

ANIMAL LOGISTICS INDONESIA NETHERLAND (ALIN) PROJECT REPORT (NICHE-IDN 223)

Animal Logistics Seminar

4th July 2019

Bogor



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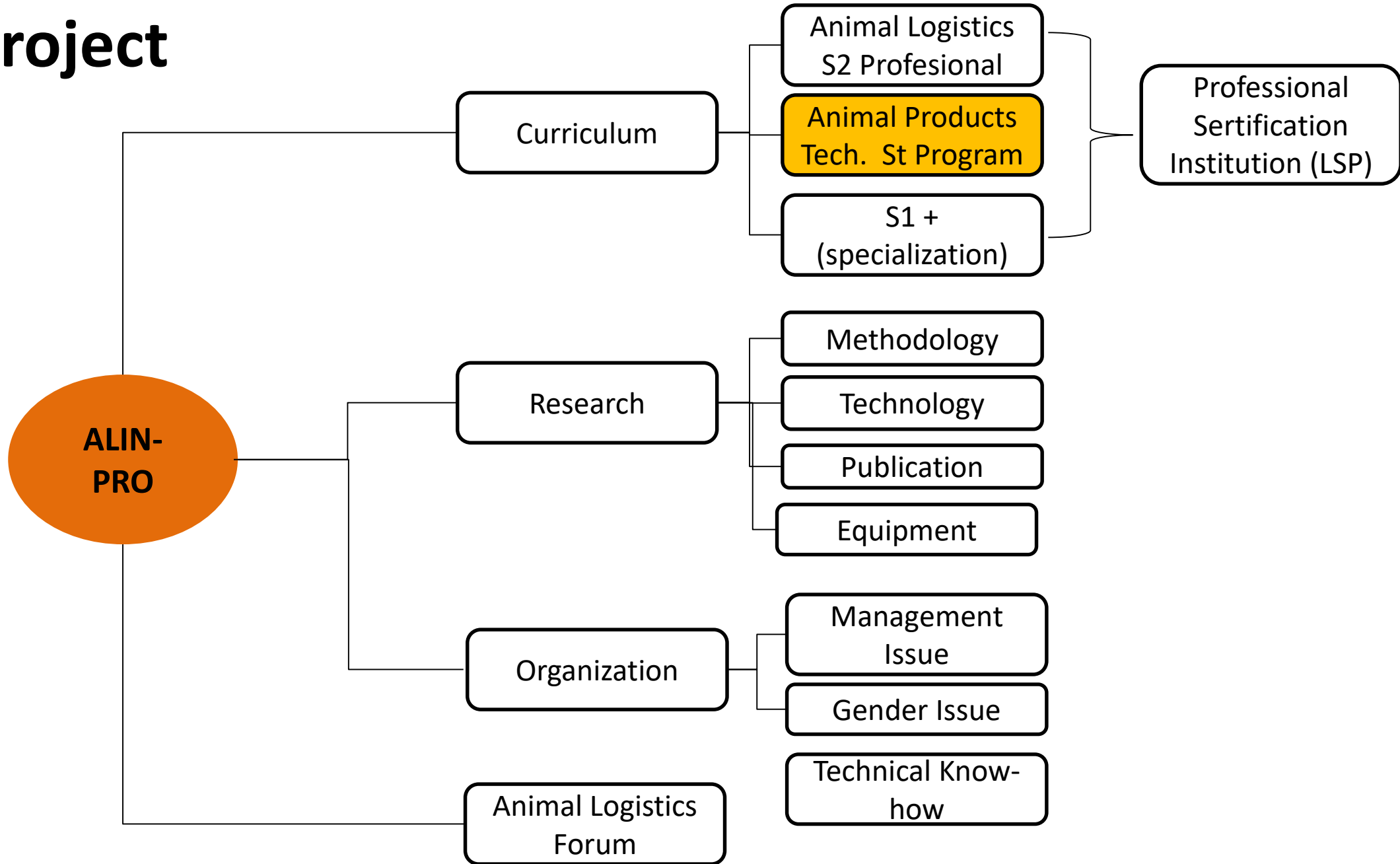
MSM

