

Conference of the Czech Evaluation Society 2021

Approach to People and Data

# Challenges and Opportunities of Double Degree Master Program: Case Study in Thailand

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# Introduction

- Agriculture shares **8.12%** of GDP (WB 2020).
- Employment in agriculture is **32.14%** (FAO 2020).
- Qualified labor shortage in agriculture is an issue in Thailand.
- **74 universities** offer programs in agriculture or related sciences (Traimongkolkul & Tanpichai 2005).
- Different mode of transnational education delivery: **Double Degree programmes**, Franchising and validation, Articulation and credit transfer, Distance learning, Credit transfer, Branch campuses, and English-medium programmes at Thai universities (British Council 2018).
- Limitations: decrease of student enrolment, increase student dropout, lack of professional resource persons, and a weak linkage between universities and Ministry of Agriculture (Hnin W. 2016).

# Case study: PISAI Project



- The PISAI Project is co-funded by the ERASMUS + Programme of the European Union and successfully launched.
- The project involved 4 agricultural universities in Thailand and provided a double degree programme at the master's degree level.
  - Module 1: Value Chain Management at Chiang Mai University
  - Module 2: Environment/Ecosystem in Sustainable Agricultural Production at Khon Kaen University
  - Module 3: Challenge and Opportunity in Sustainable Agricultural Production at Kasetsart University
  - Module 4: Internship

# 4 Thai Agricultural Universities

## Kasetsart University

established in 1943  
4 campuses (main campus in Bangkok)

## Khon Kaen University

established in 1967  
located in Northeast Thailand



## Prince Songkla University

established in 1967  
situated in southern Thailand



## Chiang Mai University

established in 1960  
located in the Lanna region



# Objectives



## Objective 1

To analyse the opportunities and challenges of the DDMP



## Objective 2

To identify which skills and competencies were improved during the DDMP



## Objective 3

To investigate the aspects influencing future employability of the students

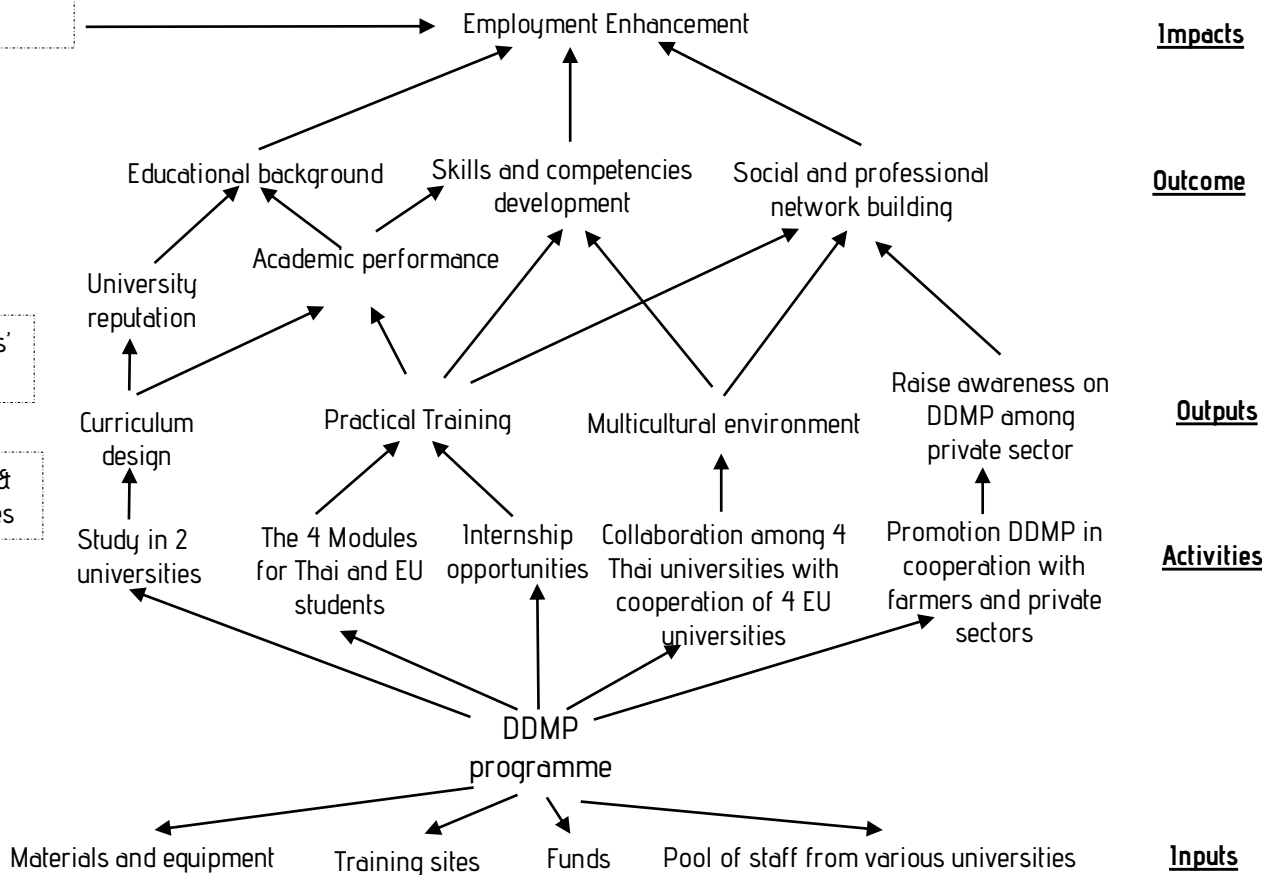
# Conceptual Framework (Model of Theory of Change)

