



Teacher Training for SMKs

March, 07th-11th 2022



Teacher Training for SMKs; Kupang 7th -11th March 2022. The Orange Knowledge Program is funded by the Dutch Ministry of Foreign Affairs and managed by Nuffic.

**TEACHER TRAINING FOR SMKs : LINKING THE EDUCATIONAL AND INDUSTRIAL
SECTORS THROUGH PROJECT BASED LEARNING AND PROBLEM BASED LEARNING
IN AGRICULTURE EDUCATION SYSTEM**

KUPANG , MARCH 7TH-11TH 2022

TECHNICAL REPORT

OKP-IDN-10029 LMSINDO : LINK AND MATCH SMK IN INDONESIA

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EXECUTIVE SUMMARY

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TABLE OF CONTENT

No	Items	Page
1	Executive Summary	
2	Table of Content	
3	Figures	
4	Tables	
5	I. Background	
	II. Mission	
	III. General Themes and Target Courses	
	IV. Activities	
	V. List of participants	
	VI. Run Down Teacher Training and MSF	
	VII. Publication	
	VIII. Outcome	
	IX. Appendix	

FIGURES

TABLES

I. Background

In response to the demand of 4.0 Education System to strengthen and elevate capacity of the Indonesian Agriculture Vocational School (SMK), LMSINDO has taken commitment and steps by providing Teacher Training event for teachers and lecturers. SMK is one most targeted institution in the line of agriculture *penta-helix* to deliver productive and skilled people to be absorbed in the industry. This capacity building in practice-oriented and learner-centered pedagogy was delivered to SMKs in the East Nusa Tenggara (NTT) region. One key element is improvement and enrichment of modules and revision of courses applying Project Based Learning and Problem Solving Method on agricultural courses.

This report emphasizes on activities for enhancing teachers' capabilities in modules development and teaching methods, with the expected output is improved agricultural teacher competency and productivity by improving pre-service and in-service teacher training programs of (future) SMK-teachers for high potential value chains, on national and regional level. Eight modules/courses are subjected for improvement on the basis of certain related topics to agriculture.

II. Mission

- Improved agricultural teachers' / trainers' capacity of POLBANGTAN, UNDANA and the two SMKs (SMK Waibakul and SMK-PP Negeri Kupang) in NTT to use practice oriented (or labor market oriented) and learner-centered pedagogical skills enabling innovation, and problem solving, on NTT's high potential value chains and environmental sustainability
- Strengthening teacher's training and revision of 8 modules/courses on the basis of practice oriented and learner centered by introducing Project Based Learning and Problem Solving/ Case Based Method.
- Enhancing the potency of collaborative work with stakeholders in preparation for sustainable internships for students and other collaborative projects.

III. General Theme and Target Courses

The general theme of this event is as follows:

“Teacher Training for SMKs : Linking the Educational and Industrial Sectors Through Project Based Learning and Problem Based Learning in Agriculture Education System”.

This theme is covering **8 targeted courses** which has been proposed by each selected participants from the invited institutions. Those targeted courses have met this following requirements:

- Selected courses to be targeted are divided into 5 themes which were generated from the findings of the labor market needs assessment (LMNA), as follows:
 1. Sustainable Dry land Agriculture, including silvopastoral systems, organic agriculture and conservation agriculture, integrated farming systems.
 2. Value addition, processing and post-harvest management: linked to Agribusiness Processing of Agricultural Products and Creative and Entrepreneurial Products (Curriculum SMK Waibakul, and for SMK-PP Negeri Kupang, and curriculum UNDANA)
 3. Marketing and digitalization: linked to the Undana Agribusiness marketing course and Information Technology and Multimedia
 4. Technology applications: linked to SMK Waibakul course on Agricultural Machine Tools
 5. Attitude, problem solving and entrepreneurship skills;

Based on those theme categories, the Team Teachers of each institution were directed to select two of **15 potential courses** to be improved which were outlined below:

Table 1. Outline of Courses relevant to themes

Themes	UNDANA	Polbangtan	SMK Waibakul	SMK PP Kupang
Topics / Courses available relevant to themes				
<u>Sustainable Dry land Agriculture</u> ,	1.Sustainable Dry land Agriculture <ul style="list-style-type: none"> - Agricultural Extension - Farm Management - Horticultural and Gardening - Crops Cultivation - Annual Crop Cultivation 	4. Product Innovation	8. Competency Skills Food Crops and Horticulture agribusiness 9. Competency Skills: livestock agribusiness	12.Meat Ruminant Agribusiness 13. Food Crops Agribusiness 14. Cultivation of Young Agricultural Entrepreneurs (PWMP).
<u>Value addition, processing and post-</u>	2.Agricultural Product and Processing Technology		10.Agribusiness Processing of Agricultural Products	15. Creative and Entrepreneurial Products

