



**BPPSDMP**

Badan Penyuluhan dan Pengembangan  
Sumber Daya Manusia Pertanian  
KEMENTERIAN PERTANIAN

**Profesional  
Daya Saing  
Wirausaha**



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# **INTRODUCTION OF STATEMENT MISSION, AIMS, AND EXPERTS IN THE DISPATCH OF EXPERT ON RICE SECTOR DEVELOPMENT PROGRAM**

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INDONESIAN CENTER FOR AGRICULTURAL TRAINING,  
MINISTRY OF AGRICULTURE OF INDONESIA**

**MARCH 18, 2022**



# AGRICULTURE DEVELOPMENT GOALS



**ENSURING FOOD  
FOR 267 MILLION  
PEOPLE OF  
INDONESIA**

**IMPROVING  
FARMER WELFARE**

**PROMOTING  
EXPORT**

**GENERAL  
OBJECTIVE  
S AND MAIN  
STRATEGIES  
2020-2024**



**GENERAL OBJECTIVE**

THE REALIZATION OF PROFESSIONAL, INDEPENDENT,  
COMPETITIVE AND ENTREPRENEURIAL AGRICULTURAL  
HUMAN RESOURCES

**MAIN STRATEGIES**



**EXTENSION**

Establish an integrated  
and modern agricultural  
extension system



**TRAINING**

Strengthen the  
agricultural vocational  
training system based on  
competency and  
competitiveness



**EDUCATION**

Strengthening  
competitive agricultural  
vocational education



**BUREAUCRACY  
REFORM**  
Reinforcing  
bureaucratic reform

# IAAEHRD ACTION PROGRAM



**1**

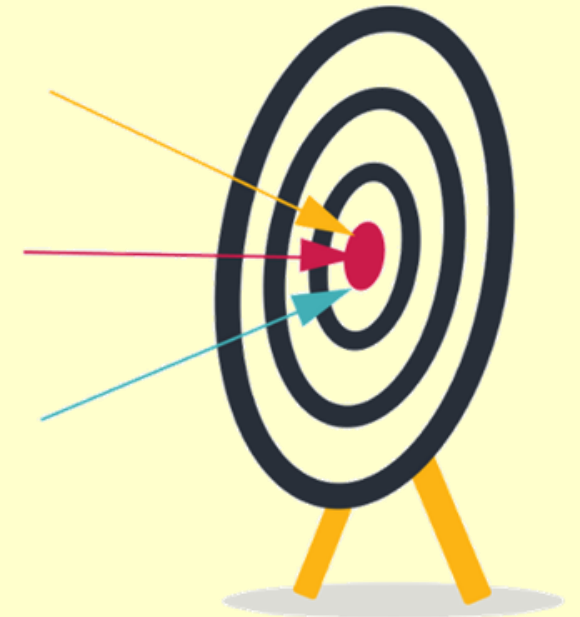
MOVEMENT OF THE  
AGRICULTURAL DEVELOPMENT  
STRATEGIC COMMAND  
(KOSTRATANI)

**2**

EXTENSION, EDUCATION AND  
VOCATIONAL TRAINING  
SUPPORT THE GROWTH OF  
MILLENNIAL AGRICULTURAL  
ENTERPRISES

**3**

EXTENSION, EDUCATION AND  
VOCATIONAL TRAINING  
SUPPORT THE MAIN PROGRAM  
OF THE MINISTRY



## SUPPORT FOR MAIN PROGRAMS OF THE MINISTRY



Development of the District-level  
Agricultural Development Strategy  
Command (KOSTRATANI)



Facilitation of Financing,  
Infrastructure, and Machinery (KUR,  
dll)



Increasing Production of Food Crops  
Through Corporate Based Area  
Development (propaktani).



Development of Competitive  
Horticultural Areas (Vegetables,  
Medicinal Plants, Fruits and  
Floriculture)(GEDOR HORTI).



National Movement to Increase  
Productivity, Production and  
Competitiveness of Plantation (Grasida).



Increased population and productivity  
and genetic quality of beef cattle and  
poultry (breeders, cattle-oil integration,  
and upstream and downstream poultry  
industries)(SIKOMANDAN).

