guideline on supervision	1.1.7.1 Research on TE supervision * Teacher role, teaching and learning method, equipment and facility, leadership, gender mainstreaming, and school operation	Report	2016 Q2	VOD and DQA	\$30,000
	1.1.7.2 Establish the guidelines on supervision of TE	Guideline	2016 Q2	VOD and DQA	\$5,000
1.1.8 Guideline on duties of TE teachers	1.1.8.1 Develop the guideline on the duty of TE teachers Strengthen supportive functions of teachers - School life - Class teacher - Career guidance - Job finding and application	Guideline	2016 Q2	VOD and DoPe	\$30,000
1.1.9 Guideline on advantages for TE teachers	1.1.9.1 Study and analyze the needs of TE teachers	Report	2016 Q3	VOD and DoPe	\$10,000
	1.1.9.2 Establish the guidelines on TE teachers' advantages/ appraisal system for TE teachers	Advantages/ Appraisal system for TE teachers	2016 Q4	VOD, DoPe and DoF	\$3,000
1.1.10 Establish the legislative framework for Career counseling program for TE	1.1.10.1 Research on the career counseling program for TE - Job finding procedure - Guidance for application and interview	Report	2015 Q2	VOD	\$30,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
	1.1.10.2 Develop the manual for career counseling program for TE	Manual	2015 Q3	VOD	\$30,000
Sub-strategy 1.2: Establishment of Management and Support Mechanism for Technical Education					
1.2.1 Establish working groups for TE at GTHSs levels	1.2.1.1 Establish and support the school steering group <ul style="list-style-type: none"> - School-industry cooperation - Career counseling - Self-quality assurance of TE * Teacher, equipment and facility, leadership, teaching and learning, extra-curricular activities, gender mainstreaming and school operation <ul style="list-style-type: none"> - Innovation in teaching and learning for TE - Peer teacher supervision 	Steering group	2016 Q4	VOD and GTHSs	\$30,000
Sub-strategy 1.3: Establishment of Research and Development					
1.3.1 Rename VOD to Department of Technical Education (DTE)	1.3.1.1 Request to modify sub-decree 84 dated 9 th June, 2009 on the establishment and operation of the Ministry of Education, Youth and Sport	Department of TE	2015 Q2	VOD and DoL	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
	1.3.1.2 Revitalize the prakas on the establishment and operation of the Department of TE	Prakas	2015 Q3	VOD and DoL	N/A
	1.3.1.3 Codify the job descriptions and job specifications for management and staff teams of Department of TE	Job descriptions and responsibilities	2015 Q3	VOD, DoL and DoPe	N/A
1.3.2 Research and develop Technical Education	1.3.2.1 Study and research on the TE - Feasibility study on new trade establishment - Skill competition - School-enterprise - Future Famer Cambodia (FFC) activities	Report	2016 Q4	VOD and related stakeholder	\$50,000
	1.3.2.2 Conduct the TE cost and benefit analysis	Report	2018 Q4	VOD	\$50,000
	1.3.2.3 Establish the feedback systems for TE based on analysis reports	System	2019 Q3	VOD	\$10,000
	1.3.2.4 Organize and conduct the consultative workshops and conferences on progress of the operation of GTHSs	Report	2017 Q1	VOD and GTHSs	\$10,000
	1.3.2.5 Organize consultative work shops and conferences on progress of the operation of GTHSs	Report	2017 Q1	VOD, Concerned Institutions and DPs	\$8,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 2: Establishment of General and Technical Education System					
Sub-strategy 2.1: Upgrade of Technical Education System					
2.1.1 Establish the technical education structure and standard	2.1.1.1 Strengthen the administrative structures of TE at national and sub-national levels	Management structure	2015 Q4	VOD and PoE	N/A
	2.1.1.2 Establish the TE standard - Curriculum - Teaching and learning materials - Facilities and equipment	Standard	2017 Q1	VOD and DCD	\$50,000
	2.1.1.3 Establish the TE operation process standard - According to international standard - Refer to the would-be Cambodian competency standard	Standard	2019 Q4	VOD and DCD	\$300,000
