Evaluation as a multi-stakeholder learning process: the Programme for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) in Bolivia, Ghana and India

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An evaluation is a particular multi-stakeholder event during which different actors share and analyse results after several years. If the evaluation has a strong formative purpose, the evaluation team is requested to facilitate a learning process involving all key actors. Evaluations that emphasise deeper learning have to be designed in such a way that different perspectives emerge and are appreciated in an interactive way. The present article reviews the results and methodological design of an evaluation at higher education centres in Bolivia, Ghana and India. The ambition of these programmes was to integrate endogenous knowledge and values into education and research programmes. The evaluation provides an example of a mixed methods design that allowed for inclusion and appreciation of perspectives of different stakeholders. An evaluation team has to consider which set of methods is responding to the project context and how the methods complement each other and can be adapted to the case. The design should deliver both quantitative as well as qualitative data that provide evidence about results as well as the stories and background what these results mean for different stakeholders.

Keywords: capacity building; evaluation; development programmes; higher education; Bolivia; Ghana; India

The present article reviews the results and methodological design of the evaluation of the Programme for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) in Bolivia, Ghana and India. The ambition of CAPTURED was to validate and integrate endogenous development and endogenous values into education and research programmes. The project took place during 2008-2013 and the evaluation was carried out a few months before the official end of the project. The purpose of the evaluation was to assess the results, to learn from the experiences and formulate recommendations.

An evaluation is a particular multi-stakeholder event during which different actors share and analyse results, followed by critical reflection to draw lessons learned. Especially evaluations that emphasise deeper learning have to be designed in such a way that different perspectives emerge and are valuated in an interactive way. In higher education programmes, for example, the perspectives of students, lecturers, researchers, government, businesses that employ students, and civil society all count.

The central topic of this article is what can be learned from the CAPTURED evaluation in terms of designing and facilitating an evaluation as a multi stakeholder process, combining and applying different methods. Guiding questions are:

- What type and combination of methodologies are needed to design and conduct inclusive evaluations where perspectives of different actors are invited to interact?
- What is the role and responsibility of the evaluation team to stimulate a process that surfaces different perspectives and allows stakeholders to interact in a joint reflection process?

The CAPTURED project

The CAPTURED project was a research, education and development initiative involving Universities, Research institutes, NGO's and local communities (2). The aim of the project was to develop the institutional capacity for Universities and research centres to carry out strategic research, development and capacity building programmes that strengthen endogenous development in their own institutions, and to support other scientific and development institutions in their respective regions.

The project was built on the experiences and collaboration of three centres of excellence in Ghana, Bolivia and India and of COMPAS, an international programme to compare and support endogenous development. Endogenous development is development based mainly, though not exclusively, on locally available resources, local knowledge, culture and leadership. It intends to review indigenous knowledge and combine or integrate it with other knowledge and practices. Endogenous development has mechanisms for local learning and experimenting, building local economies and retention of benefits in the local area.

One of the main conclusions of the COMPAS network was that between the different cultures worldwide, there is a great diversity in worldviews, ways of learning and ways of knowing. In developing countries these worldviews and ways of knowing have become marginalised in a historical process of colonial domination, neo-colonial international relations and globalisation. Formal systems of research and education in Africa, Latin America and Asia generally adhere to mainstream ("modern" Western based) knowledge. In the agricultural field, for example, researchers only started to understand complex African mixed cropping systems a few decades ago, whereas earlier they were viewing agriculture in a mono cropping perspective.

People in many countries are strongly attached to their own values and ways of knowing, social systems and spirituality as integral part of their culture. Unfortunately, the dynamics of endogenous knowledge is hampered by its marginalised position. Endogenous ways to learn and mechanisms for improving traditional values, concepts and practices by their knowledge holders have been weakened by mainstream developments that often prioritised research and development of export crops as opposed to local food crops or Western medicine as opposed to local health practices. The CAPTURED partners have documented their findings in *Learning Together* (Vol. I and II; 2010) and Haverkort et al (2012). Each of the three

countries also provides a rich documentation on their respective research programmes (see references in each of the three Country Evaluations, 2012).