## SUPPORT FOR MAIN PROGRAMS OF THE MINISTRY



Accelerating the utilization of technological innovations and propagation / production of seeds / seeds from R&D department



Alleviation of food insecure areas through family farming, Farming Goes to School Pertanian Masuk Sekolah (PMS), distribution and control of staple food prices as well as food diversification



Strengthening quarantine services and accelerating exports through the Three-fold Export Movement program(*GraTIEks*)



Management Support (Supervision and Supervision Expenditures)

**1** COMPETENCIES  
ENHANCEMENT

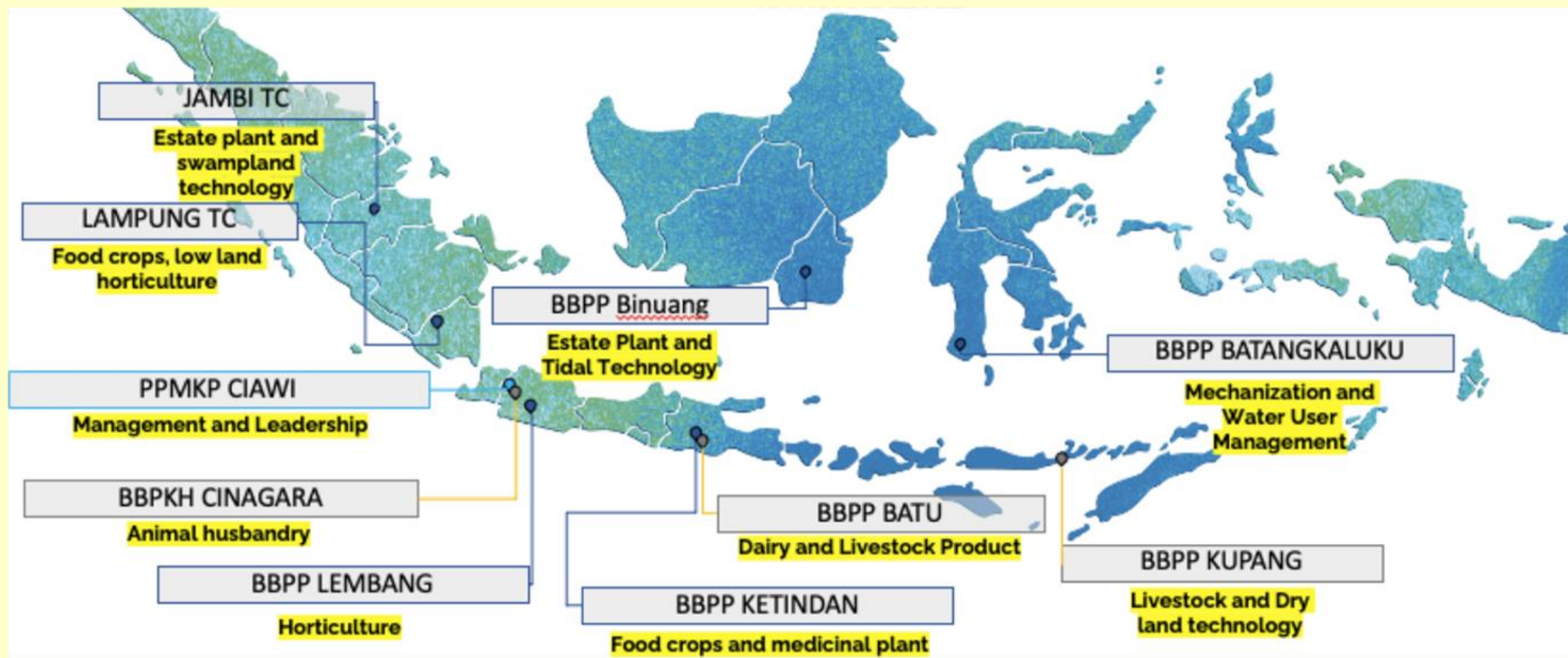
apparatus and non-apparatus through  
vocational, functional, management  
and entrepreneurship training

**2** Standardization and certification of  
the agricultural profession

**3** Growth and Strengthening Farmer  
Agricultural Rural Training Center  
(P4S)

**4** Development of technical and  
management training cooperation at  
home country and abroad, (including  
apprenticeship)

