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JICA

Introduction to **the Psychology of International Cooperation**

August 2016

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Seventeen motivation case studies *collected from the field*

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Contents

Introduction to Psychology

Acronyms and Abbreviations

FABLIST Forum	Farm Business Linkage Stakeholder Forum
JICA	Japan International Cooperation Agency
SDT	Self-Determination Theory
SHEP	Smallholder Horticulture Empowerment and Promotion
SHEP Phase 1	Smallholder Horticulture Empowerment Project

Contributing Authors

This booklet was developed by an academic supervisor and a team of coauthors comprised of Japan International Cooperation Agency (JICA) staff members and a consultant, as listed below. The case studies described in this booklet are based on information gathered during research conducted from April to October 2015 in several developing countries as well as in Japan.

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While "3. Case Studies" is based on information concerning actual events and comments gathered during the field study, identifiable details such as the following have been changed in order to protect the privacy and confidentiality of the research subjects: the names of people and institutions, the names of specific fields of expertise and the names of the particular agricultural subsectors.

Foreword

Many of the practitioners engaged in JICA's technical cooperation have consistently held one belief, and that is one pertaining to the fundamental importance of human resource development for any country's development. True, a similar belief in the importance of human capital is widely held among many development-related agencies and donors. As I see it, however, what distinguishes JICA (or Japan) from other donor agencies (or countries) is that it places particularly strong emphasis on the proactive attitude of people. This attitude will continuously cause people to, literally willingly, look for problems in their environment and make them better. This conviction held among the Japanese aid practitioners can, in a way, be interpreted as a micro-level expression of the basic principle of Japan's ODA: the self-help principle. Given the importance of such capacity development, various efforts have been made to unlock the process leading to it, including those by JICA. The current volume is an important addition to such work.

This volume's contents are based on the experience and knowledge coming from a project in Kenya on the empowerment of small-scale farmers. Premised on a theory in psychology called the self-determination theory, the project has succeeded in constructing a mechanism through which various actors -- e.g., government officials, agricultural extension workers, and farmers -- contribute collectively to the achievement of the project, while they work on their own, driven by their individual motives. The project turned out to be successful, and encouraged by that success, similar projects relying on the same premise are expanding to other African countries and elsewhere, producing similarly positive results.

This volume aims to look back at the experiences accumulated in that Kenyan project. It is an attempt to codify, with the help of a theory in psychology, the type of knowledge that has hitherto been held among people as "tacit knowledge," and turn it into "explicit knowledge." In other words, it is an effort to open the black box of the process of capacity development, and as such, it merits the attention of all those who are involved in technical cooperation.

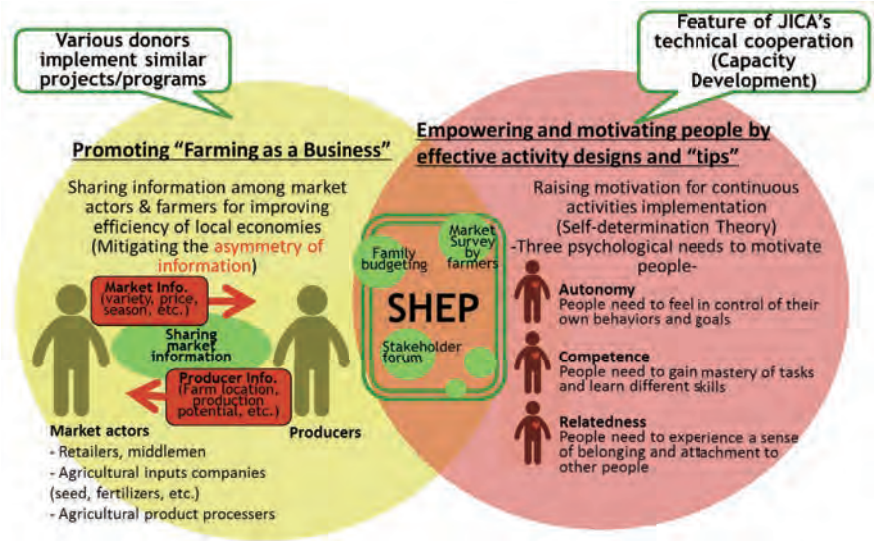
I am delighted to see that in tandem with the publication of the current volume, efforts are being made by the Kenya project members to add to the psychological knowledge on human behavior, through research papers and academic presentations. I am indeed encouraged to see an example of our technical cooperation that is evolving so that it not only takes full advantage of academic knowledge in its implementation, but also feeds back to the academic society what it has found throughout implementation. That is indeed an inspiring and praiseworthy endeavor, and I would like to express my deepest respect to everyone who has participated in such work.

Hiroshi Kato
Vice President
JICA

1. Preface Background and Aim of This Booklet

The Government of Japan has been supporting smallholder farmers in Africa for over half a century. It is now promoting profitable agriculture in accordance with many African countries' aspirations of practicing farming as a business. The SHEP approach(http://www.jica.go.jp/english/our_work/thematic_issues/agricultural/shep.html) plays a key role in assisting Africa with profitable agriculture, which was actively pursued in JICA's various technical cooperation projects.

The SHEP approach has two underpinning pillars as shown below: (1) Promoting farming as a business and (2) Empowering and motivating people by effective activity designs and tips.



The first pillar—promoting farming as a business—aims at creating an efficient local economy by sharing market and producer information among the market stakeholders. In other words, SHEP implements

activities to mitigate the asymmetry of market information held by various actors in the market. On the other hand, the second pillar—empowering and motivating people—refers to theories on motivation, particularly the Self-Determination Theory (SDT) that Edward Deci et al. proposed. SDT identifies three psychological needs; namely, the needs for autonomy, competence, and relatedness. The SHEP approach actively promotes activities which provide support for these three psychological needs. As illustrated above, the originality of the SHEP approach rests on activities which fulfill the essence of both pillars. For instance, farmers conduct market surveys in which they go to the market and interview market players, such as buyers. They obtain information on best-selling crops, price fluctuations, preferred quality, and so on so that the asymmetry of information is mitigated. Moreover, since the market surveys are conducted by the farmers themselves, they are able to feel a sense of accomplishment, thereby supporting their need for competence. The farmers then decide which crops to grow based on the information that they have gathered from their market survey. This process supports their need for autonomy. SHEP's market survey, in the end, satisfies the requirements of both pillars.

These activities, which support people's psychological needs, are not necessarily limited to the activities undertaken in the SHEP approach. In fact, JICA has accumulated case studies on good practices through its long history of technical cooperation in the field. Today, a myriad of JICA projects implement activities filled with innovative tips for motivating people. Such tips, however, tend to be developed and accumulated as tacit knowledge by individuals, without there being any opportunity for them to be shared widely among others or utilized on other occasions.

Before I started to work on SHEP Phase 1, I had worked as an expert

in the field of farmer training and agricultural extension for a rice project in Kilimanjaro, Tanzania. This project adopted the farmer-to-farmer extension approach, where core farmers who were trained at the training center taught other farmers using their own rice fields to demonstrate various techniques. This approach was very successful in disseminating basic rice cultivation techniques to a large number of farmers who, after learning the techniques, enjoyed the benefit of an increased yield. Without being paid, these core farmers were actively involved in a range of community activities on top of teaching rice farming to others. When asked, they told me the reasons for their active community work, which included the following: "I am happy that I can help our community"; "I feel proud of myself when I am called a teacher by other farmers"; and "I simply enjoy teaching others." Some wondered why the core farmers did what they did without any monetary reward. There were also people who suggested: "Since the core farmers are so skilled, we should pay them to teach at other irrigation schemes." Having heard such comments, I had a gut feeling that if we paid them, they would stop doing the community work they were actively engaged in. I was frustrated since I could not explain to others the reason for having such a gut feeling. By coincidence, however, I came across a book entitled *Why We Do What We Do* by Edward Deci, which gave me an eye-opening insight into the issue of motivation. The project in Kilimanjaro was JICA's longest-running agricultural cooperation project in Africa. As such, the farmer-to-farmer approach must have been the culmination of the knowledge and wisdom built up by my predecessors. Building upon and further developing on this experience, I designed activities based on SDT during SHEP Phase 1, which I was then working on as a project team leader. This is the backdrop to SDT playing a pivotal role in the SHEP approach.

This booklet details a variety of case studies that have occurred in technical cooperation projects for different level of stakeholders: central government staff, local government staff and the final beneficiaries (farmers). It examines the behavior of the individuals concerned and its consequences from the view point of SDT. The analyses try to convert the tacit knowledge possessed by individual project experts and consultants into explicit knowledge that can be shared with the reader. The "Tips for Project Planners and Implementers" columns at the end of each case study outline the lessons learned from the particular case study. The "Introduction to Psychology" columns introduce the readers to some of the academic theories and psychological experiments related to the case study. At the end of the booklet, summaries of academic papers that analyze the SHEP approach through SDT are introduced.

I hope that this booklet will inspire readers to learn more about theories on motivation and help them put what they learn from this booklet into practice in their work. JICA is committed to providing high quality technical assistance to partner countries, and it would be my greatest pleasure if this booklet were to help actualize such assistance.

Finally, I would like to extend my heartfelt gratitude to those experts, consultants, counterpart personnel, and farmers who cooperated with the interviews conducted for this research. I greatly appreciate their cooperation and contribution.

Jiro Aikawa, JICA Senior Advisor
(former Team Leader of SHEP Phase 1)

2. Theories on Motivation

(1) Motivation and Self-Determination Theory

The psychological aspect of the SHEP approach is based on a theory of motivation called Self-Determination Theory (SDT), which was developed by Edward Deci and Richard Ryan (Deci & Ryan, 1985). SDT is considered to be one of the defining factors behind the success of the approach. SDT was formulated in the 1970s, and it has played a major role in changing the way we view human behavior and motivation. One of the most notable achievements of SDT is the discovery and explanation of the **undermining effect** (discussed in more detail in the "Introduction to Psychology 4" column), where rewards decrease the degree of subsequent engagement in a task.

The classical notion of motivation

According to the classical notion of motivation in traditional psychology, rewarding behavior was assumed to always increase the subsequent engagement, while punishment would always decrease it. The underlying psychological mechanism for this way of thinking is illustrated in the figure below. Under this concept, all behavior is caused by **drives** (see far left of figure). Drives are based upon physiological needs such as hunger, thirst, and sleep, as well as social needs like money, punishment avoidance, power, and social approval. All of these needs, when satisfied, would enable the individual to have a better chance to survive. Drives are aroused when there is a deficiency in a specific need (e.g., hunger is aroused when there is a lack of nutrition). Discomfort is caused when a drive is aroused, so the individual will attempt to subdue the discomfort.

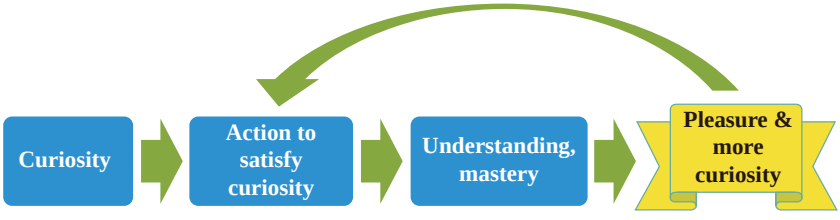
At first, they may not know how to subdue the discomfort, so they behave in ways that do not satisfy the need. However, after some trial and error, they will find a way to satisfy the need and ease the discomfort. Consequently, they will learn that the behavior they have engaged in will satisfy the need in the future. Conversely, the threat of punishment causes anxiety, so they will learn ways to avoid this anxiety. The notion of using reward and punishment—or the carrot and the stick—to motivate people is based on this classical notion of motivation.

The mechanism of classic motivation

The classical drive theory of motivation is useful in explaining many types of behavior. In fact, many would consider it common sense that using the carrot and the stick is an effective way to motivate people. True, there are cases in which the carrot-and-stick approach is indeed valid. However, the effect of this approach is in most cases short-term. That is, the desired behavior will continue as long as the reward or punishment is administered, but will be discontinued almost immediately once it is withdrawn.

A new concept: Intrinsic motivation

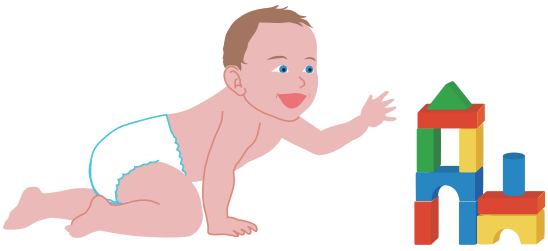
The basic idea behind classical drive theory can be paraphrased as "people will not work unless they are made to" or "people need to be motivated by something or someone else." Is this really true? You could probably think of many instances in which this is not the case. A trove of such examples can be found in small children. They will continuously engage in what seems to be the most trivial play. However, the play will not satisfy any of the child's physiological or social needs—it will not make them full and, in most cases, it will not earn the praise of their parents (or earn an admonition), but the child will continue nonetheless. This kind of behavior cannot be explained by drives, and it is based on a new concept: **intrinsic motivation**. The roots of intrinsic motivation are interest and curiosity.roots of **intrinsic motivation** are interest and curiosity.



The mechanism of intrinsic motivation

The above figure illustrates the mechanism through which intrinsic motivation causes behavior. When curiosity occurs, the individual acts in an attempt to satisfy it. When the curiosity is successfully satisfied, it will bring about understanding towards the object of curiosity and/or mastery in its handling. This will cause a cycle in which further curiosity is inspired and further action is prompted in order to satisfy this fresh curiosity. One important difference from the last figure (where learned

behavior is repeated) is that the new action to satisfy curiosity in this figure needs to be novel, which requires creativity.



The classical concept of motivation is now called **extrinsic motivation**, which is a stronger source of motivation as it is related to needs that are essential to survival, but once a need is satisfied, the motivation disappears. Intrinsic motivation is relatively weak, but it is constantly active. However, when extrinsic motivation is strong, it suppresses intrinsic motivation. This often occurs when there is a major deficiency with regard to a specific physiological need. Research has shown that intrinsic motivation results in not just better performance, but also better psychological health.

Classification of extrinsic motivation

Behavior	Non-self-determined					Self-determined
	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal
Motivation	Amotivation	Extrinsic Motivation				Intrinsic Motivation
Regulatory Styles	Non-regulation	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	Intrinsic Regulation
Example Comments	I do not do it.	I do it because I was told to do it.	I do it because I feel ashamed if I do not do it.	I do it because I think it is important.	I do it because I think it is the right thing for a person to do.	I do it because I enjoy it.

Source: Adapted from Deci & Ryan (1985)

Classification of motivation in SDT

Many of the tasks involved in development projects are not inherently interesting (i.e. not a source of intrinsic motivation). Does this mean that we are doomed to prod our trainees extrinsically? Fortunately, that is not the case. As described in the above illustration, SDT has a sub-classification of extrinsic motives.

