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Title: “Planning and Implementation of Rural Development Program Considering Farmers’ Motivation”

Studying Points

In most rural development programs, target beneficiaries are villagers and/or farmers who live in rural communities. Although program directors responsible for planning and implementing rural development programs try to facilitate positive changes among beneficiaries and sustain the program’s outcome, such situations are not always achieved as expected for many complexly intertwined reasons. This case focuses on the psychological aspect of farmers as target beneficiaries and provides opportunities to consider proper planning/implementation for sustainable achievement. Learners can develop their capacity for program planning and implementation in consideration of the psychological impacts of their work. This case is concerned with a rural development program. However, the concept of considering psychological aspects in planning and implementing development programs can be widely utilized for different sectors as well.

Basic Information

- Region : Rural areas in developing countries such as Africa
- Issue : Rural development
- Keyword: Motivation theory, Gender in Agriculture
- Country, District and Village: Greatland (A fictional country), Doka District, Maru Village
- Year: 2019

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Characters

Characters	Descriptions
Marco	Program Director, Area representative of a non-governmental organization (NGO)
Tomoz	District Agriculture Officer (DAO) in Doka District, Main Counterpart of Marco
Sense	Extension officer in charge of Maru Village
Sueol	Community leader
Hummer	Male farmer in the community
Tama	Wife of Hummer

Summary

Marco, an area representative of an NGO in charge of the Doka District, discussed an agricultural project for supporting small scale farmers in Maru Village with Tomoz, the District Agriculture Officer (DAO). They decided to implement a project to provide training opportunities and agricultural machineries to farmers based on the request by community leaders in Maru Village. Although farmers in the community initially had high expectations of the project, their self-motivation became markedly lower over time even though the project provided machineries. As a result, the project did not improve the livelihood of target farmers. In response to this result, Marco and Tomoz tried to analyze the reasons for the undesirable outcome and discussed improvement plans.

Key Questions in Reading This Case

The students, who will assume the position of Marco, are required to discuss the following points:

1. What information did this project use for planning detailed activities? How did Marco and Tomoz obtain the information? Do you think the information was enough and collected appropriately? What do you think should be the key information for planning and implementation of a rural development project? Please compare the case and ideal information collection.
2. Please discuss and imagine the self-motivation of both Hummer and Tama in each activity listed by considering the self-determination theory and temporal motivation theory (refer to *“Introduction to the Psychology of International Cooperation”*).
3. Please draw the motivation and skill/knowledge graph for both Hummer and Tama (Figure 2).
4. How would you improve the project for better results and sustainability considering farmers’ motivation? Please propose an improved project design (Table 3 and Figure 4).

1. Summary of Target Area

Greatland is a low-income country in sub-Saharan Africa with a population of about 25 million people. Its land size is equivalent to that of Kenya or Botswana (around 600,000km²). The country's Gross National Income (GNI) per capita in 2016 is 1,000 dollars and has been steadily rising in recent years mainly due to the country's relative political and macro-economic stability. While 40% of the population is living below the poverty line, there is a growing middle class. The population of this middle-class demographic has doubled in the last ten years since the government began to shift its main economic activities from public to private ownership through structural adjustment programs. The government has been consistently implementing a range of liberalization and privatization policies to create a more dynamic business environment.

Despite such efforts, the progress in infrastructure development in Greatland is still very slow with almost 90% of its rural roads unpaved and poorly accessible. Other public infrastructure such as irrigation networks, electric power distribution networks, and health and education facilities also need substantial improvement. Due to the insufficient and also poorly-managed public school system, the country's adult literacy rate is 62% for males and 51% for females.