## External influence factors:


Gender, Age


Stakeholders' satisfaction

Challenges & opportunities



# Methodology: Data collection

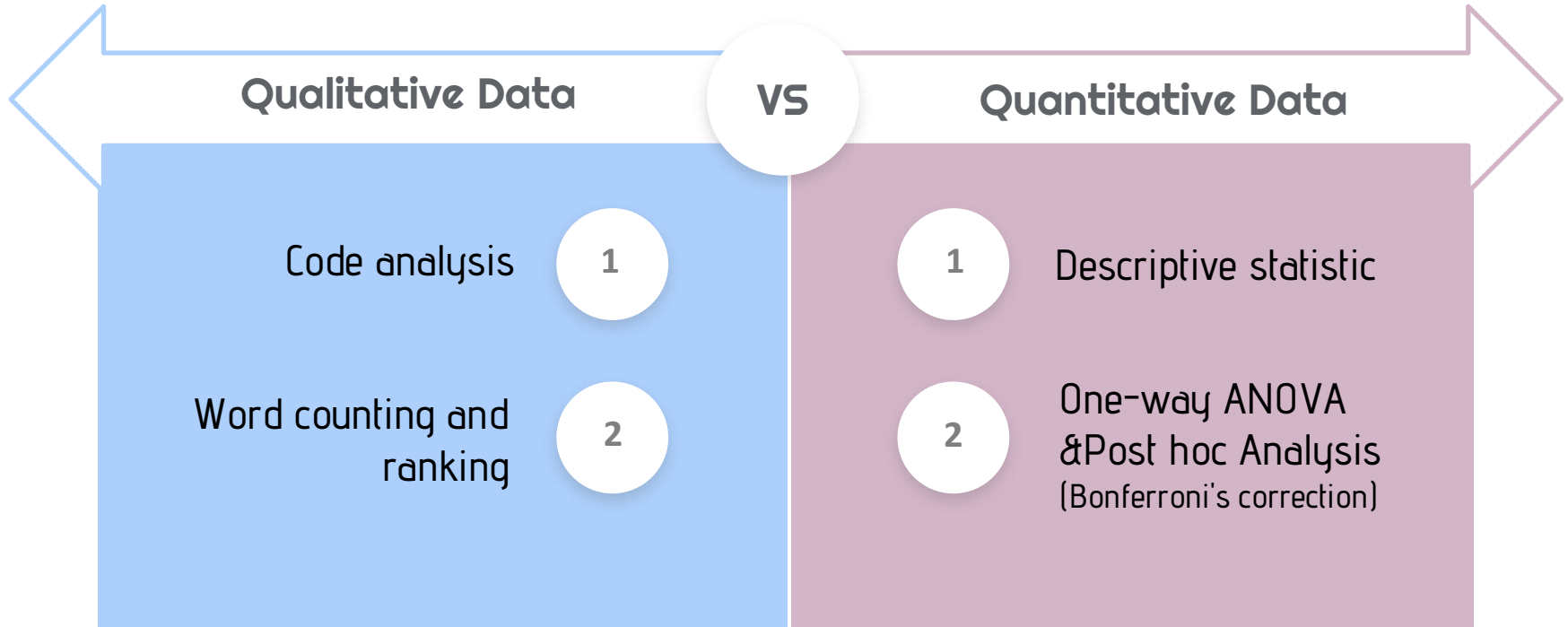
 Research tools: Online questionnaire (Google form), Personal experience (Student in Module 3), Member of PISA1 Quality Assurance Board

