

AN IMPACT-ORIENTED MANAGEMENT OF KNOWLEDGE (IOMK) FOR PROJECT DESIGN AND MONITORING

Contacts: Audrey Nepveu (IFAD) and Patrick d'Aquino (CIRAD)

1. Overview

How to effectively create local changes that trigger lasting changes and at larger scale through a time-limited intervention? Projects and programmes' outputs are confronted with many social and institutional hurdles which hamper their scaling up and out, within the country and beyond. These hurdles are often merely considered as externalities. Meanwhile, an approach to manage knowledge, right from project design or during implementation, can help overcome these social and institutional obstacles and achieve lasting scaling up and out despite the modest means of a time-limited intervention.

Creating lasting changes first implies taking into account the progress to be achieved in the comprehensive *Society knowledge process*. Achieving a lasting impact means achieving a sufficient change within *the knowledge of the different people involved in the given impact sought*. This means that the design or monitoring phase does not only deal with the local target groups, but also includes the necessary links with other stakeholders, including higher level ones, which are needed to trigger an impact process and to make this impact last. The challenge is thus to achieve changes not only in the local target groups, but also in these other people and key institutions, thereby impacting the knowledge process of the whole context. A

Impact-oriented management of knowledge: achieving a sufficient change within *the knowledge of the different people who are involved in the given impact sought* to achieve a lasting impact.

Society knowledge process: the progress in knowledge of each element of the society involved in the chain of knowledge assimilation, which ends up in a lasting improvement of the society's knowledge.

methodological answer is to develop a *contextualized framework of knowledge management* that considers the whole social and institutional context and, to remain manageable and achievable, strategically focuses on creating a practical and realistic first lasting change. This contextualized framework clarifies what practical knowledge progresses are needed from this diversity of stakeholders in order to trigger various essential micro changes which will result in a lasting impact.

Contextualized knowledge: the practical knowledge about and from the context which is required to make the different stakeholders of the impact chain progress so far as to provoke a lasting improvement of the society's knowledge.

Once the strategic focus related to the management of knowledge is clearly identified, the second priority is to turn the practical progresses in knowledge required into the contextualized personal and institutional changes of practices they imply. In other words, convert practical improvements of knowledge into contextualized changes of practices. This conversion requires local stakeholders and partners abilities, which are best placed to capture the social and institutional specificities of the local context. This is the *inclusive step* of the management of knowledge process. The methodological challenge in this inclusive step is to identify every contextualized new behaviors, organizations, practices and actions required in the context to trigger a first, modest lasting change. A relevant way to implement this step is by simulating the process of the proposed change.

Inclusive conversion step: turn the practical knowledge progresses required into the contextualized personal and institutional changes of practices they imply.

A simulation workshop enables stakeholders to simulate ("play") their behaviors, organizations, practices and actions, including their scaling up and out, and then to also "play" the modifications needed in the knowledge of the actor they are playing in order to integrate the proposed lasting change. The best way to

implement this inclusive step is to implement several workshops, some with local target groups and some with the higher level stakeholders required to achieve a lasting scaling up and out.

In two time-bound steps, the process to manage knowledge of the various stakeholders involved first defines the different practical progresses in knowledge required to affect the different stakeholders of the chain of local progresses which ends up a lasting change; then supports the development of a shared agreement among the stakeholders on the practical actions, organizations and proposals to achieve these various local changes. This impact-oriented management of knowledge process can be implemented at design stage of a project or along its implementation, as support to an impact-oriented strategy.

Supporting the Management of Knowledge to achieve lasting impacts of project helps define every practical progresses in knowledge required to affect key stakeholders in the local chain of changes which results in a lasting change, and then achieves a common agreement among stakeholders on the practical actions, organizations and proposals to achieve these different local changes.

2. Methodological guidelines

Whether at design or implementation phase, setting a contextualized framework to manage knowledge in order to bring a lasting change involves two stages.