Evaluation methodology

Based on the Terms of Reference a work plan was made for the country evaluations. In each country the team leader (Jan Brouwers) teamed up with a co-evaluator, appointed by the Southern partner (Bolivia: Rene Orellana; Ghana: George Dei; India: Rob O'Donoghue; see references of the three country evaluation reports, 2012). The methodology was designed so that each of the evaluation questions made explicit the perspectives of the different stakeholders. The main elements of the methodology were (1) documentation review; (2) interviews with key informants and group interviews applying Appreciative Inquiry and reconstructing together the Theory of Change; (3) collection and assessment of data on curricula innovation, quality and quantity of acquired capacities of University staff applying the five capabilities model and Appreciative Inquiry; and (4) triangulation and validation of findings. Concepts are explained below. Prior to the evaluation the capacity to deliver endogenous education and research was assessed through a self-evaluation by researchers, lecturers and students.

Assessing and appreciating capacity and changes in capacity over time

CAPTURED has a main result area on capacities which were assesses using the Five Capabilities Model (Baser & Morgan 2008; see Figure 1). The model 'unpacks' the concept of capacity into five capabilities that together represent capacity. A capability of an organisation is an integrative concept, similar to how an individual combines knowledge, skills and experience into a specific competence. The five capabilities comprise: (1) the capability to relate to the outside world and attract resources and support; (2) the capability to carry out tasks; (3) the capability to commit and engage; (4) the capability to adapt and selfrenew; and (5) the capability to balance diversity (allowing different perspectives in a team) while still achieving coherence in what the organisation is doing.

Appreciative Inquiry

The Appreciative Inquiry (AI) methodology (Cooperrider et al 2008) implies that the evaluating team sees its role as that of an informed facilitator providing the structure for a process of common sense-making. Evaluation requires valuing (Scriven 1967). Scriven argues that the work of evaluation is making a value judgment about the object that is under study. The valuing role belongs to the evaluation team but reality is an on-going, dynamic process and a truth is always relative to some particular frame of reference. Thus, valuing must take place within the context of understanding the "subjective meaningfulness" of the evaluation information. AI allows for such a contextual understanding together with stakeholders. It helps people to make judgements of worth.

AI approaches evaluation as a learning experience using dialogue, reflection and challenge to distil learning opportunities, to create a learning environment and to develop inquiry skills. Learning from evaluative inquiry allows the involvement of different stakeholders each representing different perspectives. It is socially situated and is mediated through stakeholders' previous knowledge and experiences. One key element therefore was the progressive deepening, validation or refuting of first findings with stakeholders and validating

lessons learned. This provided the basis for formulating afterwards collectively agreed recommendations that were based on a joint reflection process.



Figure 1: The five capability model (Source: Baser and Morgan 2008)

It is important to note that the two methodologies reinforce each other in the sense that positive changes in capabilities were further probed by AI amongst stakeholders before continuing with the analysis of areas where capabilities were lagging behind with respect to planned results or the need for new capabilities to deal with emergent issues.

Reconstructing the Theory of Change

In all three Country Evaluations a reconstruction was made of the main changes and strategic directions of the project in the past five years, applying Theory of Change (ToC) thinking. These are described in the respective Country Reports with a visual overview (see example India below). A Logical Framework typically only allows linear changes and is not always useful to describe changes in complex environments like the ones in which the CAPTURED actors operate. ToC visualization presents a flow of outcomes or pre-conditions that can be discerned into early, intermediate and final outcomes during the course of the project's life. A ToC would also add the assumptions that stakeholders have on how change happens.