In Greatland, regional variations in the development of basic infrastructure are prominent as public investment has been concentrated in the capital city and in the Coastal Plain Region near the capital city. Other regions, particularly the Northern Mountain Region and Western Marsh Region have received nominal public investment in infrastructure. Those regions suffered from long-lasting conflicts and public safety was a major issue until ten years ago when public security was finally restored. Nevertheless, these two regions are now developing very quickly, owing to the action of leading development agencies through foreign aid and also through the work of non-governmental organization (NGO) development initiatives which began after the end of the conflicts. Other regions, especially those near three major towns in Greatland, which are known either for their tourist attractions or newly-discovered mineral deposits, are catching up with the Coastal Plain Regions in terms of infrastructure and public health and education services.

Greatland is predominantly agrarian and around 80% of its citizens are engaged in agricultural production systems for their livelihoods. The rural population accounts for 85% of the total population. Due to wide geographical variations of the country, rainfall patterns and soil conditions vary significantly depending on

the region. The country ranges from semi-arid land to high-potential land in terms of agricultural suitability. While some areas have a large portion of arable land and three cropping seasons per year, other areas in the semi-arid zone have only one rainfall season with limited arable land. All the farmers, except for a very small number of medium- to large-scale commercial farmers, rely mostly on natural rainfall due to the lack of irrigation facilities and other related infrastructure. Most farmers own less than ten acres of land and practice subsistence agriculture. They grow pearl millet, maize, sorghum, cassava, sweet potatoes, beans, and peas. Some farmers in the hilly areas grow commercial crops such as coffee and tea. Local leafy vegetables are commonly grown in kitchen gardens for domestic consumption. Only a limited number of farmers grow vegetables and fruits for income generation purposes. The locations of such farmers are mainly concentrated in areas near large towns. Due to rapid urbanization and a growing awareness of nutrition and health in recent years, horticultural crops are in high demand. However, currently, not many types of horticultural products are available in the market. The shortage of vegetables and fruits during the dry season is a particularly pressing issue. There are a few international trading companies interested in exporting tropical fruits from Greatland to Europe but such exports are currently undertaken only on a small scale, mainly on a trial basis.

The government of Greatland, through its Ten-Year National Development Plan and also in its Five-Year Agricultural Sector Development Policy, promotes better market access for smallholder farmers with a view to uplifting their livelihoods and living standards. The country's Ministry of Agriculture (MOA) has been committed to fulfilling this promise by establishing a Directorate of Market Development within the ministry this year. MOA's Five-Year Agricultural Sector Development Policy clearly identifies horticulture as a high potential sub-sector and tries to encourage smallholder farmers to shift into commercial farming in horticulture.

The country has two levels of administrative divisions: regions and districts. There are a total of six regions in the country each with around five districts. MOA has a system of agricultural extension service delivery, which covers most of the districts. The current national average coverage is one extension officer per 2,000 farm households. NGOs, universities, and the private sector also provide some extension services for crop production; however, extension services of such institutions are not offered in a systematic manner. The availability of extension services by non-state stakeholders is often concentrated in densely populated and economically dynamic areas. The efficiency of delivery of extension services has always been a major problem with limited means of transportation, inaccessibility of communities during rainy seasons, and institutional weaknesses

among many of the farmer groups. MOA also has the Regional Agricultural Research Institute (RARI) as well as the Regional Agricultural Training Center (RATC) in each of the six regions, where about a dozen researchers and agronomists conduct basic research and training. There are many agricultural producer groups, many of which are community-based, working towards the goal of increased productivity and profitability. Gender relations within households demonstrate significant variation depending on tribe, ethnic group, and religion. Although there are a small number of ethnic groups in which both women and men are equally entitled to property such as land and houses, the majority of communities maintain a traditional patriarchal system, where women are not allowed to own any property. Since there is very little research conducted thus far on gender relations in rural Greatland, little is known about how farmer families in Greatland manage household budgets. Nevertheless, many development practitioners have observed that while women of some tribes are denied the right to manage household income, other tribes have “purses” for both husbands and wives, which are held separately. Very few couples seem to share a common purse for family income and expenditures. Women’s participation in agricultural work, both in cultivation and in animal husbandry, is high, although women in some communities have strict mobility restrictions due to religious beliefs. In such communities, it is frowned upon for women to be seen sitting in meetings with unrelated men. In such communities, religious leaders are usually very influential in sending religious messages to community members.

