

# Climate-Smart *Intercropping* for Sustainable Oil Palm







## WHY OIL PALM?

Indonesia is the largest oil palm producer in the world

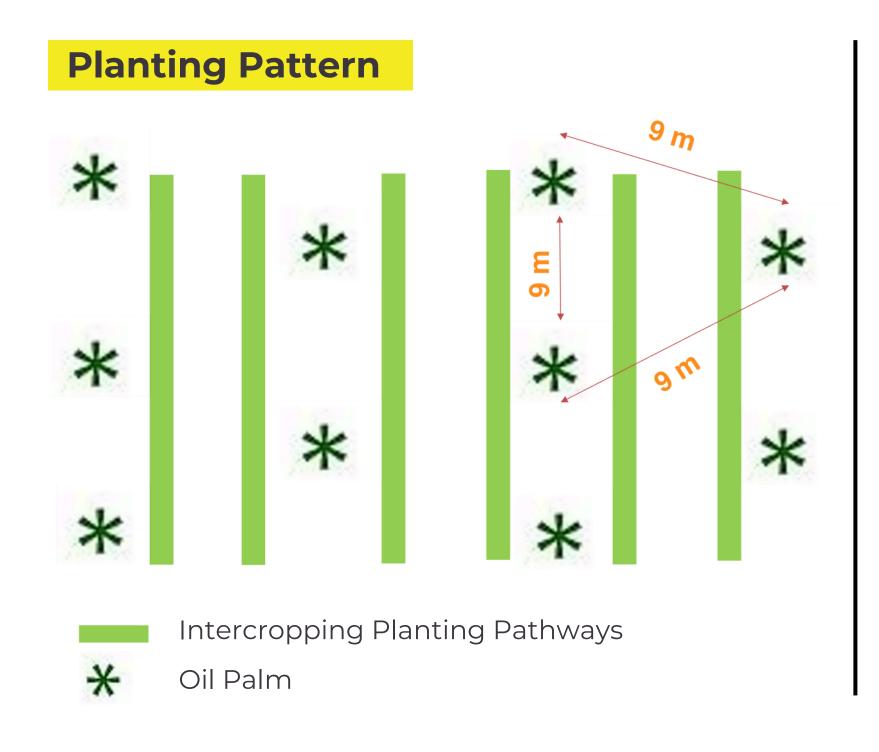
- 16 million hectares of land
- 2,5 million oil palm smallholders

Annually, 180,000 hectares of oil palm are replanted, leaving many farmers without income until the new palms are harvestable after three years



## Intercropping as a Solution:

Integrating oil palm with food and horticultural crops during the replanting phase.



### **Examples of Intercropping Commodities**

Intercropping commodities are short-term crops that can be harvested within 2-12 months without disrupting oil palm growth.







Melon



**Upland Rice** 





## Supply Chain Challenge

Farmers cannot do it alone; they need end-to-end support to implement the intercropping system in oil palm plantations.



Limited access to financing



Lack of knowledge for intercropping implementation



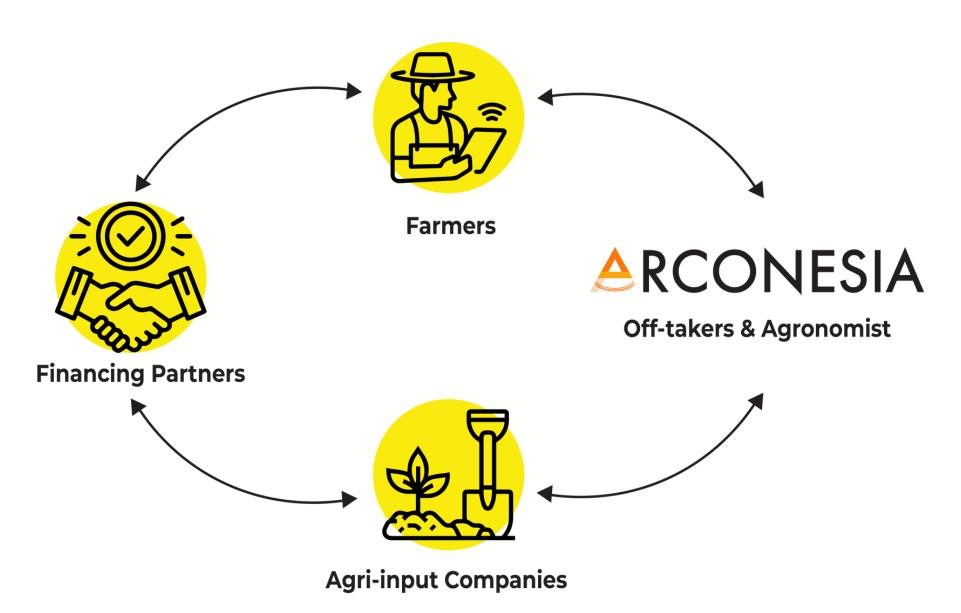
Limited market access for intercropping commodities after harvest





## A Closed-Loop *Ecosystem*

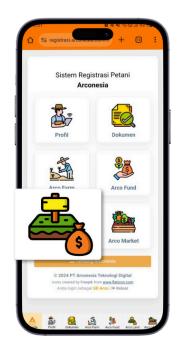
to Mitigate Risks and Increase the Success Rate of Intercropping Projects





## Arconesia Digital Platform

Integrating oil palm with food and horticultural crops during the replanting phase.