The most heteronomous type of extrinsic motivation is *external regulation,* in which behavior is regulated by external rewards or punishment. In this state, behavior is enacted because the individual is coerced to do so. If a person has not internalized the value of engaging in the task, they will not do it unless they are prompted to do so. To the right of external regulation is *introjected regulation*. In this case, the value of engaging in the task has been somewhat internalized, and behavior is enacted without external rewards or punishment, thereby making it seem voluntary. However, the person is not fully convinced of the importance of the task, and only carries it out for the sake of superficial reasons such as "it would be embarrassing not to do so" or "because it would make me look good if I did." Engaging in a task for the sake of feelings of superiority is unsustainable, because the will to engage in it quickly diminishes when the individual faces setbacks and thus cannot show off. In contrast, engaging in certain behavior in order to avoid shame or embarrassment will drive a person to zealously engage in the activity. At first glance, it may seem that the person is undertaking the task voluntarily. However, the stress related to doing a task under introjected regulation is strong, and the risk of undermining the person's mental health is high if the activity continues for a prolonged period. *Identified regulation* is a state in which the value of engaging in the task has been internalized relatively deeply, so the individual is convinced of the importance of the task. Since there is conviction in the performance of the activity, they are able to continue even

in the face of setbacks. In *integrated regulation*, the most autonomous type of extrinsic motivation, the value of the activity has been fully embraced and integrated into the self, so engaging in the task is a cherished part of life.

People usually have multiple types of motivation towards a single activity. For example, farmers could be participating in training because of a fear that they would be scolded if they didn't (external regulation). At the same time, however, they may feel that the training is important for them since they can improve their farming techniques (identified regulation). They may also feel that they simply enjoy learning new technologies (intrinsic regulation). It should be noted that there is usually a trade-off between external regulation and internal regulation: the less autonomous the extrinsic motivation is, the less likely it is that there will be intrinsic motivation.

Autonomous motivation is generally as sociated with better performance and better mental health. Note that these types of motivation are *not* a stage theory—you do not necessarily need to start at external regulation and work towards more autonomous motivation. In fact, it is difficult to internalize behavior that is originally externally regulated, so you should aim for motivation that is as autonomous as possible from the onset.

Facilitating autonomous motivation: The three basic needs

SDT assumes that it is necessary to support three basic psychological needs to facilitate autonomous motivation. We use the term "support" instead of "satisfy" when referring to these three needs, because it is not technically possible to completely satisfy these needs. These needs differ from the needs for extrinsic motivation, which are **deficiency needs**

(i.e., where a lack of a certain need will lead to motivation to fulfill that deficiency). For example, hunger will drive a person to acquire food, and this hunger will be satisfied once the person has a full stomach. However, when there is a deficiency in regard to the basic needs in SDT, motivation decreases and mental health is impaired. Additionally, there is no state in which these needs can be considered to be satisfied. (Strictly speaking, the curiosity mentioned in the figure illustrating the intrinsic motivation mechanism cannot be satisfied, either.)

The three basic needs assumed by SDT are the **need for autonomy,** the **need for competence**, and the **need for relatedness**.

The **need for autonomy** is the desire to act on your own volition—or rather, the desire to *not* be controlled by others. People do not want to be the pawn in a chess game, but the chess player (de Charms, 1968). It is very easy to undermine the need for autonomy; just force somebody to do something. When a parent says "Do your homework!" the child will often reply, "I was just about to do it! I don't want to do it anymore!" This is a typical example of the need for autonomy being undermined.

Conversely, some care and effort is required to provide **autonomy support**. Below are some of the things to keep in mind to support someone's need for autonomy.

1) Be careful of the language that you use, and never order or command someone to do a task.

   As soon as someone feels that they are being forced by you to do something, they feel that they have become your pawn. Rewards and punishment undermine the feeling that the person is doing a task on their own volition; in principle, rewards and punishment should not be used for the sake of motivating people.

2) Communicate the rationale for engaging in the task.

   Once someone understands the importance of a task, it is easier for them to feel that they are doing it on their own volition. In contrast, if there is a lack of explanation and they do not understand why they are doing the activity, they will feel that they are doing it just because you are forcing them to do so.

3) Accept feelings of discontent and criticism towards the task. Reprimanding someone for voicing their doubts about the task will not make those feelings go away! On the other hand, if you accept their opinions and feelings, they will feel that their viewpoints are regarded as meaningful, and it will make it easier for them to feel that they are acting on their own volition.

4) Provide choices in terms of what task to do and how to do it.

5) Ask for their opinions on how to do the task.

Research in SDT has suggested that this need is the most important of the three, but a vast majority of the studies have been done with mid- to upper-class Western subjects—virtually no studies have examined the

poor or destitute subjects who would be the target of technical cooperation projects in agricultural and rural development. As many readers may know from experience, any project that provides only technology and not much direction to the poor and destitute would be doomed to fail. For such people, it is probably more important to provide support for competence before providing support for autonomy.

The "competence" in the **need for competence** has a slightly different meaning from the commonly used term. Competence in SDT is defined as "the ability to interact effectively with one's environment." We feel competent when we have successfully made an impact on our environment in cases such as when we are able to achieve a task as planned in advance, when we feel that our abilities are improving, and when our curiosity is satisfied. The need for competence is the desire to feel such competence. In most cases, people facing adversities such as poverty or extreme poverty have not had the opportunity to be educated or trained, and it is very difficult for them to feel a sense of competence.

Competence support requires consideration of the following:

1) **Design tasks so they are optimally difficult**

If a task is too difficult, the person will not feel that they have successfully made an impact on their environment. To provide competence support to the poor and destitute, it is necessary to break down the goals of the task into small steps and increase the number of milestones at which they can feel the impact of their actions. It is important for them to feel that they were able to achieve the goal *using their own abilities*, so it is not a good idea to provide too much help. Conversely, if a task is too easy, the person will not feel that they have made a meaningful impact or that they are improving at the task, so they will not become autonomously motivated to do the task.

2) **Enable participants to accurately evaluate their achievements in the task**

Try to remember the first time you did a challenging task. You were probably not able to tell if you were doing the task properly or not. However, if you had had a good supervisor, that person would probably have provided you with feedback that was helpful for your understanding of how well you were doing. It is important to not just give someone undertaking a task general praise, but to be specific about what the person is doing well so that they gain knowledge that will be useful in judging how well they are doing the next time they are in a similar situation. Using methods to objectively assess progress, such as recordkeeping, would also be useful.

3) **Provide a clear structure**

If someone understands why, when, what, and how much they

need to do in order to attain a specific objective, then they will be able to accurately evaluate their achievements, as described above. Additionally, since they know how much effort is required to achieve their desired result, it will also support their need for autonomy, as they will be able to decide how much effort they want to put into the task. In development projects, it is always a good idea to present a specific itinerary or schedule, as the participants will be able to adjust their plans and allow for the time that the project requires. In contrast, if participants are not informed of the plans beforehand and are given a task without prior notice, they will most likely feel that they are being forced to do it regardless of their own will.

The **need for relatedness** is the desire to have good relationships with others. The relationship between the person giving the task and the person receiving the task has a big effect on the latter's motivation towards the task. Try to recall some inspiring words that your favorite teacher told you when you were a student. Now imagine that those words had been

said by a teacher that you didn't like. Most people would probably have felt less motivated by the latter.

Being trusted by the people undertaking the task is the most important thing for **relatedness support**. In order for you to gain their trust, they need to feel that they can rely on you if they have trouble achieving the goals of the task. This is easier said than done, but it requires the following:

1) **Commitment**

   In order for the people undertaking the task to feel that they can rely on you, you need to be both physically and psychologically available. To be regarded as physically available, you will need to meet them regularly. The more often you meet, the easier it will be to nurture feelings of trust. To be regarded as psychologically available, you will need to make them feel that they can turn to you without hesitation if they are in trouble. It is important that you not only meet several times, but also get them to feel that you understand them and their needs well.

2) **Attentive listening**

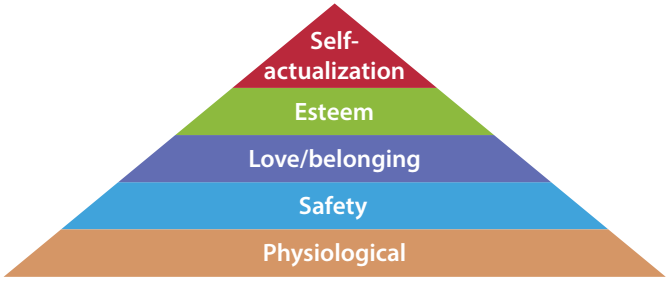
   In order for the participants to trust you, you need to avoid answering their comments negatively, and make sure that you listen attentively to what they have to say. You should not interrupt what they have to say even if you do not agree with it, and you need to sincerely try to understand why they think that way. This kind of attentive attitude is crucial in forming trust.

SDT's basic premises regarding types of motivation and basic psychological needs have been tested and confirmed in several countries, and they have been confirmed to be valid regardless of whether the

country's culture is Western or Eastern. It has yet to be tested in several of the countries in which development projects are to be conducted, but there is good reason to believe that SDT is a universal theory that will be valid in those regions, too.

(2) Maslow's Hierarchy of Needs

One of the most famous theories of motivation is Maslow's hierarchy of needs, as depicted in the figure below (Maslow, 1943). This groundbreaking theory proposes that physiological needs are not the only important factor that motivates human beings. Maslow's theory is one of the most important roots of SDT. In his theory, the needs are represented as a pyramid in which the more basic needs located towards the bottom of the figure must be satisfied before the higher needs can be addressed.



Source: Adapted from Maslow (1943)

Pyramid diagram illustrating Maslow's hierarchy of needs

The most basic of the five needs—physiological—are the basic physical needs that are required for survival, such as food, drink, and sleep. Safety needs represent the desire to live without having to worry about physical, physiological, or psychological threats. The assistance provided in international cooperation projects for the poor addresses these two types of needs.

Love/belonging is the desire to be loved by your significant others and to have a sense of belonging to a group. In terms of evolution, humans have survived through cooperating with each other, and we fear being ostracized. Once a person belongs to a group, they want to be accepted and

respected by the group members—this is the need for esteem.

The highest need in Maslow's hierarchy is self-actualization, and Maslow assumed that all four of the lower needs had to be satisfied in order for people to be able to pursue it. Maslow was a pioneer in that he pointed out that even if our basic needs are satisfied, we cannot lead a happy life unless we live a lifestyle that matches who we are. Humans are able to find ways of making life more enjoyable and satisfying for themselves.

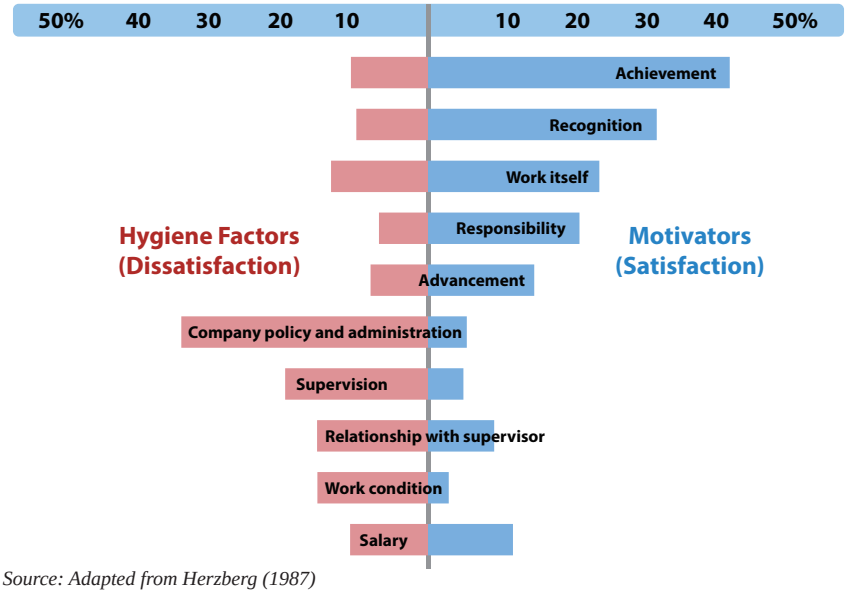
Maslow's theory is very convincing, and many who work on development projects have no doubt been inspired by it. However, the assumption that lower needs must be satisfied in order for a person to pursue higher needs is baseless. For example, the humans that created the cave paintings during the Stone Age were probably unable to stably satisfy their physiological and safety needs, but they were still able to make such sophisticated pieces of art. The basic needs at the bottom of the pyramid are indeed important, but we must not forget that the higher needs are also important *even if the lower needs have not been completely satisfied.* In terms of development projects, satisfying just the lower needs alone would probably not satisfy the participants. It is also necessary to support their needs regarding their standing within the groups that they belong to and also their self-actualization. One reason why the SHEP approach was so successful in Kenya was because it not only supported the bottom two needs through increasing crop production and marketing, but also the belonging and esteem needs through its group activities. It even addressed their also self-actualization needs, as quite a few farmers commented: "I have become a better person through SHEP."

(3) Two-Factor Theory: Addressing not just the positive, but also the negative

As we have been discussing, it is important to address factors that will facilitate motivation, such as conveying the rationale for a task and the feelings of satisfaction from succeeding at a task. However, as Frederick Herzberg pointed out in his two-factor theory, that is not enough (Herzberg, 1987). Herzberg, who did extensive research in work motivation, posited that it is also necessary to pay attention to feelings of dissatisfaction.

The two factors in Herzberg's theory are called motivators and hygiene factors. Motivators include factors that are related to satisfaction in achievement, such as feelings of responsibility and worthiness. The three basic needs in SDT are more closely related to this factor. Hygiene factors include working conditions such as salary, guarantee of status, and welfare. Any deficiency in hygiene factors leads to work dissatisfaction and undermined motivation.

Motivators and hygiene factors are considered to be independent, which means that someone can feel dissatisfied with their work because of a deficiency in hygiene factors even if there are abundant motivators. In other words, people can feel strong satisfaction and strong dissatisfaction towards their job at the same time.



Source: Adapted from Herzberg (1987)

Herzberg's two-factor theory

It is important to keep this theory in mind and address both factors when planning and implementing development projects. Hygiene factors obviously need to be prioritized for impoverished participants, but if motivators are neglected, they will not be satisfied. While this document focuses on SDT, which mainly addresses motivators, you should keep in mind that addressing hygiene factors is also important.

3. Case Studies

(1) Motivation of Central Government Staff

Case Study 1
Putting Activities on the Record

Key word **Motivation of central government staff,**
Paper writing,
Publication and presentation

A technical cooperation project for the improvement of rice cultivation technologies in Country X involved the introduction of a range of production and post-harvest technologies, as well as water management technologies. The project examined the effects of such technologies by looking at yields and profits. The main implementers of the project were staff and researchers of the central government, and they visited farmers together with project experts to monitor farmers' adoption rates for the introduced technologies. However, the attitude of the staff and researchers was passive, indicating that they were doing monitoring studies only because they had been told to do so. Their visits to the farmers were not as frequent as they should have been.

During the project various data had been collected from the farmers, but it was scattered about in many files. There had been few opportunities for the project implementers to synthesize and analyze the data. When they were required to show the outputs of the project at meetings or conferences, they had to search for and assemble the data each time to make the presentation slides.

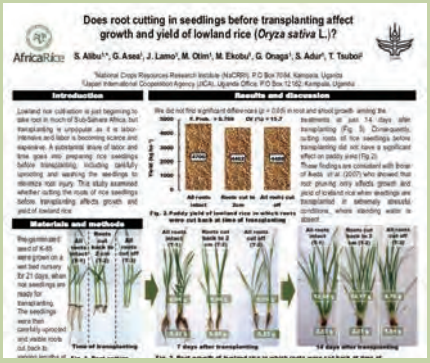
One year, one of the project experts came up with the idea of

suggesting that the staff and researchers write academic papers on the project activities. The expert, having just completed his doctoral dissertation on a topic related to the project, realized that the experience of paper writing had motivated him to work more actively on the project. That was why he thought paper writing might work positively for other project members, as well.

