

# Nippon Koei Co., Ltd.



## Project for establishment of a distribution system for safe vegetables in Viet Nam

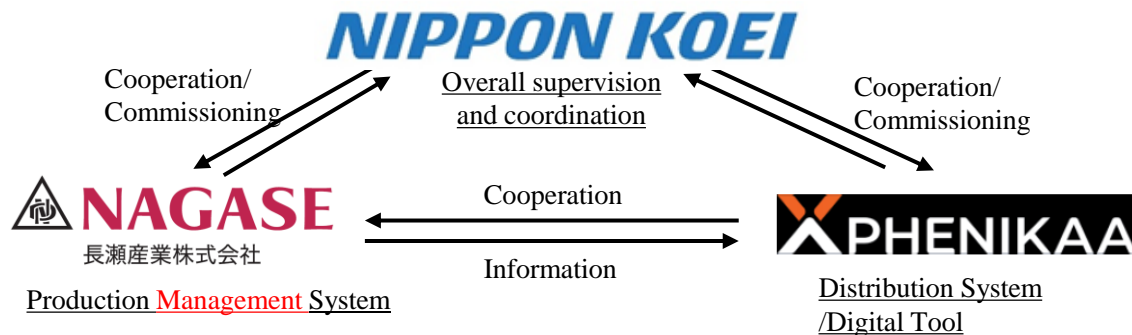
### Objective of the project

The objective is to establish a distribution system for safe agricultural products in Viet Nam by visualizing food safety through a proof of concept (PoC) of an integrated traceability system for safe agricultural products from production to distribution using digital technology.

### Cooperation with local companies/governments

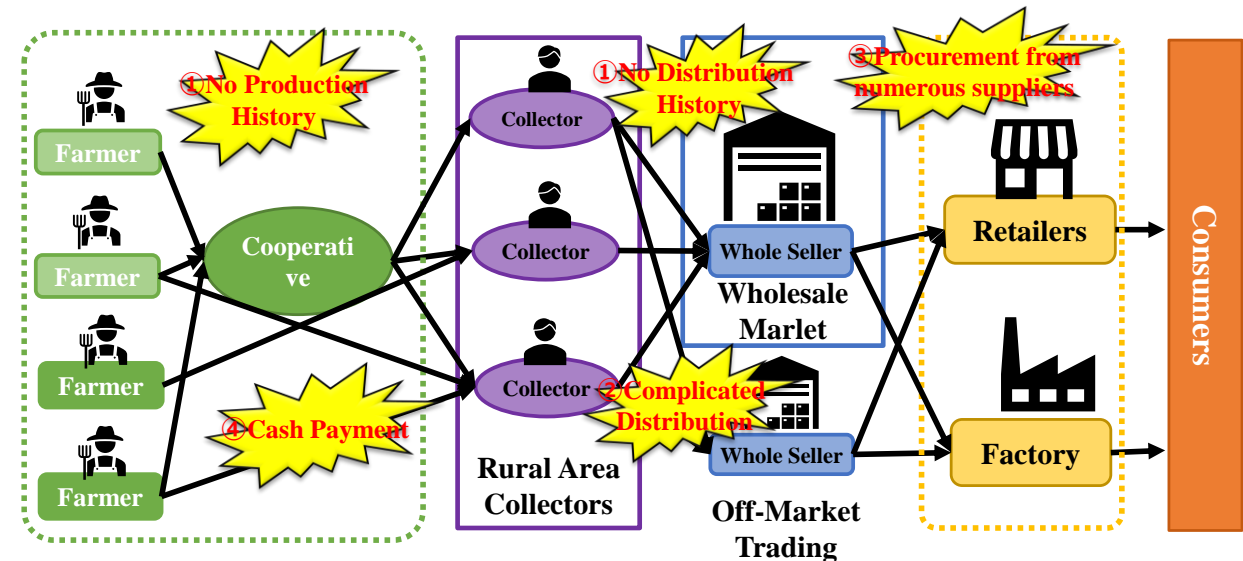
Commissioned Nagase Vietnam to establish a production management system, analyze production data, supervise the development of Phenikaa-X's production app, and provide product information on pesticides and fertilizers distributed in Viet Nam to be incorporated in the system. Commissioned Phenikaa-X to establish a production and distribution history management system and transportation route optimization and payment system, and develop a website and application.

