

Innovations in Age-friendly Farming

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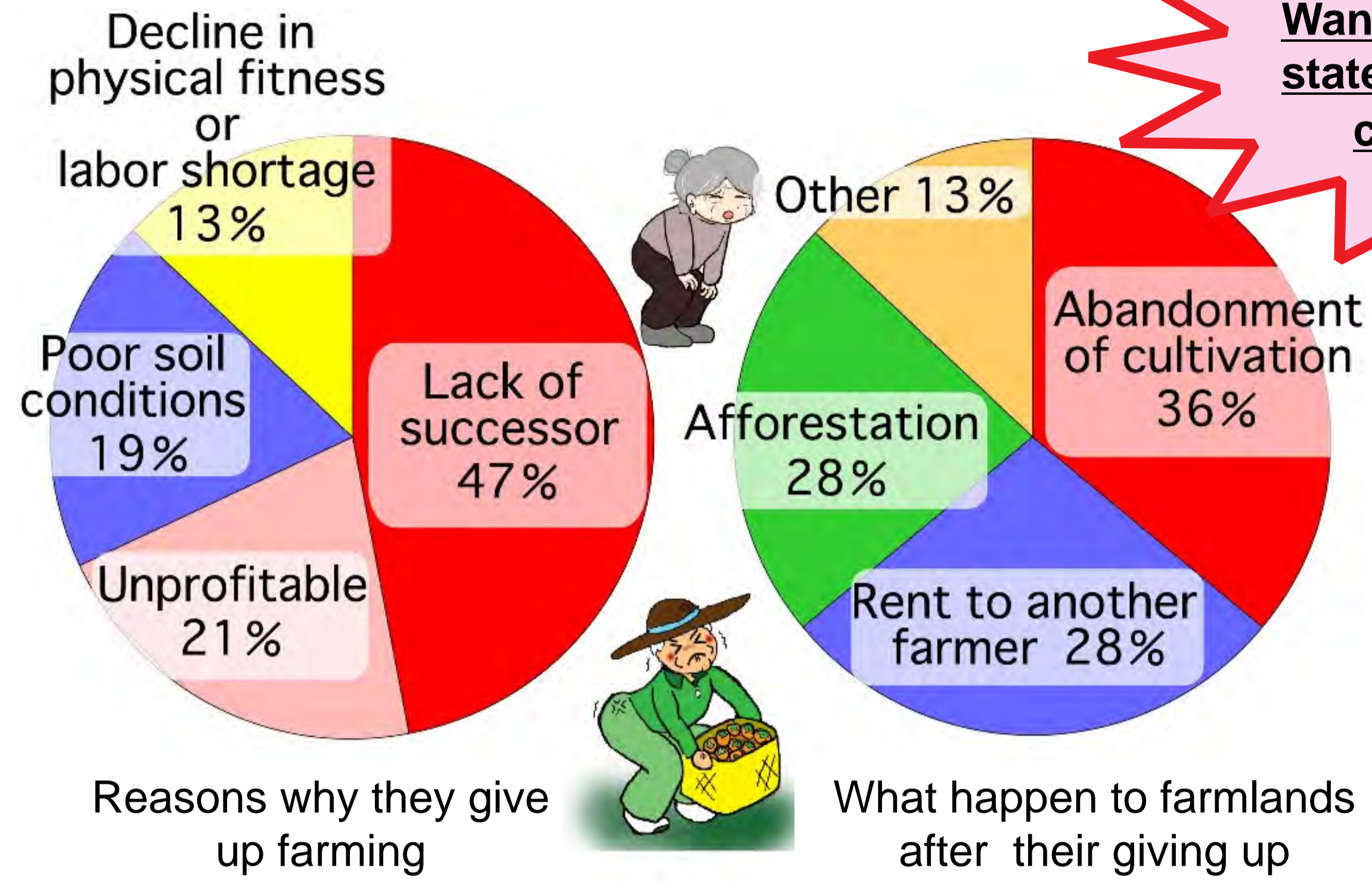
Project Goals

Problems to be solved

Japan has increasingly aging farm communities and lots of farmers are abandoning farming due to its heavy physical labor. The problem also leads to devastated farmlands by being abandoned, as well as an unsuitable environment to welcome those who wish to come back to farm work in the future.



