



An Interdisciplinary Study on Agency Enhancement Process and Factors

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The Motivation of Participants in Successful Development Aid Projects: A Self-Determination Theory Analysis of Reasons for Participating

Nobuo R. Sayanagi* and Jiro Aikawa[†]

Abstract

The aim of this study was to reveal the reasons that extension officers and farmers give for participating in successful capacity development projects, and to categorize these reasons into motivation types defined by self-determination theory, drawing from the "why questions" approach of Chandler & Connell (1987). Field officers and farmers from two successful projects, — namely, the Life Improvement Approach in Japan and the Smallholder Horticulture Empowerment and Promotion approach in Kenya — participated in semi-structured interviews regarding the reasons they participated in their projects' activities. The concordance rate of the independent ratings of the reasons by the two authors was high, verifying the reliability of the coding procedure. A large proportion of the reasons were coded as identified/integrated regulation, the most autonomous type of motivation, supporting the hypothesis that participants of successful aid projects would primarily be autonomously motivated. Other implications of the interview transcripts are also discussed.

Keywords: development aid, capacity development projects, motivation, self-determination theory

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1. Introduction

Psychology and development aid

Workers in the field of development aid, particularly capacity development, have for some time recognized the importance of understanding the behavior and psychology of aid beneficiaries. For example, Kukita (1996) posited that promoting the intrinsic motivation of beneficiaries was key to the success of aid programs. The accumulation of such interest can be seen in the subtitle of the latest World Development Report (World Bank, 2015), "Mind, Society and Behavior."

However, this interest has not been reciprocal, and there are very few psychological studies on development aid. As Sayanagi (2015) has noted, this may be due to the lack of a tested theoretical framework allowing empirical research: there is no established method to systematically collect data, which is inconvenient in the field of psychology where there is much pressure to publish in quantity.

Sayanagi (2015) has proposed a theoretical framework based on self-determination theory, a psychological theory on human motivation, to study the motivation of development aid project participants and to guide sustainable aid policies. This paper will examine the viability of the psychological measurement of such motivation.

Self-determination theory and types of motivation

Self-determination theory (SDT) is a broad psychological approach to the nature of human motivation. While most other motivational theories in psychology just take into account the quantity of motivation, SDT also considers the quality of motivation, that is, whether the motivation is autonomous or heteronomous.

The beginnings of SDT were studies on the undermining effect of intrinsic motivation, which demonstrated that giving rewards contingent to performance on an initially interesting task subsequently decreases the amount of engagement in the task (e.g., Deci, 1971; Lepper, Greene, & Nisbett, 1973; Pritchard, Campbell, & Campbell, 1977). These findings led to the understanding that when a person is intrinsically motivated, he or she is driven by interest or enjoyment in the task itself, rather than aiming to attain an outcome that is extrinsic to the task. Motivation to attain such outcomes, such as to gain a reward or to avoid punishment, would be extrinsic motivation. In a capacity development program, for example, a farmer participating in a project to receive a cash transfer or a field officer attending to the program so his superior won't admonish him would be extrinsically motivated. A farmer participating in the program because she is excited to learn new things and a field officer training farmers because she enjoys training farmers would be intrinsically motivated.

Extrinsic motivation is now considered to be a continuum that spans from heteronomous to autonomous. SDT has a sub-theory, organismic integration theory (OIT: Deci & Ryan, 1985), which details the different types of motivation along the continuum and the contextual factors that promote or hinder more autonomous states of motivation. Figure 1 illustrates the types of motivation specified in OIT, which are arranged with more nonself-determined, or heteronomous behavior to the left, and self-determined, or autonomous behavior to the right.

To the far left of the figure is *amotivation*, which represents the state of lacking intention to act. To the right of amotivation are the four types of extrinsic motivation. In the least autonomous state, the behavior is *externally regulated* by a tangible reward or a threat of punishment. Next to the right on the figure is *introjected regulation*, a relatively heteronomous state that occurs when the regulation is taken in but not fully self-endorsed. In this state, behavior is enacted without external prods, but, as the person is not fully convinced of its importance, the behavior is performed for the sake of avoiding guilt or attaining ego enhancements such as pride. Further to the right is *identified regulation*, a relatively autonomous form of extrinsic motivation. This is a state in which a person consciously values a behavioral goal or regulation, and perceives the action to be personally important. Next is *integrated regulation*, the most autonomous form of extrinsic motivation. In this state, the regulation has been fully integrated to the self and is congruent with the person's values and needs. Finally, at the far right of the figure is intrinsic motivation, which is highly autonomous and prototypically represents self-determination (Ryan & Deci, 2000).