<u>harvest management</u>				
<u>Marketing and digitalization</u>	3. Agribusiness Marketing	5. Marketing Information Technology		
<u>Technology applications</u>	- Information Technology and Multimedia	6. Smart farming System.	11. Competency Skills: Agricultural Machine Tools	
<u>Attitude, problem solving and entrepreneurship skills;</u>		7. Entrepreneurship Mindset Building		

IV. Activities

Event schedule : March, 7th – 11th, 2022

Venue : ASTON Hotel and Convention Centre, Kupang NTT

Mode of activity: Hybrid Platform

Host of Program: UNDANA

Focus of activity:

- Workshop on Project Based Learning and Problem Based Learning for Curriculum Development
- Expose and Analyze Problems on Value Chain Analysis of Several Agriculture Commodities in NTT
- Develop cases and project based on Labor Market Needs Assessment with some local examples
- Workshop on Student Collaboration and the Use of LMS Moodle for teacher's training
- Rubrics & Performance Indicators to assess project and problem based learning

V. List of participants

List of participants per institution

Institution	Invited	Number of participants	Selected courses	Registration
SMK Waibakul , Sumba	Teachers	4	2 courses	https://bit.ly/3qF7rQC
	Principal	1		
SMK-PP Negeri Kupang	Teachers	4	2 courses	
	Principal	1		
Polbangtan, Bogor	Lecturers	4	2 courses	
	Dean	1		
Undana Kupang	Lecturers	4	2 courses	
	Dean	1		
	Total	20 participants	8 courses	

List of active participants

No.	Name of Participant	Gender	Institution
1	Vitalis Umbu Kamodu,S.Pt	Male	SMK N Waibakul
2	Soviani Rambu Loba Sobang,SP	Female	SMK N Waibakul
3	Dorkas M Riwa,SPd Ek	Female	SMK N Waibakul
4	Agustina Dairu Rewa	Female	SMK N Waibakul
5	Apliana Rambu D. Iru, SP	Female	SMK N Waibakul
6	I.Stephanus Bullu,M.Si	Male	SMK PP N Kupang
7	Luthfi Retriansyah	Male	SMK PP N Kupang
8	Sitti Kamalia Kamal	Female	SMK PP N Kupang
9	Erlin Lauwoie	Female	SMK PP N Kupang
10	Ina Soda Molek Malelak	Male	SMK PP N Kupang
11	Dr. Edy Suprpto, MP	Male	Undana
12	Dr. Drs. Gunadi Tjahyono, M.Pd	Male	Undana
13	Widasari Bunga, SP.M.Sc	Female	Undana
14	Santhy Chamdra,SP.	Female	Undana
15	Dr.drh. Maya Purwanti,MS	Female	Pobangtan Bogor
16	Annisa Nur Ichniarsyah,S.TP,M.Si	Female	Pobangtan Bogor
17	Rifa Rafi'atu Sy'abani Wihansah, S.Pt.,M.Si	Female	Pobangtan Bogor
18	Dr. Arif Nindyo Kisworo,S.Pt.M.Su	Male	Pobangtan Bogor
19	Dr. Wahyu Trisnasari, S.ST., M.Si	Female	Pobangtan Bogor
20	Dr.Ir. Mayavira V. Hahuly,MCP.	Female	Undana

**VI. Run-Down Teacher Training and MSF – LMSINDO Project.
Kupang, Feb, 7th-11th 2022**

No	Day & Date	Time	Activity	Room	Mode	PIC
1	Sunday, March 6 th 2022	06.00 p.m - onwards	Cov19 antigen test	Hotel	On-site	Covid Team Committee
2	Monday, March 7 th 2022	07.00 am – 08.00 am	On-site participant registration Day1	Conference Room	On-site	Secretariat Team
		08.00 am – 09.00 am	Welcoming & introduction : Speech by SMKs and Partners : <ul style="list-style-type: none"> • LMSINDO Project Director Dr. Huub Mudde (video clip) • Director Polbangtan • Principal SMKPP Kupang • Principal SMK Waibakul • NTTAgribusiness Practitioner (GS Organik) • Opening by Rector UNDANA 	Conference Room + Zoom#1	Hybrid Duration : 7 minutes : 7 minutes : 7 minutes : 7 minutes : 7 minutes : 7 minutes	Event Team + MC Video clip online onsite onsite online
		09.00 am – 09.15 am	Morning Tea Break	Conference Room	Onsite	Catering Service Team
		09.15 am – 12.00 pm	Workshop Day 1: Keynote speaker :	Conference Room + Zoom	Hybrid	Hester (video clip) Team Trainers :

