

Through *Perspective*, CIRAD provides an opportunity to explore new avenues for discussion and action based on research.

Activating the intrinsic motivations of beneficiaries for longer lasting conservation and development projects

Driss Ezzine de Blas

How can we design conservation and development projects that produce lasting changes? How can we increase their effectiveness and legitimacy? The classical economic incentives of environmental policies (certification, sustainable forest management, payments for environmental services, green loans, etc.) are effective in the short term, but their environmental performance is not necessarily guaranteed in the long term. However, when the intrinsic motivations of beneficiaries are activated, these beneficiaries take greater ownership of the

objectives of actions: they demonstrate more lasting behavioural change. Recent research combining behavioural economics and social psychology, conducted for such projects, is opening a rich and complementary avenue to mobilise this latent human potential. Considering intrinsic motivations implies recognising the importance of the psychological dimension of any action. Research and development decision-makers and donors can harness this potential and ensure their calls for projects incorporate methods to identify and activate these motivations.

Economic incentives in the form of direct money transfers are a classical tool to ensure the effectiveness of conservation and development projects, which combine action on biodiversity (protected forest areas, certification labels, payments for environmental services, etc.) and action on rural life (new modes of production, processing and marketing of forest and agricultural products, community forestry, etc.). But by focusing solely on the benefit of receiving monetary compensation, these projects overlook certain non-economic motivations, in particular the “intrinsic motivations” of the actors concerned. These motivations, proper to every human being, are nevertheless strong determinants of the success or failure of actions and of the sustainability of their impacts.

We now have enough hindsight to assess the impact of many environmental conservation strategies, including economic incentives, which have become an increasingly important element of environmental policies through certification labels, carbon credits, payments for environmental services, impact investments and green loans. Over the last 10 years or so, numerous studies have attempted to assess the effects of these instruments on biodiversity conservation and territorial development. These studies reveal environmental efficiency that has not lived up to expectations. This is partly explained by technical reasons (the difficulty of accurately measuring efficiency), the shortcomings of incentive instruments (limited

capacity for investment and payment), or the fact that they are ill-adapted to local, individual, institutional or cultural conditions (a lack of cohesion at the local level to create collective dynamics). However, even when the instruments are suitable and well designed, their environmental performance is not guaranteed in the long term: purely financial incentive mechanisms provide effective but short-lived solutions. Some instruments may even become counter-productive in social terms: for example, payments for environmental services may undermine collective action if certain actors attempt to capture payments or if certain individuals are excluded because eligibility criteria have been poorly understood or accepted locally.

More recently, studies have focused on the impact these instruments have on the motivations of beneficiaries, in order to institute lasting behavioural changes. The variable performances of these instruments are also explained by the fact that the intrinsic motivations of beneficiaries have not been taken into account before launching a project or during its execution. If these motivations are not considered, there is a high chance that the project will be less successful than expected or that the behavioural changes produced will be only temporary in the territory in question. This is shown by research that combines behavioural economics and social psychology.

Defining intrinsic motivations

An “intrinsic motivation” is a motivation specific to each individual person. Such motivations drive people to act because the activity interests them or gives them pleasure, enrichment, recognition or meaning. Personal realisation is thus achieved through the pleasure of doing something for one’s own satisfaction. This personal sense of accomplishment is a driver of action without any external incentives. Intrinsic motivations are necessary to facilitate behavioural change (see box and figures p. 2 and 3).

By contrast, an “extrinsic motivation” drives a person to act under the effect of an external factor: this can be an economic incentive (remuneration, tax measure, etc.) or a constraint (legal obligation, punishment, fine, etc.).

Both types of motivation are drivers of action. However, whereas intrinsic motivation triggers lasting behavioural changes (known as “internalisation”, due to the appropriation of a new behaviour), the effect of extrinsic motivation disappears once the factor stimulating it is removed.

In real life, several motivations are generally activated at the same time. This is seen with projects, especially when intrinsic and extrinsic motivations emerge. Action is then often the result of a combination of the two: for example, when forest communities decide to protect a forest not only for the financial compensation they receive, but also because of their attachment to it or the importance they give it in terms of maintaining rainfall or water quality, etc.

Unlike psychologists, economists and project leaders lack knowledge and experience in this area, whether in research and development organisations or in funding agencies.