Figure 1 The self-determination continuum showing types of motivation with their regulatory styles, loci of causality, and corresponding processes (Ryan & Deci, 2000)



Autonomous regulation is facilitated through the taking in, or internalization, of values related to the task. When a value is internalized, it is assimilated to the self and personally embraced as opposed to being impersonal and foreign to the self. The more internalized a value is, the greater the degree of autonomy would be. Internalization may progress incrementally over time, but not necessarily: the values of a new behavior can be internalized relatively deeply from the onset, depending on prior experiences and current situational factors (Ryan, 1995). It would be possible for a farmer to be convinced that participation in a project would improve his livelihood and also contribute to the community, and to commit with identified regulation from the beginning. SDT posits 3 basic psychological needs, respectively the needs for autonomy, competence, and relatedness. It has been demonstrated across a wide range of activities that

supporting these needs facilitates autonomous motivation (e.g., Nunez & Leon, 2015; Van den Berghe, Vansteenkiste, Cardon, Kirk, & Haerens, 2014; Vansteenkiste & Ryan, 2013)

It has been shown that autonomous motivation generally is associated with a wide range of more desirable outcomes than heteronomous motivation, including more engagement, better performance, greater persistence, lower dropout rates, and enhanced psychological well-being. These findings have been replicated in a diverse range of domains, including education, health care, religion, physical exercise, political activity, and intimate relationships (for reviews on these outcomes and also SDT in general, see Deci & Ryan, 2008; Ryan & Deci, 2000; Ryan & Deci, 2002; Vallerand, 2012).

One additional outcome that would be of interest to development aid would be the long-term sustaining of the target behavior. One typical failure scenario of a capacity development project is where beneficiaries will show up for training while a donor agency hands out incentives in money or in kind to participate, but cease doing what they were trained once the agency departs and incentives are withdrawn — a textbook example of the undermining effect. Contrarily, longitudinal studies have demonstrated that autonomous motivation predicts sustained behavior (e.g., Kosmala-Anderson, Wallace, & Turner, 2010; Williams et al., 2006; Wilson et al., 2012). This suggests that promoting autonomous motivation in development aid projects would facilitate longer-term engagement in the activity.

It is important to note that motivation is less a trait-like factor as personality, but is more a concept that is influenced by situational and contextual factors. Also, people usually have different motivational dispositions toward different tasks, so rigidly speaking, there is no such thing as a "motivated person" as no person is highly motivated towards every single task that they encounter. Additionally, in SDT, one can have multiple types of motivation toward a particular activity. For example, a farmer may participate in a capacity development program because he doesn't want to be seen as lazy by his neighbors (introjected regulation), but also because he believes that the program can improve his skills as a farmer (identified regulation).

The aims of this study

The primary aim of this study is to reveal the reasons that extension officers¹ and farmers give for participating in successful capacity development projects, and to categorize these reasons into motivation types defined by self-determination theory, drawing from the "why questions" approach of Chandler & Connell (1987). The why questions approach, a qualitative model, is useful to assess the motivation of subjects in areas which there have been no previous studies in SDT, as in the case of this study, because it directly taps into the perceived reasons for engaging in the target activity. The answers obtained by this technique could in turn be used in a pencil-and-paper self-report questionnaire in the style of surveys widely used in SDT studies (e.g., Chemolli & Gagne, 2014; Ryan & Connell, 1989). Using answers that are obtained from actual subjects as questionnaire items as opposed to using items thought up in a laboratory would corroborate the content validity of the survey. In this study, it would be expected that in successful projects in which the trained activities have been sustained for a long period, a large proportion of the reasons would be categorized as identified/integrated, or intrinsic.