#### Implementation Structure



### Targeted economic/social issues

Traceability is an urgent issue due to growing consumer awareness of food safety in recent years. However, there is no production and distribution history of agricultural products in the traditional distribution system. In addition, the multiple and complicated distribution structure not only increases food loss, but also raises procurement costs for retailers and food service providers. Furthermore, cash settlement is the predominant method of payment to producers, reducing the efficiency and transparency of transactions. In the e-commerce sector for agricultural products, there are no existing services with consistent traceability from production to distribution, and there are mainly BtoC services and few BtoB services with restaurant chains and other customers.





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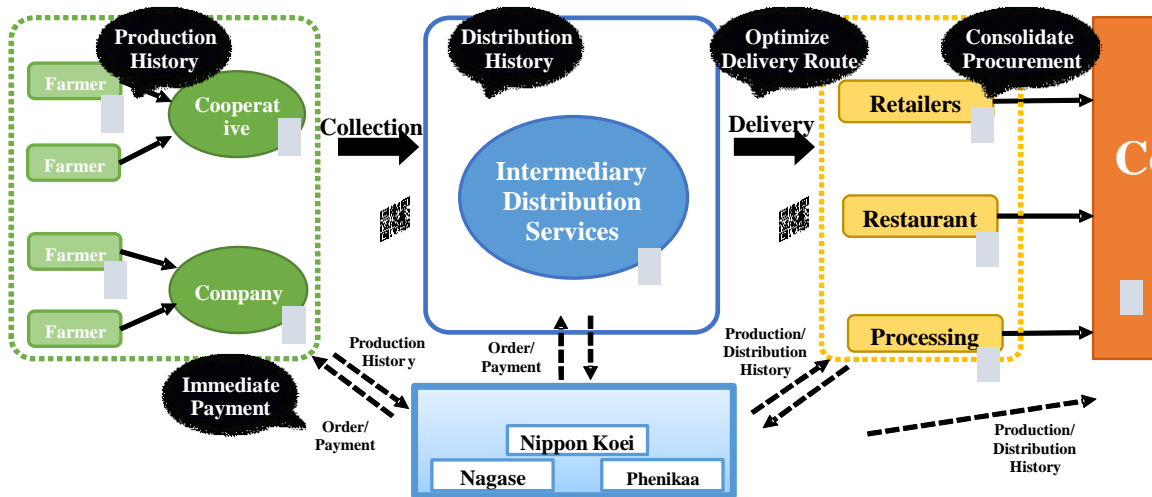
### Demonstration period

September 2022 - December 2023

### Details of demonstration

#### Details of Verifications

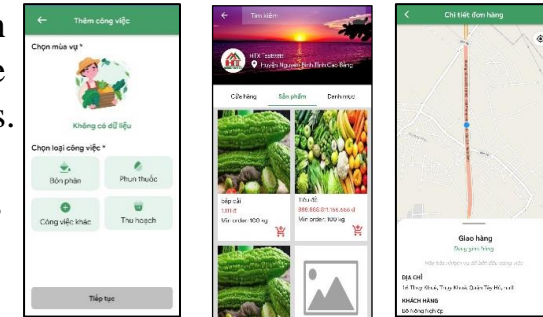
Develop digital tools (apps and websites) for producers, intermediary distributors and retailers and verify whether (i) traceability is ensured through production and distribution histories, (ii) procurement from intermediary distribution services is consolidated using DX technology, (iii) transportation routes are optimized, and (iv) payment procedures are simplified through online ordering and electronic payment. In addition, conduct a needs assessment for business and monetization.



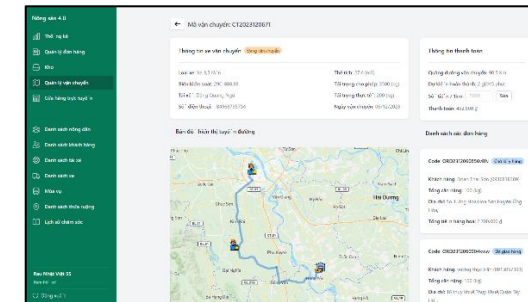
### Project outcome / Future plans

#### Results

- The following digital tools for production and distribution history systems were developed and tested in demonstration trials.
  - App for farmers "NongSan 4.0"
  - Website for cooperatives and administrators
  - Procurement app for buyers
  - Delivery app for transporters
- 83% of participants were very satisfied with the system and all participants were willing to continue using the system.
- In the needs assessment survey, it was confirmed that many buyers were concerned about food safety and that the system had an effective function in resolving their concerns.



Images of Apps



Images of Web site

#### Upcoming plans

Review the commercialization and monetization of the provided application and intermediary distribution services which we envision as business models. Conduct system modifications and continuous testing in collaboration with Phenikaa-X. Study and discuss the possibility of promotion in collaboration with the Government or with the private sector for similar projects.