2.1 Designing a contextualized knowledge process

(a) First, designing a contextualized Knowledge Management strategy

The whole method is underpinned by a thoroughly pragmatic questioning process: in the context of the planned intervention, in order to achieve the first but workable progress in empowerment in the context concerned, what hurdles need to be overcome and how? Which key people and institutions will need to be changed first and how, to achieve this initial progress? These questions may seem obvious, but experience shows that going beyond simple solutions - like involving everybody, especially disadvantaged groups, in participatory workshops - remains difficult. Indeed, among the many stakeholders involved, who are the first ones that need changing to make the context amenable to a lasting change? What are the preconditions or external factors which may limit or even prevent the local and global targeted impacts? As a consequence, do these needs to be considered as priority goals rather than as externalities?

A specific “spiral questioning”, which progressively turns the initial too general considerations on these questions into refined, contextualized and operational priorities to manage knowledge (Figure 1), helps to define a sufficiently precise operational knowledge management strategy. In particular, progressively highlighting the key pragmatic constraints often implies accepting factors that were originally identified as simple preconditions or external pitfalls as new central targets. The crux of this eliciting process is the Knowledge Management loop, which ends up in defining the exact nature of the “progress in knowledge” required to launch the first

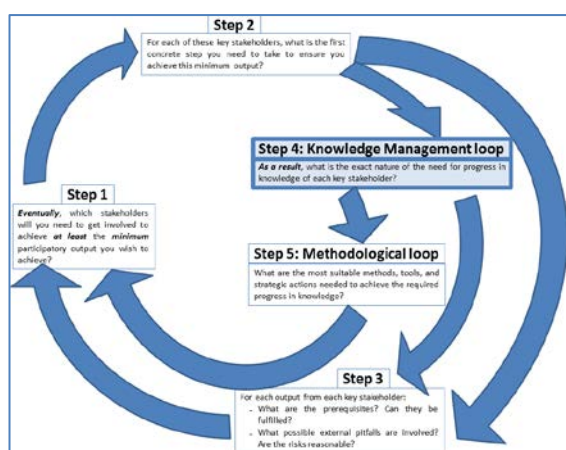


Figure 1. A spiral questioning to define the contextualized KM strategy

lasting change. In figure 1, the prerequisites and pitfalls identified in step 3 are necessary preconditions in the Knowledge Management loop. As long as the answers to step 3 remain “no” these preconditions remain unfulfilled and the process goes back to step 1. This is the way the “keep modest but operational” principle is applied. Several loops may be necessary until there are no more changes to the step 1 objectives through step 3 questioning. Once the Step 1 answers have been defined, one can go directly to Step 4.