Target programs

This study focused on two development aid programs that are widely considered to be successful. One was the Life Improvement Approach (LIA) in Japan, and the other was the Smallholder Horticulture Empowerment and Promotion (SHEP) approach in Kenya.

The LIA was conceived in Japan after the Second World War under an initiative first led by the then U.S. occupational government, and is now administered by the Ministry of Agriculture, Forestry, and Fisheries. Its initial objective was to improve the livelihoods of

¹ Extension officers, or field officers are agricultural officers employed by either the central government's agricultural agency or the local government's agricultural bureau. Extension officers regularly visit farmers in their region to provide assistance as well as train and "extend" farming techniques and technologies. In development aid projects, these officers usually are the main interface between the project headquarters and the farmers. In the planning of this study, several development aid specialists commented on the critical role extension officers play in whether such projects succeed or not, thus they were included in the survey.

impoverished farmers in rural Japan. Under the slogan *kangaeru nomin*, or "thoughtful farmers," the program especially aimed to empower female farmers. The approach does not focus on a certain farming technology as in most other capacity development projects, but instead encourages farmer groups to identify problems in their everyday lives and think of practical solutions. Examples of life improvements in Japanese LIA include not just farming techniques but also the upgrading of kitchen hearths to closed-fire ovens, the securing of financing for the building of facilities to store and process excess crops, gender awareness training and family planning, training on healthy cooking and eating, and the simplification of ceremonies such as weddings and funerals that financially burdened the impoverished farmers. Unlike many other aid schemes, LIA does not involve any direct transfer of cash or matter to participants. The approach has been successful in Japan, and it has also been adopted in several developing countries, most notably in Central America and the Caribbean. (Unfortunately, there are no academic reviews in English on LIA. For a brief overview, see Japan International Cooperation Agency, 2013. For an extensive review in Japanese, see Tanaka, 2011.)

The SHEP approach was developed by a technical cooperation project in Kenya supported by Japan International Cooperation Agency (JICA) (for a review, see Aikawa, 2013). The approach trains small-scale horticultural farmers in a wide range of activities, including not just farming techniques, but also market research and gender sensitivity training. Like LIA, the SHEP approach does not distribute any cash or matter to participants, and may be even more rigid in its frugality: while the LIA sometimes procures subsidized equipment, as in the kitchen upgrades mentioned above, SHEP does not. The first phase of SHEP was implemented in Kenya in 2006, and was considered a great success: participant farmers' average nominal income increased twofold during the 3-year project, gender awareness improved, and farmers have in large part continued to utilize the farming techniques and market research skills that they were trained to use, even after the project ended. The second phase of the Kenyan project, SHEP UP (Smallholder Horticulture Empowerment and Promotion Unit Project), which was launched in

2010 and expanded to a wider area across Kenya, was also successful, with outcomes comparable with the first phase. Subsequently, the SHEP approach has been further expanded and introduced to 20 other African nations as of 2015.

2. Method

Recruitment of participants

Participants from the LIA in Japan were recruited from a number of active groups in a rural municipality through a former extension officer. The region in which this municipality is situated is considered to be one of those in which the LIA was most successful: in terms of income, this was initially one of the poorest regions in Japan, but now poverty is not a major issue; gender equality has been greatly advanced (an interviewee noted that when LIA was first introduced to the region, it was difficult to get permission to go to group meetings, as farmers' wives at the time "had the same status of livestock" and were expected to do nothing but work, a situation that she also said had long since been resolved through LIA²); and the life expectancy and health of the area has also significantly improved. At the time of the interview, at least five LIA groups were known to still be active in the municipality.³ Two former field officers⁴ (including the recruiter) and six farmers, all women, participated in the interviews, which were conducted at a location within the municipality. The age of the participants ranged from early 40s through mid-80s. The interviewee in her 40s was exceptionally young, with the next youngest in her late 50s. The eldest interviewee joined the local LIA activities shortly after they

² This comment was obtained in an informal conversation outside of the interview. The interviews focused on general reasons that the interviewees participated in the program activities, and did not systematically ask about specific aspects of training such as gender equality.
³ That said, all of these groups were having trouble recruiting new members. Most of the members are

³ That said, all of these groups were having trouble recruiting new members. Most of the members are over 60, and the youngest are in their 40s. Some interviewees lamented that the "younger farmers don't care about the community."