To his surprise, no one responded by saying things like "I am already too busy to write a paper" or "Why bother to write a paper?" Instead, they showed great interest and made comments such as the following: "I have been feeling that nothing will remain even though I am working very hard on the project. If I write a paper, however, I can leave something tangible behind even after the project finishes" or "I have not been able to show my boss my hard work until now. If I can write up what I have been doing, I can present it to him as a proof of my work." The staff and researchers embarked upon the paper writing immediately, and they had compiled about 30 papers by the end of the project. One of the researchers won the Best Poster Award at an international conference on rice. Another staff member received unexpected feedback when her paper attracted the attention of an executive officer. The executive officer became very interested in the project after that.

One staff member said: "It takes a long time to complete a paper, but I can learn a lot during the process. On top of scientific skills, I also acquired skills and knowledge on statistical methods, the use of computer software, and report-writing, all of which are very useful for various kinds of work." The project expert commented that what they were doing in the project was in line with national priority policies. Therefore, papers on project activities often attract researchers' attention, and it can be academically valuable when written properly.

The experienced by the central government staff and researchers did not stop there. Their relationships with the farmers changed as well, since they started conducting studies on them with the renewed purpose of writing a paper. For instance, when they developed questionnaires for the farmers to fill in, they used to do it merely as a task that they wanted to finish as quickly as possible. Thereafter, they wanted to collect quality data that would meet the standards of an academic paper. They started visiting rice fields frequently and communicated closely with the farmers so that they could get reliable data from them.



The poster that won the Best Poster Award

Since the farmers started to see the government staff and researchers more often, they trusted them more than before. The farmers would make a phone call to the staff and researchers every now and then and say: "Could you come see my rice since it has developed some kind of disease?" or "Could you check what kind of pests we've got in our fields?" The staff and researchers would rush to the fields since such information was useful for writing papers. The data collected was useful not only for the papers, but also for the farmer training organized under the project. As a result, project activities such as farmer training were carried out more effectively than before.

Psychological analysis of Case Study 1

Providing competence support through research on the processes and achievements of project activities

Autonomy

- The staff were doing the activities only because they had been told to do so. However, after writing papers, they started to feel the value of participating of their own accord in the study.

Psychological need for autonomy: The reason why the central government staff and researchers were passive in conducting the monitoring studies was that they could not see the point of doing it. They probably felt that they were acting as the "pawns" of the project experts. By writing papers which would contribute to society as well as to their learning and job performance, they discovered the significance of conducting studies and started to feel that they had become the "chess player" in the task of monitoring studies through a desire to act on their own volition.

Competence

- The staff reaffirmed their achievements by recording their daily project activities in a visible format, such as an academic paper.
- The staff felt their skills had improved through the process of paper writing, which enhanced their versatile knowledge and techniques.
- The staff started visiting farmers more frequently than before since they could envisage better ways to help the farmers with their improved skills.

- The staff confirmed their achievements by receiving positive feedback on their papers and interest in their activities from their boss.
- The staff developed confident in their work by building trust with, and being relied on by, farmers.

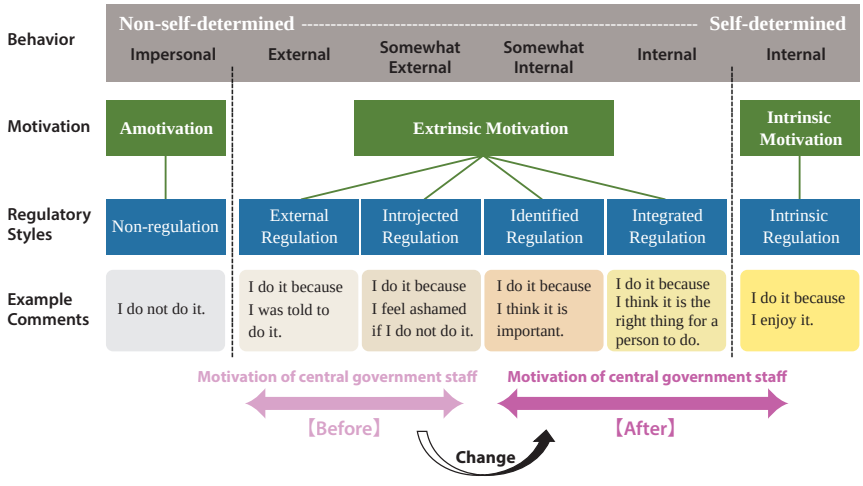
Psychological need for competence: Writing papers on what they were doing in the project served as an opportunity for staff and researchers to reconfirm the achievements of their work and feel the value of their jobs. It took energy and commitment to write the papers since a significant amount of time was required to complete them. However, during the process of writing, they were able to acquire skills and knowledge on statistics, data analysis, computer software operation, and writing, all of which would be useful for various other types of work, as well. In the end, they commented that they enjoyed the process of paper writing. Furthermore, with improved skills, they were able to envision better approaches to supporting the farmers and started to visit the field more enthusiastically than before.

The fact that executives in the organization took an interest in their papers also supported their psychological need for competence. In Case Study 1, it should be noted that the recognition came from an unexpected person. If they had written a paper with the intention of earning the executives' praise, their need for autonomy would have been thwarted. Thus, we should not encourage someone by saying things like "You will be spoken highly of if you write a paper."

The trust they won from the farmers was an indication that the extension work was effective. Therefore, it also supported their need for competence.

Analysis of motivation: The behavior shown by the central government staff and researchers before they wrote the papers was either external or somewhat external as they did the studies because they were told to do so or because that was part of their job. After a clear goal of writing papers on their project activities had been set, their behavior became internal as they felt that they were doing the study for their own benefit or because writing a paper itself was a rewarding experience. After the staff eagerly started writing papers, they began to see positive results, such as being able to obtain quality data, having improved relationships with farmers, and applying knowledge gained through the studies effectively in farmer training. This is a good example of where synergetic effects were generated by aligning the researchers' efforts to their career and skills development in line with the direction of the overall project activities.

Analysis of motivation in Case Study 1



Tips for Project Planners and Implementers

Since a project is basically done by a team, the achievements of the project are usually attributed to the team, not to an individual. However, if a paper on some project activities is written with an individual's name on it, the work of the government staff who participated in the project is recorded in a recognizable format, which in turn could have a positive effect on the future career of the staff.

Case Study 2
Chosen by the Team

Key word **Motivation of central government staff,**
International training and conferences,
Giving a speech,
Team work

"Since I was chosen by the project team, I want to be responsible and do my best. My team trusts me. I want to contribute to my team and give a good speech at the conference. I am not alone. I believe my team will help me if I am in trouble since I am representing them." This was the comment made by Mr. M who was going abroad to give a speech at an international conference.

Country O in Africa had seen some successes through its farmer-to-farmer extension approach. The approach was still in its nascent stage in Africa, and the experience of Country O was attracting attention from other countries.

The project members started to have quite a few opportunities to attend overseas training or to make presentations at international conferences and workshops. When such opportunities arose, the project

team always organized a meeting and built a consensus as to who would go to the conference or training.

One year, the project team was asked to give a speech on the project activities and achievements at a conference in a neighboring country. The team decided to send Mr. M to the conference after a discussion among its members.

The team's rule was that the person who would make the speech should prepare the presentation materials themselves. Therefore, Mr. M wrote a draft paper and asked the opinions of the team members. The team made comments such as the following: "Why have you used this word?"; "How will you respond to a question such as this?"; and "Wouldn't using more illustrations and pictures facilitate better understanding?" These were all very useful in making the presentation better. Mr. M also practiced his speech in front of the team members to prepare himself better for the conference. Mr. M also said: "I think our project is considered to be a pioneer project in adopting the farmer-to-farmer approach. I feel very happy and honored to be able to make a presentation on our project."

Mr. M, having returned home after his speech at the conference, was met by an unexpected chorus of "Congratulations!" from the other team members. They rushed up to Mr. M and said: "We heard your speech was very successful" and "We heard they all became interested and asked you many questions." In fact, one of the organizers of the conference e-mailed the project team in Country O after Mr. M had finished his presentation to inform them that he had made an excellent speech. On that day, Mr. M, filled with satisfaction and euphoria, thought: "I am glad I did my best for the team. I contributed to the project as a representative of the team." The memory of the conference has remained vividly in Mr. M's heart as one of the happiest experiences of his life.

Providing competence and relatedness support through opportunities to represent the team

Competence

- Mr. M felt satisfied by being able to make a meaningful speech at an international conference with the support from the team.

Psychological need for competence: As he prepared for his speech at the conference, Mr. M understood the value of disseminating the pioneering farmer-to-farmer approach inside and outside the country in which the project was being carried out. He felt his speech was improved by getting advice from other team members. His need for competence was supported, as he was able to improve the quality of his work through the constructive criticism that he received. At the conference abroad, he received a good response from the participants and was able to feel that he had made a meaningful impact. These facts indicate that his need for autonomy as well as his need for competence were supported.

Relatedness

- Mr. M felt responsible for the team and wanted to earn further trust from the team.
- Mr. M developed a strong willingness to succeed and contribute to the team as their representative.

Psychological need for relatedness: Mr. M willingly accepted the idea of making a speech because he trusted the team. The fact that the team chose him as their representative further enhanced Mr. M's trust in the team. His sense of responsibility and mission was strengthened by the trust he had in the team, which in turn made him determined to successfully deliver the speech in line with his team's expectations.

The feeling of happiness that Mr. M had after returning home was due to the team work he had been engaged in. If he had given the speech without any help from the team, he would not have felt such a strong sense of accomplishment.

Tips for Project Planners and Implementers

In many projects, government staff are sent overseas to attend training and meetings. If the representatives are selected arbitrarily by a handful of executive officers, for example, hard feelings may develop between those who are selected and those who aren't, and this would have a negative impact on the project. Setting clear and fair selection criteria is important. Alternatively, choosing representatives by building consensus, as shown in Case Study 2, is also a good approach. A representative's eagerness to work for the team and to contribute to the project is higher if they are selected by fair methods.

Case Study 3
Trust within the Team

Key word **Motivation of central government staff,**
Communication within the project team,
Attitude towards farmers,
Trusting relationships

A project in Country K appeared to be going smoothly. However, the central government staff who were members of the project team were burdened with a big problem. The staff did not know how to communicate with the leader of the expert team—Mr. D—who had recently arrived in Country K. Some of the staff even started expressing their concerns by saying: "Mr. D must think that the project would progress better without us."

Unlike Mr. D, the previous leader loved visiting communities and understood the farmers' technical levels and socio-economic conditions very well. When he noticed that some farmers were not adopting the techniques the project had taught them, he would ask "Could you tell us why you are doing this without using the techniques you learned in the training?" and tried to understand in detail what problems the farmers had. He would share the information he obtained during his field visits with the project team and ask government staff: "This situation is happening among the farmers. What do you think about it? Is it just a problem of one farmer or have you seen similar cases elsewhere?" He would frequently provide a forum for discussing management issues. As a result, there were many times when the activities started to run smoothly again. When the team faced issues which were too complicated to overcome despite their best efforts, the members could, nevertheless, all feel a sense of satisfaction,

thinking: “We did our best.”

In contrast, whenever Mr. D noticed any mistakes and problems, he would shout at almost every farmer, including the elderly and young women, saying: “Why can’t you do what I told you to do? Do like this, not like that!” The farmers became angry or felt intimidated by his strong reprimands.

The government staff of County K had to visit these farmers later to apologize, saying: “We are very sorry for the shouting, but please understand he did not mean to embarrass you.” On other occasions, after a decision had already been made by consensus among the team members, Mr. D would say: “I changed my mind. Let’s forget what we have decided and do this instead of that”. He would not give sufficient reasons for his change of mind.

One day, a government staff member of County K said with a disheartened look: “It is true that the technologies the farmers have in this country are not advanced. Our technical skills are no match for those in Mr. D’s country. But that is exactly why this technical cooperation project started. We, as well as the farmers, are by no means ignorant. We have a wealth of experience that is unique to this country. Mr. D must be thinking we are so ignorant and incompetent that he has to teach us just like we are small children. He must not be seeing us as equal members of the team.”

Psychological analysis of Case Study 3

Thwarting autonomy needs through coercion (and also negatively impacting relatedness and competence needs)

Autonomy

- The reprimanding and commanding thwarted the need for autonomy.
- Mr. D revoked decisions that the team had made by consensus, which sent the message that the opinions of the team members were worthless, thereby significantly thwarting the need for autonomy.

Psychological need for autonomy: Mr. D's authoritarian attitude, particularly his reprimanding and commanding of other people, instantly discouraged the project team members and farmers and thwarted their autonomy need. In addition, Mr. D revoked decisions that had been made by consensus among the team. Such actions sent out the negative message that the opinions of the team were worthless, which resulted in the team members' psychological need for autonomy being greatly thwarted and their motivation towards the project being diminished to a great extent.

Psychological need for relatedness and competence: Mr. D's attitude towards the team members and farmers may well be seen as condescending, which understandably did not allow him to build trust with them. Perhaps Mr. D thought that he had to point out the problems to them directly on the spot in order for them to understand. Thus, he exhibited rather high-handed behavior even towards elderly farmers, who should be respected in accordance with social norms. His behavior had a

negative influence on the team and was a burden on the government staff of County K as they had to make extra efforts to repair the relationship with the farmers at a later date. Also, in terms of decision-making, he disturbed the order of the team when he overturned their decisions, thwarting the team members' relatedness needs significantly.

Mr. D also thwarted the competence needs of the farmers and government staff when he pointed out their lack of ability and treated them as incompetent.

Reprimanding and forcing others to do something may work temporarily because they will follow the orders immediately. However, since such an attitude thwarts all three psychological needs of autonomy, competence, and relatedness, it does more harm than good in the end. The ultimate goal of the project (i.e., sustainable action by the project stakeholders) would not be achieved by such an attitude.

Tips for Project Planners and Implementers

In any project, it is important to create conditions where the project implementers and beneficiaries can feel that they own the project and want to continue the activities on their own initiative. This can be done by providing them with autonomy support. A project is undertaken not by a single person, but through the collective efforts of a team. Therefore, trusting relationships among the team members serve as the basic support for all the project activities. Particularly in order to overcome the challenges of cultural differences among the team members, it is essential for the members to make an effort to build a strong partnership

on a daily basis by caring for one another and sharing as much information as possible. High-handed behavior, such as that shown in Case Study 3, should be condemned as it thwarts all three psychological needs.

Introduction to Psychology 1 — Is Praise Effective?

Praise is often used as a way to motivate others, and it is also considered beneficial to the performance of the person being praised. But is that really the case? Psychological research has shown that not all praise is helpful. Some ways of praising are actually detrimental.

SDT studies have shown that material rewards generally decrease intrinsic motivation, but the effects of verbal rewards differ according to how the message is received. If the person praised feels "I'm being praised because this person wants to control me and make me do something," intrinsic motivation will decline. This is because the controlling aspect of rewards undermines the need for autonomy. However, if the praise includes clues on how to do the task better, the informative aspect of the feedback will support the need for competence and enhance the intrinsic and autonomous motivation. In summary, if we praise someone for the sake of making them do more of a task, we risk undermining their motivation. In contrast, if we can point out specific aspects of the task that the person is doing well but the feedback we provide helps them realize that this information can help them perform better next time, we can expect them to be more motivated towards the task.

Carol Dweck has been one of the forerunners in research into praise. One of her key findings was that praising ability leads to lower motivation, less engagement in tasks, and less desire to take on challenges. In contrast, praising effort enhances motivation (Dweck, 2006).