MAASTRICHT
SCHOOL OF
MANAGEMENT



aeres groep
LIFE, SOIL AND PRODUCE SUSTAINABLE

ALIN-Project



1. Human Resource Development in Animal Logistics

1. Curriculum development for Postgraduate (S2) animal logistics programs
2. Curriculum development for bachelor plus (S1+) animal logistics
3. Competency certification for animal logistics supervisors
4. Capacity building staff for doctoral (S3) and Master (S2) levels



Post Graduate Program (S2) of Animal Logistics

Master Theses of Animal Logistic Program 2017/2018

LIVESTOCK LOGISTIC

“Analysis of Changed in Physiological Parameter of Cattle during Transport by Sea using Camara Nusantara Ship” (Adam Kustiadi)

“Transportation Stress in Cattle: Physiological Parameter at the Beginning and Ending of A Trip on Camara Nusantara Ship” (Davin Christian Hartono)

“Air Quality during A Trip on Camara Nusantara Ship” (Devina Talithania)

“Evaluation Model of Cattle Animal Welfare and Performance which Transported by Camara Nusantara Ship” (Shabrina W)

LIVESTOCK PRODUCT

“Bali beef from East Nusa Tenggara Quality during Distribution from Slaughterhouse to Consumer” (Anggia)

“Evaluation of Halal Principle Based on the Slaughter of Cattle in A Re-stunning Box in Some Slaughterhouse” (Ricky Fernaldi)

“Forecasting analysis and Simulation Model of Beef Needs in Indonesia”
Nanda P

HUMAN RESOURCE

“Development Strategy of Human Resource Competency in Animal Transportation Ship KM Camara Nusantara” (Zulhijariyanto)

“Human Resouece Competency Development Post Unloading from Livestok Carrier KM Camara Nusantara” (Galuh M)

FEED LOGISTIC

“Evaluation of Various Types Feed Quality and Feed Forms Efficiency for Sea Transportation” (Kania Asri Liany)

“Study of Feeding Efficiency and Feeding Behavior Response of Local Cattle Post-Transportation using KM Camara Nusantara” (Nur'aini)

Master Theses Planning of Animal Logistic 2018/2019

FOREGE SUPPLY CHAIN

CONCENTRATE SUPPLY CHAIN

MEAT MARKETING

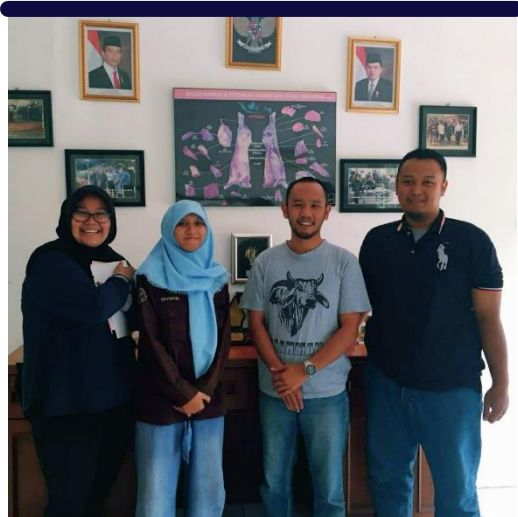
POULTRY TRANSPORTATION

**DOC ANIMAL
TRANSPORTATION**

SHEEP TRANSPORTATION

Internship Program

Master Student of Animal Logistic 2017/2018



PT. Lembu Jantan Perkasa

1. Kania Asri Liany
2. Galuh Mutdaman
3. Shabrina Dyah



The Agricultural Quarantine Major Service of Tanjung Priok

1. Nur'aini
2. Davin christian H



PD. Dharma Jaya

1. Anggia Martiana
2. Ricky Fernaldy
3. Adam Kustiadi N
4. Devina Thalithania

PT. PELNI

Zulhijariyanto



UPT Agribisnis Peternakan - Dinas Pertanian Sukabumi Nanda Perdana Putra



Bachelor Plus Animal Logistics (S1+)

Equivalent to 18 credits
Creditable to master program in animal logistics

Qualifications

- ▶ Bachelor (Animal Science, Veterinary, Logistics, Transportation, Economics, Industrial Engineering, Family and Consumer Science)
- ▶ Letter of Graduation
- ▶ Fresh Graduate/Employee with work experiences
- ▶ Individual or Company Delegates

- ▶ S1 Plus graduates will get the competency certification of profession as animal logistics supervisor from Indonesia Logistics Certification Centre
- ▶ IPB - Indonesia Logistic Certification Center collaboration 2017 to Develop Animal Logistics Professional Certification Institution (LSP)



Signing collaboration agreement with Indonesia Logistics Certification Centre - December 16, 2017



Training for Competence Assesor - June 27-30, 2019

2. Animal Logistics Research

- a) Mapping animal logistics problems in Indonesia as outlined in topic research (whitebook research agenda)
- b) Implementation of research for optimization of the Camara Ship
- c) Research engineering training is also programmed in both laboratory technical training and statistical training.
- d) Increased international publication of Faculty of Animal Husbandry IPB through the internationalization of Media Peternakan journal is also one of the research programs.