⁴ Both former field officers had attained local government positions, but still voluntarily continued to interact with the farmer groups and to provide support regarding LIA activities. Thus, for the purpose of this study, they were considered to be active participants.

were launched in the region in the mid-1950s, and three others also had been participating since at least the early 1970s.

Participants from the SHEP approach in Kenya were recruited as follows. The "why questions" of this study were conducted as a part of a larger study of the SHEP approach. First, the SHEP Unit in Nairobi chose a number of districts as potential candidates for the larger study. Districts were selected so that they varied in degrees of success, but also so that itinerary of the study entourage would be manageable, as the regions and villages were widely dispersed. Next, the field offices of the target districts selected the farmer groups to be interviewed. Extension officers stationed at these offices and in charge of these farmer groups were interviewed. Finally, the leaders of the farmer groups chose the farmer interviewees. Initially, 11 field officers and 13 farmers from nine districts were subject to the "why questions." However, not all of the interviews were properly conducted. These interviews were conducted by a number of agents commissioned by JICA, but some agents confused the "why questions" with other questions of the larger study,⁵ and the transcripts did not include any reasons for engaging in SHEP activities. Ultimately, interview data from five field officers (three male, two female) and five farmers (four males, one female) were used in this study. Also, the ages of four of the field officers and nine of the farmers were not recorded. The age range of the known field officers was 33–49, and 53–60 for the farmers.

Procedure

Semi-structured interviews were conducted with field officers and farmers from the two respective approaches. The Japanese interviews were conducted one-on-one by the lead author. The Kenyan interviews were in principle conducted one-on-one in English by the agents, but in

⁵ Many of the agents were subcontracted by the main agent, and thus it was not possible to provide training regarding this survey. Most of the unusable data were from these subcontracted agents. The authors provided feedback as the interviews progressed, and consequently all of the interviews that were conducted later in the study tour were useable.

some cases in which the farmer could speak in only the local tribal language a field officer provided interpretation. All interviews were conducted in line with the interview guidelines set in the Japanese Psychology Association's code of ethics. At the beginning of interviews, all interviewees were briefed on the aims of the survey and told explicitly that they could decline the interview at any time without any consequence. Additionally, they were assured that their data would be used in a manner so that individual identities would not be revealed. Kenyan interviewees gave written consent for the aforementioned larger study of which this interview was a part. Japanese interviewees gave their verbal consent at the beginning of the interview. No incentives were distributed for answering the interviews.

Interviewees were first asked to describe the kind of project activities they regularly engaged in to confirm that they were indeed engaged and committed to them. The commitment of all field officers and farmers was confirmed. Next, based on the "why questions" approach conceived by Chandler & Connell (1987), interviewees were repeatedly asked the reasons they continued to commit to project activities until they could think of no more (see Appendix 1 for the interview manual first handed to the agents, and also a summary of supplementary material later sent after some of the first interviews were unusable). Although the subjects of the original Chandler & Connell study were children, and in this study adults, the manner in which the interviews were conducted was basically the same. The interviewer first confirmed that the interviewee indeed engaged in the activity to some degree, then proceeded to ask why the person perceived that they did so. One difference from the original study is that while interviewees were asked to choose only one important reason, this study recorded all reasons given. In some cases, the interviewees talked of episodes of persisting in past project activities, and the reasons they persisted at that time were also asked. Interview times ranged from around 10 minutes to 30 minutes.