 Sample Selection: Non-random (Purposive), PISA1 project's stakeholders

 Participants: Students, Project staffs, Agricultural companies

Sample Types	Thai Universities					EU Universities			International Organizations		Total
	KU	CMU	PSU	KKU	CZU	SupAgro	UCPH	UHEL	IRD	Agrinatura	
DDMP (Thai) Students	3	6	7	5	-	-	-	-	-	-	<b>21</b> → 88%
International Students	2	-	2	1	7	3	-	2	-	-	<b>17</b> → 52%
Project staffs	4	5	17	4	2	1	1	1	1	1	<b>37</b> → 62%
Agricultural companies/farmers											<b>14</b> → 41%
<b>Total</b>	<b>9</b>	<b>11</b>	<b>26</b>	<b>10</b>	<b>9</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>89</b>

# Methodology: Data analysis





# Opportunities of Students in DDMP

Opportunities	DDMP students		International students		Project staff	
	Count	Rank	Count	Rank	Count	Rank
<b>Skills &amp; Competencies Development</b>	8	1	2	3	22	1
Good Contents and Practical Experience	-	-	10	1	-	-
<b>Good Curriculum Design</b>	7	2	-	-	8	2
<b>Network Building</b>	5	3	7	2	6	3-4
Good Educational background	2	4	-	-	6	3-4
Job Opportunity	1	5-6	-	-	2	5
Financial support	1	5-6	-	-	1	6

# Challenges of Students in DDMP

Challenges	DDMP students		International students		Project staff	
	Count	Rank	Count	Rank	Count	Rank
Language	10	1	9	1	12	2-3
A tight schedule	6	2	-	-	16	1
Difficult curriculum	5	3	2	3	12	2-3
Conflicting regulations	4	4	-	-	6	4
Financial problems	1	5	-	-	2	5
Cultural differences	-	-	4	2	-	-

# Skills and Competencies Developments

	Students	Staff	Employers	
	Mean (SD)	Mean (SD)	Mean (SD)	F value
Decision making	3.90 (0.70)	4.08 (0.72)	3.86 (0.77)	0.67
Capacity to learn	4.05 (0.59)	4.14 (0.48)	4.21 (0.80)	0.35
<a href="#">Capacity to adapt to new situations</a>	4.14 (0.57) <sup>a</sup>	4.54 (0.51) <sup>a</sup>	4.14 (0.77)	4.18*
Capacity for generating new ideas	3.85 (0.62)	4.08 (0.55)	4.00 (0.78)	0.55
<a href="#">Capacity for applying knowledge in practice</a>	3.81 (0.51) <sup>a</sup>	4.08 (0.43) <sup>a</sup>	4.36 (0.74)	4.61*
Capacity for analysis and synthesis	3.81 (0.60)	3.86 (0.63)	4.21 (0.80)	182
Capacity for critical and self-critical thinking	3.81 (0.68)	3.81 (0.70)	4.07 (0.83)	0.74
<a href="#">Interaction with other people and cultures</a>	4.33 (0.66)	4.59 (0.55) <sup>a</sup>	4.07 (0.83) <sup>a</sup>	3.61*
Responsibility	4.43 (0.60)	4.41 (0.69)	4.43 (0.76)	0.01
Ability to make your way through	4.14 (0.65)	4.22 (0.67)	4.07 (0.83)	0.23
<a href="#">Self-confidence</a>	3.48 (0.93) <sup>a</sup>	4.16 (0.65) <sup>a</sup>	3.71 (0.75)	5.95**
Ability in problem solving	3.86 (0.57)	4.16 (0.55)	4.21 (0.73)	2.22
Research skills	3.81 (0.75)	3.95 (0.62)	4.07 (0.73)	0.65
Language skills	4.00 (0.77)	4.08 (0.64)	3.79 (0.80)	0.87
Computer skills	3.62 (0.86)	3.68 (0.82)	3.86 (0.86)	0.36
Time management	4.00 (0.95)	3.97 (0.76)	4.29 (0.73)	0.79
Capacity to work in team	4.29 (0.64)	4.35 (0.63)	4.21 (0.70)	0.24
Planning and organization	4.10 (0.70)	4.03 (0.60)	4.00 (0.78)	0.10
Oral and written communication	3.86 (0.85)	3.95 (0.57)	3.93 (0.73)	0.11
Technical knowhow	4.00 (0.63)	3.68 (0.75)	4.07 (0.83)	2.13