Differences in assumptions reveal different worldviews of actors, which are important to articulate when working in a multi-stakeholder approach. Often different change pathways are described that take place at the same time and influence each other. ToC is often applied for analysis and planning, and as a result provides stronger focus for monitoring and evaluation. In this case it was applied as a joint re-construction of what happened, what results were achieved, and what strategic change pathways evolved. This allowed stakeholders to articulate

how change was planned at the start, how it came about and what this means for the design of future similar programmes.

Preparing the evaluation

Prior to the evaluation a three-tier evaluation approach was used by CAPTURED to allow different project partners and stakeholders to be involved and prepared for the evaluation. The first tier was a self-assessment in each of the three countries, the second tier was a local resource persons' assessment of the progress, and the last was the recruitment of international consultants for the evaluation. A multi-stakeholder approach was used to involve all those who were foreseen in the project document. They included representatives from the community, local policy representatives, representatives from Non-Government Organisations and Civil Society Organisations, students, faculty members, University administration, and donors. At the start of the evaluation a set of documented resources was available, providing both quantitative as well as qualitative data.

Bolivia

After five years of support by CAPTURED in Bolivia, AGRUCO (Centro Universitario Agroecología Universidad Cochabamba) was able to establish a learning community interested in subjects like inter- and intra-culturality, inter-scientific dialogue, intercivilizational dialogue, participatory research methodologies that recognise the wisdom of indigenous peoples, decolonization (6), integrative understanding of history and culture, and transdisciplinarity. AGRUCO achieved a shift in the main concepts it is working with: from agro-ecology, biodiversity, sustainable endogenous development, and reciprocity towards indigenous economies, new legal and political issues like plural nationality, autonomy, plural legal systems, communitarian socialism, well-being, and other concepts. The AGRUCO team managed a major achievement by formulating a "Continuous Education Programme" containing technical training on Operational, Intermediate and Advanced level, a Bachelor, a Specialization, a Master, as well as a Ph.D Programme.

AGRUCO became the nucleus of various networks, firstly within the Faculty of Agriculture, afterwards within the University Mayor San Simon (UMSS, Cochabamba) and with other Universities in Bolivia and Latin America. AGRUCO is well connected with various units within the UMSS and it counts with the full support of the Rector and Deans of Faculties. Its capacity to develop academic programmes has allowed AGRUCO to enlarge its academic position. The strongest and the most sustainable Ph.D programme of the UMSS is the one conducted by AGRUCO.

In the current political reality of Bolivia it is important to take the "well-being" discourse to a next level. AGRUCO contributed with a support to the Bolivian National Development Plan, the framework of Intercultural Governance, and other policies, programmes and projects. The plural-national education system is expected to strengthen this process in the future and AGRUCO provided an example that has the potential to be expanded in Latin America. The capability to relate as well as the capability to adapt and renew were assessed as 'medium' at the beginning of the programme. By 2013 these capabilities have been strengthened. The reconstruction of the ToC showed that at the start of the project the

acquired knowledge and profile on agro-ecology was a key institutional achievement on which AGRUCO could build. A next main achievement was the development of a new methodological framework with new concepts (see below). This was the basis for (1) expanding a network with interested stakeholders, especially indigenous and farmers' social organisations as well as political representatives working on new legislation; (2) designing a new 'decolonised' curriculum for a range of different type of students; and (3) developing a new practice of participatory and trans-disciplinary research based on 'diálogo de saberes', or inter-cultural dialogue.

Contribution to political and institutional results

During the project period political events in Bolivia generated significant changes in the Bolivian Constitution and created a context that allowed educational organisations such as AGRUCO to engage in major institutional changes. A significant group of stakeholders were the indigenous and farmer organisations. Key stakeholders have been involved in the design of the new curricula and research framework, and their role was crucial to understanding why AGRUCO managed to become a promoter of transformation.