# TRAINING CENTER

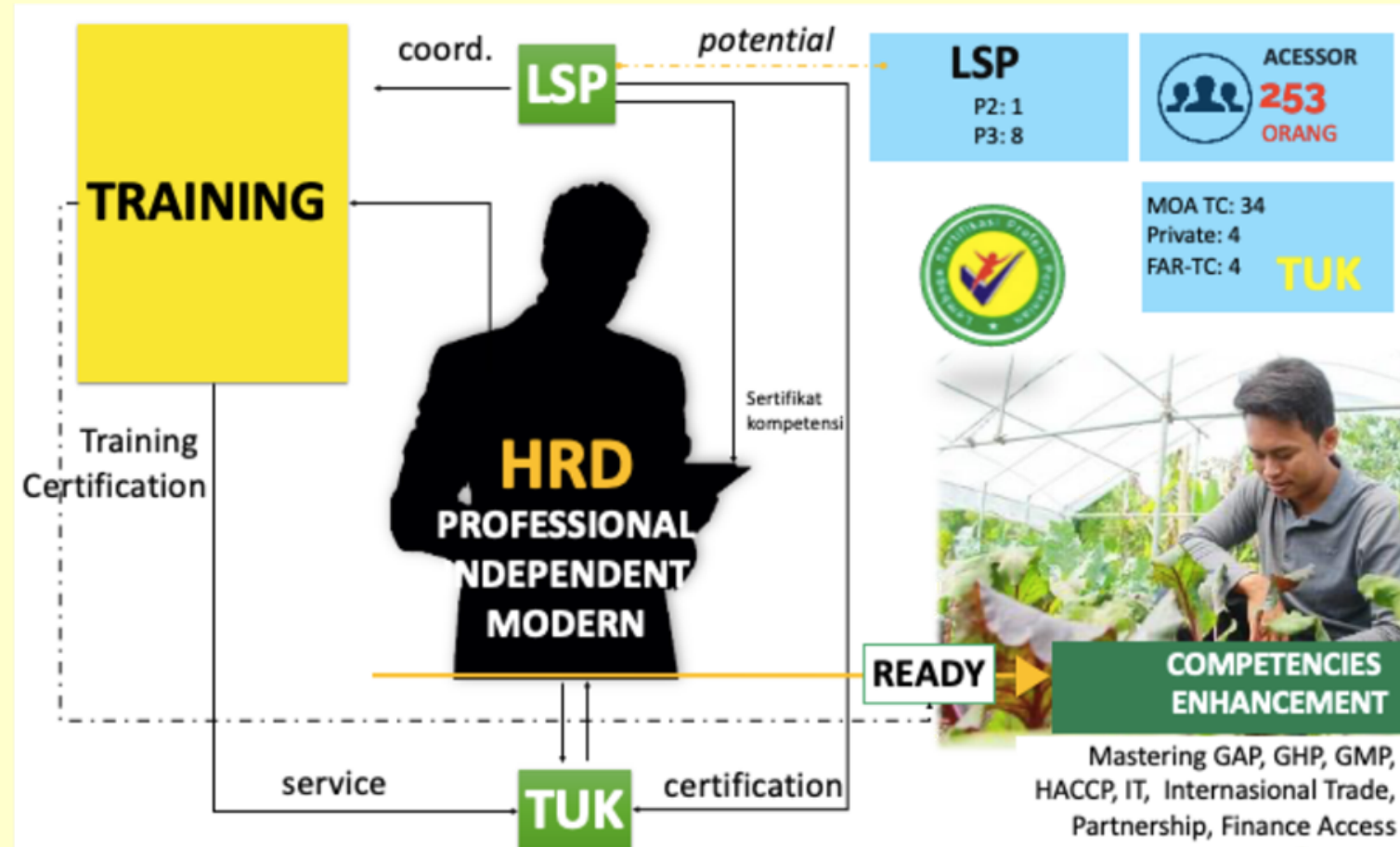


# TRAINING IN COMPETENCY IMPROVEMENT OF AGRICULTURAL HUMAN RESOURCES

**1** Agri Training Camp (ATC)

**2** Downstream, Vocational,  
Functional Technical  
Training

**3** Young Farmer Leader  
Training in Japan



# IT BASED TRAINING DEVELOPMENT

## BENEFIT

- Industry 4.0 implementation
- Remove time, space, distance barriers
- IT utilization
- Training solution during the Covid 19 pandemic



## DISPATCH EXPERT ABROAD : BENEFITS AND URGENCIES

Agricultural cooperation is also one of the efforts that can be expected to increase partnerships between countries in terms of technique, information, experience, and economy

The Ministry of Agriculture of Indonesia can contribute positively to the development of emerging countries to reduce dependence on developed countries and chasing the gap between