Intrinsic motivations, between social psychology and behavioural economics

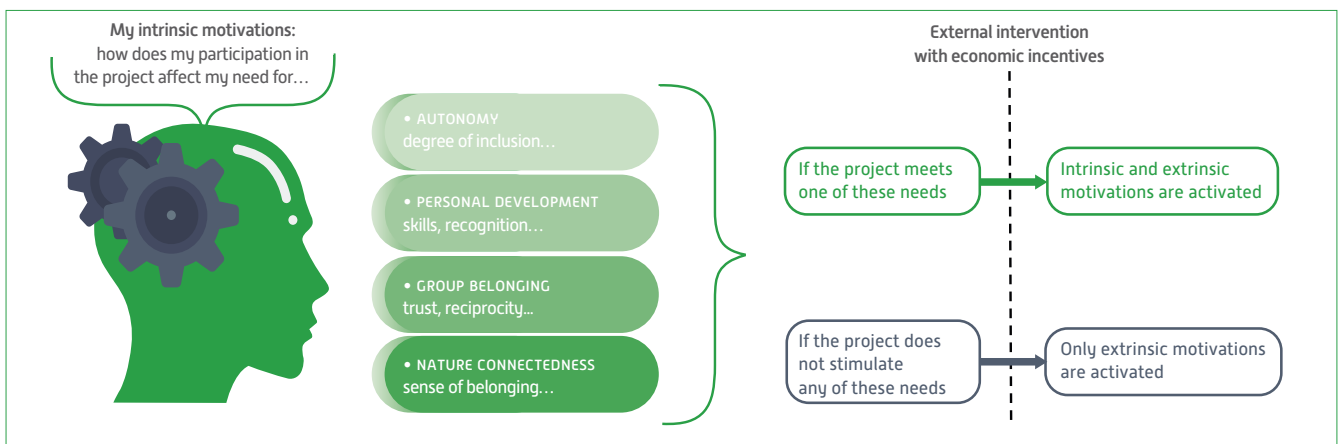
The economic sciences do not use the notion of motivation. They apply a different concept, that of preferences, which are linked to the appraisal of the relative utility of a good or service. In the context of neoclassical economics, studies on consumer or beneficiary preferences do not explicitly include the motivations underlying the choices of individuals. They are based on theoretical models in which the predominant motivation when measuring an individual’s desire to perform a specific task is utility maximisation under budget constraint.

On the other hand, research in social psychology conducted since the 1990s shows that intrinsic motivations are an important driver of decisions that are not based on economic utility. These motivations are the expression of basic psychological needs – personal development, freedom (in the sense of autonomy), recognition and social belonging –, all of which underpin the need for happiness inherent to all human beings.

Once the focus turned to performance, research in behavioural economics began to explore the notion of motivation, in particular by analysing the impact of economic incentives. Whatever the conditions (activities measured, places, economic sectors, work life, private life), the results confirm the role of intrinsic motivations as a driver of many of society’s activities, but also their possible replacement by extrinsic motivations linked to monetary or coercive measures. In addition, if participants are paid to perform a task they enjoy and that they previously did

without payment, fewer of them will continue this task once the payment stops. This is known as motivation crowding out. It results in a loss of individual performance, which may even fall below the level observed prior to the intervention: this is known as the undermining effect.

How can the intrinsic motivation approach be understood in relation to similar notions such as moral motivations, selflessness or economic incentives seen as merit- or reward-based? While moral motivations are linked to judgements of what is good or bad for the group to which an individual belongs, the intrinsic motivations of individuals are linked to their sense of belonging, in other words to their desire to participate in a group, to improve a society, or to be socially recognised by others, beyond moral considerations. Selflessness implies altruistic behaviour, in other words acting for the good of others even at one’s own expense, a motivation that may or may not be linked to intrinsic motivations of personal development and social belonging (participating in a group, in a fair vision of society, etc.). With regard to merit or to economic reward through a salary, for example, we must ask the following question: would we do a different job to the one we currently do for the same salary? If the answer is yes, there is no intrinsic motivation that explains our current choice. If the answer is no, a combination of intrinsic motivations (the pleasure the job gives us) and extrinsic motivations (the salary) explain our choice.

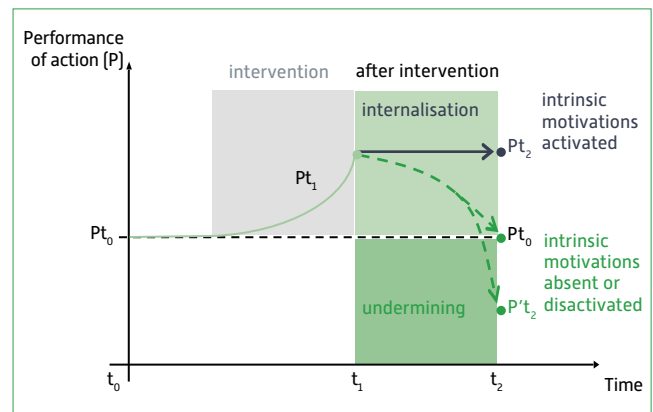


The four main intrinsic motivations at work in an integrated conservation and development project.

Examples of activities to include in an integrated conservation and development project in order to stimulate intrinsic motivations.

By developing certain aspects of autonomy, personal development, social ties or nature connectedness, the project will foster lasting actions. These proposals may seem obvious, but their application in the field is innovative.