The issues of transdisciplinarity, endogenous knowledge and creating space for intra- and inter-cultural exchange developed by AGRUCO in cooperation with other partners have created a theoretical and political corpus that contributed to the national debate, particularly in the context of the new constitutional framework that began in 2006 and ended in 2009. In order to reinforce the impact, AGRUCO has built strong alliances with other institutions from the social, public and the private field, while having a consistent relation with social organisations, particularly indigenous and farmer organisations.

The Law of 'Mother Earth and Integral Development for Living Well' is a good example of the process of institutionalisation as well as the process of construction of the regulations prescribed by that law. This law has been defined as one of the central ones in the context of the construction of a vision of development that incorporates 'Mother Earth and nature' as well as society in the core of the development. The concepts and theories developed by AGRUCO supported that process.

Another example is the Bioculture programme that has been constructed by AGRUCO. This network has been working in the implementation of the law of 'Mother Earth and integral development for living well' and implemented the central issues of the law at the local level in numerous communal cases through what have been called the Bio-cultural Endogenous Systems (BES). These BES are working with different approaches such as fostering local public governments in order to support communal processes, or fostering economic and political processes of communal organisations.

Conclusions from Bolivia

The endogenous development and participatory research have built what can be described as a new paradigm of intercultural dialogue of knowledge and respect to Mother Earth and wellbeing. As a result, transdisciplinarity has been rolled out in research and education and by 2013 Bolivia has produced considerable numbers of educated professionals with the competences to work together with indigenous and farmer community organisations. The coordinated work that AGRUCO achieved together with indigenous and farmer social

organisations resulted in a network that is applying new legislation, policies, and academic processes.

Ghana

For Africa, the CAPTURED programme was hosted by the University for Development Studies (UDS) in Tamale, Ghana. Ghana was to serve as a pilot from which an Africa-wide initiative would emerge. The pilot was primarily to generate research, teaching and learning materials and capacity to establish partnership and deliver courses. The internal objectives were satisfactorily achieved, apart from the production of completed Ph.D theses and the Africa-wide expansion, which turned out to be an over-ambitious objective given the project duration.

During the project UDS was able to engage with internal stakeholders such as the University Council and Management, faculty of other programmes, and students. This gave rise to a Ph.D programme in endogenous development currently running with almost sixty Ph.D students at various stages of execution. Before CAPTURED, there was not a Ph.D programme at UDS and this first programme served as a model and an inspiration for other Ph.D programmes. By 2013 UDS has five Ph.D programmes designed. At UDS three main platforms for endogenous development have been created which are now running annually: 1) the Interfaculty Lecture Series; 2) the Harmattan School Series; and 3) the Graduate Student Seminar Series, now absorbed by the UDS Graduate School. Various publications have been made in the course of the CAPTURED project (see Ghana Country Report for details). External stakeholders included the national Accreditation Board, other Universities in Ghana like the University of Cape Coast, other African Universities like Ahmadu Bello University (Nigeria) and Makerere University (Uganda); and Universities in the North. Also NGOs and CSOs were key partners as field implementation agencies, communities as implementers and social laboratories for investigations and source of information for the (re)construction and revitalising of endogenous development frameworks in agriculture and natural resource management. UDS also worked together with partner Universities in Africa by way of dissemination, limited networking, and platform building as in initiating a Pan Africa Network for the Revitalisation of African Knowledges (PANRAK).

In Ghana, a number of efforts have been made from the start to build up and share lessons on endogenous development for community level support. These included partnerships with the Alliance for Food Sovereignty in Africa; research on Holistic Evaluation; an Urban Food Security Project; the Grass for Carbon programme to support the regeneration of Sacred Groves in communities; and Food Security programmes. These partnerships allowed UDS to put indigenous knowledge and endogenous development into research agendas.

The Education Programme supports student scholarships, management and administration, teaching and learning activities and research and dissemination of student work. The Ph.D programme has 58 students at various stages of execution. A major result achieved by UDS was new curriculum development sustaining the Ph.D programme, which consisted of Programme Documents (Ph.D Curriculum and Student Hand Book); new courses; and Teaching Learning Resources.