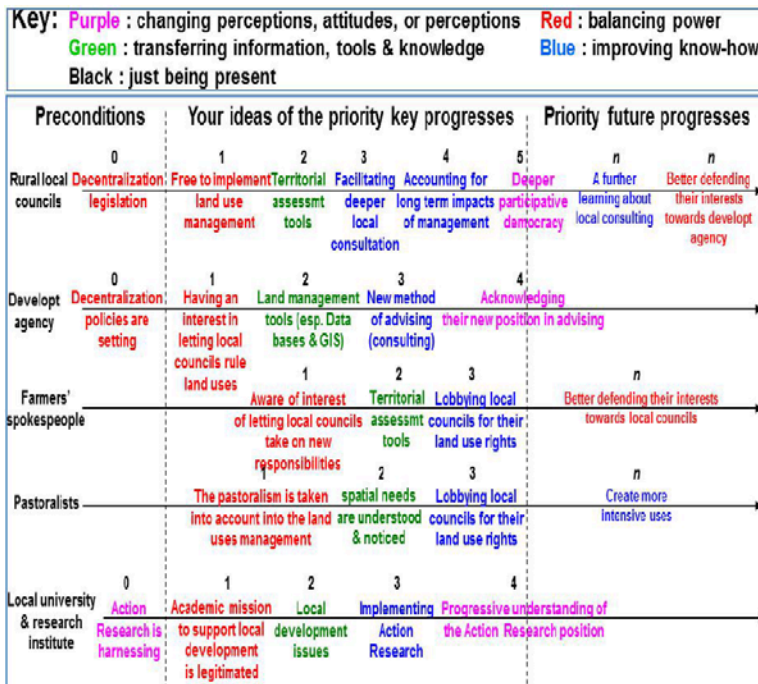


Figure 2. A color frame to refine contextualized KM objectives

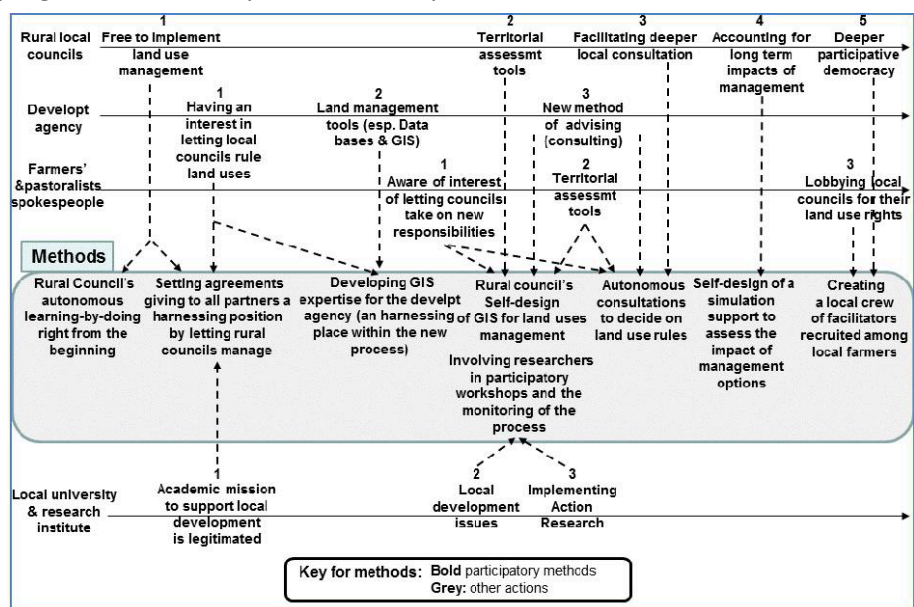
to manage society's knowledge in the mid- and long-terms, which outputs respond to modest short-term objectives but are also embedded within a more ambitious long-term frame (lasting scaling up and out). The minimum conditions and operational processes required to trigger a momentum able to achieve the first priority lasting impact are identified.

Managing four different types of knowledge: scientific information, know-how, attitudes and leadership capacities.

(b) Second, identifying methods and tools to support Knowledge Management process within the Project implementation

Once all the targeted practical progresses are clearly and concretely tailored with stakeholders, it becomes easier to select methods and tools suited to achieve each progress in knowledge (see the last loop in Figure 1). With the help of facilitators skilled on implementation methods, this loop helps to select each specific methodological support and the corresponding action that is indispensable to deal with each distinct knowledge progress identified in the previous steps.

Figure 3 presents an example of the diversity of methodological means



selected using this form of knowledge management strategy: participatory appraisal or planning, training, learning by doing exercises, personal exchange, social networking, institutional lobbying, etc. Some unusual

During the implementation of this central "Knowledge Management loop", a color-coded specification is used to help participants focus on the very operational and contextualized progresses in knowledge required to bring change about (Figure 2).

In fact, during the definition of the knowledge processes of a given project, one may easily be not practical or contextualized enough... What is at stake is to understand what is exactly needed for each key stakeholder (practical synthesis of different theoretical learning concepts): does s/he merely need to be present? To receive particular information? To develop a specific know-how? To changing a specific attitude? To have his/her power position modified? This fourth eliciting loop results in a workable short, contextualized strategy

actions can also be identified, e.g. acts that confer a higher status to certain stakeholders in the process could jeopardize achieving the most important impacts.