As a means of showing Indonesia's agriculture excellences

## IAAEHRD EXPERIENCE IN SENDING EXPERTS INTERNATIONALLY (1999-2021)

44 Times Sending  
Missions

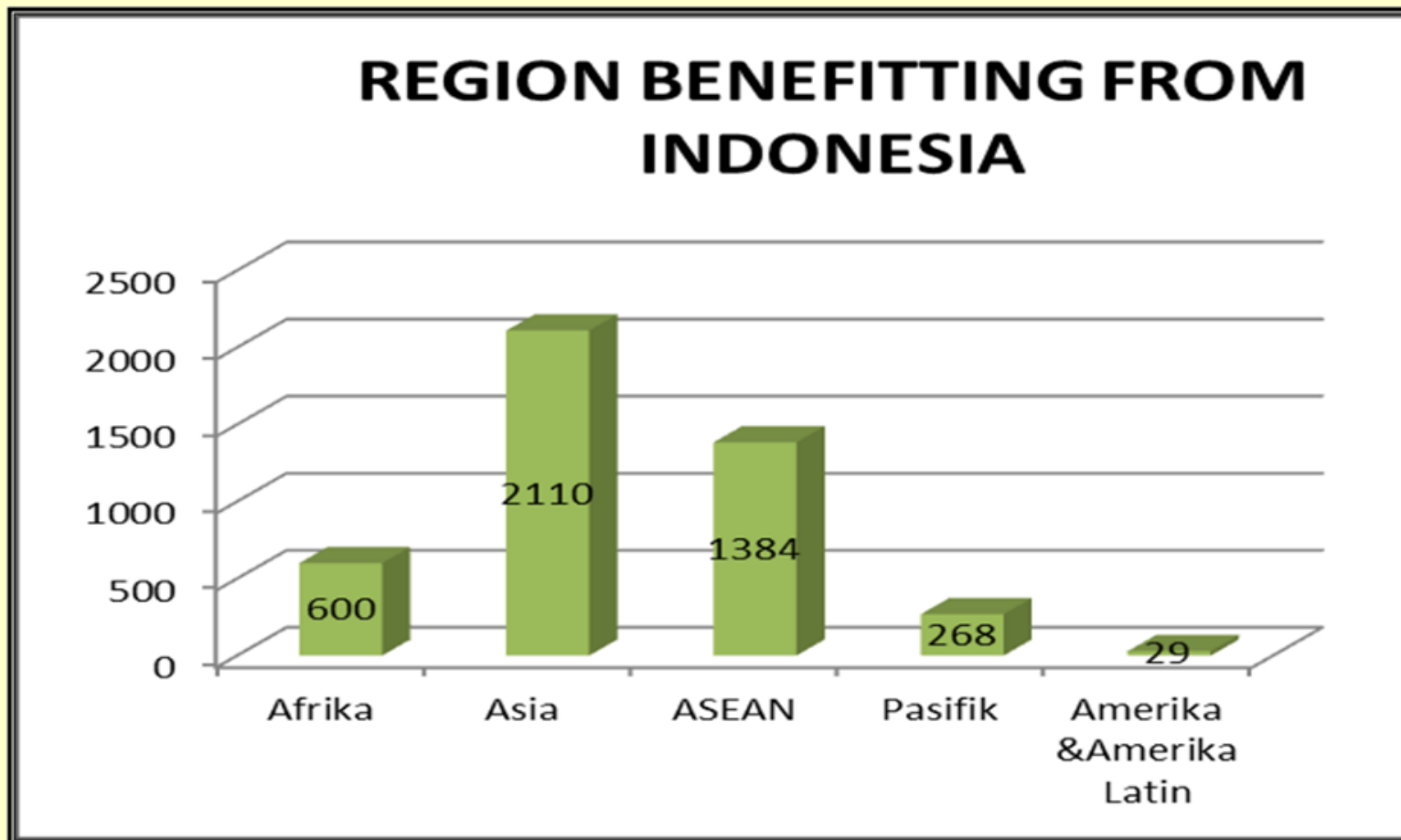
Contributing Positively  
in Pacific, Africa, Asia  
Regions