Stakeholders' involvement in the evaluation

All project partners interacted with evaluators during a two days' workshop and joined in the assessment of results and capabilities, and the reconstruction of the ToC underpinning the programme. The UDS experience gave methodological considerations for dealing with endogenous development in a project like CAPTURED. The evaluation provided space for UDS to carry out a self-assessment by the end of the project with a comparison to the situation at the start. The analysis revealed that of the five capabilities the capabilities to act, to renew and to balance diversity and achieve coherence were already quite strong at the start and remained by the end of the project capabilities on which UDS can rely. The capability to relate was weak at the start, has improved as a result of project activities and could still become stronger in the next years. UDS can build on its other capabilities to strengthen its coalition building with other actors; it has achieved coherence in its profile and product offering, which will guide its networking and further positioning.

Reconstruction of the Theory of Change in the evaluation process

The reconstructed change trajectory described how the UDS was able to reach out to rural communities and contribute to quality poverty reduction actions based on revitalized indigenous knowledge. UDS has a code of conduct that governs the processes spelt out for engagement within an endogenous development perspective. The Code requires starting research from the community; either what is already on-going in the area of their knowledge or dialogue with them to determine the research theme. The interplay and emerging tensions in the modern world of Western scientific knowledge served to open up topics and questions for Ph.D research through processes of translation with empirical verification using more conventional types of knowledge. The Ph.D research insights and verifications were then fed back into design of endogenous development with community partners.

Conclusions from Ghana

UDS has broadened the scope of the concern for endogenous development and research in particular in the context of agriculture and natural resources related poverty reduction issues. Faculty and students have worked from a strong engagement with endogenous knowledge holders in a co-engaged action research design. They have also brought clarity and strength to fragmented but still evident indigenous knowledge of African practices at the village level, crucial to de-colonising the education system in Africa. The evaluation design allowed UDS and its partners in Ghana to have the platform and articulation by project partners themselves of the project approach or 'reconstructed' Theory of Change.

India

In India the CAPTURED programme was carried out by the Institute of Ayurveda and Integrative Medicine (I-AIM), part of the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bangalore, India. The integration of research materials and development capacity to establish partnership and deliver on courses is one of the biggest strengths in India. This is most notable in the coherence of the model for endogenous development and community-managed health practices. In India it is estimated that about one million folk health practitioners serve as the first stop for services like midwifery, treatment of

common ailments with herbal remedies, simple fractures and sprains, snake and scorpion bites and provide for about 80% of primary healthcare services especially in rural areas. However, their knowledge is often not identified, appreciated, or validated.

During the project period I-AIM was able to engage with various stakeholders such as Universities and other knowledge institutions, NGOs, milk unions and health workers. I-AIM worked together with them to develop materials and programmes around ethno-botany and health provision. Early 2013 I-AIM was legislated into an independent State University by the Karnataka State Legislative Assembly. The core programme allowed FRLHT to resource the partner Universities, colleges and government organisations with development materials and programmes around ethno-botany and health provision. The ethno-veterinary work produced modules for a new distance education programme for veterinary post-graduate work.

The outreach (making the results of research available to society) initiated through I-AIM is being extended by partner institutions through innovative curriculum programming. An example is the curriculum based on endogenous development that has become part of teaching material in Tamil Nadu Veterinary and Animal Sciences University's post graduate Diploma programme in Ethno-veterinary Practices. There is also a two day course on ethnobotany applying an anthropological approach to botany that is included in the development of the medicinal garden on the Christ University campus. In the case of Mount Carmel College in Bangalore a certificate course was developed in home medicine.

Cornerstone results were the establishment of cheap technology for drinking water, researching effective village-based malaria prevention practices, exploring wider holistic health concerns with health producing and curative medicines, addressing dietary deficiency producing concerns of iron and anaemia, setting priorities for conservation and verification of changing plant uses (as species lose their diversity), probing a pressing need for authenticating plant drugs and quality, and pharmacology efficacy in biodynamic practices. These research focus areas in the Ph.D programme have been expanded to include partnered research, materials and course development for a revival of ethno-veterinary practices, including a dairy co-operative partnership programme to resolve the problems of milk quality and costs related to veterinary treatment.