2.2 Converting the contextualized knowledge process in a chain of local changes, in an inclusive manner

The contextualized conversion is implemented through participatory simulation workshops. It has been increasingly recognised that, when dealing with complex issues, simulation and participation can be mutually reinforcing. A simulation game is very similar to a role playing game. Simulation games are based on the “learning-by-doing” hypothesis that assessing complexity is more efficient when people act (simulate) and then progress on their own with the opportunity to analyze the outcomes of their actions (e.g. Reed et al., 2010). Where a full-fledged learning-by-doing process would be too heavy, the learning-by-doing exercise is replaced by “learning-through-simulation”.

The simulation game which supports the inclusive conversion of a knowledge process in a chain of local changes is designed with the combination of the outputs from the contextualized knowledge process (2.1 above) and the issue tackled by the project.

According to the issue tackled by the project, a simulation board is developed, which translates in material items on the board the key elements of the issue: products, incomes, natural resources, infrastructure... the material items may be very common, like matches, even for complex issue (burned matches in a match box have been already used to represent avian flu chickens in an ASEAN simulation game on the control of avian flu epidemics). Outputs and outcomes of the project must also be represented by some of the material items of the board (tokens, cards, marbles...).

Participants of the simulation game are identified thanks to the previous knowledge management framework (see figure 2 above). They draw on their knowledge of the context to play the roles of the various stakeholders involved in the simulated chain of local changes (also identified thanks to the previous knowledge management framework). Participants simulate (“play”) the actions of these stakeholders within the current situation of the issue: taping resources, implementing different farming activities, producing incomes and investing, feeding their family, negotiating access rights, agreeing for a new infrastructure... Roles are identified not only for local users and target groups but also for the other stakeholders involved in the chain of changes resulting in a lasting scaling up and out: neighbouring communities, higher levels stakeholders...

Participants “play” the game and enrich it with their own points of view, in particular on the institutional and social contexts. Thanks to simple material items, they are able to assess medium and long-term impacts of their actions while they are using the board game.

Participants are then asked to identify the different changes required to improve the results of the “game” (i.e. indicator(s) of the issue, monitored thanks to simple material items like tokens or matches), and to test their proposals by simulating them (playing again).

After a few cycles of debating/proposing/simulating, participants have tailored precise, concrete and shared assessments on how the context could achieve a lasting change. Since by construction of the game, the group of participants brings together the different key stakeholders required to obtain this change (see below the workshop settings), the output of this inclusive assessment will be more easily transformed in outcomes, and then impacts.

Simulation workshops have to bring together the different key stakeholders required to obtain the targeted change, which often means two different types of stakeholders: the local target groups and the other “surrounding” stakeholders required for a scaling up and out. It is often more convenient to separate these two groups and organize two different simulation workshops: the first one only with local target groups, and the second one with representatives of the local target groups and with the other “surrounding” stakeholders. Simulation workshops need time: the best way to achieve results is to implement a three-day workshop (d’Aquino et al. ref).

Thus in two time-limited steps, this Impact-Oriented Management of Knowledge (IOMK) support defines all the practical progresses in knowledge required to affect key stakeholders in the local chain of changes which results in a lasting change. The IOMK then achieves a common agreement among stakeholders on the practical actions, organizations and proposals to achieve these different local changes.

3. Training method: what does it takes?

The training method itself is based on knowledge management principles: combining knowledges, learning-by-doing, and incremental progress. The whole process, comprising (i) the design of the strategy for Contextualized Management of Knowledge, (ii) the inclusive conversion of this knowledge process into a practical chain of local changes, and (iii) the mobilization of the whole group of key stakeholders for an impact-oriented approach (target groups, projects staff, portfolio resources people, CPM, other key stakeholders at higher scales), is based on three workshops (for a total of 9 days):

- a two-day KM strategy design;
- two parallel three-day participatory simulation workshops (one in the field and one in the office); and
- a one-day completion meeting.

3.1 Training process: learning-by-doing in selected projects, to improve their impact-oriented strategy

The training method is designed to reach three target groups within the same training support: (i) project staff of selected cases; (ii) other interested projects from the region; (iii) the relevant CPMs and CPOs of the regional division.