Why does this make such a difference? For example, if someone praises a student by saying "You are so smart!" for getting a good grade, the student will first think "I did well because I'm smart" and then "If I'm smart, I'll probably do well in the next exam (even if I don't study much)." On the other hand, if the student is told that they prepared very well for the exam, they will think "In order to do well on the next exam, I need to prepare well again" and continue to put in the effort to study. It is also known that praising results can be detrimental, while praising process (including effort) is beneficial.

Another finding from psychological research is that praising success in completing a task that was too easy will decrease motivation. This is because the person being praised will suspect that: "I am being praised because they think that I cannot do anything that is more difficult."

The relationship between the person doing the praising and the person being praised is also important. Even if the same words of praise are used, the effect will differ depending on the relationship between the two people. Praising is actually a very intricate and delicate exercise—we need to keep in mind that we shouldn't just give praise randomly, and it is necessary to focus on the process rather than the results and be mindful of our relationship with the other person.

Case Study 4
Our Initiative, Our Project

Key word **Motivation of central government staff,**
Ownership,
Relationships with project experts

A project to provide technical training on agriculture and livelihood improvement was started in Country F for rural residents with very limited natural resources. In the early stages of the project, a project expert and central government staff of Country F visited villages to ascertain the basic situations of the target communities. One day, they saw a village girl of around ten years of age who was traveling to gather water. She said that she walked one hour there and back to get drinking water from a creek every day.

The project expert was shocked to hear this, and said to the government staff: "How could such a terrible situation happen on a daily basis in this country?" The government staff realized the challenges faced by County F and strongly felt that the project expert was right and that, as responsible citizens of Country F, they should never allow such a situation to happen. One of the government staff commented: "The project experts, as third-parties, can see the true nature and reality of the target areas and beneficiaries. They are able to identify things which the people of Country F tend to overlook because they take them for granted."

The project team was made up of JICA project experts and

government staff of Country F, and decisions were always made jointly by these two groups. The government staff of Country F explained: "We and the project experts are equal partners. They teach us technical skills and ask us how best to teach the techniques in this country. In return, we teach them how things are in Country F and advise them on the best approach we can take based on our own expertise. We develop the best method by working hand-in-hand with JICA experts. In a sense, we are a 'hybrid team' built on the strengths of two countries."

Since the project experts were open to the ideas that the government staff of Country F proposed, the staff felt comfortable giving various opinions on the project. Many of the staff said: "I felt my knowledge and experience were useful for the project because my ideas were often taken up for the project."

When the project was approaching the final stage, the relationship between the experts and the government staff of Country F gradually changed. "The main actor for the project is Country F. We need to continue carrying out our activities even after the project finishes. We try to think on our own first and then ask the experts for ideas as a second opinion. In that way, we try to reach the best approach," said the government staff.

The project experts explained their position in the project team as follows: "We and the government staff of Country F discuss ideas on an equal footing. However, when we go out into the field, we try to avoid being in the forefront and to keep a low profile. The project is owned by Country F. They should be the heroes—not us foreigners."

Psychological analysis of Case Study 4

Providing autonomy support by clarifying the ownership of the project

Autonomy

- The government staff reaffirmed the value of the project and felt that the project was owned by their country as it brought home to them the project's social importance and their responsibility for their citizens.
- The government staff's initiative was further strengthened because their ideas were taken into consideration in the project's decision-making.
- The ownership of the government staff became stronger because they took center stage in work on the project activities.

Psychological need for autonomy: The project experts continuously helped the government staff of Country F to feel that they were the main actors in the project so that they would have responsibility for, and ownership over, the project. They also pointed out, as third-parties, the hardship that rural people experienced in obtaining water, which otherwise might be seen as a commonplace event and overlooked by the people of Country F. Through this everyday interaction with the project experts, the government staff of Country F were able to realize the social significance of the project and the responsibility they should accept for it. As a result, their psychological need for autonomy was supported.

Their autonomy need was greatly supported by the attitude of the project experts, who were open to the staff's opinions and willing to leverage their knowledge. The staff's autonomy was enhanced through

their experience of taking center stage in work on the project activities at all times. As the project approached its final phase, the staff members were able to acquire well-developed awareness and confidence that Country F was the core actor for the project.

The project experts' attitude—which included a willingness to delegate the main tasks to the government staff of Country F and to listen attentively to them—not only provided them with autonomy support but also competence support in that the government staff were able to feel their expertise was recognized by the project organizers.

Tips for Project Planners and Implementers

Since projects are expected to produce tangible outputs in a relatively short period of time, it is not uncommon to see a situation where project experts that have been dispatched from an industrialized country lead the project team at all times. However, sustainability will not be ensured unless the government staff of the implementing country develop their capabilities and ownership over the project activities. When project experts transfer their skills to the government staff, it is advisable that they help, as fellow team members, the government staff to take the initiative, especially when they interact with local staff or final beneficiaries, so that the staff can strengthen their feeling of ownership over the project.

(2) Motivation of Local Government Staff

Case Study 5

Allowing Local Staff to Take the Initiative in Developing Training Materials

Key word **Motivation of local government staff, Exchanges among local government staff, Material development, Technology development**

The technical cooperation project for increasing rice productivity in Country A was intended to develop training materials on the cultivation of (1) irrigated rice, (2) rain-fed rice, and (3) cool highland rice, the conditions for which were location-specific for each of the five target regions.

In the first year of the project, all of the project members at both the central and local government offices were busy with other duties, so the project experts took the initiative in developing the training materials. During the first cropping season since the project had begun, the project experts visited farmers' fields to pilot the prototype version of the materials. They wanted to visit farmers with the local government staff so that the project experts' knowledge would be transferred to the staff. However, no one accompanied them for the whole process. Some staff members accompanied the experts for a few hours at a time, but with very limited involvement in the activities. The project experts felt a strong sense of crisis after this, and started to think hard about how they could create an environment in which the local government staff would willingly take the initiative in implementing project activities.

The project experts decided to ask the local government offices

to develop training materials which would be best suited to their local conditions, as the rice cultivation conditions in the target regions were very diverse. They also asked local governments to develop the types of training materials which would be most effectively utilized by farmers. The project experts prepared standardized formats, provided basic data and photos to be included in the materials, and gave them to the local government offices. Local project teams consisting of 10 to 15 local government staff members then embarked upon the development of customized training materials using the formats and data provided. They tried to develop materials which would be easy for them to use and easy for the farmers to understand.

The training materials that they made were flip charts with pictures on the front page for the farmers to see. On the back, explanations of the front page were written so that the extension staff could read them aloud for the farmers. While the project experts developed standardized front pages, development of the explanations for the back pages was left to the local project teams. These local project teams thought carefully about how to transfer the techniques for raising rice productivity to the farmers and wrote explanations which they thought would be most effective on the back pages.

After the development of the training materials, a workshop for all the local project teams was organized. Each team presented their training materials and exchanged opinions. Exchange field visits were also organized.

The development of materials
by local project teams

The front page was the same
for all the local project teams

Example back pages: The combination of photos, content and explanations
vary depending on the local project teams

The local government staff, who only watched what the project experts did in the first year, started to say: "I now enjoy my work" or "I began to think how I could help farmers understand, learn and adapt the techniques that we introduce to them." In the second year of their involvement, the development of technical packages and training materials began. One staff member even started to present the materials she produced to other international development agencies and financial institutions by saying: "Are you interested in using the training materials that we have developed?"

Providing autonomy and competence support by handing the initiative to local government staff

Autonomy

- By developing materials that reflected their own perspectives, the staff were able to feel that farmer training was something that they were doing on their own accord rather than something that they were being forced to do.
- Through the creation of tangible outputs, such as training materials suited to local conditions, the staff felt the significance of contributing to the areas they were in charge of more strongly than before.

Psychological need for autonomy: During the first year of the project, the local government staff passively followed the project experts and did not actively engage in the project activities. The fact that the experts took the initiative in developing the training materials possibly made them think that the experts were making them do the activities. From the second year, however, local project teams were established to start developing training materials in accordance with the local conditions. This shift from centralized leadership to distributed leadership encouraged the local government staff to feel that they were the implementers.

Furthermore, the development of training materials which took local conditions into consideration prompted the local government staff to consider the project as something contributing to their communities, rather than something being imposed by the project experts. In other words, it brought home to them the importance of the project.

Competence

- The local project teams were able to accomplish the task, since it involved customizing the back pages of the flip chart instead of creating the training materials from scratch.
- The local government staff began to provide extension services with confidence, since they completed the task of developing training material successfully.

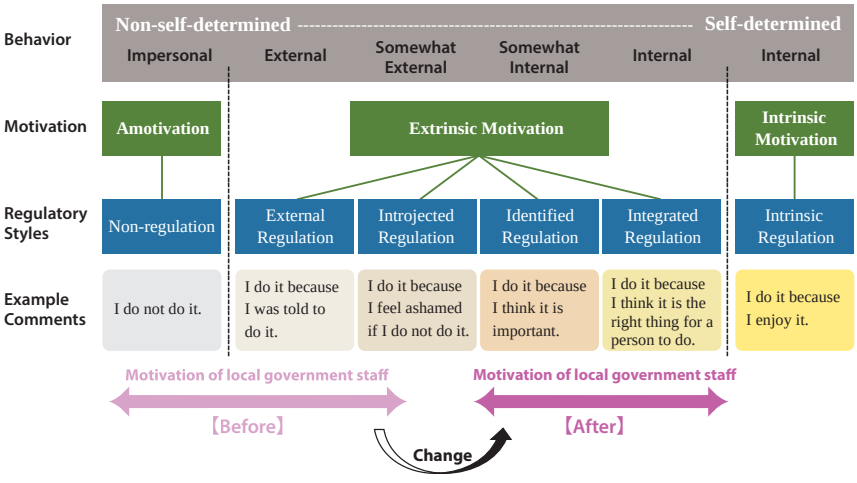
Psychological need for competence: It would have been a challenging task for the local project teams to develop training materials from scratch, since they tend not to have the necessary skills and knowledge to complete such a task. Because they were provided with a standardized format, however, even government staff who were not so confident in their skills or knowledge were able to develop materials step by step with the support of other team members. Setting achievable tasks of an appropriate difficulty level to the local project teams supported their psychological need for competence.

Furthermore, the local government staff got a better idea of how to provide extension services with the standardized training materials. They also conducted their extension work with much more confidence now that the training materials suited the local needs. Their increased confidence was evident as some of them presented the materials to other international development agencies and financial institutions.

Analysis of motivation: The local government staff used to demonstrate behavior which was either impersonal or external as they did not visit farmers or visited them only because they were told to do

so. Later, their behavior became more internal. They were proud of the materials they developed and thought about better ways to help farmers. Some said they enjoyed the work and started confidently "selling" the materials that they had developed to other institutions.

Analysis of motivation in Case Study 5



Tips for Project Planners and Implementers

It is not uncommon for staff at the project headquarters, who possess ample expert knowledge, to develop all the training materials and technologies needed for the project. In Case Study 5, the project team intentionally delegated such work to local government staff so that their feeling of ownership over farmer training would be enhanced. This decision led to the development of technologies and materials which were more appropriately suited to the specific local situations and farmers' needs.

Case Study 6
Listening to Opinions Leads to Changes

Key word **Motivation of local government staff,**
Opinions from the field,
Proposals for the project

When she heard that another agricultural development project would soon begin, Ms. G—a long-serving manager of a local agricultural office—felt dejected, thinking: "We will be so busy again."

In the past, when Ms. G was working on a new project as a still newly appointed manager, she enthusiastically proposed various suggestions to improve the activities in the field. Building upon her previous experience as a field worker, she would say things like: "I think the most effective approach for the farmers is …" or "Taking into consideration the actual circumstances of the farmers, I think this way would be better than what has been instructed." However, these proposals were all dismissed for reasons such as "Things have already been decided." For some projects, the opinions of the local agricultural office staff were listened to just for the sake of formality. However, these projects were still better than those for which orders were given without any chances for opinions and suggestions from the field to be returned.

When Ms. G had her proposals rejected, she would be filled with negative feelings such as: "The project office looks down on the local offices after all" or "No one cares about me." She gradually started to do only what she was assigned to do, thinking: "After all, nothing will change even if I speak up. So it is better to keep my mouth shut." The situation had been like that for many years when news of this new agricultural development

project reached her.

The project team instructed her to choose model farmers. After she had shortlisted three farmers in accordance with the selection criteria developed for the project, the central project team visited the farmers in order to assess their suitability as model farmers. The team selected one farmer who passionately expressed his willingness to work as a model farmer. After the team had left, some extension workers expressed concerns about the suitability of the farmer since they had had some negative experiences with him in the past. Ms. G held discussions with the extension workers and decided to visit the farmers again. She realized that a farmer who was much quieter than the one who had been chosen was indeed very earnest, responsible and much better suited to the model farmer position.

Although she thought the project team would not listen, Ms. G forwarded this information to them anyway. She also told them that the number of training participants should be limited to 20, instead of 50 as instructed, so that the training would be more practical. As she anticipated, the project team showed strong resistance to her proposal. However, on the following day, one of the project team members visited Ms. G and asked why she had made such suggestions. Although she was rather skeptical about their seriousness, she described the reasons in detail and explained the situation in the field.

A few days later, Ms. G was informed that both of her proposals had been accepted and an announcement was made to all the local agricultural offices that the training would be conducted in the form of a workshop with a maximum of 20 participants so that the training would be practical, just as she had proposed. In addition, the project team revised the selection criteria for model farmers, taking her opinions into account. Ms. G was in

almost complete disbelief, thinking: "I feel respected by this project team. They actually listened to us." She also felt that the project team, for the first time, valued her competence. At the same time, she felt ashamed for having been doing only what she was told to do without thinking much and without doing her best. She felt sorry for the farmers, too.

The farmer that Ms. G and her colleagues chose did a wonderful job as a model farmer. When she visited the farmer one day, he thanked her and explained how much he had been able to improve his life through his participation in the project.

Ms. G, now busy every day with the project activities, was filled with a feeling of satisfaction. She thought: "I am so glad that I mustered the courage to make suggestions to the project team that day. My work, after all, will lead to farmers' happiness."

Autonomy support helps people to feel that they are acting on their own volition rather than being forced to do something

Autonomy

- The local government staff's attitude changed from feeling that she was being forced to do something to that she was doing something of her own volition when she realized that her opinion had actually improved the project.
- The local government staff came to understand the value of taking part in the project as an active player because she was able to feel that her experience and intuition as a field official contributed positively to the project.

Psychological need for autonomy: Ms. G, due to her bitter experience of repeatedly having her suggestions rejected for various projects, felt that she was being forced to do activities due to the projects' top-down approach. In other words, she was a "pawn" for the projects and had little sense of autonomy.

Fortunately, the new project team expected her to work as the "chess player" in the field activities and she was able to meet this expectation by implementing activities which reflect the opinions of those on the ground. Her need for autonomy was greatly supported and, going forward, she will be able to propose even more creative ideas for the project. Her suggestions focused on the beneficiaries and helped the farmers improve

their livelihoods. She will be able to find more job satisfaction through her positive change of attitude towards the project.

Tips for Project Planners and Implementers

Project teams tend to give instructions unilaterally and sometimes force the local government staff to do tasks because the team members focus too much on the smooth implementation of their plan. The local government staff, on the other hand, often possess local wisdom and experience that the central project team cannot even imagine. The flow of knowledge should not be limited to "central to local." A "local to central" flow of knowledge should also be created to give rise to a more effective approach with a clear focus on the final beneficiaries. Such a reverse flow will, at the same time, provide autonomy support to the local government staff. Even in a situation where the suggestions from the local staff cannot be accepted, a clear explanation of the decision should be given to them. In this way, they will feel that their opinions are being heard and their need for autonomy will be supported. It is likely that they will continue providing useful information to the project team.