Doka District is located in the Western Marsh Region. In the recent years, projects supported by other development partners and NGOs have been actively implemented due to the favorable environment for agriculture production. Maize as a staple crop was grown in wide areas, while small-scale farmers have gradually introduced horticulture crops for income generation since the end of the conflict. However, the number of farmers who could start horticulture crops is limited due to less cultivated land. Even if farmers attempt this, many of them cannot earn enough income because of low quality and quantity of crops, and limited access to markets. The gender situation and norms in this district are relatively better compared to other areas, so female farmers can attend the same training opportunity with male farmers. It was said that while women did over 70% of workloads for farming, men dominated decision making in many areas. As a

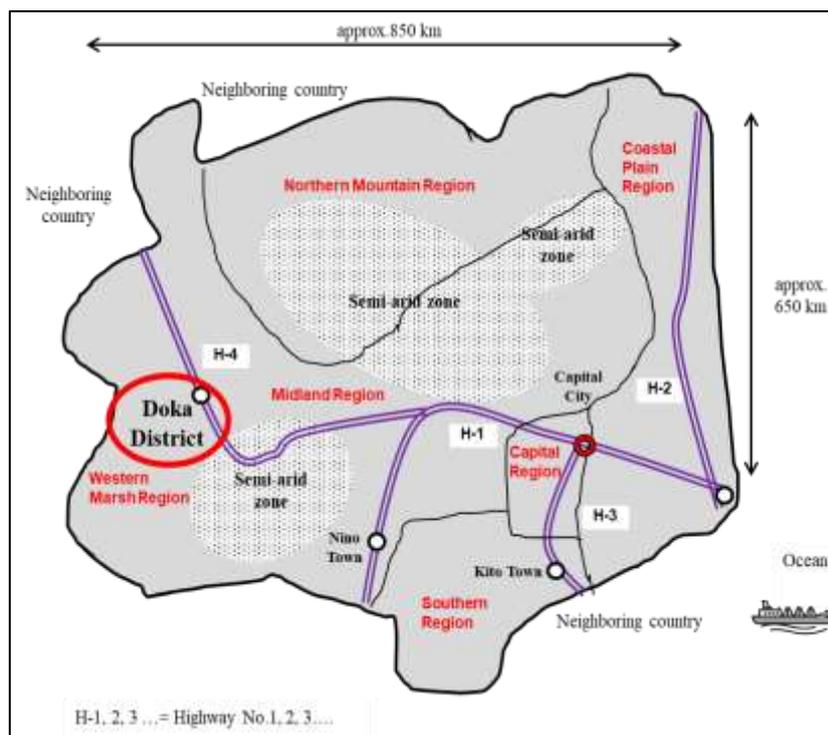


Figure 1. Country Map of Greatland

result of this dynamic, representatives from the community who attend important meetings or trainings are mainly men.

2. Project Activities

Marco, who was an officer in charge of Doka District, started to plan a new agricultural project to support small-scale farmers under a national program of his NGO. Marco consulted with Tomoz, the District Agriculture Officer of Doka District, on the new project and decided to implement it in Maru Village first, where there was high potential for agriculture, but less support from any development partners. Tomoz introduced Sense, an extension officer in charge of Maru Village, to Marco and three of them agreed to visit Sueol, who was a leader of one of the biggest communities in the village. At the meeting, a small number of community representatives shared information about the current situation in the village. They said that only a few farmers gained better income from horticulture crops, while the majority had difficulty expanding farmland due to a shortage of water during the dry season and an overall lack of labor. In addition to that, community members shared that farmers' skills were poor and their access to markets was very limited. Based on this information, Marco, with support from Sense, organized a participatory workshop for a small number of representatives

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including Sueol and committed himself to creating an action plan after identifying the participants' main problems.