Involving 42 Experts

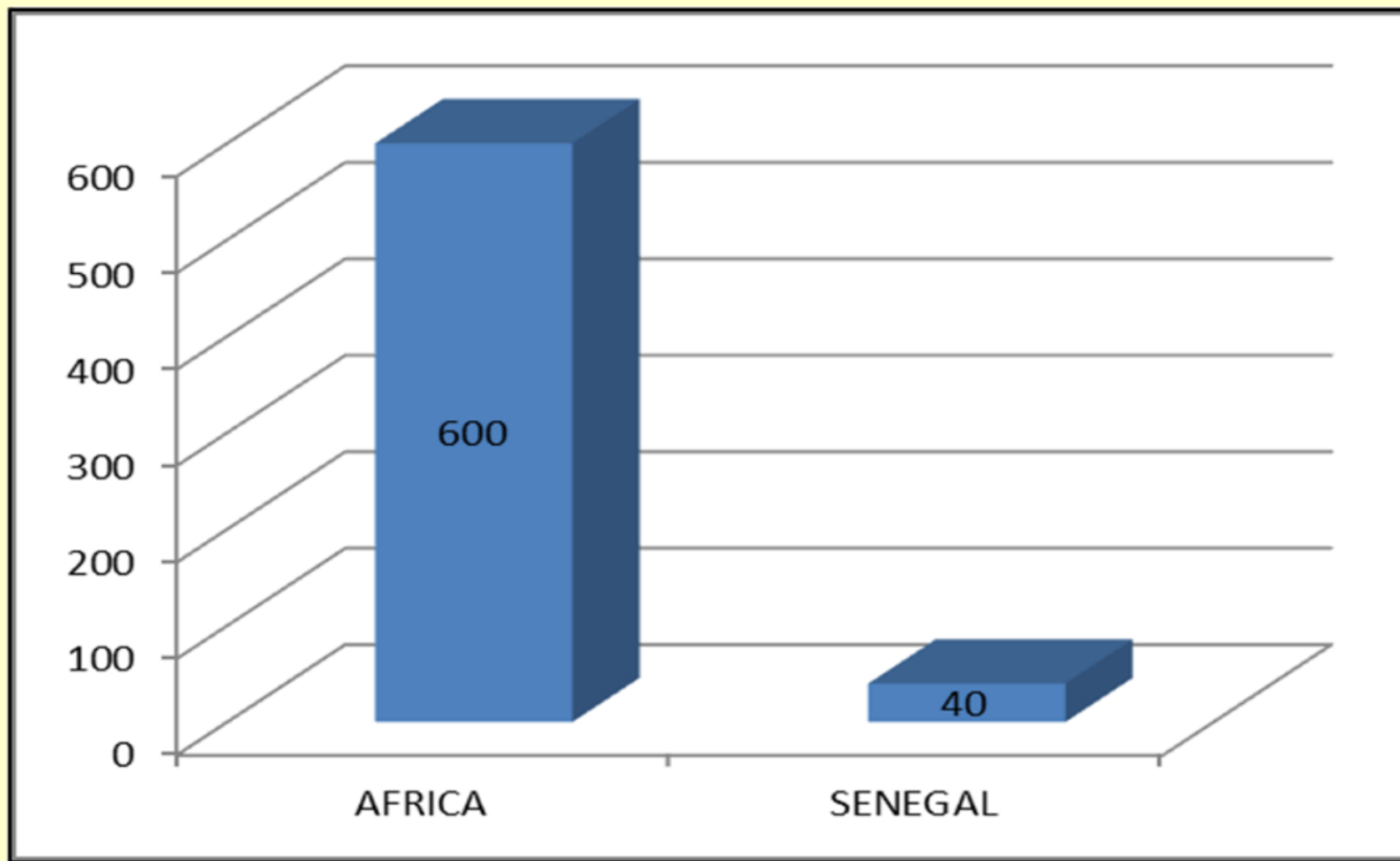
Various Mission and  
Different Funding  
Organizations

Different Fields of Agriculture  
(food crops, machinery,  
horticulture, food processing,  
livestock, post harvest, and  
integrated farming)

## FOREIGN PEOPLE RECEIVED AGRICULTURAL TRAINING/WORKSHOP IN INDONESIA



## ZOOM IN AFRICA AND SENEGAL



## EXPERTS AND THEIR ORGANIZATIONS

Two experts coming  
from National Training  
CenterLembang and  
Rice Research Agency  
Sukamandi

Both are having good  
capabilities in  
delivering lecture,  
dissemination  
technology, social  
engineering, and  
international  
experience

Both institutions are  
the best technical unit  
under the Ministry of  
Agriculture of  
Indonesia

## CURRICULUM VITAE



### Personal Details

Name : Dr. Fiadini Putri, SP., M.Sc.  
Phone : 08122770892  
Email : [fiadini83@gmail.com](mailto:fiadini83@gmail.com)  
Profession : Widyaiswara  
Institution : Indonesian Center of Agricultural Training (ICAT)  
Lembang

### Educational and Professional Qualification

Formal Education :

| Educational level | Title       | Study Program             | University     | Graduated |
|-------------------|-------------|---------------------------|----------------|-----------|
| S3                | Doktor (Dr) | Agronomy and Horticulture | IPB University | 2021      |