Case Study 7
More Knowledge Leads to Better Service

Key word **Motivation of local government staff,**
Acquisition of knowledge,
Application of knowledge for farmers

"Aquaculture had rarely been done in this country and I could not find a chance to use my knowledge in my work even though I studied fisheries at a technical college. I sometimes felt I was redundant and lost confidence in my aquaculture knowledge since I could not practice it," said Mr. Q, a fisheries extension officer. Mr. Q had always been interested in fisheries and enjoyed learning fisheries skills and knowledge. It was his dream to become a fisheries extension officer, but he did not feel enough satisfaction from his work since there were very few farmers practicing aquaculture in the areas that he was in charge of.

When an aquaculture project was started in the area, Mr. Q attended a technical training session organized for the project that year and learned new knowledge. The training included practical exercises in the field, and he was able to confirm that what he had learned from textbooks could actually be applied to the fish ponds in the area. This was a very exciting experience for him since he had had hardly any opportunities to attend such hands-on training. The project also provided him with clip charts, posters, videos and other materials that the farmers would be able to easily understand. Mr. Q took these materials and taught the farmers with these audio-visual aids.

On top of that, for this project, demonstration experiments were conducted on the application of various technologies, and data was

collected on the effectiveness and economic feasibility. He was able to explain the technologies to the farmers by showing them such evidence (i.e., hard data) with confidence.

Mr. Q started to develop an awareness and confidence that he was an expert in fisheries as he participated in the project and renewed his eagerness to use his knowledge in the field. He commented: "I always had a passion for fisheries, but did not have any opportunities to learn new knowledge or to use it for the benefit of society. At the training offered for the project, I was able to learn both the theory and practice. Unlike before, I no longer feel redundant because I can now help others using the knowledge that I gained from the project. I am now regarded and well respected as an expert in aquaculture. I feel satisfied when I see that my knowledge is useful and the farmers have started to trust me more. I believe that city people like me owe farmers so much as they provide food for us. I need to repay them." He then continued: "Some of the farmers have asked me to visit their fish ponds. I need to go now. I am the only expert in this area, you know." He then hurriedly made his way to the village with a broad smile on his face.

Photo:Akio Iizuka/JICA

Psychological analysis of **Case Study 7**

Providing competence support to local government staff by giving them useful knowledge and skills for improving farmers' livelihoods

Competence

- The local government staff was able to find opportunities to make use of his expertise, which he was not so confident about because of a lack of experience in the field.
- The staff's intellectual curiosity was aroused by learning practical knowledge during the project.
- The staff was able to experience more job satisfaction because he felt that his knowledge and practical abilities had improved.

Psychological need for competence: Mr. Q had always had a passion for fisheries and wanted to learn new knowledge to use for the farmers. After he gained some practical knowledge and was given an opportunity to use it in the field, his need for competence was greatly supported because he felt that his skills and practical abilities had improved.

Mr. Q was able to feel that his skills had improved through his use of a variety of tools (i.e., audio-visual materials which could be readily used in the field and convincing scientific evidence). His intellectual curiosity, which had been rather sluggish before the project, was once again aroused by learning new knowledge through the project. We can now envisage continued success for Mr. Q going forward.

Tips for Project Planners and Implementers

Although Case Study 7 was taken from a project in the area of fisheries, many government workers choose their jobs purely because they are interested in the particular field that they have decided to enter. Some have been studying the same field for a long time since college. An effective way of motivating them is to give them a small but challenging task, as well as to help them learn new knowledge, so that their intellectual curiosity will be satisfied. A project expert who works with irrigation engineers said: "I have discovered that they become very much motivated if I stimulate their 'instinct' as engineers. There is no end to engineers' learning."

Case Study 8

Some Work Hand-in-Hand with Farmers, Others Get "Abducted" by Them

Key word **Motivation of local government staff, Building trust between extension staff and farmers**

An extension worker explained her job by saying: "I feel demotivated when my farmers do not show up at the agreed time. When I am late for a meeting, I tell the farmers in advance because I want to be responsible. I would like them to understand the importance of keeping promises and being punctual so I try to set a good example myself first. The farmers gradually become more responsible after seeing the way I work." She further explained her views on extension work: "My knowledge centers on the theories I learned at college. I believe the important thing about extension work is to share knowledge with the farmers. I can learn so much practical knowledge from farmers. I will become an expert if I combine my scientific knowledge with the practical knowledge that the farmers have. In that way, I will be trusted by the farmers." She continued by saying: "I obtained good results in the project that I implemented in this village. I was able to build a very strong trusting relationship with the farmers. I personally made friends with them. Everybody greets me whenever I visit the community. I feel much more comfortable working in this village."

Another extension worker in charge of a different area recalled a bitter experience: "When I visited the community, I was 'abducted' by the farmers. They said, 'We won't let you go until the project you promised to implement gets official approval. We have been waiting for it for over four years now.' On that day, I couldn't go home for hours." The extension

worker continued by saying: “You can earn the trust of farmers in a fairly short period time. However, once you lose that trust, it is extremely difficult to regain it. You are most likely to lose their trust if you promise them something which does not come true, just like in the case I explained to you.”

Photo:Akio Iizuka/JICA

Psychological analysis of **Case Study 8**

Building trust with farmers as the cornerstone of relatedness support

Relatedness

- The key to building trust between extension workers and farmers is having an equal relationship on a daily basis.
- A reciprocal and respectful stance, rather than one-sided teaching, is important for building a good relationship.
- Giving false hope to farmers shatters their trust and thwarts their relatedness need.

Psychological need for relatedness: The main difference between the two extension workers in Case Study 8 is that while the first extension worker clearly showed the farmers what she couldn't do, the second extension worker gave them false hope without discretion. The second extension worker ended up losing the trust of the farmers because he could not fulfill his promise. As this extension worker explained, it is very difficult to regain trust once you lose it. Therefore, he had a hard time re-building trust with the farmers.

The first extension worker clarified her roles to the farmers, which helped them understand how and to what degree they could rely on her and what to expect from her. Thus, this extension worker and the farmers were able to build a healthy and equal relationship which encouraged them to learn from each other.

Tips for Project Planners and Implementers

It is no exaggeration to say that the key to success for a project is in the hands of the extension workers. The project team should support the extension workers on a daily basis in order for them to build a good relationship with the farmers. It is advisable for the project team to not only build their capacity in terms of knowledge and techniques, but also help them to improve their facilitation and communication skills with farmers as well as to enhance their sense of responsibility towards work. It is important for the project team to clearly explain to the extension workers what the project can and cannot do so as to avoid misunderstanding or misinterpretation. Such efforts will prevent the extension workers from damaging the relationships that they have already built with the farmers.

Introduction to Psychology 2 — False Hope Ruins Motivation

We often offer words of encouragement when someone we are trying to help is struggling. Sometimes, we will say things such as "Don't worry, you will be alright!" even though we know that there is not much hope. This kind of kindness is an important social skill, especially with friends and family. However, it can backfire if you give false hope to someone you are trying to motivate.

Indeed, false hope does have a temporary beneficial effect—especially if the person has lost sight of the prospects and goals of the activity—as it instills a sense of purpose. However, since the goal is impossible to attain, the false hope quickly changes to real despair. In SDT terms, false hope undermines the need for competence, since the person cannot achieve the goal they desire, no matter how hard they try.

In development projects, it can be heartbreaking to look at the desperate situation in which the participants live. However, it is important to accept reality as it is, and begin with small steps that the participants will be able to accomplish with their own abilities in order for their motivation towards the project to be sustainable.

(3) Motivation of Farmers

Case Study 9
Farming for Joy and Farming to Serve as a Role Model

Key word **Motivation of farmers,**
Farming as a fun activity,
Farming and family relationships,
Taking pride in farming

"Look at these tomatoes. They are redder, sweeter, and tastier than any other tomatoes. I've been working so hard to produce these tomatoes. Finally I made the perfect tomatoes. It was worth all the effort," a horticultural farmer said.

"When I feed the fish, I can forget all the worries I have even if I am in big trouble. I never get tired of watching the fish. I prepare the pond, add fish seedlings, feed them, let them grow to adult fish, and harvest them. Each step is fun. When I eat the fish that I grow, I think about better ways to grow them bigger and make them taste better. I enjoy thinking about such things. If someone stops me from farming fish, I will die." This fish farmer continued by saying: "I have no educational background since I dropped out of middle school due to serious illness. I don't want my children to experience what I have been through. I am working very hard to develop my aquaculture business so that my children can get a good education. I also want my children to learn not only academic matters, but also the pleasure of aquaculture. When you farm fish, you can learn a lot of things which school does not teach you. It's a real-world learning experience."

A rice farmer said: "My farther, who was always very kind to

other villagers, is my role model. He was a good farmer. He was always surrounded by his farmer friends and very well respected. I always wanted to be like him. Now, I run demonstration farms for the group and try new techniques before anyone practices them in my capacity as a young leader of the group. I am leading the group because I want to improve myself. I also want my children to see me working hard. I want to teach them how fulfilling it is to work hard and farm with our community members. I am working hard so that I can catch up with and surpass my father. I want my children to be better than me in the future."

Photo:Takeshi Kuno/JICA

Photo:Masataka Otsuka/JICA

Psychological analysis of Case Study 9

Farming can be an intrinsically and autonomously motivating activity

Autonomy

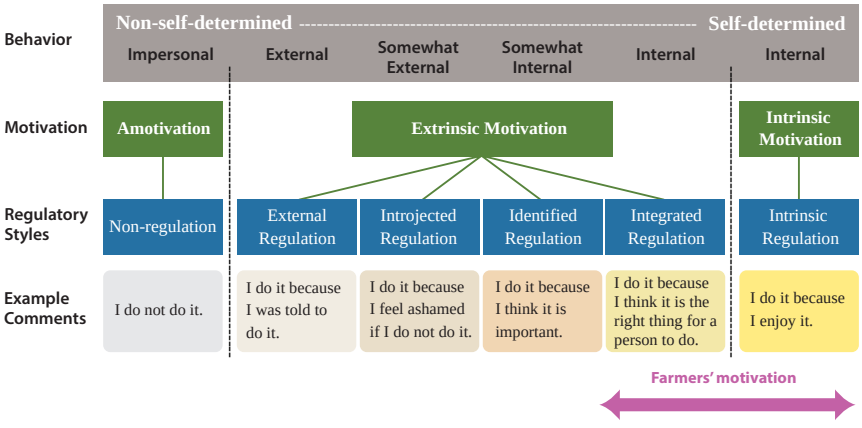
- Comments such as "Farming is fun" and "I want to be better at farming" demonstrate the farmers' intrinsic motivation.
- Saying "I farm hard as a role model for my children" suggests that the farmer works hard because he thinks it is important and the right thing for a person to do. He has autonomous motivation based on integrated regulation.
- Both farmers find pleasure or value in agriculture, which implies that they demonstrate sustainable motivation when the autonomy need is supported.

Psychological need for autonomy: The farmers in Case Study 9 took pleasure in growing vegetables or fish, and they engaged in these activities autonomously. This suggests that they were conducting the activities based on intrinsic motivation. They are likely to continue their actions not just temporarily but sustainably. Additionally, the farmers were working hard to produce better tomatoes or fish, for example, in a creative way through trial and error, which demonstrates that their need for competence is also supported.

Analysis of motivation: Some of the farmers in Case Study 9 said that they were working hard in order to give their children a hands-on

education or to serve as a role model for them. This was based on their value judgment. They considered agriculture to be important and the right thing for a person to do, which gave them autonomous motivation based on integrated regulation (see below). Their motivation can be regarded as being high quality and sustainable.

Analysis of motivation in Case Study 9



Tips for Project Planners and Implementers

The planners and implementers in agricultural projects often consider agriculture to be something that needs to be done. We should not forget that many farmers actually enjoy farming itself. Although there may be some farmers who farm without having much interest in it, most of the farmers who are willing to join the project may well have a pure motivation, such as wanting to enjoy farming more or wanting to discover something interesting in agriculture. Other farmers firmly believe in the value of agriculture in relation to their family and work very hard to become a better person. If the project team thinks over issues such as how they can help farmers enjoy farming more or how they should help farmers understand the value and pleasure of farming, then the farmers' intrinsic motivation will be raised.

Introduction to Psychology 3 Intrinsic Motivation Enhances Creativity

As we have discussed, intrinsic motivation is strongly associated with engagement and persistence, but it is also known to enhance creativity.

In a classic study by Mark Lepper and his colleagues from 1973, an experiment was conducted by having nursery school children draw pictures. One third of the children were promised rewards for drawing "good pictures" (the expected reward group) (Lepper et al., 1973). One third were given a reward without any previous notification (the unexpected reward group). The remaining children were neither promised nor given

any reward (the no reward group). Two weeks after the initial drawing trial, Lepper and his colleagues returned to the nursery school to observe the children's free-playing activities. They found that the amount of free-time drawing had decreased in only the expected reward group. In other words, the intrinsic motivation towards drawing had decreased in only this group. Additionally, art students rated this group's pictures as the least creative.

Teresa Amabile has been researching the relationship between intrinsic motivation and creativity since the 1980s. She and her colleagues have conducted experiments involving activities such as poetry, composition, and handicrafts, and all of her studies have indicated that a higher intrinsic motivation towards an activity is robustly correlated with creativity in the activity (Amabile, 1996).

In development projects, since experts and officers cannot spend all of their time with the project participants, the amount of ideas that they can provide is limited. This means that the projects' success largely depends upon the creativity of the participants in the sense that the more they are able to think of solutions for the problems they face by themselves, the more likely the project is to succeed. Additionally, in order for the participants to sustain the activities they learned even after the project has ended, they will need to be creative in applying their knowledge. Therefore, it is crucial to promote the participants' intrinsic motivation towards the project.

Photo:Mika Tanimoto/JICA

Case Study 10
My Best Partner Is the Extension Staff

Key word **Motivation of farmers, Relationships between extension staff and farmers, Complementary relationships between extension staff and farmers, Attending training together**

Mr. J, who aspires to be a leading farmer, actively adopted new technologies and was selected as a model farmer for an agricultural technology extension project. The model farmers had the role of attending training to learn various agricultural technologies for raising productivity and profitability, demonstrating them on their farmland, and disseminating them to other farmers in their communities. Mr. J was very pleased to be chosen as a model farmer, saying: "I can learn new technologies before anyone else and try new things."

At the same time, Mr. J had some concerns. He had become seriously ill and dropped out of school when he was in fifth grade. Therefore, he had only basic English skills and he was not so good at reading and writing in English. He was not so good at math either. Nevertheless, he had confidence in himself in the area of practical farming since he had an inquisitive mind, always learned new agricultural techniques by watching others and experimented with different farming methods on his farm all the time.

The project team conducted technical training for the model farmers as planned. Mr. J found to his surprise that Mr. V, who was the extension staff in charge of his community, was also attending the training. At first,

Mr. J thought Mr. V had come to act as a trainer, but he was there as a trainee just like Mr. J. During the training, lectures were given using materials written in easy language with plenty of illustrations and photos so that participants like Mr. J who had limited literacy skills could easily understand the content. The training also included practices in the field and Mr. J, who had felt a little nervous before attending the training, was able to understand the program content sufficiently. Mr. J was happy when Mr. V reassured him by saying: "You understood the training very well. You will have no problem teaching other farmers."