In practical terms, it is proposed to choose specific field issues (projects issues, policy dialogue...) as case studies and mobilize facilitation skills to implement the Impact-Oriented Management of Knowledge support through four workshops (see details below). Project staff of the selected case studies will co-facilitate the process with the trainer (cf. learning-by-doing), and the others trainees (interested projects, CPMs and CPOs from the regional division) will attend the process.

The learning-by-doing facilitation process includes four steps and an optional fifth one:

- (a) A one-day workshop facilitated by the trainer - Finalizing the selected field issue, and its related *strategic participants* (CPM, projects staff, portfolio resources people, and other key stakeholders) which will be brought together during the following workshops.

A deep knowledge of the context is required to fill in the Knowledge Management framework and progressively refine, loop after loop, a better contextualized strategic position. To implement this eliciting process, it is worth sharing knowledge of the context and views between diverse key partners. Consequently, deciding what is meant by key local partner is a first requirement. According to the strategic and contextualized stance developed, these key people identified are a local strategic alliance, which rallies stakeholders around common goals right from the beginning of the process.

- (b) A two-day workshop co-facilitated by the trainer and project staff of the selected case study - Designing the KM contextualized strategy for the selected field issues with the *strategic participants*.

The whole workshop is underpinned by a thoroughly pragmatic questioning process supported by a spiral questioning framework (see above methodological guidelines on 2.1): in the context of the selected issue, in order to achieve the first but workable and lasting progress in the context concerned, what hurdles need to be overcome, and how? Which key people and institutions will need to be changed first, and how, to achieve this initial progress? These questions may seem obvious but experience shows that going beyond simple solutions - like involving everybody, especially disadvantaged groups - remains difficult. Indeed, among the many stakeholders, who are the first ones that need changing to make the context amenable to a lasting change? What are the preconditions or external factors which may limit or even prevent the local and global targeted impacts? As a consequence, do these need to be considered as priority goals rather than as externalities?

- (c) Two three-day workshops co-facilitated by the trainer and project staff of the selected case study - Implementing the two KM inclusive workshops on the issue selected from the field, one with local target groups, and one with the *strategic participants*.

These workshops let participants design on their own the devising process and supports the development of a lasting impact. A simulation game has been designed by the trainer from the outputs of the first two workshops. The support provides a very opened role playing game that enable participants to shape *their* ideas about the chain of changes which can result in a lasting impact, and then to test them by “playing” them:

- Participants identify the key stakeholders required to achieve a lasting impact, and these key stakeholders become roles in the simulation game.
 - Participants then identify the “winning objective” of each of these stakeholders (what motivates the given stakeholder?), and the “activities” they practice (from farming activities to administrative management or power behaviors), and these elements become the playing rules for these roles.
 - Then the facilitator suggests an organization of the board game basic elements in order to enable the players to follow key impact indicators (according to the issue, it may be progresses in productivity, incomes, food self-sufficiency, resources stocks or quality, intensity of conflicts...).
 - Participants are then able to simulate (spontaneously play, based on their own perception) the behaviours of the stakeholders from whom a change is required to achieve a lasting impact.
 - From this first use of the simulation platform, participants debate the best changes required for each stakeholder to achieve the lasting impact sought. They then test their ideas by playing it. After a few cycles, some precise and very diverse actions (from participatory assessments to lobbying) are tailored by participants.
 - As the participants are at the origin of the above outputs, their commitment to support the actions devised together is very high. They launch themselves into a strategic planning to implement these actions and support project staff for some of them (lobbying or disseminating knowledge for example).
- (d) A one-day workshop facilitated by the trainer - Completion training session with project staff to finalize the impact-oriented action plan developed during the previous workshops.

Optional additional step: Monitoring sessions of the impact-oriented action plan can be organized yearly.

3.2 Opening the learning opportunity to others not in the field, through monitoring sessions of the project cases implementation

The training method may include a parallel, less intensive training for IFAD staff interested in a better understanding of the Impact-Oriented Management of Knowledge organized around monitoring sessions of the implementation of these case studies.