Animal Logistics Indonesia- Netherlands (ALIN) Research

White Book

Strengthening Animal Logistics System in Indonesia

Submitted to LPPM, Ristekdikti & Bappenas

ALIN Research Program

“Optimizing CAMARA NUSANTARA SHIPS to Improve Efficiency of Livestock Transportation Systems”

- 1 Development of IT-based Traceability System to Support the Optimal Use of Camara Ships to Improve Efficiency of Livestock Transportation Systems
- 2 Feed Production for Cattle during Transportation Using Camara Ship
- 3 Quality of Local Beef during Distribution and Consumer Perceptions of Frozen Beef in Indonesia
- 4 Development Strategy of Human Resources Competency of Animal Transportation in Camara Nusantara Ships

Researcher & Contributors

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Diki Gita Purnama

Research Partners

- Government of NTT Province Livestock Services,
- Directorate of Processing and Marketing of Livestock Product (PPHnak),
- Meat & Livestock Australia (MLA)
- PT Lembu Jantan Perkasa ,
- Indonesian Logistics Association (ALI)
- Indonesia Shipping Company PT Pelnip (Persero),
- PT. Sierad,
- PT Charoen Pokphand,
- PT Japfa,
- PT Cargill,
- Indonesian Feedmill Association (GPMT)
- PD.Dharma Jaya,
- Great Giant Livestock Company (GGLC),
- and Indonesian Cold Chain Association (ARPI)

4. Animal Logistics Networking



Indonesia Animal Logistics Forum (FLPI)

Vision:

- ▶ To be the most trusted forum for multi-stakeholders in sustainable capacity building for the livestock logistics sector in Indonesia.

Mission:

- Bring together business people, government officials, community representatives and academics who are professionally involved in animal logistics in Indonesia.
- Helps resolve transportation and logistical problems in food security and security, effectiveness and efficiency in the livestock and poultry sectors at present and in the future.
- Providing national and international networks, sharing existing ones and generating new knowledge that is relevant to the market, seeking innovative solutions, and strengthening competencies.