	2.1.1.4 Consult and disseminate the TE standard for GTHSs regularly	Workshop and report	2017 Q3	VOD and GTHSs	\$20,000
2.1.2 Issue Prakas on establishing standard of GTHS	2.1.2.1 Establish Prakas on standards for GTHSs	Prakas	2016 Q4	VOD and DoL	N/A
Sub-strategy 2.2: Expansion and Strengthening of General and Technical High School					
2.2.1 Expand and strengthen General Technical High Schools	2.2.1.1 Conduct the analysis of GTHSs operations	Report	2018 Q4	VOD	\$50,000
	2.2.1.2 Strengthen and expand the GTHSs in seven provinces/ municipality based on school standards and labor market needs	Number of GTHSs	2019 Q3	VOD	\$50,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
2.2.2 Increase TE students enrollment	2.2.2.1 Strengthen the vocational orientation program at all lower secondary schools	Vocational Orientation document	2016 Q1	VOD	N/A
	2.2.2.2 Advertise the TE to attract all students	Advertisement Strategy	2016 Q1	VOD	\$50,000
Sub-strategy 2.3: Operation and Support of General and Technical High School					
2.3.1 Allocate budget operation of GTHSs	2.3.1.1 Allocate the GTHSs' operation budget	AOP (Annual operational plan)	2015 Q4	VOD and DoF	PB
	2.3.1.2 Conduct following up and monitoring GTHSs operation progresses	Following up and monitoring reports	2016 Q4	VOD and GHTSs	N/A
2.3.2 Establish GTHSs Assistant teacher and Co-teacher system	2.3.2.1 Study the assistant teacher and co-teacher system for GTHSs	Report	2016 Q1	VOD	\$30,000
	2.3.2.2 Establish the prakas for Assistant teacher and co-teacher system	Prakas	2016 Q3	VOD, DoL, and DPs	N/A
	2.3.2.3 Implement the assistant teacher and co-teacher system for GTHSs	Number of co-teachers and assistants teacher	2016 Q3	VOD and GTHSs	\$8,000 (2 persons of co-teachers and/or assistants teacher per year)

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 3: Development and Revision of Technical Education Curricula and Textbooks					
Sub-strategy 3.1: Development and Revision of Technical Education Curricula and Textbooks					
3.1.1 Develop curricula and textbooks related to trades of GTHSs	3.1.1.1 Review the provincial labor market demand and social context	Review report	2019 Q3	VOD	\$1,000
	3.1.1.2 Revise the curriculum based on labor market demands, regional characteristic and technology development	Revised curriculum	2019 Q3	VOD and DCD	\$50,000
	3.1.1.3 Revise the textbooks in accordance with revised curricula for each trade	Textbooks	2019 Q4	VOD and DCD	\$20,000 Per textbook
Sub-strategy 3.2: Development of Technical Education Teaching and Learning Framework					
3.2.1 Organize Technical Subject team for developing teaching and learning framework	3.2.1.1 Formulate a guideline on the establishment of a research and develop team for diverse teaching and learning methods	Guideline	2016 Q3	VOD	N/A
	3.2.1.2 Conduct research and development for diverse teaching and learning methods for each trade	Report	2016 Q3	VOD and GTHSs	\$3,000 per school
	3.2.1.3 Set up a framework to share efficient learning and teaching methods developed	Framework set up	2017 Q1	VOD and GTHSs	N/A
	3.2.1.4 Implement teaching and	Implementation	2017 Q4	VOD and	N/A

Programs		Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
		learning methods	result		GTHSs	
3.2.2	Develop the guideline to encourage students' participation	3.2.2.1 Establish the guideline for self-directed learning	Guideline	2016 Q4	VOD and GTH Ss	\$3,000 per school
		3.2.2.2 Establish the peer tutoring guideline	Guideline	2016 Q4	VOD and GTH Ss	\$3,000 per school
3.2.3	Implement the extra-curricular activity	3.2.3.1 Offer the extracurricular activities to intensify learning activities	Extracurricular programs	2016 Q3	VOD and GTH Ss	\$5,000 per school
Sub-strategy 3.3: Regular Revision for Innovative Technical Education Curricula According to Social Changes						
3.3.1	Revise regularly Innovation of Technical Education Curricula according to Technology Development	3.3.1.1 Revise the curriculum based on technology trend and development	Revised curriculum	2019 Q3	VOD and DCD	\$50,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 4: Establishment of Technical Education Facilities and Installation of Equipment					