However, when Mr. J tried to practice what he had been taught in the training on his farmland, he realized that there were things he could not remember even though he thought he had understood everything at the time. He searched for the information in the training textbook but could not find it. He turned pale thinking: "I am the only farmer from this community who attended the training but I can't teach it to others." He then thought of Mr. V, who had attended the same training with him. Mr. V came running to see him after receiving a call from Mr. J and told him: "It's my role to help you practice the techniques and teach others. Thank you for contacting me." Mr. V read the textbook easily and taught him what was written there. To correct Mr. J's misunderstanding, Mr. V also pointed out: "You just planted this way, but in the training they taught us differently." Although both of them had attended the same training, Mr. V is an extension staff with expert knowledge, so he understood the content better than Mr. J when it came to scientific information. Mr. J, on the other hand, had much more practical experience than Mr. V and was full of innovative ideas about how to apply techniques in the local soil and climate conditions.

Mr. J explained his relationship with Mr. V cheerfully: "I would feel

pressure if I was asked to teach others on my own. But since Mr. V, who learned the same information as I did in the training, supports me all the time, I feel relaxed about it. I think Mr. V and I are a good combination because I can teach the practical skills and Mr. V can give explanations based on scientific evidence. Before, I thought my position was to be taught by the extension staff. But now I am working together with Mr. V as a partner—we have different roles to play but we have a common goal."

Mr. J, a model farmer (left), and M. V, his extension staff (right)

Psychological analysis of **Case Study 10**

Providing relatedness support to farmers through partnership building with extension staff

Relatedness

- The farmer did not have to feel the anxiety of doing the task on his own since it was done as a joint effort with the extension staff.
- The farmer relied on the extension staff to help with the tasks he didn't feel so confident about because he had trust in him.

Psychological need for relatedness: The farmers chosen to be model farmers are usually very active and willing to take on tasks autonomously. They would most likely want to apply new technologies on their own. However, they may not feel so confident at times as they struggle with reading and writing and are not very familiar with the scientific information, even though their practical skills are relatively high. If their lack of skills or knowledge is pointed out by the project implementers, they may feel discouraged and their need for autonomy may be thwarted.

In Case Study 10, the farmer and the extension staff participated in the training together and their trusting relationship was strengthened. The farmer was able to feel comfortable working on the areas he was not so good at since he knew he could always rely on the extension staff if he needed him. A farmer's need for autonomy will not be thwarted if they receive additional knowledge and skills support from the extension staff who support their relatedness need. Through a joint effort with the

extension staff, the farmers can successfully accomplish difficult tasks and such experience provides competence support for them.

Tips for Project Planners and Implementers

Extension staff and farmers are often perceived as being teachers and students, respectively. However, it is more desirable for the extension staff to make the most of the abilities that the farmers already possess and to give a helping hand only when they are in need of assistance. In Case Study 10, the extension staff and the farmer worked together towards a common goal while recognizing their different roles. Although they had different strengths and weaknesses, they complemented each other through working together. There have been many cases in other projects where inviting both the farmers and the extension staff to the same training has fostered a trusting relationship similar to that described in Case Study 10.

Case Study 11
Model Farmers as Trainers

Key word
Motivation of farmers,
Model farmers and ordinary farmers,
Teaching ordinary farmers,
Undermining effect

Country S, one of the least developed countries in the world, has received many international assistance programs in the area of agriculture. Various technical assistance projects have been implemented in order to address the issue of low agricultural productivity. The technical cooperation project in which Ms. L worked actively as a model farmer was implemented as an assistance program by a foreign country. Ms. L received intensive training, including a leadership training, through which she raised her awareness as a model farmer. She also improved her technical skills, which enabled her to increase the agricultural yield of her farmland substantially. Seeing the success of her farming, the farming group members and her neighboring farmers all came to her to learn her skills.

Ms. L eagerly taught the other farmers, saying: "I learned this from the project without any cost. Of course, I should teach others free of charge."

In fact, Ms. L was always saying: "I want to guide other farmers as a leader. I want to contribute to the community." Given this, she had no hesitation in teaching others as a model farmer. Sometimes, even strangers who happened to hear about her would call her for advice. At such times, she would feel elated and say to her family and friends: "I got a call again.

I am pretty famous."

The project that Ms. L actively participated in finished with great success. She continued teaching others even after the project, and the whole community was improving its agricultural skills. She spent her days busily researching new techniques and practicing various methods on her farm. One day, another assistance project run by a different country started in her area. The new project was also aimed at raising agricultural skills, and Ms. L, who was already well known in the area, was selected as a model farmer again. The difference from the previous project was that Ms. L was to be paid to teach others for this project. She was naturally a hard working person and worked even harder to teach others for the new project. Those who were taught by her steadily improved their productivity and after two years, the project was completed very successfully.

After that, however, one of Ms. L's neighbors visited Ms. L as usual and asked if she could teach him some agricultural techniques once again. She responded to him bluntly, saying: "Can you ask someone else? The project has already finished."

Photo:Kenshiro Imamura/JICA

Psychological analysis of **Case Study 11**

A textbook example of the undermining effect

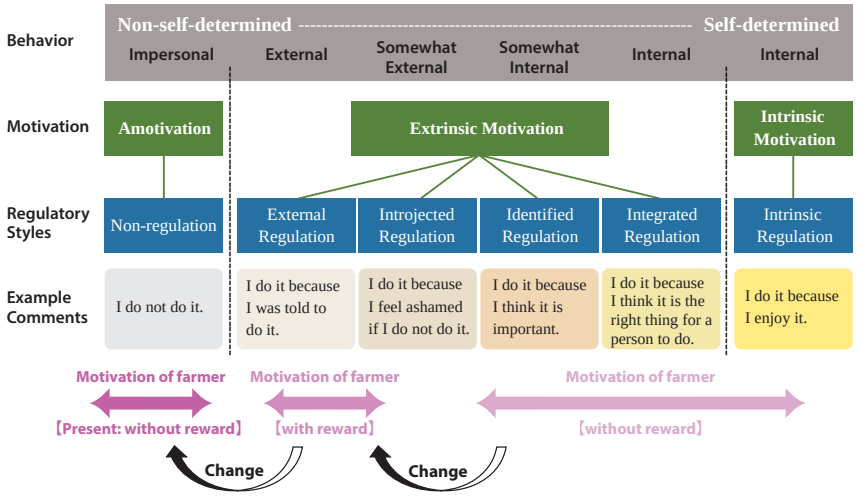
Autonomy

- Without a reward, the model farmer taught others autonomously, recognizing the social significance of her actions. She did it to benefit others and act as a leader.
- The model farmer's autonomy need was thwarted by the reward, and she started to teach others for a reward (i.e. driven by extrinsic motivation).
- The farmer's intrinsic motivation was undermined by the reward. When the project finished, she no longer continued teaching others because her extrinsic motivation vanished without the reward.

Psychological need for autonomy: Ms. L first taught other farmers autonomously because she was happy to be relied upon as a leader and recognized the social significance of helping others. However, when she started being paid under the new project, her motivation changed to teaching others for money. In other words, her motivation became controlled by the reward. Her psychological need for autonomy was thwarted by the reward and her motivation to teach others became extrinsic. While the reward was being given, her eagerness to teach others seemed to become stronger. However, her intrinsic motivation was, in fact, weakened during that time. When the reward was withdrawn (i.e., when the extrinsic motivator ceased to exist), it became difficult for her to continue teaching other farmers.

Analysis of motivation: As explained above, Ms. L's motivation was intrinsic when no reward was given to her. She taught others because it was important and it was the right thing for a person to do. When she started receiving a reward, this intrinsic motivation was weakened and the extrinsic motivation—which was doing the task for a reward—became dominant. When the reward was withdrawn, she stopped teaching others because her extrinsic motivation was lost. In Self-Determination Theory, this phenomenon is called "the undermining effect". The undermining effect refers to the situation in which you lose your intrinsic motivation by being given material rewards for doing the task.

Analysis of motivation in Case Study 11



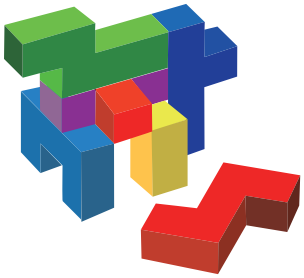
Tips for Project Planners and Implementers

Case Study 11 described a situation in which a farmer started to be paid under a new project for doing the same task she had done for a previous project without pay. Apart from this example, there are many other cases in which different projects target areas and/or farmers that are already included in an ongoing project. While such collaborations between two projects may produce synergetic effects, it is necessary to carefully see to it that neither project is thwarting the farmers' autonomy needs by giving monetary rewards, for instance.

Introduction to Psychology 4 The Undermining Effect

The undermining effect is a phenomenon that was proposed by Edward Deci in his seminal 1971 paper that led to the establishment of Self-Determination Theory (Deci, 1971). In this experiment, Deci recruited university students to work on a puzzle. He promised a reward to half of the students for successfully solving the puzzles, but not to the other half. The rewarded students indeed solved more puzzles while the reward was administered, but once the reward was withdrawn, they worked less on the puzzles than they had at the beginning. In contrast, the students who were not rewarded continued working on the puzzles at the same rate throughout the experiment.

These results were controversial at the time, as they defied the common sense idea that rewards would increase the amount of engagement. However, study after study replicated these results, and the undermining effect is now considered to be a robust psychological phenomenon. The undermining effect is caused not only by rewards, but also by punishment, threats, and deadlines.



There is a Jewish fable about a shop owner that describes something like the undermining effect (Deci & Flaste, 1995). Some hoodlums were trying to make a man go out of business by harassing him day after day. One day, he told the ruffians that he would give them each a dime to harass him. As you can imagine, they were delighted and happily continued to hound the shop owner. At a later date, however, the shop owner told the hooligans that he could only pay them a penny. The young men sneered and retorted that they couldn't waste their time for just one cent. Thus, the shop owner succeeded in stopping the harassment.

The reason why the undermining effect happens is that we engage in puzzles because they are fun to do, but if we are promised rewards for solving them, the activity becomes something we do for money instead of for the enjoyment, so when the reward is withdrawn, there is no longer a reason to engage in the task. Additionally, when we engage in the task for the enjoyment of solving the puzzle, we do so on our own volition. However, when somebody promises us a reward, the activity becomes something that we do for the sake of that person, and our need for autonomy is undermined.

There are studies that also show that rewarding uninteresting tasks

undermines the performance of such tasks. In a report published in 2005, Dan Ariely and his colleagues recruited subjects in India to participate in an experiment involving nine dull tasks (Ariely et al., 2009). Subjects were divided into three groups, each with a different level of reward. The first group was promised a reward equal to one 1 day's wages for succeeding at the tasks. The second group's reward was worth two weeks' wages. The third group's reward was an amount equal to five months of the local average wage. The group that performed the worst in eight of the nine tasks was the group that had been promised the equivalent of 5 months' wages.

It is important to understand that money itself does not cause the undermining effect. If farmers believe that the money they earn through their farming activities is earned due to their abilities rather than as a reward for participating in someone else's project, it will support their need for competence so the undermining effect will not occur. If project organizers invite prospective participants by telling them that if they participate, their income is guaranteed to increase, it will lead the participants to believe that any increase in income is because of the project instead of their own abilities. This will not matter so much while the project is successful, but if irregularities such as unfavorable weather occur and their incomes decline, the participants' motivation to continue in the project will probably be seriously undermined.

Case Study 12
The Technologies May Be Outstanding But…

Key word **Motivation of farmers, Appropriate technology, Profitability, Appropriate target setting**

"Please do not tell this to anyone, but I don't want to make the pickled radish that I was taught to make in the project anymore. If I sell it to my neighbors, I make a loss because they don't pay much. I can sell it at a higher price at the local market, but I am too busy with rice farming to go there. If I can't sell it all, it will go bad. Besides, it is too much work for me to make pickles because I have a lot of farm work and house work to do," said a female rice farmer complaining about her situation.

In another village, a male farmer said: "The project taught us how to produce cut flowers, which are in high demand in Europe. But I discovered it would cost a large amount of money to get the facilities. Also, it takes a lot of care to produce flowers that would meet the market requirements. I can't afford the money or time for that. So, I decided not to grow flowers after attending the training. There are some farmers who started growing flowers and they are making a lot of money. The techniques the project taught us are indeed good. However, those who are making money from flowers had a lot of financial resources to hire laborers in the first place. Small-scale farmers like me can't do the same. Many of us have given up on the idea of producing flowers."

Farming group members gathered in a village and discussed issues about the local mill. "We received a mill under the project, but we have

power outages frequently here. We are disappointed since we can't mill as much as we wanted. The project team told us that if we had a mill, we would be able to add value to the corn we produce and our income would increase. So, we decided to get the machine. But it is too much trouble to run the machine if we can only mill a small amount due to the shortage of electricity. It is also a waste of time to stay at the mill waiting for the power to come on. So, in the end, we gave up using the mill even when the power was on. Besides, we worry about the maintenance costs in the future. We wonder if the project will be able to cover the cost for repairs too." In both cases, the technologies that the farmers were taught under the project were very good. With these technologies, they would be able to make high-quality products that no one else could in their country. The project team was confident about their technologies and did not understand why the farmers failed to adopt them or to use the machines provided. The team visited the communities and repeated to the farmers: "If you follow exactly what we told you, you can definitely produce good products. Just keep on working." The farmers' adoption rates for the new technologies and machines, however, remained low.

Psychological analysis of **Case Study 12**

Competence needs thwarted by technological mismatch

Competence

- Most of the farmers had their competence needs thwarted by technologies which required high-level marketing and management skills or a strong financial capacity.
- Machines which were beyond the management capacity of the farmers also thwarted their competence needs in terms of solving their problems.

Psychological need for competence: Many projects are implemented to try to disseminate new or improved technologies to farmers. The farmers in Case Study 12 were taught technologies which did not match their financial, technical, managerial, or socio-economic levels. The project team was confident in the quality of the technologies and believed that the farmers would benefit from the training. In fact, the technologies themselves were excellent, as the farmers pointed out. However, the farmers did not feel the impact of the introduced technologies because they were not suited to the famers' circumstances, so their competence needs were thwarted. If the technologies cannot produce an immediate impact, such as improved profitability or a reduced workload, the farmers will not want to adopt the technologies.

Tips for Project Planners and Implementers

Many projects are aimed at developing and disseminating agricultural techniques for improving farmers' productivity and profitability. We use the word "farmers" in a general sense, but there are multiple aspects to their circumstances: economic power, access to resources and the market, main income sources, working conditions, social networks, socio-economic vulnerability, and educational background, to name but a few. It is important to carefully choose the technologies which match each farmer's capacity. Questions such as "Who is this technology designed for?" or "What is this technology (means) intended to achieve (ends)?" need to be asked beforehand and appropriate target setting (selection of target farmers) should be conducted. Developing an approach that allows flexible customization of the technologies to meet farmers' needs, rather than disseminating technologies uniformly, is also necessary. In any case, putting the means (technologies) ahead of the ends (farmer's benefit) will undermine the ultimate goal of the project: "Who is the project being implemented for?" Care should be taken to avoid inappropriate prioritization regarding the means and the ends.