The 5 overriding themes for FLPI activities

1. What are the **optimal transport and information systems** in the whole livestock production chain?

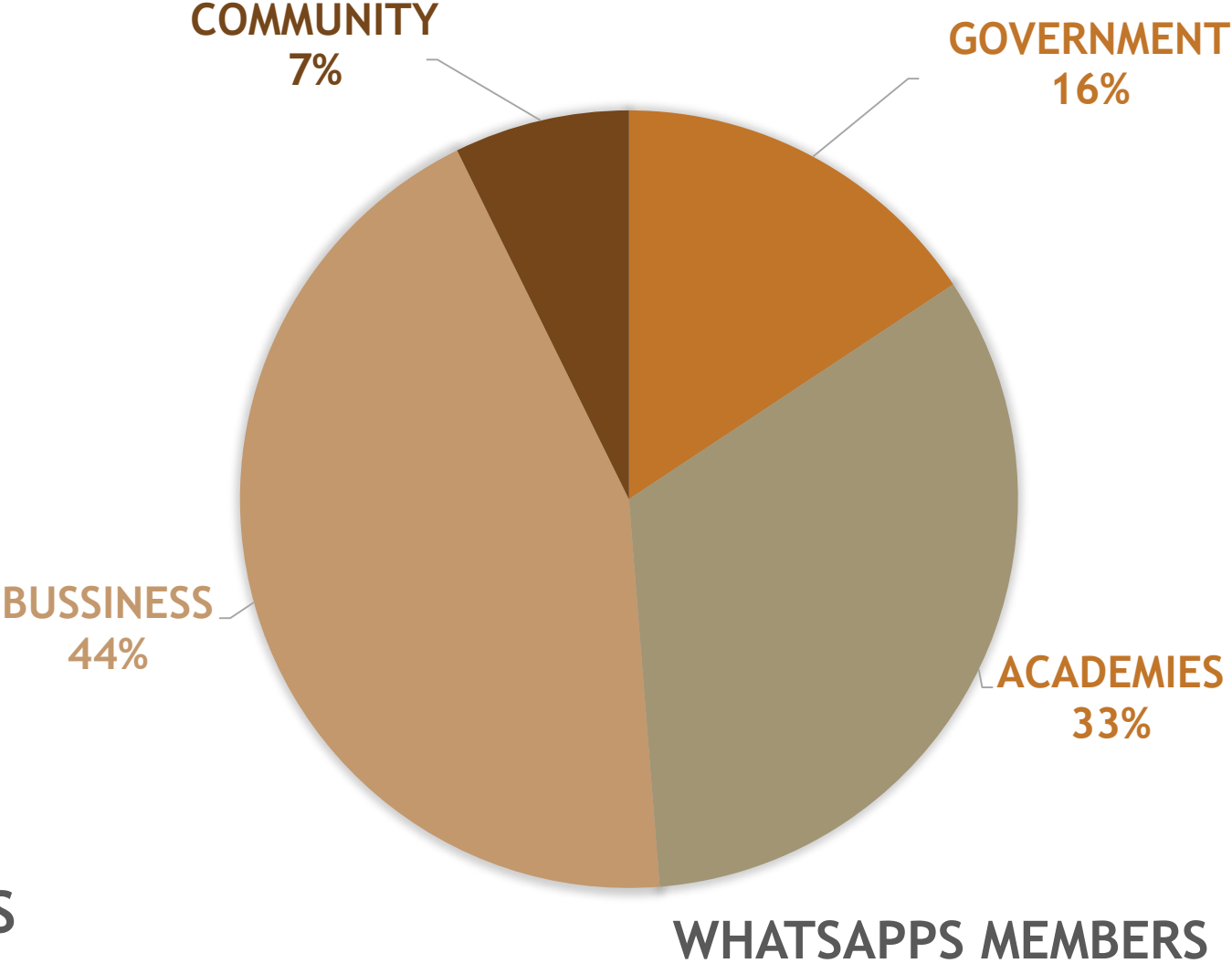
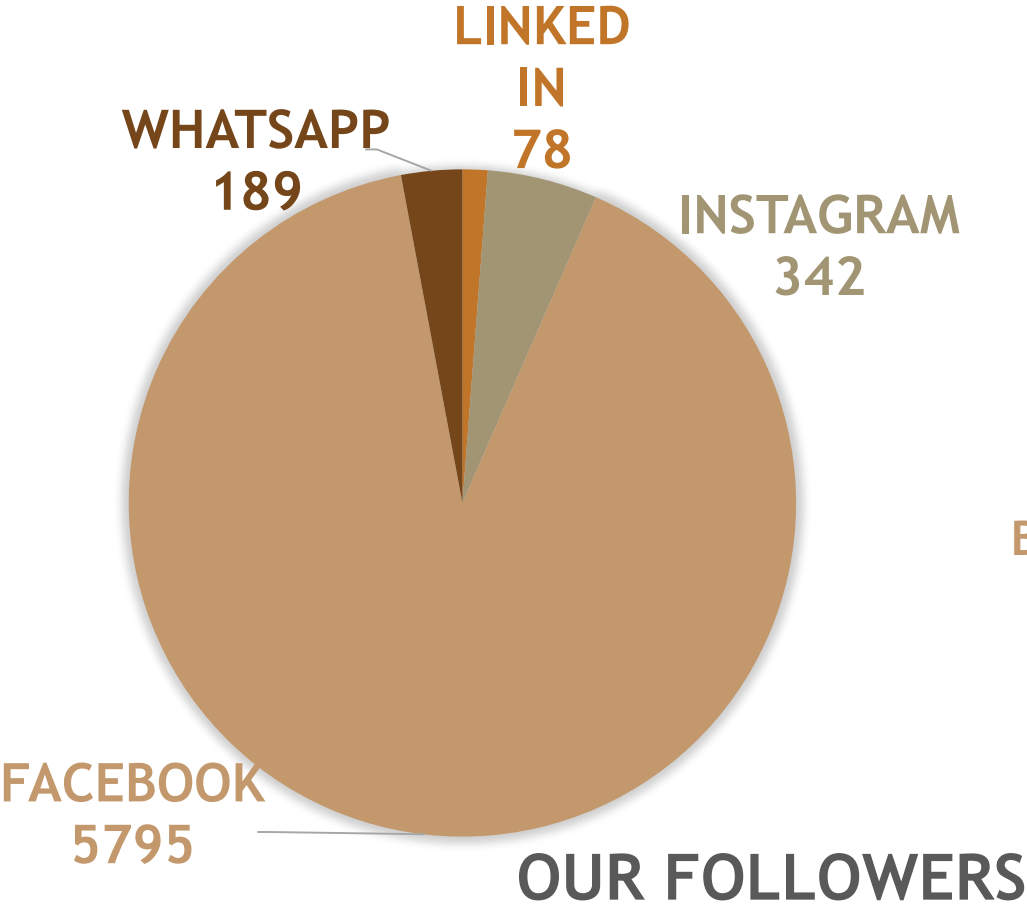
2. What kind of **policy and regulation** can efficiently control human resource and capital in every chain of livestock production system to ensure affordable and safe food?