Steep sloping fields in which transporting itself is a hard work



Waning or devastated state of farm village communities

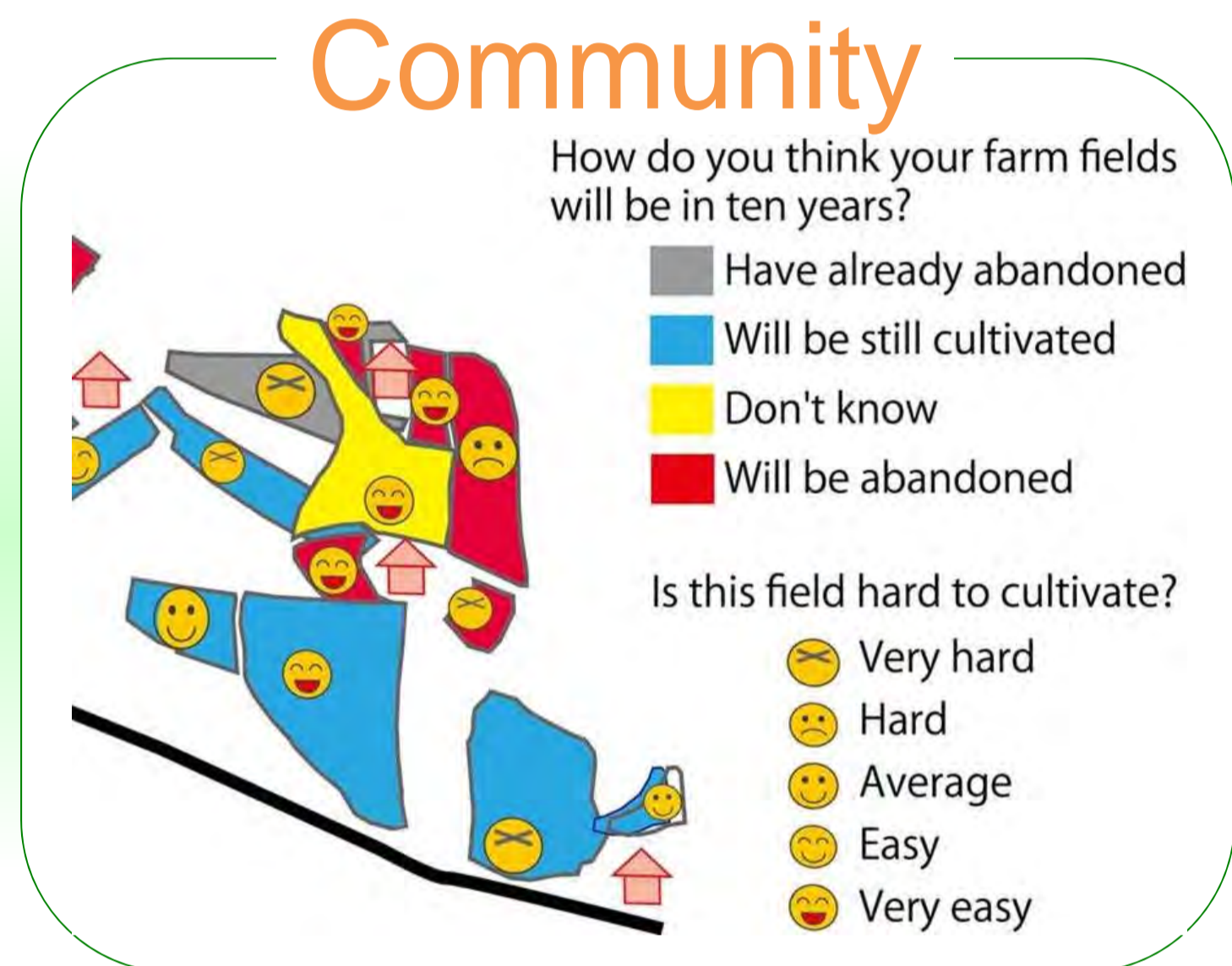
R&D Target

By creating an environment in which aged farmers are able to continue farming 10 more years, waning or devastated state of farm village communities will slow down. It will open the door to a revitalization scheme which brings in those who are interested in coming back to farm work after retirement and also new entrants.