Examples of intrinsic motivations of project participants	Examples of activities to include in the project
Autonomy, through... inclusive participation	Involving stakeholders in project design (participatory approach)
Personal development, through... skills recognition and enhancement	Communicating on the success of an action or a task performed by a person, a group Enhancing the skills that interest participants through training and information campaigns (loan applications, new cultivation techniques, information on water-related health risks, etc.)
Social ties (social belonging), through... reciprocity	Adjusting the project benefits to the intensity of participant involvement (gradual payments or benefits)
distributional equity	Prioritising the most vulnerable populations at the social and environmental level (specific targeting based on socio-economic indicators that are validated collectively, no longer stigmatising certain social communities, supporting schooling for children from poor families)
social justice	Aligning the project with collective institutional standards and rules (compliance with rules on the use of fire, sharing environmental surveillance tasks) In order to create a feeling of justice that is shared collectively, sanctioning groups that violate social norms
community inclusion	Proposing collective activities: project monitoring and assessment, conflict resolution through consensus, research, festivities, etc.
Nature connectedness (environmental belonging), through... the need to belong to a place, a landscape, etc.	Protecting the means to maintain and transmit traditional ecological knowledge (for example, linking environmental messages to local knowledge and rites)
well-being, awareness of benefiting from a healthy environment	Implementing environmental education, especially for the younger generations, including exchanges with people from different social environments and geographical areas



Performance of the action of a beneficiary within a project: the interplay of motivations over time.

Measuring intrinsic motivations and proposing appropriate implementation

Let us take the example of an intervention with agricultural innovation and economic incentives for the conservation of a plot of forest. When the participant (for example a farmer, a community member or a landowner) feels that this intervention strengthens one or more of his/her motivations – autonomy, personal development, social ties, nature connectedness –, these motivations will act positively on his/her behaviour and performance: intrinsic motivations are then said to be activated. This makes it more likely that the performance initiated by the intervention will be maintained in the long term. This lasting impact is the result of the appropriation of the objectives of the intervention through intrinsic motivations.

Conversely, when the external intervention does not act on intrinsic motivations, only extrinsic motivations are mobilised, such as fear of punishment, economic benefit, etc. In this case, once the intervention ends, the likely scenario is a return to the initial behaviour, or even below that level if the person concerned is more demotivated than before their participation.

Mobilising the intrinsic motivations of beneficiaries of a development project or incentive policy implies identifying them beforehand and determining their distribution according to participants’ characteristics. This information, compiled in a “motivation map”, is obtained by means of surveys of the actors concerned. These are first conducted at the beginning of the intervention to understand the baseline for key social, economic and motivational variables. They are then repeated at the end of the project and again several years later, with an identical protocol (content, people surveyed), in order to measure the degree of permanence of the impact of the intervention. Repeating these surveys over time provides a time series of the evolution of motivations: this is known as “panel data”.

Mapping the motivations underlying the desire to participate in a project and to change behaviour helps to specify the most suitable activities for development over the course of the project [see table p. 3]: these are often simple proposals, but their implementation requires a preliminary survey phase of the population targeted by the intervention before it begins.

Policy implications, research and support strategies

Considering intrinsic motivations means recognising that the psychological dimension is just as important as other already known factors, such as economic motivations (household income).

Decision-makers, development and research donors and project leaders can pursue this objective when planning the content of their interventions – conservation and development projects and policies, field surveys, monitoring-assessment and learning methods, and background scientific research.

Before designing a call for projects or a public policy, or before implementing an action, *ex ante* surveys can be integrated and financed in order to map the motivations of beneficiaries and the resulting mental models, including their hopes for the future. This type of map can be produced using qualitative tools

(interviews and participant observations) and quantitative tools (through surveys or implicit association tests).

It could be worth making the development of the intervention conditional on the role that intrinsic motivations could play in the long-term effectiveness of the measures planned.

Over the course of the intervention, assessments of actions can be included, and where appropriate, the objectives of these actions can be adapted to ensure greater impact. Assessing impact over time, both during the action and afterwards, produces panel data, which measure not only visible variables (income, conservation of environmental services), but also invisible ones (motivations that may change over time and affect behaviour differently).

These projects and policies will benefit from being accompanied by scientific research that takes account of the theory of change and social psychology in fields linked to agriculture and environment. ■

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> Invaluable – Integrating Valuations, Markets and Policies for Biodiversity and Ecosystem Services (2011–2015, French National Research Agency, ANR, France, project ANR-11-EBID-0003, <https://anr.fr/Projet-ANR-11-EBID-0003>);

> PESMIX – Payments for environmental services: new panacea or auxiliary for environmental management? (<https://pesmix.cirad.fr/en>, 2011–2014, French National Research Agency, ANR, France, project ANR-10-STRA-0008, <https://anr.fr/Projet-ANR-10-STRA-0008>).

This research has given rise to a collection of articles and to other publications:

Special section of the journal *Ecological Economics*: Ezzine-de-Blas D., Corbera E., Lapeyre R., 2019. Special Section: Crowding-out

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A few words about...

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