All interviews were recorded on digital audio media with explicit consent from the interviewees and later transcribed. Reasons were extracted from the verbatim record, and were

categorized by the co-authors according to a coding manual based on a similar manual used by Sayanagi, Kotani, & Kawamura (2005). The coding manual provided definitions and criteria for four exclusive categories: extrinsic regulation, introjected regulation, identified/integrated regulation, and intrinsic regulation (see Appendix 2 for a summarized version of the manual). Inter-coder agreement rates were obtained using the weighted kappa test, based on Cohen's (1968) coefficient, which gives provision for disagreements of varying gravity. The cell weighting of Cohen's weighted kappa can be assigned arbitrarily, but since the categories of motivation in SDT assume that disagreement between adjacent categories (i.e., external and introjected) would not be as important as that between distant categories (i.e., external and intrinsic), the weighting was obtained using the method proposed by Fleiss (1981), where in a four-category matrix as in this study the weight of disagreement between adjacent cells would be given a score of 8/9 of total agreement, disagreement between alternate cells (e.g., introjected and intrinsic) 5/9, and the farthest cells 0.

3. Results and discussion

From the transcripts, a total of 82 reasons were extracted. The number of reasons per interviewee ranged from one to nine. To confirm the reliability of the coding procedure, the two authors, both highly familiar with SDT, coded 54 of the reasons independently in one stretch, and examined inter-coder agreement for the 54 reasons in one session. Weighted kappa was .96: there was disagreement for only two reasons. The disagreements were discussed between the authors, and the coding manual was revised to resolve the ambiguity in the categorizing of these two items. Judging the manual to be sufficiently reliable, the remaining 28 reasons were coded based on the revised manual by the first author.

Sample responses are shown in Table 1 and coding results are shown in Table 2. In both the Japanese and Kenyan interviewees, the largest number of reasons was categorized as

identified/integrated, supporting the hypothesis that the motivation for participating in these successful programs would be, in most part, autonomous. Taken with the result that relatively few reasons were coded as external, this also suggests that the field officers and farmers had internalized the social values behind the respective programs and primarily perceived them to be important activities, rather than a means to make more money.

Table 1 Sample of responses from each category

Intrinsic Regulation

- It was fun to go (Japanese farmer)
- I enjoyed the relationships (Japanese field officer)
- ... whenever a farmer is happy ... it makes me happier than anything else. (Kenyan field officer)

Identified/Integrated Regulation

- To improve myself... Increase knowledge, going on study tours... going places and broadening my perspective. (Japanese farmer)
- [The group] is something that I was involved in from the beginning, and I want to give it my best. (Japanese farmer)
- We need to educate our children. (Kenyan farmer)
- ... you can also help other people in the community (Kenyan farmer)
- I felt that I was useful to the farmers. (Japanese field officer)
- Because the kind of knowledge I have been imparted with, I should not just serve myself but also to others and improve their lives. (Kenyan field officer)
- We want to do away with poverty... especially in my county. (Kenyan field officer)

Introjected Regulation

- I was on the board, so I had no choice but to attend. (Japanese farmer)
- When people are still asleep we can score our goal... so the time [other communities] wake up, we will be a step ahead. (Kenyan farmer)
- If I don't do something for which I am employed, it won't look good. (Kenyan field officer)

External Regulation

- I thought that if we could get some extra money, we perhaps could go out to dine once or twice. (Japanese farmer)
- Perhaps we can use the money to go on a trip. (Japanese farmer)
- We need to survive. (Kenyan farmer)
- They also give us money. (Kenyan farmer) Note: This is apparently a misunderstanding, as the SHEP approach does not distribute money in any way.
- Because this is where I earn my living. (Kenyan field officer)
- To secure my job. (Kenyan field officer)

5				
	LIA (Japan)		SHEP UP (Kenya)	
Regulation Style	Field Officers	Farmers	Field Officers	Farmers
	(2 women)	(6 women)	(3 men, 2 women)	(4 men, 1 woman)
Intrinsic	3	3	3	0
Identified/Integrated	4	19	12	18
Introjected	0	6	3	2
External	0	3	3	3

Table 2 Coding results

Sample responses from each category are displayed in Table 1. There were only three instances in which money was mentioned as a reason for engaging in project activities (all shown in Table 1), of which one was a misunderstanding, and the other two, a modest increase in income. This result corroborates the aforementioned speculation that money was not the primary objective of the participants in these programs.