Sub-strategy 4.1: Construction of Classrooms, Workshops and Laboratories					
4.1.1 Construct classrooms, workshops and laboratories according to TE standard	4.1.1.1 Design the classrooms, workshops and laboratories based on teaching and learning norms and TE standard	Design	2015 Q4	VOD and DoC	\$5,000
	4.1.1.2 Construct the TE standard-based classrooms, workshops and laboratories for each trade	Construction specifications	2016 Q2	VOD and DoC	\$900,000
	4.1.1.3 Monitor the progress of construction	Report	2016 Q2	VOD and DoC	\$5,000
4.1.2 Establish Manuals and safety measure	4.1.2.1 Compile the operational manuals and safety measures for facility and equipment management	Manuals	2016 Q3	VOD, DoC, DPSA and GTHSs	\$5,000
Sub-strategy 4.2: Installation of Technical Education Facilities and Equipment According to the Standard of each Trade					
4.2.1 Install and monitor the equipment	4.2.1.1 Monitor the equipment installation based on TE standards	Reports	2016 Q3	VOD	\$5,000
4.2.2 Compile the equipment maintenance and repair manuals	4.2.2.1 Formulate the equipment maintenance and repair manuals	Manuals	2016 Q3	VOD	\$5,000
	4.2.2.2 Set up the budget allocation plan for maintenance and repair	AOP	2016 Q4	VOD	N/A
	4.2.2.3 Provide TE teacher training programs in facility and equipment maintenance and repair processes	Training programs	2016 Q3	VOD and GTHSs	\$3,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 5: Training of Technical Education Teachers and Promotion of Technical Education Teacher's Qualification and Competency					
Sub-strategy 5.1: Enhancement of Competence and Qualification of Technical Education Teacher and Managerial Staff					
5.1.1 Organize capacity building program for TE teachers and staff	5.1.1.1 Plan the training programs on management, leadership and planning for education staff of GTHSs	Plan	2016 Q2	VOD	N/A
	5.1.1.2 Train the GTHSs education staff in accordance with plan	Number of participants	2016 Q3	VOD	\$9,000
	5.1.1.3 Organize and conduct the field trip for GTHSs management and operation.	Number of participants	2016 Q3	VOD	\$6,000
	5.1.1.4 Organize and conduct the overseas short, medium and long term training courses for education staff	Number of participants	2017 Q1	VOD, DoF and GTHSs	\$1,300,000 + PB
	5.1.1.5 Encourage the education staff for lifelong learning	Number of participants	2015 Q3	VOD	PB
5.1.2 Enhance education staff evaluation program	5.1.2.1 Develop the annual evaluation program for education staff based on quality assurance	Evaluation program	2017 Q2	VOD	N/A
	5.1.2.2 Strengthen the career development program for education staff	Career development program	2018 Q1	VOD and DoPe	N/A
Sub-strategy 5.2: Development of Training Programs for Technical Education Teachers					
5.2.1 Establish pre-service and in-service training programs for TE teachers	5.2.1.1 Establish the long-term plan for TE teacher recruitment and pre-service training	Teacher recruitment plan and pre-service training program	2015 Q4	VOD, DoPe and NIE	N/A
	5.2.1.2 Organize and conduct the capacity building programs for teaching and learning	Number of programs and participants	2015 Q3	VOD, DoPe and GTHSs	PB

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
	activity, technical skills enhancement and class room management - TE teachers have to participate in predetermined amount of training hours				
	5.2.1.3 Conduct a needs analysis to select training courses	Report	2015 Q4	VOD	PB
	5.2.1.4 Employ the TE teachers based on the long-term plan	Number of TE Teachers	2015 Q3	VOD and DoPe	PB
Sub-strategy 5.3: Development of an Appraisal System for Technical Education Teachers					
5.3.1 Develop TE teachers' appraisal/ Incentive systems	5.3.1.1 Develop the education staff appraisal/ incentive systems at GTHSs for principals, vice principals and TE teachers according to their position and standards	Appraisal/ incentive system	2016 Q4	VOD and DoPe	N/A