### Experiences as resource person

1. Online Training Course on Hydroponics for African, Caribbean and Latin American Countries, 2021
2. Online Training Course on Horticulture Seed Propagation with Tissue Culture for African, Caribbean and Latin America, 2021
3. Online Training Course on Food Labelling and Food Packaging, for Asian and Pacific Countries, 2021
4. Online Training Course on Hydroponics for Asian and Pacific Countries, 2021
5. Online Training Course on Horticulture Seed Propagation with Tissue Culture for Asian and Pacific Countries, 2021
6. ASEAN Online Training Course on Strawberry Production, 2021
7. International Training on Agriculture Sector for African Countries, di Jenoi, Gambia, 2018
8. Training Course on Innovative Production on Vegetable Technique for Palestinian Officers, 2016
9. International Training Workshop on Agriculture, di Mkindo, Morogoro Tanzania, 2015

### Scientific Papers

1. Bioactive Compound Characteristics, Growth, and Green Shallots Production at Different Altitudes, Seasons and Fertilizer Rates (Dissertation), IPB University, 2021
2. Putri F, Aziz SA, Andarwulan N, Melati M, Suwanto. 2020. Growth performance of green shallot from five different varieties in Indonesia. *Plant Archives* (20):813-818
3. Putri F, Aziz SA, Andarwulan N, Melati M, Suwanto. 2021. Leaf pigment, phenolic content, and production of green shallot of five different shallot varieties. *Journal of Agro Science*. 9(1):48-57.



Ms. Fiadini Putri and some of her qualifications

- Holding Doctorate Degree in Agronomy and Horticulture
- Resource Speaker of International Training for Africans, Pacific, Caribbean, Latin America
- Working at National Training Center, Lembang

# EXPERTS AND THEIR ORGANIZATIONS

The training that has been carried out by ICAT Lembang



TISSUE CULTURE TRAINING



SMART FARMING TRAINING



POSTHARVEST AND PROCESSING OF  
HORTICULTURAL PRODUCT TRAINING



HYDROPONIC TRAINING



VEGETABLES CULTIVATION TRAINING



HORTICULTURE AGRIBUSINESS TRAINING

## EXPERTS AND THEIR ORGANIZATIONS

# The Laboratories

TISSUE CULTURE LABORATORIUM



PROCESSING AGRICULTURAL PRODUCT  
LABORATORY



BIOLOGICAL AGENTS LABORATORY



# PACKING HOUSE & GREEN HOUSE



## Packing House fulfilled with the Procedures of a Packing House

The Packing House consists of the reception of goods, pre cooling area, cleaning room, sortaton and wrapping, processing room for agricultural products, cold storage and the room where goods come out.

## Modern Green House

4 units of Green House Modern, in collaboration with Taiwan Technical Mission, which one of the Green House equipped with automatic temperature and humidity control



## Practical Yield (Business Incubation)

The area of ICAT Lembang Business Incubation is 2.5 hectares, planted with various agricultural commodities, with conventional and hydroponic technology cultivation (DFT, NFT, Drip irrigation, aeroponic), such as vegetables, fruits, ornamental plants, livestock, and training workshops



# EXPERT OF INDONESIAN CENTER FOR RICE RESEARCH (ICRR)



NAFISAH, PhD

- PhD in Genetics and Plant Breeding (Chinese Academy of Agricultural Sciences, Beijing, China), 2013
- **Indonesian Best Breeder Award**, 2021
- **Some projects involved** :
  - ❖ 2020/2021 : Development of High yielding rice varieties adaptive tidal swampy and coastal area rice ecosystem and abiotic multi stresses tolerant.
  - ❖ 2014, 2017-2021 : Development of high yielding rice varieties tolerant to salinity with grain quality equality to Ciherang rice varieties
  - ❖ 2022 : Rice Seed Production