Of the reasons coded in the autonomous motivation styles, intrinsic regulation and identified/integrated regulation, it is notable that there are several that are *other-oriented*, such as "whenever a farmer is happy, it makes me happier" and "I should not just serve myself but also to others and improve their lives." A post hoc count of other-oriented intrinsic and identified/ integrated reasons was conducted. Other-oriented was defined as statements that clearly indicate the benefit of others, including one's own family and children. For example, "enjoying relationships" and "improving myself" would not be counted as other-oriented. Of all of the Japanese farmers' and field officers' reasons, only one ("I felt that I was useful to the farmers") was other-oriented. Of the Kenyan field officers' intrinsic reasons, all three were other-oriented; of the field officers' identified/integrated reasons, 10; and of the farmers' identified/integrated reasons, 12. The absence of other-oriented autonomous reasons in the Japanese groups may explain their difficulty in drawing new members, while the abundance in the SHEP UP groups may explain their ongoing success. While this is highly speculative, it may be useful to distinguish in future studies between self-oriented autonomous motivation and other-oriented autonomous motivation and othe

One salient difference between the two programs was that Kenyan farmers mentioned the education of their children (five instances) and survival (one instance) as reasons for program participation, while Japanese farmers did not. This clearly reflects the difference in socioeconomic context between the two countries, as absolute poverty and the lack of universal education is still an issue in Kenya, while in Japan it is not. There were no other notable differences between the two samples despite the two distinct cultures.

That so few farmers mentioned money as a reason for their participation in the SHEP approach came as a surprise to some JICA staff members. Some suggested that they may have considered the increase in income as an already given reason and not bothered to mention it. Perhaps this is so, but taking into mind that many responses were other-oriented rather than self-oriented, the authors speculate that income would not be a primary driver in successful aid projects. However, more investigation is warranted and future studies should ask participants how important increasing income is in their participation.

One critical aspect that this study was unable to make clear is the relationship between type of motivation and performance. In both the Japanese and Kenyan samples, all interviewees who gave reasons that were categorized as relatively heteronomous also gave responses that were autonomous. For example, the Kenyan farmer who said "They also give us money" (external) also said "We will have a better place to stay and people will be well informed about our future" (identified/integrated); a Kenyan field officer who said he was working on the project just "To secure my job" also said "We want to do away with poverty, poverty alleviation, especially in my county" (identified/integrated); and a Japanese farmer who said "[an in-law] kept me in the group" (external) also said "It was fun to go" (intrinsic). None of the interviewees who gave these heteronomous reasons were notably worse off in performance or status. Perhaps the lack in individual difference is because all interviewees were all active members from relatively successful groups. While this study provides evidence on autonomous motivation as a possible factor of the sustainability of group activities, investigation regarding the relationship between individual motivation and performance is warranted.

4. Concluding remarks

The biggest limitation of this study is its small sample size. Thus, it remains an open question whether the results can be generalized across the field of development aid. Additionally, only successful projects were chosen as subjects. We do not know if participants of unsuccessful projects would give different reasons.

Nonetheless, this study enters a terrain that is new to psychology, and the interviews are informative on how beneficiaries perceive their participation in aid programs. The results of this study support the hypothesis that participants' motivation for taking part in successful capacity development projects would be primarily autonomous. Also, it is encouraging that the reasons for participating in these development aid projects were reliably sortable along the self-determination continuum, as this suggests that SDT will be a viable theoretical framework for psychological research in the field of development aid. The reasons revealed in this study could in turn be used as items for a paper-and-pencil measure styled after the self-regulation questionnaire (Ryan & Connell, 1989) that would allow quantitative studies to test if the hypothesis can be generalized, as well as to examine the role of motivation in predicting outcomes of development aid projects. Hopefully, a better understanding of motivation and its outcomes in such projects will lead to the planning of more effective programs that will enhance the wellbeing of their participants.

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Appendices

Appendix 1

Initial interview guide for both Japanese and Kenyan surveys:

"Ask his/her reasons for participating in SHEP activities. Probe, and keep asking questions such as "So, you said you wanted money. But why did you want money?" "Was that the only reason?" "Were there any other factors that influenced your decisions/ your way of thinking/ your action?" etc. in order to elicit as many reasons as possible. Obtain a variety of reasons until the answer becomes exhaustive.