	5.3.1.2 Develop an appraisal/incentive system for teachers who apply for GTHSs lacking TE teachers	Appraisal/ Incentive system	2017 Q1	VOD and DoPe	N/A
	5.3.1.3 Provide higher priority for GTHSs education staff in international invitation program	Number of education staff participate in training	2017 Q2	VOD	N/A
	5.3.1.4 Formulate qualification framework to encourage outstanding and competent graduates to work as technical teachers	Number of Outstanding Graduates becoming TE teachers	2016 Q3	VOD and DoPe	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 6: Accreditation and Quality Assurance of Technical Education					
Sub-strategy 6.1: Establish Accreditation and Quality Assurance System for Technical Education					
6.1.1 Develop accreditation and quality assurance frameworks	6.1.1.1 Formulate the legislative framework for accreditation and quality assurance in cooperation with relevant stakeholders	Legislative frameworks	2017 Q2	VOD and QAD	N/A
Sub-strategy 6.2: Accreditation and Student's Qualification					
6.2.1 Establish accreditation and Students' Qualification	6.2.1.1 Strengthen GTHSs students' qualification in accordance with Cambodian Qualification Framework	Accreditation	2016 Q3	VOD	N/A
6.2.2 Deliver TE student competency programs and opportunities for life long learning or work	6.2.2.1 Disseminate the TE awareness - Campaign program to improve TE awareness	Campaign to raise TE awareness, number of applicants	2015 Q4	VOD	\$20,000
	6.2.2.2 Hold the skill competition and fair for student achievements	Competition and fair	2016 Q4	VOD and GTHSs	\$15,000
	6.2.2.3 Enrich GTHSs student club activities (voluntary technical extra-practices, competition preparation, etc.)	Number of Clubs	2016 Q4	VOD and GTHSs	\$1,000
	6.2.2.4 Formulate the framework for TE stream graduates for applying for engineering universities	Framework	2015 Q3	VOD	N/A
	6.2.2.5 Formulate minimum qualification for TE student admission	Minimum qualification	2015 Q3	VOD	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Sub-strategy 6.3: Development of Monitoring and Evaluation System of GTHSs					
6.3.1 Develop monitoring and evaluation system	6.3.1.1 Organize external/ internal monitoring and evaluation mechanism for GTHSs	Report	2016 Q1	VOD	N/A
	6.3.1.2 Develop and conduct self-assessment and evaluation procedure	Report	2016 Q2	VOD	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 7: Establishment Plan for Sustainability of Technical Education					
Sub-strategy 7.1: Promotion of Industry-School-Government Cooperation					
7.1.1 Build School-Industry partnership	7.1.1.1 Reach MoU to set up school-industry partnership - Internship - Scholarship - Job finding	MoU	2016 Q1	VOD and GTHSs	N/A
	7.1.1.2 Organize extra practice programs based on industrial needs	Extra practice programs	2016 Q3	VOD and GTHSs	N/A
	7.1.1.3 Share school facilities, works hops and equipment with private sector	Record of sharing	2016 Q3	VOD and GTHSs	N/A
	7.1.1.4 Organize job fair in cooperation with private sector	Job fair	2017 Q1	VOD and GTHSs	N/A
	7.1.1.5 Coordinate invitational lectures from industrial sector for experience and practical skill sharing purposes	Invitational lectures	2017 Q1	VOD and GTHSs	N/A
Sub-strategy 7.2: Promotion of Entrepreneurship and Competitiveness					
7.2.1 Cultivate entrepreneurship and competitiveness	7.2.1.1 Formulate entrepreneurship programs for GTHSs	Entrepreneurship Programs	2017 Q2	VOD and DGoY	PB
	7.2.1.2 Organize Future Farmer Cambodia (FFC) in agriculture trade	Organization	2017 Q1	VOD	PB
	7.2.1.3 Organize the conferences/ Workshops / competition for students' business concept sharing purposes	Conference	2017 Q3	VOD and GTHSs	\$6,000
	7.2.1.4 Enrich extra-curricular activities related to small	Extra-curricular activities for	2016 Q3	VOD, GTHSs and	\$6,000

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
	businesses for entrepreneurship cultivation	entrepreneurship		DGoY	
Sub-strategy 7.3: Plan to Raise Budget					