Let's change our farm village communities to the land with harvest full of fulfillment (Raku-Raku (Easy)! Fun! The breath of life!) for aged farmers!

Project implementation

Project overview



To develop a checkup method to understand the status quo of village communities

Livelihood (Farming)



To develop the "Raku-Raku easy growing" method for aged farmers

Tools (Machines)



To develop elderly-farmer-friendly electric carts

Body (Health)



To develop "physical checkup + exercise for prevention of injury (Raku-Raku easy exercise)" for farmers

Target community

Nara Prefecture Yoshino-gun Shimoichi Town, Tochiyama area



R&D Structure

Nara Women's University, Nara Prefecture Agricultural Research and Development Center, Sanko-Seiko, Co., National Institute of Technology, Nara College, Shimoichi Town

Consisted of 6 village communities (Otoga, Nishibo, Nakamura, Shimomura, Okugaito, Asahigaoka)
 Population: 281 Number of households: 83 (Full-time farmer: 33)
 Population aging rate: 34% Land area planted with persimmon trees: 100 ha
 Steep sloping fields of 20 degrees occupy this area and 80% of those are fields from a long time ago.
 The most of residents are shrine parishioners of Hahime Shrine, which follows Engi-shiki style, and they are carrying on its tradition in the village such as an annual festival in October.

Project achievements and future prospects

Project achievements

1. Electric wheelbarrow/Electric cart
2. Community checkup method (Raku-Raku easy method)
3. Raku-Raku easy growing
4. Raku-Raku easy exercise

Future developments and prospects

Tochiyama project triggered the movement of regional development!

Pruning workshop at a deserted farm

Birth of a new persimmon leaf farm

Cooperated with a rural development program by the Rural Development Division of Nara Prefecture!

The cumulated production of persimmon leaves exceeded one million! (2015: 500,000)
 The project was featured as part of the revitalization scheme for farm villages taken by Nara Prefecture and further development is expected.

The sale of upgraded "Raku-Raku-go" electric cart started!

- 10W LED floodlight assures safety in the dark.
- Being equipped with a solar panel, it can be charged in a field!
- The switch lever needs just one finger to control.
- Smooth movement with 2 support wheels.
- The in-wheel motor enables strong back-and-forth motion of the main wheel.
- Control box with an original high power built-in battery.
- Its good performance in the community was introduced in a NHK TV program.

The upgraded model of Raku-Raku-go arrived! It is more easy to handle with support wheels attached to a wheelbarrow. Now on sale - 250,000 yen (catalog price)! The original wheelbarrow model has also been improved and is now at an affordable price (150,000 yen).

A health seminar, etc. were held, along with the promotion of "Raku-Raku easy exercise"

"Raku-Raku easy exercise" was introduced in an open lecture held by Nara Women's University. Its DVD was also used in a health seminar held by Shimoichi Town, and at Nara Prefecture General Rehabilitation Center.

Starting from Shimoichi Town, our "Community Checkup Method" has been introduced in many cities, towns and villages.

Community Checkup Method: Diagnosing, Prescribing and Implementing

Shingo TERAOKA and Gentaro MIZUGAKI
 Nara Women's University
 Community Welfare Summit NARA2015

A training workshop on community building was held for local government workers who are involved in rural development (November)

We are currently working on further requests for workshop, such as introducing welfare activities in a small community, collaborative activities in agriculture and welfare, and the development of easy community checkup method.

Furthermore, the success of this project has led to various events as follows. The project was featured on Shimoichi TV and webcasted / Nara Women's University and Shimoichi Town entered into a comprehensive partnership agreement / Publication of a research paper related to the project and a new collaborative study is being planned in Turkey