Summary of supplementary instructions after some initial interviews were unusable in the Kenyan survey:

- Please note that we need to ask the *reasons* that the respondent engages him/herself in the activities promoted by SHEP.
- Please keep in mind that the objective of this interview is to obtain reasons for currently engaging in activities promoted by SHEP and *not* reasons that the respondent joined SHEP.
- Please remember that the aim of the interview is to obtain reasons that the respondents engage in SHEP-promoted activities. Below is a list of possible lead questions. Using questions like them, try to have the respondents give all of the reasons that they can think of.
 - What are the reasons that drive you to work on the activities that SHEP taught you?
 - Why do you continue to do the activities that you learned through SHEP?
 - Can you think of any other reasons that you keep on doing SHEP activities?

Appendix 2

Summary coding manual for categorizing reasons for participating in capacity development projects

- All reasons extracted should be coded into just one code each. Note that in extracting reasons, reasons that the interviewee *began* to participate in the program should not be included, as they do not necessarily reflect their current motivation. Only reasons regarding why the interviewee continued to participate should be extracted.
- The definitions and coding criteria of each category are below.

Intrinsic regulation

Definition: This motivation style is based on doing the action just for the sake of doing it. It manifests as the interviewee mentioning that they are doing it because the action itself is fun, entertaining, or interesting.

Coding criteria:

- 1. When fun, enjoyment, and/or interest are explicitly mentioned.
 - Even if fun or interest are explicitly mentioned, if the fun/interest is not inherent to the action itself, do not code in this category, but based on what the fun/interest is based upon (e.g., "It's fun to make a lot of money" should be coded as external.)

Identified/integrated regulation

Definition: This state is the most autonomous form of extrinsic motivation. It is extrinsic in the sense that engagement is not for the sake of doing the action itself as in intrinsic motivation, but rather it is a mean to attain and external goal. However, this goal is highly congruent with the person's values. The social values behind the action have been internalized, and the person is convinced of the action's social value.

Coding criteria:

- 1. When the interviewee mentions, explicitly or implicitly, that engaging in the activity is personally important.
- 2. When the interviewee mentions that the action is important for the people around them.
- 3. When the interviewee mentions that the action is in line with their personal beliefs.

Introjected regulation

Definition: This form of extrinsic motivation is relatively low in autonomy. The action is enacted without any salient external prods or rewards, but the value of the action has not been fully internalized, so the interviewee is not fully convinced of its importance. Failure to act would result in feelings of shame or guilt, while success merely leads to ego enhancement.

Coding criteria:

- 1. When shame and/or guilt are explicitly mentioned as results of failure.
- 2. When success is contingent to ego enhancements such as feelings of pride.
- 3. When the interviewee seems driven to engage in the task despite no salient rewards or punishments, and also the interviewee cannot explain the reason they are so driven. (The inability to explain would be considered a sign that they have not fully internalized the value of the action.)

External regulation

- Definition: The interviewee perceives that they are engaging to avoid punishment or to gain a reward. In some cases, they perceive that they are acting because of an external request, e.g., "Because I was told to."
- 1. When a reward is explicitly mentioned.
- 2. When punishment is explicitly mentioned.
- 3. When the interviewee says that they are simply acting because they were told to do so.

要約

本研究は、能力開発プロジェクトの普及員と対象者が認識するプロジェクトへの参加理由を 明らかにし、それらの参加理由を自己決定理論で定義される動機づけのタイプに分類するこ とを目的として行われた。動機づけの分類においては、Chandler & Connell (1987)の"why questions"アプローチを用いた。成功した2件の能力開発プロジェクト、日本の生活改善 アプローチとケニアの小規模園芸農民組織強化計画プロジェクト(SHEP)アプローチの普及 員と対象者への半構造化インタビューで、それぞれのプロジェクトに参加する理由を問うた。 共著者がそれぞれ独立して回答を分類し、一致率が十分に高かったことから、コーディング 方法の信頼性が確認された。理由の大部分は、最も自律的な動機づけである同一視的・統合 的調整に分類されたことから、成功プロジェクトの普及員および対象者の動機づけが自律的 であるとの仮説が支持された。さらに、インタビューの逐語の分析から得られた示唆につい ても検討を行った。