Note: Rate between 1-5:

1 – Very low,

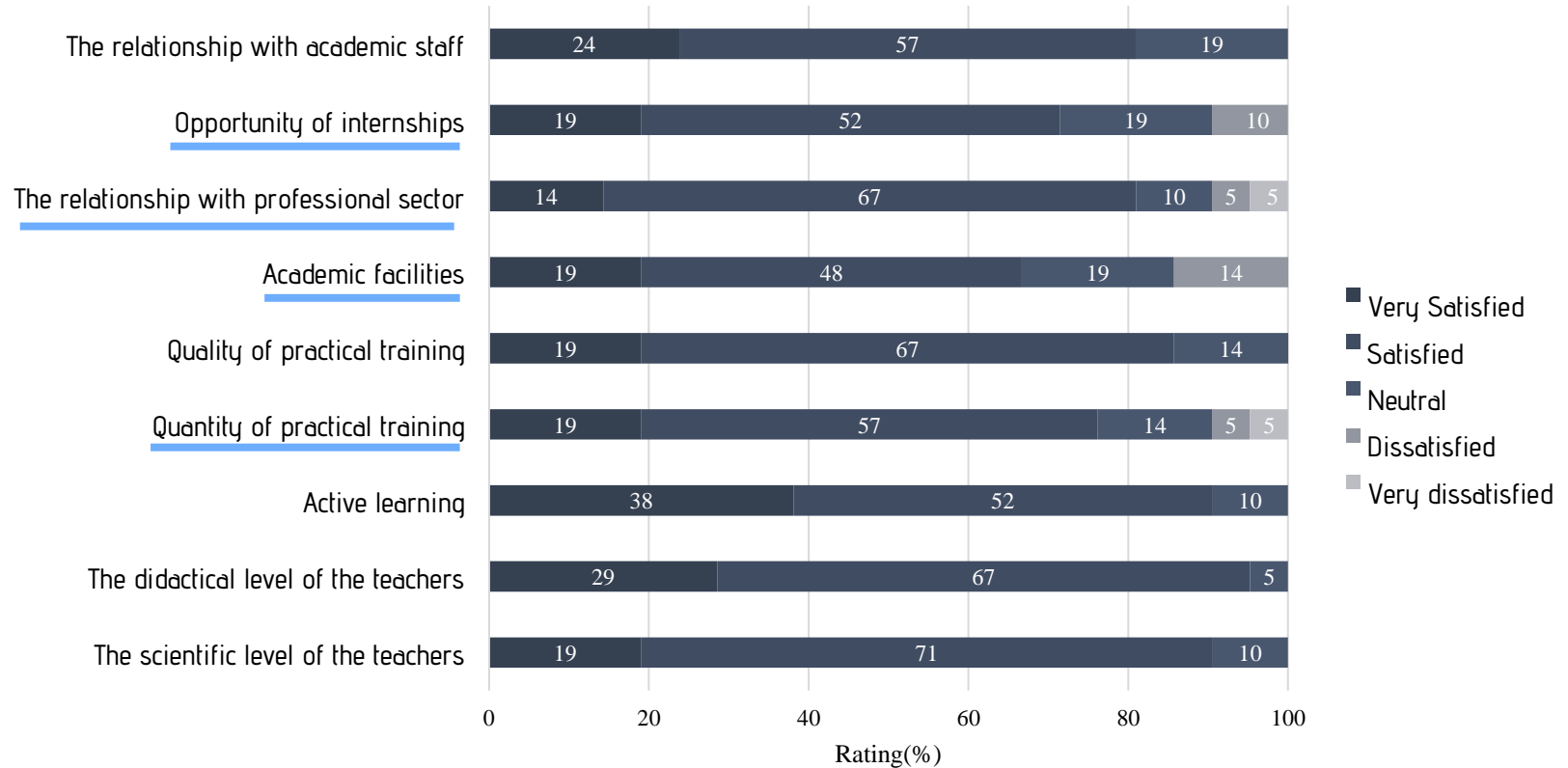
2 – Low

3 – Moderate