The action plan was implemented as indicated below.

Activities 2 through 11 will be repeated in new villages, which will be selected every year. A total of three cycles will be undertaken until the end of the five years' project.

Table 1: Implemented Action Plan and Details of Activity: Maru Village in Doka District

Timing	Activity	Details of Activity
1 st year		
January	Project Orientation session	Marco organized a meeting with Tomoz and extension staff including Sense, and discussed the project idea.
February	Selection of target village and community	Marco, Tomoz, and Sense selected Maru Village as the first site.
March	Participatory workshop for needs assessment and Action Plan making	Marco and Sense facilitated a participatory workshop with representatives from the selected community including needs assessment for machinery and equipment, and made an action plan.
May	Provision of agricultural machinery and power pump for irrigation	Responding to the needs of the representatives from the target community, the project procured and provided small tractors for ploughing and seeding, and a small power pump for irrigation for 10 members of targeted community.
June	Establishment of trial and demonstration farm	Based on the needs shared by community representatives, Marco arranged to establish trial and demonstration plots for new crops and farming techniques at a Regional Agriculture Training Center (RATC) close to the community.
July	Teaching Material Making	Marco and Tomoz made teaching materials supported by Regional Agricultural Research Institute (RARI) for training of trainers.
October	Technical Training	Marco, Tomoz, and Sense provided training on farming techniques and skills for all members of community (not only representatives) at the demonstration plot in RATC.
November	“Circulation Board” System	Marco proposed and implemented a “Circulation Board” System, through which Sense and members of community share information on all matters

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		related to agriculture production and marketing.
December	Training for administration/management of rental machinery business	District officers and extension staff including Tomoz and Sense conducted training for the operation and maintenance of machinery and the administration and management of a machinery rental business.
2 nd year		
January	Market Survey	Marco and Tomoz conducted a survey on market needs and prices for the crops that had been introduced in demonstration plots. The results were circulated to community members through the "Circulation Board."
February	Book Keeping Training	All extension staff received bookkeeping training before training for farmers. The extension staff including Sense visited farmer groups and taught bookkeeping during various meetings.

【Exercise 1】

Please draw graphs of motivation and skills/knowledge of Hummer and Tama who participated in the project.