Case Study 13
Not Allowed to Quit

Key word **Motivation of farmers,**
Options,
Coercion from above

A member of a women's group in a small village was chatting with one of her neighbors, when she said: "I took handicraft training organized by the project team. I can produce handicrafts from cheap, easily available materials between household chores. So, women can do this easily. But I've discovered the handicrafts don't sell at a high price even though I put quite a lot of effort into making them. I can't even earn any pocket money. If I lived near a town where tourists visit, I could probably make profit. But here only local people buy the products. The leader of our women's group has a husband who often goes to the capital city for work. So, he can sell her handicrafts at a high price. I am envious of her."

The other woman told her: "If it takes so much time for no gain, why don't you quit it and start raising chickens? You always wanted to get into the poultry business, right? We have middlemen who come to our village regularly to buy chickens and eggs at a good price. I think you can make more money raising chickens than making handicrafts."

However, the member of the women's group sighed and said: "I told our extension worker the other day that I wanted to stop producing handicrafts because it didn't make as much profit as I had expected. But she snapped at me, saying: 'How much of the project's money and time do you think we have spent on organizing the training? If you are not making money, that's because you are not working hard enough to improve your

production and marketing skills. Just keep on producing until you make a profit out of it. Look at your group leader. She is making a profit.' So, I could not quit. If I make her angry, the whole village will be in trouble."

"Besides," she continued, "When I told her I wanted to learn poultry, she said: 'This project is a handicraft project. We don't teach poultry'. So, I had to give up."

Photo:Shinichi Kuno/JICA

Coercing farmers into activities against their will thwarts their autonomy needs

Autonomy

- The farmer's autonomy need was thwarted as she was coerced into using technology which was not appropriate for her in terms of profitability and the time/labor required.
- Not giving the farmer other technological options also thwarted her autonomy need.

Psychological need for autonomy: Handicraft making seems to be a profitable business for those who met certain conditions. Unfortunately, this was not the case for the woman in Case Study 13. She proposed raising poultry to the extension worker as an alternative because she had always been interested in this and she thought it would earn her more money than handicraft making. The extension worker, however, immediately dismissed the alternative idea and forced her to continue making handicrafts based on the reason that it is convenient for the government. As a result, the woman did not take up raising poultry. Such an attitude on the part of extension workers thwarts farmers' autonomy needs if they try to find various options to improve their livelihoods.

This village woman was too afraid to push her idea on the extension worker any further because she thought that the villagers would not be able to receive training in the future if the extension worker turned her back on them. The extension worker may have thought that the woman

willingly accepted her idea. However, the woman's need for autonomy was, in fact, greatly thwarted during this interaction and it would be difficult to see her succeed in handicraft making in the future.

Apart from thwarting the farmer's autonomy need, the project thwarted her competence need too. She worked on handicraft making in the hope that she would improve her life. However, her competence need was thwarted when she realized that this unprofitable and time-consuming handicraft production was not having a meaningful impact.

Tips for Project Planners and Implementers

Even if all the villagers master an effective technology, some will be able to increase their income while others will not. Ideally, of course, none of the villagers should drop out by way of a group effort. In reality, however, people's priorities and situations are different and there are villagers who want to search for other sources of income if the technology that they have been taught involves substantial time and labor. Not giving any alternatives to the farmers and forcing them to continue the task will never lead to a sustainable outcome.

Helplessness Can Be Learned

Nobody likes to fail repeatedly. However, the effects of repeated failures go far beyond just feeling bad—such an experience is known to be the cause of apathy and depression.

The renowned psychologist Martin Seligman conducted a series of experiments in the late 1960s in which he administered electric shocks to dogs (Seligman, 1972). All of the dogs were harnessed so that they could not escape, but half of them were able to terminate the shocks by pressing a panel with their snouts, while the other half were not. Next, these dogs were placed in a different cage. The floor of this cage was rigged to give the dogs electric shocks, but the dogs could easily escape by jumping over a low partition. All of the dogs that had been able to terminate the shock when they were harnessed safely escaped the shock in the second cage. However, most of the dogs that had not been able to terminate the shock when they were harnessed did not—they seemed to simply give up and resign themselves to the electrical shocks.

This experiment has been replicated with human subjects, too. In this experiment, half of the subjects were able to terminate an annoying sound on their headphones by pressing a button, while the other half were not. All were later put in a situation where they had to listen to more annoying noises through their headphones, but could easily stop the noise if they wished. All of the subjects who had been able to terminate

the noise in the initial setting immediately stopped the irritating noise, but most of the other subjects did not.

This phenomenon is called **learned helplessness.** Learned helplessness occurs when somebody repeatedly experiences failure under circumstances that they cannot control. Once the person learns such helplessness, they will not try to succeed even under circumstances that they are able to control. It is important to understand that learned helplessness can happen to anyone. In many cases, those who live in destitute conditions may seem to be apathetic, and people often assume that they are lazy and that it is their own laziness that is to blame for their poverty. However, we must remember that they have not had an opportunity to develop their abilities, and because of their lack of ability, they have repeatedly failed to achieve tasks that would improve their livelihoods—in other words, they are most likely in a state of learned helplessness. For such people, it is necessary to provide tasks that are optimally challenging for their ability levels, and provide the necessary support so that they can experience success.

Case Study 14
Providing Free Goods and Equipment

Key word **Motivation of farmers,**
Provision of free goods and machines,
Giving rewards for participation,
Farmer's ownership

In County P, one of the poorest countries in the world, not so many farmers participated in training when invited to do so under a project. Everyone was very busy with their own farming work and it was difficult for them to find time for the training. In a past project, each participant was paid five dollars as an allowance, which resulted in many farmers attending the training. However, the adoption rate for the technologies promoted in the training was very low and the project was considered unsuccessful. For the new project, it was decided that free seed and fertilizer would be given to participants in the crop production training instead of cash. The project team thought that distributing seeds and fertilizer would encourage the farmers to use the technologies that were going to be taught in the training.

As expected, many farmers attended the training. They grew crops using the seeds and fertilizer received in the training, which pleased the project team immensely. However, in the next cropping season, there were very few farmers who bought the necessary seeds and fertilizer themselves to continue growing the crops. There were various reasons for this. Some said: "I don't think it would be profitable in the end if I pay for the seed and fertilizer." Others said: "Growing these crops promoted under this project requires a lot of labor and I prefer growing the crops that we always grew before the project" or "I realized we didn't have enough water to grow these crops in this area." When the project conducted follow-up training, the

number of farmers that attended decreased by half in comparison with the previous training.

In a village without electricity in Country P, there was a fishing group that was discussing how to raise the members' income through the fisheries business. As this village was one of the target villages for a project on fisheries development, the group wrote a proposal entitled "Plan for a Village Fish Market" and submitted it to the project office. The group thought that if there was a facility where fish could be frozen and stored, however small it might be, the villagers could sell all of their fish catch to a large market in a nearby town without wasting it, thereby increasing their income. The plan was approved under the project and the group received technical training on managing the fish market. The group members paid for the materials for the building. The members also provided the labor to build the facility. The members, however, could not raise enough funds to purchase a solar-powered freezer. The group requested financial assistance from the project team to make up the shortfall. The request was approved, and the freezer was provided. Finally, the group was able to start the fish market. When the freezer had a mechanical problem, the members followed the operation and maintenance plan that they had prepared before the start of the fish market and repaired the freezer using funds that they had been saving for such an occasion. Presently, the group still runs the fish market smoothly and continues to make a profit from it.

Solar-powered freezer in the village's fish market

Providing goods and machines can either thwart farmers' autonomy or support their competence

Autonomy

- Giving a reward, whether it is in the form of cash or goods, for attending training thwarts farmers' autonomy needs.
- The attendance rate for the training may rise temporarily because of the reward, but the farmers' autonomous motivation won't be enhanced. For the technologies to be adopted and practiced by the farmers continuously, which is the primary purpose of the training, farmers need to have their autonomous motivation promoted.
- If goods are provided to beneficiaries who have realistic and reasonable plans which were formulated and proposed by the farmers themselves in accordance with their actual needs, it does not necessarily thwart the farmers' autonomy needs, since the reward is not given in exchange for participation in the activity.

Psychological need for autonomy: The project team organized the training promising to give seed and fertilizer to the participants. Even though the reward was items that would be useful for the dissemination of the technologies rather than money, the fact that the project gave a reward in exchange for attending the training thwarted the farmers' autonomy needs. The farmers' attendance rate for the training may be high as long as the reward is given. However, it is necessary to reconsider what we really want to achieve by offering training to farmers. The primary purpose of the training should be to help farmers use the technologies sustainably and

improve their livelihoods sustainably. If that is the case, the project needs to create an environment in which the farmers' autonomous motivation will be enhanced. If the farmers participate to receive a reward (i.e., they are driven by extrinsic motivation), the project team will be unable to achieve the goal of the training.

The case of the fish market was different in that the project team did not give rewards for participating in the project activities. The fishing group themselves made the plans based on their own needs and raised the funds to implement the plan, but they fell short of the required funds. Since the project team stepped in financially to assist the actualization of the plan, it did not thwart the fishing group's need for autonomy. In fact, the fishing group continued to operate the fish market on their own initiative even after receipt of the goods, which can be regarded as evidence of their autonomous motivation.

One thing to note is that if the farmers considered the task of planning to be "planning with the aim of obtaining goods," it would thwart their autonomy needs regardless of the circumstances. When designing a project or explaining it to farmers, it is important to clarify and communicate to the farmers that the purpose of making plans should not be to get goods and machines.

Competence

- Hurdles which farmers cannot overcome through their own efforts can thwart their competence needs.
- If the plan is realistic, reasonable and sustainable, providing goods which would help the farmers to overcome such hurdles supports their competence needs, thereby raising the prospect of sustainability.

Psychological need for competence: In the case of the fish market, the fishing group faced a problem in that they could not raise enough funds to buy a solar-powered freezer, which prevented them from implementing their plan. Hurdles which the group could not overcome through their own efforts would thwart their competence needs. If the project team had not done anything, the group's motivation to implement the plan could have been weakened.

The project team, however, provided financial assistance to help the group overcome the hurdles at the right time. To put it differently, the project team confirmed that the group's plan was realistic and reasonable and decided to provide them with competence support. Provision of goods in this way would not thwart the group's autonomy needs; instead, it supported their competence needs. It is expected that this situation will lead to enhanced sustainability for the group's activities.

Tips for Project Planners and Implementers

Many technical cooperation projects include a component that allows for the provision of certain materials or goods to the beneficiaries. Providing free goods is not inherently good or bad. What is important is how the materials are provided. Depending on how you provide them, it could have either a positive or a negative impact on the farmers' motivation.

Case Study 15
Building Trust among Farmers

Key word Motivation of farmers, Fairness among farmers, Conflict among farmers, Trust-building

A project team in Country G conducted various types of production training in poverty-stricken areas. One of the target communities received financial assistance for the installation of irrigation facilities, aquaculture ponds, and greenhouses for vegetable production. When the project was approaching its final stage, the irrigation facilities were destroyed. In addition, chloride was poured into the aquaculture ponds, killing all the fish. It was later discovered that some members of the community who had attended the training but not received financial assistance for construction of the facilities were responsible for destroying the irrigation facilities and putting chloride in the ponds.

The owner of one of the greenhouses, who was a young farmer, said: "There are 26 families in this community but only 3 families received assistance for the construction of the greenhouses. Recently, those who didn't receive assistance protested against the project as they were jealous of us. Of course, I was happy to receive the greenhouse but, to be honest, I didn't want to receive assistance which would cause such jealousy among other community members. The irrigation, greenhouses, and fish ponds all benefited only a small portion of the community. I wanted assistance which would benefit the entire community." The father of this farmer, who had been working as a leader of this community for a long time, added

disappointedly: “There was a great deal of conflict within the community over who would receive what assistance from the various projects. The relationships among the community members became worse and worse, and we lost trust in each other completely.”

In contrast, there was another community whose group work was enhanced through its participation in a project. The community had female members growing herbs together. The female members said: “It is more like free time for us when we gather for the post harvesting work. We enjoy working and chatting with other women who we would otherwise be unable to see very often because we are so busy every day. We became busier after starting this herb business but our lives became brighter after having this opportunity. We all became good friends. Unlike when we were growing herbs individually, we are able to improve our production skills and find many buyers because we, as a group, can come up with various different ideas. Even if we make a loss in the future due to crop failure, for example, we will never give up this group.”

Psychological analysis of **Case Study 15**

Fairness among farmers supports their competence and relatedness

Competence

- The farmers' competence needs were thwarted by other farmers trying to interfere with their plans.

Psychological need for competence: The fact that some farmers received substantial financial assistance for such things as irrigation facilities, aquaculture ponds, and greenhouses caused jealousy among other farmers, which resulted in the destruction of the facilities. One of the farmers said "I didn't want to receive assistance which would cause such jealousy among other members of the community," which indicates that the assistance they received can be regarded as something that stood out disproportionately considering the poor socio-economic conditions of the community. Because of the relationships among the community members would not allow for someone getting ahead of the others, the farmers' activities were disrupted and came to a standstill. The motivation of the farmers who had received the facilities was weakened since their competence needs were thwarted.

Relatedness

- A sense of unfairness among the project participants deteriorated the farmers' relationships.

- Farmers' relationships were strengthened through their joy of working together.

Psychological need for relatedness: The facilities—i.e., irrigation, aquaculture ponds, and greenhouses—were expensive and stood out in a poor community. Thus, a sense of unfairness developed between those who received assistance and those who did not. This sense of unfairness caused conflict among the farmers and damaged their relationships. The farmers' need for relatedness was thwarted as a consequence. The project team should have had a deeper understanding of the local socio-economic situation and provided assistance that was more appropriate to the community. The project team also should have involved all the target farmers in consensus building so that they could agree on who would receive what assistance.

On the other hand, the second community in Case Study 15 provides a good example of relationships among the community members being strengthened through their participation in a project. The members worked together and shared ideas for the improvement of the group farm while they enjoyed working on the project. Such a situation increases the farmers' motivation in performing their activities.

Tips for Project Planners and Implementers

Regardless of whether the project targets individuals or groups, all of the target farmers live in rural communities. Thus, a project's success is inevitably influenced by the farmers' relationships with others in the community. The project implementers should always keep an eye on the relationships between the target farmers and others in the group, and carry out activities that would help to build trust among them. Effective means of mitigating a sense of unfairness among farmers include the establishment of clear and transparent criteria for the provision of assistance or the introduction of a stricter cost-sharing mechanism for purchasing goods and machinery. Transparency and fairness is important in providing relatedness support.

Case Study 16
Leveraging Farmers' Strengths

Key word **Motivation of farmers,**
Farmers' strengths,
Utilizing existing resources

An income generation project targeting the poorest areas of Country J had been carrying out a variety of activities in accordance with the local farmers' needs. These activities included soil conservation, afforestation, crop production, vegetable gardening, animal husbandry, dairy farming, and handicrafts, to name but a few. The target areas had few literate people and there were only a handful of villagers who could speak the official language of Country J. All of the villagers were subsistence farmers. Their natural resources were limited and the rural roads were in bad condition. Given this dire situation, it took much more time than expected for the villagers to learn new knowledge and technologies. Even if they started producing the new products that the project recommended, a lot of them gave up producing them because they could not find buyers.

Nevertheless, one community conducted the activities very successfully. This community—Village P—had extremely limited natural resources; particularly its water resources, which were in such short supply that planted trees did not survive. The male community members had to work outside of town as migrant workers most of the time, and only children and female community members stayed in the village. Their main source of income came from the men's migrant work and goat rearing, which had been a long tradition among women in this community. Since the community's situation was so harsh, the project team was at a loss as to what to do in this community at first. Then, one of the project experts was

struck with the idea of introducing an improved breed of goat, saying: "The only resource they have is goats. So, they can make the most of it."