7.3.1 Formulate GTHSs enterprises	7.3.1.1 Integrate businesses and practical work or GTHSs project of each trade	Businesses and practical work / Projects	2016 Q3	VOD and GTHSs	N/A
	7.3.1.2 Provide budget for well starting schools-business plan among GTHSs	School business plan	2016 Q3	VOD and GTHSs	PB
	7.3.1.3 Brainstorm on business concept for school-enterprises	Report	2016 Q4	VOD and GTHSs	N/A
7.3.2 Build International cooperation	7.3.2.1 Build national and international cooperation projects	Projects	2017 Q1	VOD and GTHSs	N/A
	7.3.2.2 Organize students and education staff exchange programs	Number of participants	2017 Q2	VOD and GTHSs	\$10,000
Sub-strategy 7.4: Development and Implementation of Bridging Programs					
7.4.1 Enhance and expand bridging program to draw drop-out students to enroll in GTHSs	7.4.1.1 Develop the bridging programs at GTHSs	Bridging programs	2016 Q3	VOD and GoY, D	N/A
	7.4.1.2 Recruit and support student drop-outs who have not attained a lower secondary certificate to enroll in GTHSs through a placement test	Number of participants	2016 Q3	VOD and GTHSs	PB

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
Strategy 8: Gender Mainstreaming					
Sub-strategy 8.1: Provision of Infrastructure for Gender Equity					
8.1.1 Build infrastructure for gender equity	8.1.1.1 Organize a lecture of gender equality for government officials	Program	2017 Q1	VOD and GTHSs	PB
	8.1.1.2 Design dormitories, playgrounds and toilets using the principle of gender equity	Design concepts	2017 Q1	VOD and DoC	N/A
	8.1.1.3 Construct dormitory for female students' and teachers' accommodation in higher priority	Ratio of male and female students in accommodation	2017 Q2	VOD and DoC	N/A
	8.1.1.4 Formulate guidelines for gender equity based on the management and usages of school facilities and dormitory equipment	Guidelines	2017 Q3	VOD and DoL	N/A
Sub-strategy 8.2: Promotion of Gender Equity in Technical Education					
8.2.1 Promote gender equity in TE	8.2.1.1 Provide vulnerable and female students with scholarship programs	Number of Vulnerable students and female students receiving a scholarship	2016 Q3	VOD and GTHSs	PB
	8.2.1.2 Provide female students with counseling service	Number of counselors	2017 Q1	VOD and GTHSs	\$3,000
	8.2.1.3 Prioritize female teachers' and students' social activities	Number of female teachers and students	2016 Q3	VOD and GTHSs	N/A
8.2.2 Issue the guideline to prioritize female students'	8.2.2.1 Issue the guideline on student enrollment with gender	Guidelines	2015 Q2	VOD and DoL	N/A

Programs	Tasks/Activities	Indicators	Implementation time	Responsible Units	Budget
enrollment in technical education	equity				
	8.2.2.2 Enrich female students' TE training participation by giving prioritized factors	Number of female students graduated	2015 Q3	VOD and GTHSs	N/A
8.2.3 Set up minimum qualifications and criteria for female teachers	8.2.3.1 Provide a framework for the female teachers to receive general and specific training courses - Technical training courses - Gender equality education	Number of female teacher participants	2016 Q2	VOD and GTHSs	N/A
	8.2.3.2 Assign appropriate duties to female teachers relevant to their talents and skills	Job specification without gender discrimination	2015 Q3	VOD and GTHSs	N/A
Sub-strategy 8.3: Development and Strengthening of Competency on Gender Mainstreaming					
8.3.1 Promote the participation of female students and teachers in school, social activities	8.3.1.1 Enable female students and teachers to join school and social activities by giving them some advantages	Number of Female students and teachers	2016 Q3	VOD and GTHSs	N/A
8.3.2 Enrich the students' and teachers' accomplishment and newly invented collaboration	8.3.2.1 Provide female teachers and students who invent something innovative with some advantages	Invent creative things	2017 Q4	VOD and GTHSs	\$5,000
	8.3.2.2 Evaluate their accomplishment highly by setting up criteria	Criteria	2017 Q3	VOD and DQA	N/A
	8.3.2.3 Encourage female teachers and students to show their accomplishments	Number of Female teachers and students	2017 Q4	VOD and GTHSs	N/A