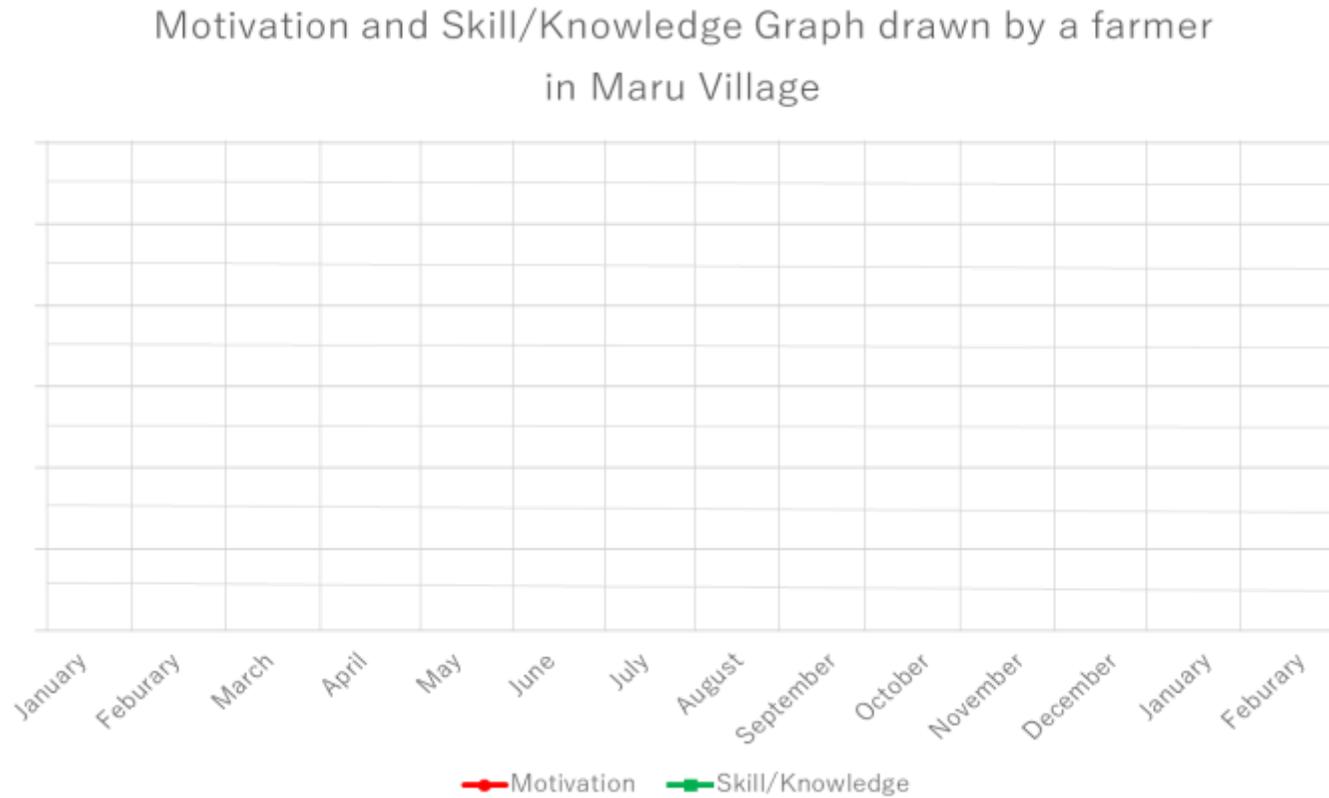


Figure 2: Format for Graph of Motivation and Skills/Knowledge

3. Reaction of Project Participants

Representatives of the community headed by Sueol welcomed their selection as beneficiaries. They actively shared their problems with Marco and Tomoz during the participatory workshop in February of the first year. Based on the farmers' feedback during the workshop, Marco decided to provide a small tractor for the expansion of farmland and a small power pump for irrigation from an adjacent river. Marco was satisfied with the positive reaction of representatives. Three months after the participatory workshop, in May, the project provided a long-awaited tractor and power pump for ten farmers including Hummer. In June, Marco instructed project staff to establish trial and demonstration plots with new crops to introduce new techniques such as suitable planting density of plants, the application of fertilizer, and the control of pest and disease at the RATC located close to community.

At the same time, Marco and Tomoz made teaching materials supported by the RARI for technical training for extension staff on new crops and new techniques. Marco organized technical training for extension staff including Sense using the demonstration plot in October. During this period (almost five months), targeted farmers had no chance to participate in any project activities. Then, Marco proposed an idea to implement a "Circulation Board" System for accelerating communication and information sharing between target farmers and Sense as an extension staff, and the system began. Finally, in December, seven months after the provision of machinery, the project conducted training on the operation and maintenance of machinery and the administration/ management of a rental machinery business. District officers and extension staff including Tomoz and Sense participated in the training. However, some of farmers could not use machinery any more since the machine had been broken by the time of the training.

After the machinery training, Marco and Tomoz visited both adjacent and regional markets and conducted a survey on the requirements of quality and quantity, required crops, prices, etc. since farmers insisted during the first participatory workshop that the lack of a market is one of their biggest problems. The results of market survey were shared with target farmers through "Circulation Board" System. Immediately after sharing this information, Marco realized the majority of targeted farmers didn't keep farming records including information on how much they earn or spend. The project then provided training on record keeping for extension staff including Sense who was expected to teach farmers. One year after the commencement of the project, none of the farmers had increased their

income from horticulture, which was the purpose of the project. The project was not able to achieve anything it had expected.