3. How to regulate and control **safe and halal product** in environmental friendly slaughter house and processing?

4. What **competencies do the worker** in the whole value chain need?

5. How to **educate customers** in purchasing animal products, not only based on price but also on quality?

FLPI members



FLPI MILESTONE

2015
Establishment of
FLPI

2016
FLPI website and
Newsletter are
launched.

2017
(1) Communication
channels between
members are developed in
the form of WA groups,
Facebook along with its
fanpage and Instagram
(2) Workshops, FGDs and
training are regularly held.

2018
(1) Influencing
government policies to
include livestock logistics
in the 2019 National
BAPPENAS Program and
one of the research
agendas at
Kemenristekdikti.
(2) Involvement of FLPI
members in animal ship
optimization research
which is a research
project of ALIN-FAPET
IPB.

2019
(1) MoUs have
been established
in cooperation
with 3 parties,
including: ARPI
(Indonesian
Cooling Chain
Association),
Trilogy University
and NU Circles.
(2) Started to
achieve financial
sustainability

FLPI Workshop & Training

Year	Number of Workshop, FGD & Training Activities	Number of Participants (out of Students)
2015	2	25
2016	4	60
2017	6	108
2018	14	192
2019..	8..	112

FLPI ACTIVITIES



Workshop “Livestock logistics Contribution for Food Security in Indonesia” (March 24, 2016)



FLPI Website

<http://flpi-alin.net/>



Workshop “Poultry and Livestock Cold Chain System” (October 18, 2016)

FLPI ACTIVITIES

2017



Training “Healthy and Quality Meat Handling” (October 26, 2017)



Workshop “Consumer Awareness and Frozen Meat Supply Chain in Indonesia” (August 31, 2019) at Bogor Life Science and Technology (BLST), IPB Taman Kencana, Bogor



Focus Group Discussion “Improvement of Transportation Process in Supply Chain Beef to Maintain Productivity and Animal Welfare Aspects” (July 25, 2019)

FLPI ACTIVITIES 2018

No	Activities	Topic	Date
1	Training (fee-based training)	Management & Quality Assurance System of Poultry Slaughterhouse (RPHU) and site visit to RPHU	January 18, 2018
2	Training (fee-based training)	Animal Logistics Research Methodology	February 08, 2018
3	Audience to Kemenristekdikti	Meeting with the Research Director	February 15, 2018
4	Audience to BAPPENAS	Meeting with the Director of Food and Agriculture Bappenas	April 3, 2018
5	Free Invitation for 10 FLPI members and signing MoU between FLPI-Trilogy University at the International Conference at Gran Melia Hotel, Jakarta	Cold Chain and Logistic Management	April 04-05, 2018
6	Workshop	Standardization of Animal Logistics Human Resource Competencies	April 17, 2018
7	Exhibitor at "Southeast Asia's Leading Integrated Supply Chain Exhibition & Conference 2018"	Connectivity for Indonesia and beyond	May 02-06 , 2018
8	Training (fee-based training)	Implementation of Animal Welfare on Cattle Supply Chain and site visit to Slaughterhouse PT Elders Indonesia	May 14, 2018
9	FLPI National Conference	Strengthening Network on Animal Logistics Industry	August 29, 2018
10	Signing MoU FLPI with Indonesian Cooling Chain Association (ARPI)		August 29, 2018
11	Invitation to the meeting from the Head of Sub Directorate of Goods Transport, Ministry of Transportation-Directorate General of Land Transportation	Completion of the draft Revised Ministerial Decree No. 69 of 1993 specifically the live animal transportation clause	October 1, 2018
12	Workshop	Animal welfare improvement in living animal transport	October 12, 2018
13	FGD	The role of corn logistics systems in the provision of national feed raw materials	November 14, 2018
14	Training (fee-based training)	Management & Quality Assurance System of Ruminant Slaughterhouse and site visit to PT PPU Slaughterhouse	December 11, 2018