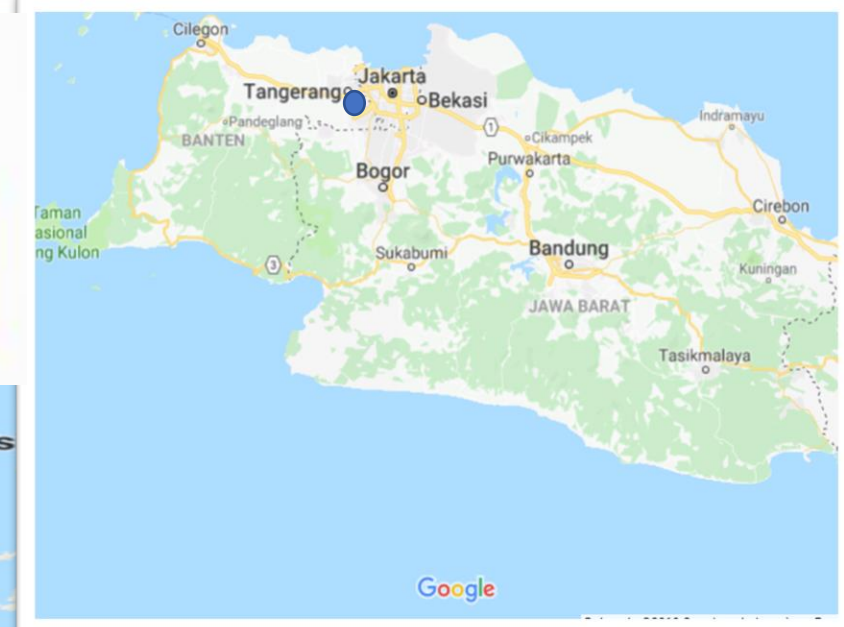
## **Variety released:**

Irrigated inbred high yielding rice varieties :  
Inpari 7, Inpari 8, Inpari 9, Inpari 10 (2009),  
Inpari 11, Inpari 12, Inpari 13 (2010), Inpari 20 (2011), Inpari 22 (2012), Inpari 26, 27, 28 (2012), Inpari 32 (2013), Inpari 34,35, 36 and 37 (2014), Inpari 41 (2015), Inpari 42 and 43 (2016), Munawacita (2017), Padjajaran (2009), Inpari 48 (2020)

# SPOTLIGHTS FROM INDONESIA CENTER FOR RICE RESEARCH (ICRR)



Jalan Raya 9 Sukamandi, Subang, WEST JAVA  
Website: [www.bbpadi.litbang.pertanian.go.id](http://www.bbpadi.litbang.pertanian.go.id)



# Facilities



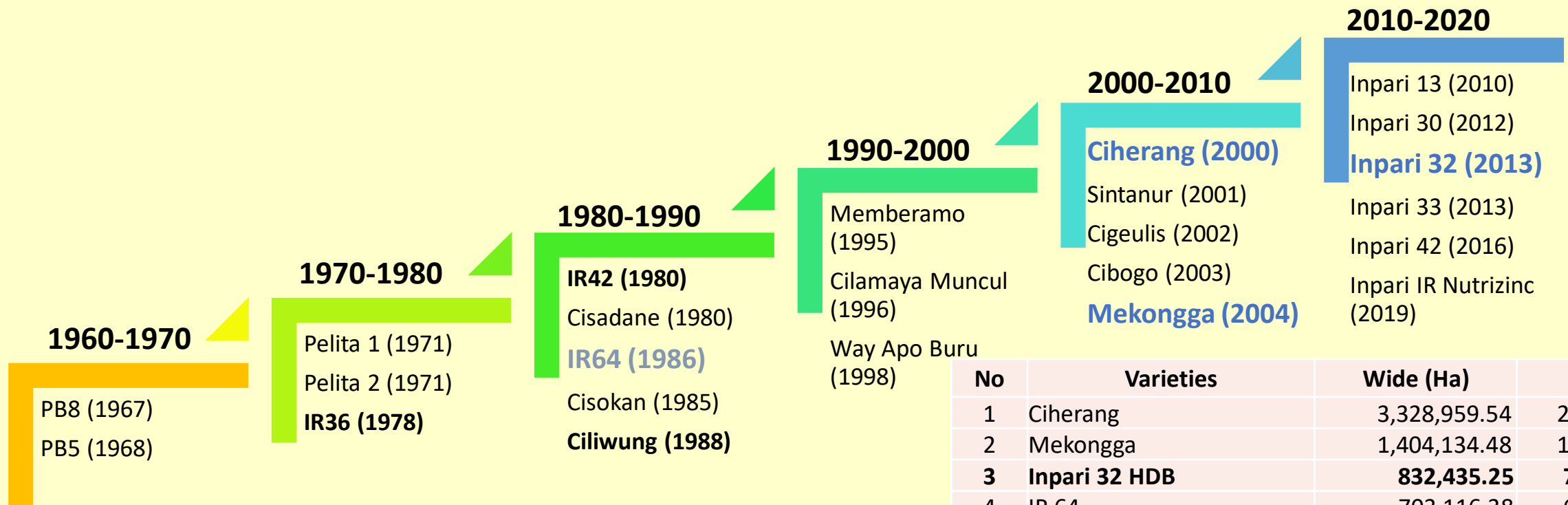
1. Experimental Stations:
  - **Sukamandi, (300 ha)**
  - Pusakanagara (40 ha)
  - Kuningan (30 ha)
  - Muara-Bogor (30 ha)
2. Green houses
3. Research laboratories
4. Rice milling unit
5. Agro-science techno Park