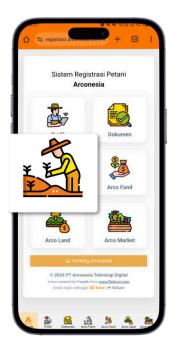
### **ArcoLand**

Links oil palm farmers offering land for intercropping with landless farmers growing watermelon, maize, or upland rice.



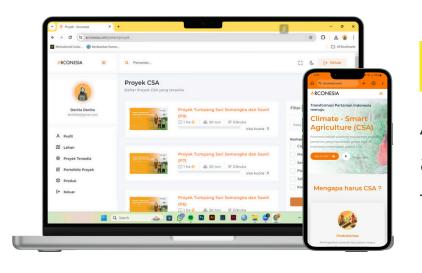
### **ArcoFund**

Provides experienced intercropping farmers with input financing, technical support, and secured market contracts.



### **ArcoFarm**

Empowers young, passionate farmers with salaries, training, and risk-free farming opportunities.



### **ArcoMonitor**

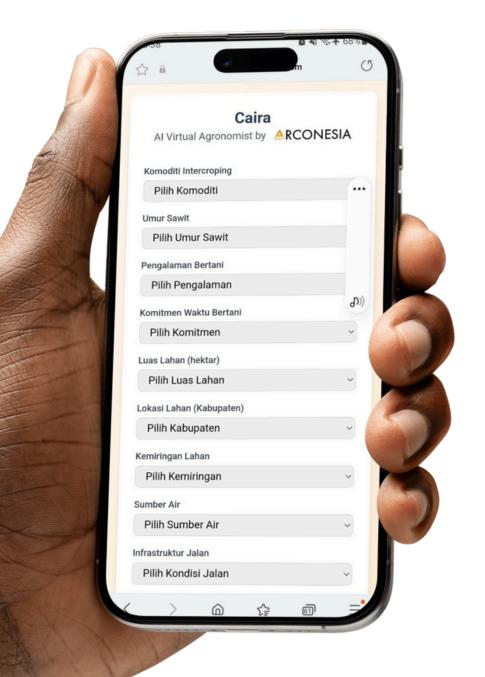
A platform for farmers to log activities, manage budgets, and track agri-inputs, optimizing future planting strategies.



## **CAIRA**: Arconesia's Al Agronomist

A farmer's smart agronomist—available anytime, anywhere







### **Your 24/7 Intercropping Advisor**

Farmers can message Caira on WhatsApp anytime, anywhere, for oilpalm intercropping guidance. All advice follows Arconesia's validated standard

Talk to Caira:

+62 858 4000 1741

### **Data-Driven Planning for Oil Palm Intercrops**

Provides precise yield and income forecasts for oil-palm intercropping—customised to each farmer's data and field conditions—plus input recommendations and budget estimates.

Connected with Caira:

https://caira.arconesia.com/



## The intercropping project is also supported by the *latest* and *sustainable technologies*.



Mulch and Drip Irrigation



Solar Panel Water Pump



Organic agri-inputs



## **Achievements and Awards**



The Most Favourite Social Enterprise of the 'Pikiran Terbaik Negeri'
Program by BUMN Foundation



1st Winner of ASEAN SEDP 3.0



Top 3 of LEAF Project – (JICA, DI Vietnam and ANGIN)



Top 3 global call for ideas in Milano Digital Week 2021



1st Winner of Innovation Fair 2022



**Key Implementer the SustainPalm Project** 





## The Social Impact of Oil Palm Intercropping\*

- Ol Replaces income for oil palm farmers during the replanting phase
- O2 Provides land access for landless farmers who have no land to farm
- Creates up to 10 jobs/ha 40% held by women (women empowerment)
- Reduces oil palm maintenance costs by up to IDR 25 million per hectare due to reduced fertilizer use and non-herbicide practices
- Boosts carbon capture by 2–3 t CO<sub>2</sub>/ha/year offers potential additional income for small farmers

\*Note: measured and validated in collaboration with Wageningen University and Research and IPB University under the SustainPalm Project (https://sustainpalm.org/)



Latest Impact Highlights from Our Recent Traction

30% - 50%

Increased income of oil palm farmers

300+

**Women Empowerment** 

### 600 Tons

Potential carbon sequestration that could become future income stream for farmers

100+ Ha

Land access provided to landless farmers

## **IDR 3 Billion**

Total cost savings for oil palm landowners



## Milestone since

250+

Small farmers

8.000+ ha

In the pipelines

IDR 6.2 Billions

Total disbursement to farmers







### **Meet Our Teams**

### Founded in 2020 in Bengkulu, Sumatra Island for mainstreaming intercropping system in Indonesia

### **Founder**



#### **Jusrian Saubara Orpa Yanda**

CEO

Master's degree from Wageningen University and Research, Netherland; 4 years working on oil palm intercropping projects



**Muhammad Alfian** 

COO

Master's degree from Gadjah Mada University; 4 years working on ecology narrative and green literature



**Robbie Sughara** 

**CTO** 

On going Master's student in University of Amikom; 5 years working on serial tech entrepreneur



















7	Financing Partners	amartha ALAMI ANGIN Lecosystem equatora capital
	Offtakers	Bumi Buah Nusantara, CV Sinar Family Nusantara, Harus Makan Buah
<u>,</u>	Agri-input Companies	YaraMila syngenta Agros
)	Oil Palm Companies	PTPN4 LAGRICINAL
	Enablers	NEW ENERGY NEXUS Indonesia Koalisi Ekonomi Membumi
	Government	ALBUMATER SELUMA
	Universities	Van hall larenstein university of applied sciences



## ARCONESIA

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"Let's Collaborate and be Connected!"