The building of training and curriculum materials progressed from foundation books through a lecture programme that was produced as training manuals in 2010-2011, strengthening the core curriculum component for the Ph.D programme. This systematic building was possible through supervision teams that reflected all of the disciplinary and technical support for the research to advance with foundations in the endogenous roots of Ayurveda and folk knowledge. The folk knowledge where the naming and using came from the forest dwellers was combined with the Ayurveda body of knowledge and verified in Ph.D research. This shows epistemology in which there is a relation between folk and health management that leads to research validation. The process legitimised and mainstreamed endogenous development practices, as relevant research topics have been selected through an interactive way with partners, including representatives from folk knowledge, to validate these practices through research. All the research topics were endogenous development based and use a trans-disciplinary design. The mainstreaming programme is complemented by short-term courses on specific topics.

Stakeholders' involvement in the evaluation

During the evaluation a two days' workshop was organised with the main stakeholders. All project partners interacted with evaluators during the workshop and joined in the assessment of results, changes in capabilities, and the reconstruction of the Theory of Change underpinning the programme (see below). The appreciative inquiry process allowed an articulation by I-AIM of the implicit perspective traced in the Ph.D research programme.

What came out was a two-stage research design perspective. The first stage involved an observation of a living health tradition practiced by the community that was experienced by the community to be effective. The second stage involved reading the codified medical texts to understand the theory underlying the community practice. This second stage included translating the 'traditional' theory into a scientific hypothesis and evaluating the traditional theory using tools and parameters of conventional types of science. The end result of this two stage approach was validation and refinement of an endogenous health practice.

I-AIM carried out a self-assessment of its capacity by the end of the project, comparing it with the situation at the start. Their analysis of the five capabilities revealed that the capabilities to act, to renew and to balance diversity and achieve coherence were already quite strong at the start and remained by the end of the project capabilities on which I-AIM can rely on in the future. As in Ghana, the capability to relate with the community knowledge was weak at the start, has improved and could still become stronger in the next years. I-AIM can build on its other capabilities to strengthen its coalition building with community based organizations to identify real-life problems in endogenous practices and afterwards partner with research institutions in life and bio-medical sciences to validate and where possible improve upon endogenous knowledge.



Figure 2: Theory of Change visualisation CAPTURED India

Reconstruction of the Theory of Change in the evaluation process

The reconstructed change trajectory is described by a number of streams that continue to flow at the end of the present project period (see Figure 2). The first stream that started before the project in the mid-nineties is the 'foundation stream'. I-AIM articulated the theoretical foundation of folk heritage narratives and combined it with the Ayurveda manuscripts. This allowed the second stream of research to start at the beginning of the CAPTURED project. Through the Ph.D research health practice was assessed empirically. This allowed a third course and outreach stream to start afterwards based on the first two streams. This last stream provided feedback to village level practice by a series of courses and professionalization of folk health practitioners. Finally, partners were able to carry out outreach (making research useful for development) and contribute to quality healthcare based on revitalized Indian medical heritage. Acknowledging the relevance of what was known by folk health practitioners, particularly on preventive medicine, had the effect of increasing confidence at the level of folk health knowledge holders.

The endogenous roots in India are interesting as they came from both an oral tradition in village practice as well as ancient Ayurveda manuscript tradition. The oral and the ancient manuscript traditions reflect interplay of engagement at the village level and narrative modelling in writing to guide health practice as a holistic tradition. The knowledge producing process for the Ph.D programme reflects work with village-engaged folk health practice in interplay with Ayurveda texts. This interplay and emerging tensions in the modern world of Western scientific medicine served to open up topics and questions for Ph.D research with empirical verification using conventional biotechnology tools. The Ph.D research insights and verifications were then fed back into endogenous development with village partners.