FLPI ACTIVITIES

2018



Meeting with the Head of Sub Directorate of Goods Transport, Ministry of Transportation-Directorate General of Land Transportation (October 1, 2018)



Workshop "Animal Welfare Improvement in Living Animal Transport in Indonesia" (October 12, 2018)



FGD "The Role of Corn Logistics Systems in the Provision of National Feed Raw Materials" (December 11, 2018)



Training "Management & Quality Assurance System of Ruminant Slaughterhouse and Site Visit to Pramana Pangan Utama Slaughterhouse" (December 11, 2018)

FLPI ACTIVITIES

2019



Two Days Training “Management & Quality Assurance System of Poultry Slaughterhouse and Site Visit to Poultry Slaughterhouse” (January 17-18, 2019)



Two Days Training “Cold Chain Logistic on Meat Products and Site Visit to PT Adib Cold Storage (February 21-22 , 2019)



Two Days Training “Management of Feed Logistics & Site visit to Feedmill of PT Charoen Phokphand Indonesia, Tbk (March 26-27, 2019)



Focus Group Discussion “Development of Cattle Traceability System” (March 04, 2019)



MoU Signing with NU-Circles (April 02, 2019)

4. Preparation of educational facilities and research (laboratory, field and transportation facilities).

20 Laboratory Equipment - Installed & Functioning
Support research activities

Laboratorium of Microbiology (Lab. 1)



Colony Counter

- Model: 570
- SUNTEX



Vertical Laminar Air Flow

- Type: BBS-V800
- Innotech



Biological Microscope

- Series: XSZ-107BN
- YAZUMI

Laboratorium of Microbiology (Lab. 1)



Incubator

- Type: SLI-400
- Eyla



Electric Pressure Steam Sterilizers

- Type: 75x
- All American



High Performance Ammonia ISE

- Type: 9512HPBNWP
- Thermo Scientific ORION

Laboratorium of Physicochemical (Lab. 2)



Convection Oven, Forced Air Flow Oven

- Type: NDO-400
- Eyela



Rotary Vacuum Evaporator

- Type: N-1300 (230 V)
- Eyela



Fiber Analyzer

- Type: 200
- ANKOM Technology

Laboratorium of Physicochemical (Lab. 2)



Centrifuge Centurion

- Type: PrO-Research
- Centurion Scientific Ltd.



Centrifuge

- Type: 5430R
- Eppendorf



Lactoscan MCC

- Type: ACURA 825.1000
- Socorex

Laboratorium 3 (GC and NIRS)



Gas Chromatograph

- Type: 7820 A
- Agilent



Near Infra Red Spectrometer

- Type: N-500
- BUCHI

Field and Transportation Facilities

Truck

Objective : To transport large animal safely. In particular, the effects on the welfare of animal transported of : loading densities, travelling times, resting times, watering and feeding intervals and interactions of each of these with the right transportation and with any stress during loading and unloading.



PICK UP with Colling Box Carosery

- ▶ **Background :** To transport animal product (example : meat, etc) safely and maintain product quality.



Ammonia Gas Detector Smart Sensor

Background : To detect and measure ammonia gas on animal transportation



Infrared Thermometer

Background : To measure temperature on animal transportation



Methane Meter - Portable

Background : To detect and measure methane gas on animal transportation



Air Quality Meter

Background : To measure air quality O_2 , CO_2 , and CO on animal transportation



Acknowledgment

- NICHE
- NUFFIC Neso Indonesia
- MSM Consorsium (WUR, Aeres Group, MSM)
- Netherlands Embassy Indonesia
- IPB University
- Faculty of animal Science
- Related Stakeholders
 - Indonesian Government
 - Company
 - Association
 - Communities