# ICRR Target Output of 2020-2024:

| Varieties                                                                                                                                                                                                                                                                                                                                  | Technologies                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• High potential yield</li><li>• Very early maturity</li><li>• Multi-resistance to pest and disease</li><li>• Multi-tolerant to abiotic stress</li><li>• Nutrient uptake efficiency</li><li>• Low green-house gas emission</li><li>• Premium grain quality</li><li>• High nutrient content</li></ul> | <ul style="list-style-type: none"><li>• Supports high yield (&gt;15 ton/ha) in irrigated lowland environment</li><li>• Supports high yield in an unfavorable environment</li><li>• Environmentally Friendly Pest and Disease control</li><li>• Improvement of postharvest and grain quality</li></ul> |

# Major popular irrigated rice varieties in Indonesia



## Major rice varieties planted (2020)

| No | Varieties                       | Wide (Ha)            | %            |
|----|---------------------------------|----------------------|--------------|
| 1  | Ciherang                        | 3,328,959.54         | 29.87        |
| 2  | Mekongga                        | 1,404,134.48         | 12.60        |
| 3  | <b>Inpari 32 HDB</b>            | <b>832,435.25</b>    | <b>7.47</b>  |
| 4  | IR 64                           | 703,116.38           | 6.31         |
| 5  | <b>Inpari 30 Ciherang Sub 1</b> | <b>519,085.03</b>    | <b>4.66</b>  |
| 6  | Situ Bagendit                   | 459,658.78           | 4.12         |
| 7  | Cigeulis                        | 353,195.88           | 3.17         |
| 8  | Ciliwung                        | 295,995.38           | 2.66         |
| 9  | IR 42                           | 170,615.54           | 1.53         |
| 10 | <b>Inpari 33</b>                | <b>165,358.70</b>    | <b>1.48</b>  |
| 11 | Cibogo                          | 136,658.65           | 1.23         |
|    | Vother dominant rice varieties  |                      |              |
| 12 |                                 | 1,676,100.55         | 15.04        |
|    | <b>TOTAL</b>                    | <b>10,045,314.16</b> | <b>90.13</b> |

# Product Profile of Rice Variety-based on popularity

- Maturity :
  - ▣ Early maturity : 105 – 124 das
  - ▣ Very early maturity : < 90 das
- Plant height: about 100 cm
- Rice quality depends on shape, texture, milling recovery
- Texture preference :
  - ▣ Java: soft rice, aromatic, slender
  - ▣ Sumatera : slender, hard rice
  - ▣ Kalimantan : small (Siam type), hard rice, sometime soft rice
  - ▣ Sulawesi : soft rice without aroma

# BEST MANAGEMENT PRACTICES FOR VARIED RICE AGROECOSYSTEM



# Dissemination and Research Collaboration

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## National research collaboration

- ▶ Partners : Private companies, government research institutions, local government offices of Provincial and District levels
- ▶ Hybrid rice : Multi-location yield trials, comparison plot testing, variety release, adaptation test
- ▶ CFT trial of GM rice with stem borer resistant (LIPI – Indonesian Science Institute)
- ▶ Local varieties purification and release

## International research collaboration

- HarvestPlus Project : rice biofortification with Zinc, partnership with CIAT and IFPRI, release of Inpari IR Nutizinc variety in 2018
- Genetic Improvement of Rice Breeding Material and Technology in Indonesia → JIRCAS
- Selection and Dissemination of elite salt-tolerant rice varieties to AFACI member countries → AFACI
- IRRI collaboration: Multi-location Hybrid Rice Yield Trial, CURE, Golden Rice, Rodent Management, Zinc Rice, MET rainfed and irrigated, INGER, GSR



# WHICH RICE TECHNOLOGY SUITABLE FOR SENEGAL?

- ❑ What condition and constraint
- ❑ Need to be discussed

## Available technologies

- ❑ High yielding rice varieties
- ❑ Best management practices for certain target rice agroecosystem



**THANK YOU**  
**TRAINING CREATES INDEPENDENT, ADVANCED,**  
**MODERN AGRICULTURE HRD**