Conclusions from India

I-AIM has broadened the scope of the concern for endogenous development and research in the context of Indian medical heritage. The project staff has strengthened the fragmented but still evident folk health practice at the village level. Indigenous knowledge has been identified, appreciated and validated, making folk health practitioners more confident about their health practices. The evaluation design allowed the surfacing and articulation by project partners themselves of the project approach or 'reconstructed' Theory of Change. The evaluators and stakeholders concluded that the approach developed by I-AIM and its partners is basically a translation and process model.

Discussing the role of a final evaluation as a moment for joint learning

Traditional evaluators are used to designing an evaluation mainly as an iterative, negotiated, but still mainly donor- or government-orchestrated process. In recent years the monitoring and evaluation function has seen an increased practice area where stakeholders take a stronger self-regulated steering with various self-assessment methods, already during the project period (Carden & Alkin 2012). An end evaluation, as discussed here, should select a set of methods that is in line with the domain or sector where stakeholders operate and combine the methods in such a way that it builds on findings already available in the course of the project

life. It should also facilitate that different perspectives emerge and interact in the course of the evaluation to allow joint analysis and agreement on findings.

The CAPTURED evaluation provides an example of an evaluation design with a set of different methods and their combination that allowed different stakeholders to become coevaluators in a final evaluation. Firstly, it was important to align with the main domain of work, namely endogenous development. Respect for local mind-sets, perspectives, methodology and ways of learning had to be part of the evaluation approach. This was the reason why self-assessment of capacity and changes in capacity combined with AI were chosen as methods to allow perspectives of different actors to surface and interact. In this way results were identified, checked and valued by different actors. The reconstructed ToC allowed to understand the achievement of results over time and reconstruct the trajectories how early outcomes over time resulted in intermediate outcomes and eventually end-ofproject outcomes. The reconstructed ToC also allowed seeing how different strategies and outcomes, or 'streams' as they were called in India, interacted and reinforced each other. The reconstructed ToC also allowed finding a common change framework, or theory as to how, by the end of the project, the present understanding of endogenous development and how it can be enhanced in wider society through research and education institutions can be done. This provided a stronger theoretical foundation how education and research organisations can engage with local communities and develop curricula that include endogenous knowledge as well as educate students that have effective competences for designing action research with local communities.

The role and responsibility of the evaluation team

A first role is a methodological responsibility requiring a good understanding and verification of the type of evaluation and the Terms of Reference, especially the evaluation questions, and translating this into an appropriate mix of methods (Bamberger 2012). Final evaluations often are carried out just before the end of the project and can therefore only assess outcome at the end of the project period. Impact in terms of sustainable changes in the lives of people and their environment is often argued to take place only years later. It is important, however, to check and update the ToC and see if indeed change pathways are occurring as identified at the start of the project. Have outcomes indeed materialised and is the direction towards final impact confirmed or does it need strategic re-orientation or in other words an updated ToC?

A second role of the evaluation team respecting multi-stakeholder interests during an evaluation is a facilitating role. The evaluation team has to ensure that the methodology is understood by the key actors and that they feel confident to apply it. Another part of facilitation is ensuring the joint assessment and confirmation (or refutation) of findings. Still another one is the joint analysis of findings, after their confirmation. Reflecting on what findings mean, combining different findings and formulating conclusions as a group of different stakeholders needs facilitation. Lastly, the facilitation role requires that the joint agreement of findings and lessons learned need to be translated into recommendations. In the past the formulation of recommendations was typically a competence that mainly (external) evaluators have developed. This competence can also be strengthened amongst the representatives of stakeholders taking part in an evaluation.