4. Review Session and Meeting

Responding to disappointing results, Marco, together with Tomoz and Sense visited targeted farmers individually and interviewed them about the project activities. During his interview, Hummer, one of the targeted farmers, mentioned, "I expected a lot to come from the project, because it provided machinery. I thought farming would change. But at the same time, I was a little bit nervous when the machine arrived because I didn't know how to use it. Although the project organized the training on machinery, my machine was broken at that time. I understood why mine was broken through the training. But it was too late." He added, the "Circulation Board" was good and I learned carrots are good for better income. However, I did not know how to grow carrots since the training at the demonstration plot was only on tomatoes. Market information is nice. But I don't know how to use such information. What should I do?"

Hummer's brother added, "The training on bookkeeping was good. I understood my kale did not bring any income to me. So could you please tell me which crop I should grow? Carrots?" Tama, one of the female farmers and wife of Hummer, was critical of the project, saying, "I was also happy when I heard machines will come. I thought my workload would be reduced since machines would do everything such as ploughing and weeding without me. However, my husband Hummer expanded our plot and I had to spend much more time weeding. After a few weeks, the machine broke. I thought my husband didn't follow proper usage or know how to maintain. This was an obvious result, as we received the machine without any instruction. I was interested in participating in the technical training on farming. It was a great chance to change our farming. However, only my husband attended the training and he did not share what he learned. I was tired of the project."

As a last comment from farmers, Sueol asked Marco, "When will you start the next project for us? We need a cooling facility to store crops!"

5. Discussion on Next Site

The project turn out to be a complete failure. Only a few of the machines provided were used, and those were not used continuously. Marco and Tomoz could not find any target farmers who increased their income from horticulture crops as a result of project activities. Sueol's question about what they can receive next was representative of other farmers' attitudes.

Marco came to understand gradually that the project did not fail because of the provision of the machinery, but rather because the psychological aspect of beneficiaries was not considered. Then, Marco learned of the Self Determination Theory developed by Prof. E. Deci after searching for useful information online using "Motivation" as a keyword. He read a book titled "*Why we do? What we do?*" by E. Deci and started to think carefully about the relationship between skill and motivation. He thought that without motivation there could be no improvement of skills. He imagined Tama's situation regarding motivation and skills/knowledge as depicted in the graph below. (Please refer to Table 2 for considering level of her participation and influence in decision-making.)