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			Hester van de Kuilen, M.Sc Topic : “Problem based learning “			Renny, Henny, Maria Bano, Maria Lobo
		12.00 pm – 01.00 pm	Lunch Break	Restaurant	On-site	Catering Service Team
		01.00 pm-01.30 pm	Q&A with Hester on PBL	Conference Room	Hybrid	Dr. Hester
		01.30 pm – 03.30 pm	Key note speaker Dr. Clemens Kolo (Undana) Topic : “ Project based learning and curriculum development “	Conference Room + Zoom #1	Hybrid	Dr. Clemens+ Team Trainers : Renny, Henny, Maria Bano, Maria Lobo
		03.00 pm – 03.15 pm	Afternoon Tea Break	Conference Room	On-site	Catering Service Team
		03.15 pm – 04.00 pm	Discussion + Wrapping Up led by Sri Widinugraheni	Conference Room + Zoom#1	Hybrid	Committee
3	Tuesday, March 8th 2021	07.30 – 08.00	On-site Registration Day-2	Conference Room	On-site	Secretariat Team
		08.00 am -09.00 am 09.00-09.30 09.30-10.00	Key note speaker Dr. Damianus Adar, M.Ec (Undana) Topic : Value Chain Analysis of Several Agriculture Commodities in NTT Interactive Discussion Quiz #1 (Kahoot or Mentimeter)	Conference Room + Zoom #1	Hybrid	Dr. Damianus Adar

		10.00 am – 10.15 am	Morning Tea Break	Conference Room	On-site	Catering Service Team
		10.15 am – 10.25 am	Sharing Session LMNA Local I : Head of BPTP Naibonat (Horticulture or Food Security)	Conference Room + Zoom #1	Hybrid	Kepala BPTP Naibonat
		10.25-10.35	Sharing Session LMNA Local II : Mr. Vincent Nurak – NGO (Integrated farming)	Conference Room + Zoom #1	Hybrid	Vincent Nurak
		10.35 -12 pm	Interactive Discussion of the sharing sessions	Conference Room + Zoom #1	Hybrid	PIC /Team Trainers
		12.00 pm – 01.00 pm	Lunch Break	Restaurant	On-site	Catering Service Team
		01.00 – 02.30 pm	Key note speaker : Olivia Ansenk, M.Sc Topic : Labor Market needs analysis /LMNA	Conference Room + Zoom#1	Hybrid	Olivia Ansenk M.Sc
		02.30-02.40 pm	Discussion/ Quiz #2 Kahoot Mentimeter			
		02.40 pm – 03.00 pm	In group activity : Developing projects and cases	Conference Room + Zoom#1	Hybrid	Participants + Facilitators (Dr. Clemens + Team Trainers)
		03. 00 pm – 03.15 pm	Afternoon Tea Break			
		03.15 - 04.45 pm	In group activity continued : Problems and Cases Draft Presentation Preparation *Group is classified based on 2 background of teaching : 1. Vocational High	Conference Room + Zoom#1	Hybrid	Participants + Facilitators (Dr. Clemens + Team Trainers)

			Schools Teachers, 2. Lecturers			
		04.45 – 05.00 pm	Wrap up by Ibu Maria Bano	Conference Room + Zoom#1	Hybrid	Ibu Maria Bano
4	Wednesday, 9 th March 2021	07.30 – 08.00	On-site Registration Day-3	Conference Room#1	On-site	Secretariat Team
		08.00 - 10.00 am	Short practice presentation (Recap previous day in group activity) - recorded *Each group is given 15 minutes for presentation + 10 minutes discussion	Conference Room + Zoom#1	Hybrid	Trainers + Participants Remark : PPT collection to be sent to facilitators for feedback , and to MSF Coordinator
		10.00 – 10.15 am	Morning Tea Break	Conference Room#1	Onsite	Catering Service Team
		10.15 am – 11.00 am 11.00 am – 12.00 pm	Short workshop by Hester van de Kuilen, M.Sc Topic : “Student Collaboration” : • In group activity : Continuation working on projects and problem based learning (same groups)	Conference Room + Zoom#1	Hybrid	Hester + Participants Remarks : Grouping and how to enhance collaboration among students (also reference to inclusive education)
		12 pm – 01.00 pm	Lunch Break	Restaurant	Onsite	Catering Service Team
		01.00 pm – 02.00 pm 02.00 pm – 03.00 pm	Short workshop Topic : “Introduction to Moodle “ by Renold Modok, S.Pd.MPd In group activity : Continuation working on projects & problems (cases)	Conference Room + Zoom#1	Hybrid	Bp Reinold Modok, S.Pd.MPd + Team Trainers
		03.00 pm – 03.15 pm	Afternoon Tea Break	Conference Room#1	Onsite	Catering Service Team