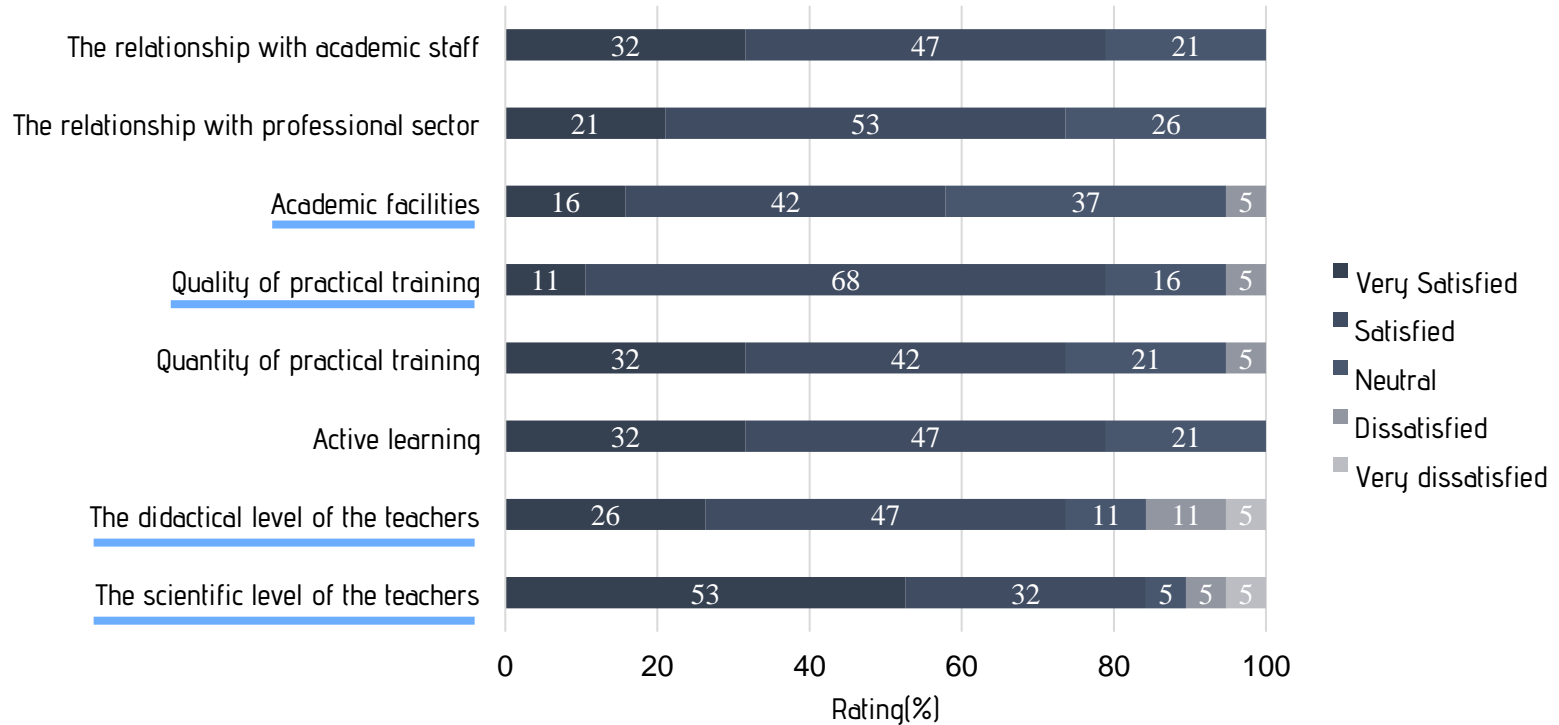
4 – High

5 – Very high

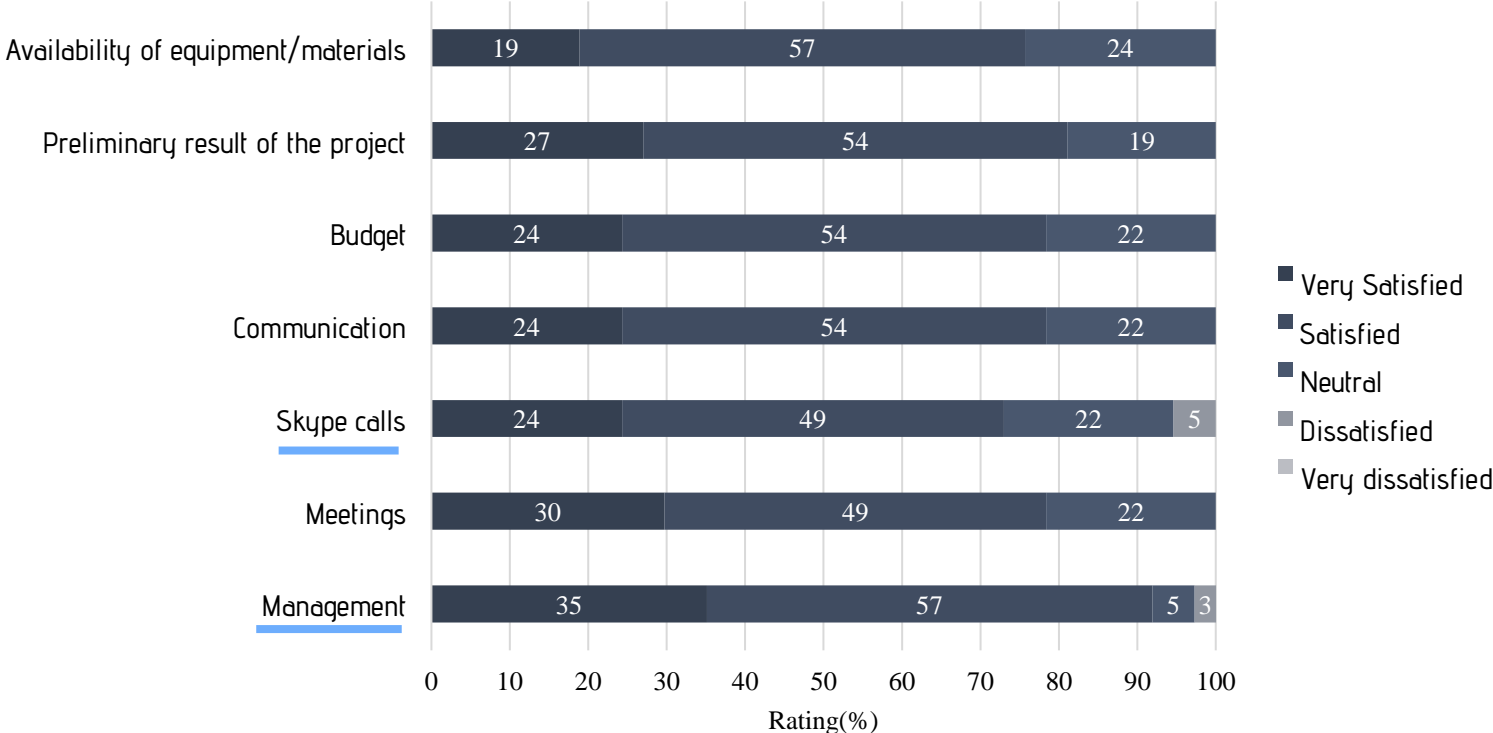
# DDMP Students' Satisfaction