Motivation and Skill/Knowledge Graph drawn by female farmer in Maru Village

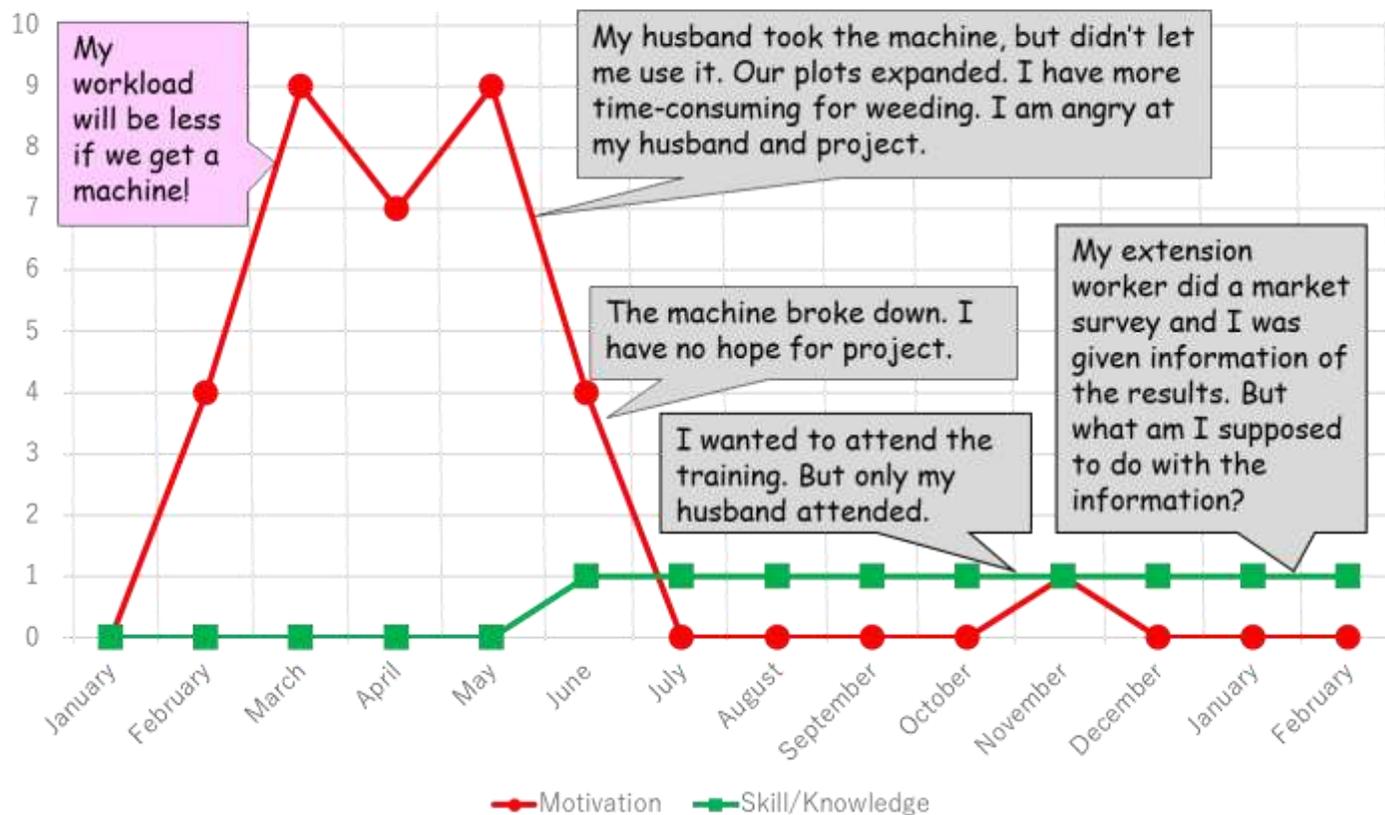


Figure 3: Graph of Motivation and Skills/Knowledge by Female Farmer

Table 2: Implementers and Participants of Action Plan: Maru Village in Doka District

Timing	Activity	Implementers/Organizer	Participants
1 st year			
January	Project Orientation session	Project Director and District Agriculture Officer (DAO)	Extension Staff
February	Selection of target village and community	Project Director, DAO	Extension staff and Representatives of community
March	Participatory workshop for needs assessment and Action Plan making	Project Director and Extension Staff	Representatives of community
May	Provision of agricultural machinery and power pump for irrigation	Project Director and Extension Staff	Selected ten farmers (Many of them are representatives)
June	Establishment of trial and demonstration farm	Project Director and Regional Agriculture Training Center (RATC)	Farmers in community
July	Teaching Material Making	Project Director and DAO supported by Regional Agricultural Research Institute (RARI)	
October	Technical Training	Project Director and Extension Staff	Representatives of community
November	“Circulation Board” System	Project Director and Extension Staff	Farmers in community
December	Training for administration/management of rental machinery business	Project Director and Extension Staff	Extension Staff and representatives of community
2 nd year			
January	Market Survey	Project Director and DAO	
February	Book Keeping Training	Project Director and Extension Staff	Extension Staff and farmers in community

Marco shared his idea on the Motivation Theory with Tomoz, and they agreed to consider and introduce the concept on motivation to their project. Tomoz had faced a problem called “Dependency Syndrome” since starting his work as an extension staff. So he expected a project which took into consideration farmers’ motivation would solve such a problem. They began to discuss the improved project design with other staff.