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		03.15 pm – 04.45 pm	<ul style="list-style-type: none"> • Ice Breaking (led by Ibu Freny & Ibu Maria Lobo) • Video presentation editing • Finishing up PPT and Video on projects & problems 	Conference Room + Zoom#1	Hybrid	Ibu Frenny + Ibu Maria + Participants Remarks : <ul style="list-style-type: none"> • (Length : 10-15 minutes) • PPT and Video presentation should be sent to committee by afternoon
		04.45 pm-05.00 pm	Wrap Up by Pak Wayan Nampa and Ibu Maria Lobo	Conference Room + Zoom#1	Hybrid	Pak Wayan Nampa + Ibu Maria Lobo Remarks : Q: What do we need from other stakeholders to improve the collaborations? Covid Team and Committee
		18.00 pm	Swab Test Antigen			
5	Thursday , March 10th	08.00 am – 05.00 pm	Field Visit Priority : BBPP GS Organic	On-site	On-site	Event Team Remarks : All participants and several committee Video interview will be produced in reporting the visits
6	Friday, 11 March 2021	07.30 - 08.00	On-site Registration Day-5	Conference Room	On-site	Secretariat Team
		08.00 am – 10.00 am	Workshop by Dr. Clemens “How to assess projects and problem based learning ? “	Conference Room + Zoom #1	Hybrid	Workshop. Dr. Clemens + Team Trainers Remarks : (rubrics & performance indicators +

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						summative and formative assessment).
		10.00 am – 10.15. am	Morning Tea Break	Conference Room	On-site	Catering Service Team
		10.15 am – 12.00 pm	<i>In groups activity :</i> lecturers / teachers working on assessments for the project and problem-based learning.	Conference Room + Zoom #1	Hybrid	Participants + Facilitator+ Team Trainers
		12.00 pm – 01.00 pm	Lunch Break	Restaurant	On-site	Catering Service Team
		01.00 pm – 03.00 pm	Parallel Sessions : Teacher Training : Video Presentation Evaluation: by Trainers	Conference Room + Zoom #1	Hybrid	Participants+ Trainers
			FGD MSF Meeting lead by I Wayan Mudita , PhD	Zoom #2 *Only for MSF participants	Online	Leaders : Dr. I Wayan Mudita , Dr. Huub Mudde Dr.Maria Lobo
		03.00 pm – 03.15 pm	Afternoon Coffee Break	Conference Room	On-site	Catering Service Team
		03.00 pm – 04.30 pm	<i>Live Final presentation on Project Based and Problem Based</i> by 8 groups participants in front of the audience	Conference Room + Zoom#1	Hybrid	Trainers
		04.30 – 05.00 pm	Closing remarks : –MSF Wrap Up by Undana/MSM Representatives (Dr.I Wayan Mudita/ Dr. Huub Mudde) -Virtual Certificate Handover by Dr. Hester van de Kuilen representing University of App Sc, NL Closing by Rector UNDANA	Conference Room + Zoom #1	Hybrid	MC
7	Saturday , March 12th 2022	09.00 am – 11.00 pm	Check Out *Ticketing	Hotel	On-site	

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VII. Publication

This event allows publication through media partners and internal network, which the link to those publication can be accessed as follows:

1. Pos Kupang, Tribun News :

<https://kupang.tribunnews.com/2022/03/08/menanggapi-tuntutan-sistem-pendidikan-40-lmsindo-gelar-pelatihan-bagi-tenaga-guru-smk>

2. You Tube private channel:

<https://youtu.be/z8dcsJHc41o>

3. Humas Undana

<https://undana.ac.id/hasilkan-petani-andal-kualitas-guru-smk-perlu-ditingkatkan/>

4. BBPP Facebook :

<https://www.facebook.com/1745514150/posts/10209804610829052/>

5. Polbangtan Bogor Network

<https://www.polbangtan-bogor.ac.id/berita/sinergi-lmsindo-dan-msm-tingkatkan-kompetensi-guru-smk>

6. SMK PP N Kupang Network

<https://timexkupang.com/2022/03/15/tingkatkan-kemampuan-peserta-didik-dan-lulusan-tendik-smk-kementan-ikut-workshop-4-0/>

7. SMK Waibakul Network

<https://mailchi.mp/b56a4413dceb/indonesian-agricultural-tvet-projects-in-progress-may-15328004>

8. TVRI Kupang

<https://drive.google.com/file/d/1gKjBQ93ntfUDdmpl6BX1LUiJT4sw1R0R/view?usp=sharing>

VIII. Teacher Training Modules and LMS

All participants were supported with materials as is available through the LMS e- learning below :

<https://elearning.undana.ac.id/enrol/index.php?id=85368>

IX. Outcome

Improved agricultural teachers' / trainers' capacity of POLBANGTAN, UNDANA and the two SMKs in NTT: SMK Waibakul and SMK PP Kupang, to use practice oriented (or labour market oriented) and learner-centered pedagogical skills enabling innovation, and problem solving, on NTT's high potential value chains and environmental sustainability.