Another role is remaining critical. The evaluation team, as well as teams that include representatives from stakeholders during self-assessment, should always try to probe findings, find illustration and references whenever statements are made on results, triangulate if possible, consider other potential actors that may have a different appreciation (like gender issues), and think about alternative reasons that explain findings. A critical note on methodological weaknesses and areas for improvement is to be included in any evaluation report.

Interest of stakeholders to be involved in this type of evaluations

The five years of the CAPTURED project has shown how in each of the three countries an exploratory and consensus-building practice has evolved and allowed the principles of the project to be applied within different contexts. It was in this very project logic that stakeholders were also involved in the evaluation, as this provided an occasion for deeper learning. The three cases show each how the context and different sets of actors resulted in specific (combinations of) pathways of change, as illustrated in the Theories of Change. The joint reconstruction of the ToC allowed stakeholders to articulate a clearer picture as to how the different stakeholders were positioned in the change processes and how they contributed to results. Like evaluators, also different stakeholders like community representatives, students and researchers like to learn about evaluation tools and how they could use these in their practice. This helps to strengthen self-assessment, be critical, articulate the ToC and discuss weaknesses and areas for improvement.

Conclusions

An end of project evaluation can be designed in a mixed methods design that allows for inclusion and appreciation of perspectives of different stakeholders and help them to make judgements of worth. An evaluation team applying mixed methods design has to think through which set of methods addresses the evaluation questions and responds to the required domain and project context, as well as how the methods complement each other and can be adapted to the case.

The mixed methods design provided evidence from quantitative and qualitative data as well as the stories and background information which describe what these results mean for different partners in the programmes. In this way, the final evaluation provided both summative proof of results as well as formative understanding of what these results meant for different stakeholders.

The CAPTURED evaluation helped to show new forms of partnered, negotiated and contextualised collaboration. In this way the evaluation allowed to appreciate and build on values and accumulated knowledge generation processes and institutions in the three countries. Mixed methods design seems to fit evaluation needs in an end of project or programme evaluation where the perspectives of a set of different actors is needed and where outcomes are difficult to measure and often intangible.

References

Bamberger, M. (2012): Introduction to mixed methods in Impact Evaluation. *Impact Evaluation Notes 3*, New York: Rockefeller Foundation

Baser H. and P. Morgan (2008): Capacity, Change and Performance. *ECDPM Discussion Paper 59B* ECDPM-Maastricht

Brouwers, J.H.A.M. (2012): End Evaluation CAPTURED. *CDI report 12-021*Wageningen UR; Centre for Development Innovation

CAPTURED (2010): Learning Together. Developing inclusive knowledges and sciences (Vol. I and II)

Carden, F. and M.C. Alkin (2012): Evaluation Roots: An International Perspective. *Journal of Multi-Disciplinary Evaluation*, Volume 8, Number 17, p. 102-118

Cooperrider, D.L, D. Whitney and J.M. Stavros (2008): Appreciative inquiry handbook: For leaders of change (2nd ed.). Brunswick, Ohio: Crown Custom publishing, Inc

Dei, G.J.S. and J.H.A.M. Brouwers (2012): Ghana CAPTURED Country Evaluation *CDI* report 12-016 Wageningen UR; Centre for Development Innovation

Haverkort, B., D. Millar, D. Shankar and F. Delgado Burgoa (2012): Towards Interscience Dialogue. Building on the diversity of worldviews, values and methods in different knowledge communities. New Delhi: Nimby Books

Orellana Halkyer, R., y J.H.A.M. Brouwers (2012): Bolivia Evaluacíon CAPTURED (Spanish report) *CDI report 12-019* Wageningen UR; Centre for Development Innovation

O'Donoghue, R. and J.H.A.M. Brouwers (2012): India CAPTURED Country Evaluation *CDI report 12-018* Wageningen UR; Centre for Development Innovation

Scriven, M. (1967): The methodology of evaluation. In RE Stake (Ed.), *Curriculum Evaluation* (American Educational Research Association Monograph Series on Evaluation No.1). Chicago, IL: Rand McNally

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