On DDMP



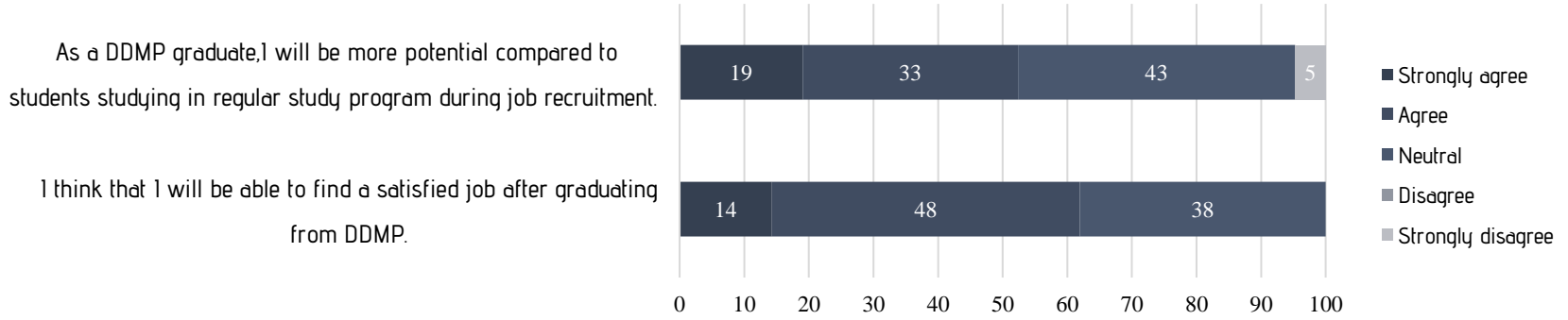
# International Students' Satisfaction on the Module