The village women switched from rearing the traditional breed of goat to an improved breed, and they started to sell the goats' kids much more frequently than before since the fertility rate of the improved breed was much higher than that of the traditional one. On top of that, the milk yield more than doubled and the women were able to raise their income substantially from cheese production and sales.

A farmer raising the improved breed of goat

One of the women who raised the improved breed of goat said: "Goat breeding is something we have been doing for generations. It is natural for me to raise goats and I love taking care of them. Thanks to this project, I have learned new things, such as how to treat sick goats. I give names to each one of them and keep them very attentively." The extension worker who was in charge of this village explained his experience: "Goat keeping is part of people's culture and lives in this area. The villagers already had knowledge about goat breeding before the project. We didn't introduce something totally new to them. Rather, we made use of what they already had and reinforced their knowledge through the introduction of a new breed. If we teach them something totally unfamiliar, it takes a long time for them to master it. What's worse, they often stumble and give up along the way. We didn't do anything out of the ordinary for them in this village, so both the implementers and the beneficiaries felt comfortable engaging in the activities."

Psychological analysis of **Case Study 16**

Competence support through leveraging farmers' strengths

Competence

- The project assisted the farmers in activities that they were familiar with. Thus, the farmers were able to develop their capacity smoothly and feel the impact of their improved skills.
- Unlike when a completely new technology is introduced, the project built upon farmers' existing resources, which enabled the farmers to adopt the technology without taking major risks.

Psychological need for competence: The introduction of an improved breed of goat was something that the village women felt comfortable with and readily acceptable. The farmers did not have to start from zero. Rather, they were able to add the new techniques to what they already knew and felt confident about. They were also able to see the impact of their skills improvement because they were already familiar with the area that they were engaged in. Their competence needs were supported because they were able to see that their skill levels had improved.

Another thing worth noting is that the farmers did not have to make additional investments when they introduced the improved breed because they were able to use their existing facilities and resources, such as goat sheds and grazing land. In other words, the village women were able to adopt the new technology without taking financial risks. In this sense too, the project succeeded in providing support for their competence needs.

Tips for Project Planners and Implementers

For projects, particularly those that target the poor, activities are often planned based on the farmers' need (i.e., what is lacking and what is needed). Generally speaking, this needs-based approach to planning is considered effective. However, there are many cases where such an approach is not necessarily effective, particularly in cases such as that described in Case Study 16 where the project's scope is broad, a wide range of activities are conducted, and the capacity of the target population is very limited. The farmers need a long period of time to master the new technology, and in many cases give up before they have done so. They often have a hard time finding buyers with their limited marketing skills and resources. What is more effective in such a situation is an approach which focuses on what they can do already; in other words, an approach which tries to draw from farmers' strengths. Instead of doing (1) problem analysis and then (2) objective analysis, the following planning procedure offers a clearer focus and may prove more effective in supporting the competence needs of poor farmers with limited capacity: (1) strengths analysis and then (2) identification of methods and options for leveraging these strengths.

Case Study 17
Speedy and Timely Implementation

Key word **Motivation of farmers,**
Speed,
Timing,
Attaining output in a short time,
Accumulation of successes

Country C implemented a project that provided a maximum of 1,000 dollars to a farming group for it to undertake a group effort to ensure the adoption of the agriculture and agricultural infrastructure technologies taught under the project. A group that planted potatoes using this financial assistance said: "We thought this project was really good because the whole process, from planning through to implementation, was done within a short period of time. If it had taken a long time between the planning and implementation, we would have lost our motivation to carry out the activities. A speed of action that enables us to do things when we want to do them is very important for us. In addition, the project helped us gain a tangible benefit—i.e., increased income—in a short time, which also kept our motivation high."

The extension staff who was in charge of this group added: "Big projects with large budgets often make beneficiaries wait for months after the planning has been finished. If there is a long wait between the planning and implementation stages, the circumstances of the communities often change. For example, the villagers may leave their community for seasonal work and the expected results become hard to obtain. This project, however, had a one-year project cycle in which the planning, implementation and

monitoring stages were all completed within a short space of time. So, even if the farmers faced a challenge in the first cycle, there was always a chance that they could recover from it in the next cycle. Besides, farmers who saw the success of other farmers in the first cycle joined the activities in the second cycle, thereby creating a virtuous circle with more and more farmers joining the project."

Another farming group that constructed an irrigation canal under this project implemented various activities on their own initiative in the planning stage. The group constructed the canal in stages: 50 meters in the first cycle; an extension of 100 meters in the second cycle; and a further 150 meters in the third cycle. They faced many challenges at first and had to learn by trial and error. But as they went on, they accumulated experience and knowhow and became able to solve various issues efficiently. When the third cycle was finished, their experience gave them a lot of confidence and pride. When visitors from other villages came to see the canal, the farmers were able to confidently explain the details of their activities, including skills related to civil engineering and construction management.

Farmers constructing the irrigation canal

Psychological analysis of **Case Study 17**

Timing of the results is crucial in supporting competence

Competence

- The farmers felt that their techniques had improved because they saw the achievements in a short time. They were also able to immediately identify issues that needed to be resolved when they faced problems.
- The farmers boosted their confidence as they experienced success in a short period of time.

Psychological need for competence: For both the potato farming and the irrigation canal construction, the plans were made with a farmer-centered approach and the activities were designed so that the farmers would feel the impact of their actions in a short period of time. Since the farmers gradually experienced success, they were able to continue their activities as they saw an improvement in their skills and confirmed their achievements in a short time. Even if they faced difficulties, the problems were relatively minor because they were generated in a short space of time. Therefore, the farmers could easily identify the issues and rectify the problems without much trouble. The project was designed in such a way that the farmers could raise their confidence as they accumulated more experience, which effectively supported farmers' need for competence.

Autonomy

- The activities were implemented at the right time while the farmers' motivation was high. Thus, the activities were implemented as planned

and the farmers' capacity was developed.

Psychological need for autonomy: The speedy and timely project implementation helped the farmers to realize that their plans were progressing, which raised their sense of self-determination. This approach provided support for the farmers' autonomy. The project implemented small-scale but sound activities one after another without missing the windows of opportunity when the farmers' motivation was high. In this way, the farmers' capacity was developed effectively and they were able to carry out their activities steadily while confirming the progress of their plan.

Tips for Project Planners and Implementers

Many people are very careful about the planning and spend a lot of time just on this stage. After the planning is finished, a long time is often required to acquire the budget and to make various arrangements. The project implementers are too busy to notice that the farmers feel demotivated as they are kept waiting for so long. Besides, the situation on the ground may change substantially during the long waiting period. It is important not to pursue the "perfect" plan from the beginning. Instead, it is more appropriate to implement activities on a small scale and improve the plan through trial and error so that the farmers can keep their motivation high during the activity implementation stage.

Introduction to Psychology 6 — The Importance of Timing (Temporal Motivation Theory)

It is sometimes hard to make yourself work on a task if you know that it will take time to attain the desired outcome. Temporal motivation theory, proposed by Piers Steel and Cornelius König, can explain this decrease in motivation (Steel & König, 2006). The theory is expressed with the following formula:

$$Motivation = \frac{Expectancy \times Value}{1 + Impulsiveness \times Delay}$$

Motivation, located on the left side of the equation, represents the amount of motivation required to achieve a certain task. The numerator on the right side of the equation (i.e., *Expectancy* × *Value*), comes from the formula for expectancy-value theory. *Expectancy*, or self-efficacy, is the perceived probability of succeeding in the task, and it varies between 0 and 1. Value is the perceived value of succeeding in the task. According to expectancy-value theory, the motivation to succeed in a task is maximized if the probability of succeeding is 100% and if there is a big reward associated with success. Indeed, who would not try if they could easily gain a big reward? Equally, most of us would hesitate to engage in a task if the probability of success was very low.

However, if the probability of success is high for a very rewarding task, but it will take time to attain the result, motivation declines. Think of when someone has a deadline that is far in the future. They will most probably procrastinate and not work on it immediately, and then work very hard when the deadline approaches. This is exactly the kind of behavior that temporal motivation theory explains. When there is a lot

of time until a deadline, it also means that there is a lot of time until you will receive the evaluation or reward for the task. Temporal motivation theory improves on the formula for expectancy-value theory accordingly by adding a denominator.

Delay the time until realization of the result, while Impulsiveness represents the person's sensitivity to delayed results. If either *Delay* or *Impulsiveness* is 0, then the denominator is 1, so there will be no decrease in *Motivation*. However, if both *Delay* and *Impulsiveness* are larger than 0, then the *Motivation* value will be lower than what would be expected in expectancy-value theory.

It is inherently difficult for participants to be fully motivated in agricultural development projects that involve technical training, because it takes at least one season until the farmers are able to harvest and sell their produce. Hence, it is a good idea to plan projects so that there are several checkpoints where the participants are able to see the tangible results of their training before they obtain the financial benefits of their crops. It is also important to remember that it is crucial to begin training immediately after proposing a project to the participants. The reason why many development projects fail can be attributed to a delay between the proposal of the project and the actual implementation.

In summary, temporal motivation theory tells us that timing is important and that speed of action is crucial.

4. Afterword: Aligning Ourselves to Attain the Goal

In this booklet, we have analyzed the motivation for different project stakeholders: central government staff, local government staff and the final beneficiaries (farmers). It has been made clear that motivation throughout all the levels of stakeholders is greatly influenced by how much support (or thwarting) the stakeholders have received from others with regard to the three psychological needs. These case studies indicate that SDT, proposed by Deci et al., can be adequately applied to international cooperation in the field of agricultural and rural development. SDT can serve as a practical theory that may lead to improvements in technical cooperation going forward.

JICA's technical cooperation projects for agricultural and rural development often pursue increased income or improved livelihoods for the final beneficiaries as the project purpose, overall goal, or as one of the objectively verifiable indicators for the output or project purpose. Needless to say, achieving development and prosperity for the regions or communities is the most important mission for all the project implementers. Thus, the implementers should make it clear that they are carrying out the activities for the benefit of the communities, not for personal gain. Otherwise, farmers may feel that the government officials and extension workers are conducting the activities simply because they have to do it as part of their work, rather than for the benefit of the farmers. While it is important for the project planners and directors to think about how they can motivate each level of stakeholders, they should not forget to align all the stakeholders so as to attain the project goal.

Conducting activities to improve the farmers' income and livelihoods directly supports the competence needs of the final beneficiaries, which is the farmers and rural residents. Therefore, if the project appropriately caters to their needs, the motivation of the beneficiaries will almost certainly rise. But what about the motivation of the central and local government staff? If the project achieves increased income and improved livelihoods for farmers, the government staff members may be able to feel job satisfaction. Having said that, they probably feel most motivated in their daily work when they realize that their skills have improved or their relationships with their bosses or other project team members have been strengthened, rather than when there has been an improvement in the farmers' income or livelihoods, since the former directly impacts and influences their professional life. To put it another way, while the income or livelihood improvements which the project is aimed at achieving can directly raise farmers' motivation, it only has an indirect influence on the motivation of the project implementers.

For the SHEP project in Kenya, the project team regularly reported

to their boss so as to raise the project's recognition within the Ministry of Agriculture. This effort was made intentionally to raise the motivation of the central government staff. The central government staff gradually deepened their understanding of SHEP's unique value and significance through their repeated explanations to their bosses. They then started to take pride in their work. Furthermore, the staff's motivation for their everyday work was raised by the fact that their bosses now understood and valued their work better. As they were now undertaking their daily duties thinking that they were doing something important, they were able to attain tangible outputs from the project sites as well as to receive the expected recognition from their bosses. It seems that the central government staff raised their motivation much more through interaction with their bosses because they were able to demonstrate the significance and effectiveness of their project inside and outside their organizations, which in turn supported their competence needs.

For the benefit of the local government staff, the project invited high-ranking government officers to make the opening remarks at locally organized events, such as the Farm Business Linkage Stakeholder (FABLIST) Forums. The local government staff felt honored to have such distinguished guests and their willingness to work harder became stronger in order to prove their ability to make the activities successful. Besides, if their work was recognized, their chances of getting promoted to central office positions also improved. Therefore, for those who wanted to receive recognition or be promoted, receiving someone from the central government at their local work place was a motivating factor. In fact, in the SHEP project that was implemented in Kenya, there were several local government staff members who were promoted to important positions at the central office because of their excellent performance as local officers. In

order to raise the extension staff's motivation too, the project team invited high-performing extension staff to give speeches on their successful experiences at meetings organized in other locations, so their competence need was supported.

As explained above, apart from working on improving farmers' income and livelihoods, a variety of activities were conducted for the SHEP project in order to raise motivation throughout the different levels of government staff by paying due attention to their three psychological needs. As a result, the SHEP approach succeeded in aligning both the project implementers and the beneficiaries in attaining the project goal in the end.

When conducting a technical cooperation project, it is advisable to create conditions under which various project stakeholders can easily align themselves for the achievement of the project goal. While the goal is common to all of the stakeholders, differentiating the types of encouragement to raise each person's motivation is necessary in order to create such conditions. In other words, when supporting the three psychological needs for different levels of stakeholders, a comprehensive viewpoint that enables a synthesis of motivational activities is the key to success.

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Suggested Readings

Books on Self-Determination Theory

Deci, E. L. & Flaste, R. (1995) *Why We Do What We Do: Understanding Self-Motivation*. Putnam's Sons.

Pink, D. H. (2011) *Drive: The Surprising Truth About What Motivates Us*. Riverhead Books.

Books on Other Theories of Motivation

Amabile, T. & Kramer, S. (2011) *The Progress Principle: Using Small Wins to Ignite Joy, Engagement, and Creativity at Work.* Harvard Business Review Press.

Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. Harper Collins.

Dweck, C. S. (2006) *Mindset: The New Psychology of Success.* Random House.

Maslow, A. H. (1943/2012) *A Theory of Human Motivation*. Start Publishing.

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SHEP Approach from the Academic Point of View

(1) A Self-Determination Theory Analysis of Reasons for Participating in Projects

Summary: Field Officers and farmers that were involved in the Smallholder Horticulture Empowerment and Promotion approach in Kenya (SHEP Phase 1) and the Life Improvement Approach in Japan participated in semi-structured interviews* regarding the reasons why they participated in their projects' activities. The reasons were categorized into motivation types defined by SDT. A large proportion of the reasons were coded as identified/integrated regulation, the most autonomous type of motivation, which supported the hypothesis that participants in both projects would primarily be autonomously motivated.

Full text: http://jica-ri.jica.go.jp/publication/assets/JICA-RI_WP_No.121.pdf

*Semi-structured interview: An interview method that is commonly used in social surveys. Although there is a fixed list of general questions or topics, the interviewer is allowed to make certain reactions, modify the expressions, order and content of the questions in response to the dialog. This method has an advantage in that the interviewer is able to get new information along with the interviewee's response by setting both structured and flexible questions.

(2) Application of Self-Determination Theory in Implementing JICA's Technical Cooperation Program

Summary: Developed in a technical cooperation project in Kenya, the SHEP approach is composed of a series of activities which take into consideration Self-Determination Theory. The activities, such as the Participatory Market Survey done by the farmers themselves and the Target Crop Selection that was based on the survey results, helped to keep the motivation of the target farmers high. JICA has officially indicated that SDT is one of the main pillars of the approach and trained government officials from 23 African countries. SDT-based extension work for farmers has been implemented widely as a development program.