In practical terms, two monitoring sessions of the case study implementation can be organized, in Rome for example: one before and one at the end of the process. These sessions would allow additional people to familiarize and assimilate the approach.

4. Opportunities for IFAD portfolio: project cases for in Southern Asia

4.1 Cambodia: Rural livelihoods improvement project in Kratie, Preah Vihear and Ratanakiri

The Impact-Oriented Management of Knowledge (IOMK) support will help project staff to design and implement a contextualized strategy about:

- How to effectively involve commune councils, local extension workers and village elders in the design and implementation of an out scaling strategy of the project results to other villages?
- How to effectively involve these stakeholders in the design and implementation of an up scaling strategy to government offices, especially the Ministry of Agriculture, Forestry and Fisheries?

4.2 Cambodia: Tonle Sap poverty reduction and smallholder development project

The Impact-Oriented Management of Knowledge (IOMK) support will help project staff to design and implement a contextualized strategy about:

- How to effectively set lasting arrangements to pilot rural communication technology for information on access to technology and markets?
- How to effectively involve key people from provincial, districts, commune and village levels in a collective support to the project target groups, through a more effective governance?

4.3 Lao PDR: Sustainable natural resource management and productivity enhancement project

The Impact-Oriented Management of Knowledge (IOMK) support will help project staff to design and implement a contextualized strategy about:

- How to effectively embed projects outcomes within government's overall objectives, for a lasting scaling up and out, especially with regards to Lao Northern lands?
- How to effectively involve national, provincial, district and village levels in a shared action to achieve this lasting impact? The IOMK support proposes tools and methods for a multi-level participatory design of this up scaling (e.g. d'Aquino and Bah 2013).
- How to effectively stimulate a shared strategy between poor farmers, farmers' organizations, producers' associations and private sectors so that poor farmers remain involved in these processes in the long term?

The IOMK process is particularly devised for launching a multi-level commitment (from villages to government) towards a shared responsibility of natural resources, land and water management scales (participatory local land uses x provincial plans x government planning objectives):

- The playing board for the local simulation session can be the participatory land uses mapping, while the board for the 'office' (central) simulation session will be the provincial management plan. As the board game can bring together within the same game session several board maps (d'Aquino and Bah 2012), the local simulation session can take into account the needed coordination with neighbouring communities' planning while the central session can gather several board maps representing different provinces... and raise discussions about how to coordinate these.
- Whoever they are – farmers in the local session or government officers in the central session –, each participant plays two roles: the local user (by playing the role into the game) and the government officer (because of the way the roles in the game have been designed: see details of step b above). This particular setting leads participants of both sessions to develop a shared understanding and proposal to implement a 'multi-level' chain of changes towards a lasting impact.

4.4 Lao PDR: Rural livelihoods improvement program in Attapeu and Sayabouri

The Impact-Oriented Management of Knowledge (IOMK) support will help project staff to design and implement a contextualized strategy about:

- How to effectively achieve a lasting acknowledgement of the strengthened village institutions by locals as well as by the State?
- How to effectively achieve a lasting scaling out of the new farming technologies introduced?
- How to effectively achieve a lasting acknowledgement and support by the State of the newly introduced measures to manage natural resources? How to effectively embed in the long term the local land uses tools into national land uses policies?

The IOMK process is particularly devised for launching a multi-level commitment (from villages to government) towards a shared understanding and a common proposal to implement a 'multi-level' chain of changes towards a lasting impact.

4.5 Viet Nam: Project for adaptation to climate change in the Mekong delta in Ben Tre and Tra Vinh provinces

The Impact-Oriented Management of Knowledge (IOMK) support will help project staff to design and implement a contextualized strategy about:

- How to effectively design a scaling out method so that local stakeholders (from villagers to government officers) themselves disseminate the achievements of the project on rural poor' adaptive capacities to better contend with climate change? The IOMK support provides tools and methods that involve key stakeholders of this scaling up into the strategic design of the process of scaling up and out (e.g. d'Aquino and Bah 2012).