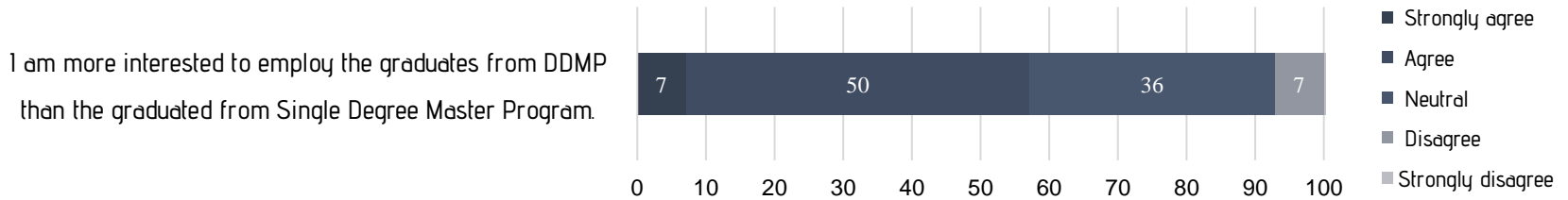
# Project Staff's Satisfaction with PISAI Project



# Perception of Future Career Opportunity



## DDMP Students Perceived on Their Future Career Opportunity



## Employer's Perception on the Graduates From DDMP

# Discussion: Comparison DDMP with other Programmes

- **Opportunities:**

- [DDMP students](#): improved skills and competences, experienced multicultural and innovative curriculum design, and built networks.
- **Study abroad and travel**, enhance language and job-related skills, university reputation, and alternative to existing programmes, (Culver et al. 2012),
- Get two degree at shorter duration, **less workload**, and less financial burden (Knight, 2011)

- **Challenges:**

- [DDMP students](#): Language, tight schedule, difficult curriculum, and administrative issues.
- **Languages, different culture**, excessive workload and time constraints, academic issues (two enrolment procedures, two thesis in two languages, two supervisors, and two thesis defences), ensuring funding (Knight 2011 & Culver 2012).



# Discussion: Comparison DDMP with other Programmes

- **Skills and competencies:**

- **DDMP students:** The ability to interaction with other people and cultures, capacity to work in team, capacity to adapt to new situations, and ability to make your way through.
- DD in two different countries made student gained academic skills: critically thinking, effective communication, problem solving, leadership, ability to adapt to new situations (Culver et al. 2011), and **confidence** (Sherrill 2000), responsibility, decision making, and **independence** (Chaloupkova et al. 2015).

- **Employability:**

- **DDMP students:** 62% of DDMP students believed that they will be able find a satisfied job and 52% of them had confident to be more potential than students in single program.
- **96% of DD alumni** felt that the dual-degree program had helped them to obtain their current position and **87% of them** were personally satisfied with their job (Culver et al. 2012).

# Recommendations and Limitations

- **Recommendations:**

- Language programme and administrative support should be provided to students.
- Engage students in some courses or activities that can boost self-confidence and independent.
- Curriculum between home and host university should be complement to each other.
- Double degree should be well advertised and promoted among employers about their value.

- **Limitations:**

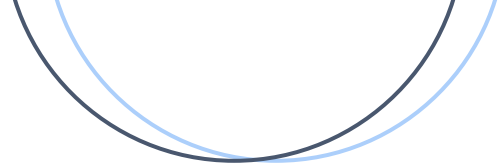
- Participants were all stakeholders involved in PISA1 project and aware of double degree, especially agricultural companies or farmers.
- The DDMP students have not yet completed their study or fresh graduate, so it was hard to evaluate the impact of the program on the employability.

# Conclusions

- DDMP within the PISA1 project is very special because its unique way of collaboration between four Thai agricultural universities in cooperation with EU universities.
- DDMP students could gain many skills and competencies through the program; however, there were also several challenges students faced: language, time, workload, administrative issue.
- DDMP had numerous strengths and will bring many opportunities for students, especially their future career path.
- The study provides interesting insights and recommendations for future projects and implementation of similar activities at other universities.

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