Motivation and Skill/Knowledge Graph of farmers in Next Site

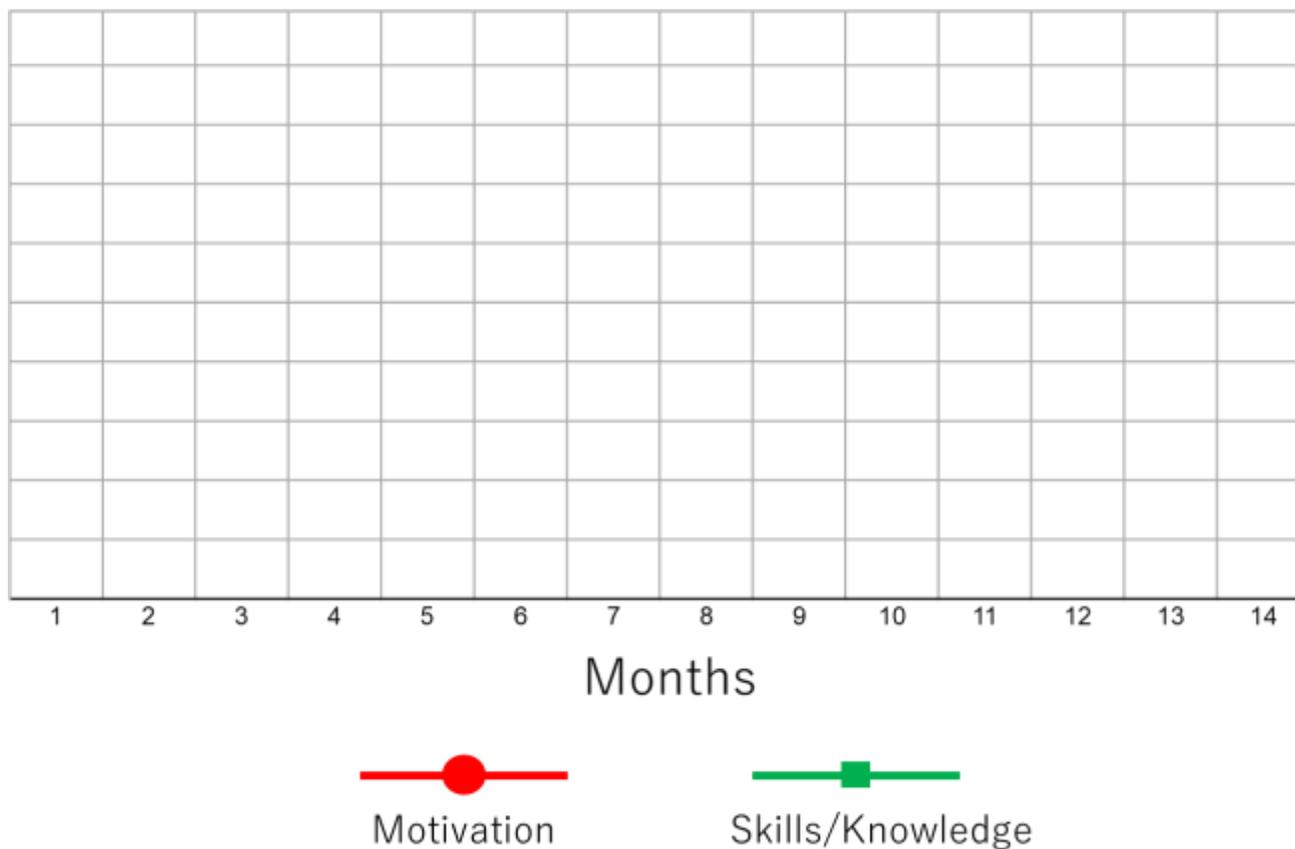


Figure 4. Format of Motivation and Skills/Knowledge Graph

Essential Literature and Video

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