

CAPTURED End Evaluation Synthesis Report

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CAPTURED Evaluation Synthesis Report

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CAPTURED Evaluation Synthesis Report

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This report provides the summary findings of the CAPTURED End Evaluation. After five years of support by the CAPTURED project the three CAPTURED partners have achieved commendable results. Ten lessons learned are formulated that emerged from the CAPTURED experience and can guide future similar initiatives. The main conclusions of the End Evaluation are that the CAPTURED project provided a clear return on investments, illustrated the emergence of innovative trans-disciplinary research practices, established three PhD Research Programs that are grounded in endogenous frameworks, managed to design and conduct innovative educational programs, and institutionalised the practice area of endogenous knowledge and related EE and ER in their respective organisations and networks. The Evaluation also noted that whereas in the South the interest for endogenous development related higher education is increasing, the interest in the North is weak, which risks to loose valuable endogenous knowledge.

The main recommendations are: consolidate with external academia and accredit research protocols, create a 18 months transition phase to design an up-scaling phase, expand the group of actors in a next phase, formulate a research program that deepens and validates the material produced by CAPTURED, build on the CAPTURED practice of transdisciplinarity, and acknowledge the role of constructivism in science for innovation. Specific recommendations are formulated for nine potential different actors that could engage in a next phase.

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Preface

This report provides the summary findings of the CAPTURED End Evaluation. In addition, three country evaluation reports have been produced, based on the work of the CAPTURED partners in Bolivia, Ghana and India. As noted in the ToR document, the purpose of this evaluation of the Program for Capacity and Theory Building for Universities and Research Centers in Endogenous Development (CAPTURED) is “to assess the results (products and impact), to learn from the experiences in terms of strategy and efficiency, and formulate recommendations about the possible ways in which the program activities may be continued in each of the three cases and about the options for mutual cooperation and up scaling of the program in the future” (Appendix 4 ToR).

The Program for CAPTURED was initiated in 2008 and is funded by the Ministry of Foreign Affairs, Directorate General for International Cooperation (DGIS, sub-directorate DSO-00) in the Netherlands. This international program involves The University for Development Studies (UDS) in Ghana as the main implementing agency, in cooperation with AGRUCO of the University Mayor San Simon (UMSS) in Cochabamba, Bolivia and the Foundation for Revitalisation of Local Health Traditions (FRLHT), in Bangalore India.

This partnership built on experience of the University Consortium of COMPAS (Comparing and Supporting Endogenous Development) Network, and ETC, The Netherlands. Before the CAPTURED project these Universities and research centres provided technical support to COMPAS partner organisations. Cooperation with COMPAS and ETC foundation and expatriate support has been part of the program design of CAPTURED which also runs with an international advisory board monitoring the program and offering advice on a yearly basis.

The evaluator is grateful to the three co-evaluators that joined him in the respective three country evaluations: Professor George Dei (Ghana Evaluation), Professor Rob O'Donoghue (India Evaluation) and Dr. Rene Orellana (Bolivia Evaluation). Their contributions were critical to produce the country reports, which form the main basis for the present synthesis study. The evaluator is also most grateful to the three country partners that provided an excellent learning environment to conduct country evaluations in Bolivia, Ghana and India.

The evaluator passes the appreciation by all CAPTURED partners towards the Dutch government for having funded this project. The Dutch government is one of the first funding agencies in the area of Higher Education having the courage to fund a project like CAPTURED that allows for co-evolution of knowledge putting end users at the centre. The evaluation team hopes that this kind of research will become inspiring for new innovate projects in Higher Education.

The views expressed in this evaluation report are the responsibility of the evaluator and involved institutions are not formally represented in the findings of this report.

Wageningen, October 2012,
Dr. ir. Jan H. A. M. Brouwers (Wageningen UR, The Netherlands)

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Executive summary

The Project for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) started in 2008 and is currently in its fifth and last year (2012/13). The project was funded by the Ministry of Foreign Affairs, Directorate General for International Cooperation (DGIS/DSO-OO) in the Netherlands. It involved the University for Development Studies (UDS) in Ghana as main implementing agency, in cooperation with AGRUCO of the University Mayor San Simon (UMSS) of Cochabamba in Bolivia and the Institute of Ayurveda and Integrative Medicine (I-AIM, an initiative of the Foundation for Revitalisation of Local Health Traditions) in Bangalore, India. Cooperation with COMPAS and ETC foundation and expatriate support has been part of the program design. An international advisory board monitored the program.

After five years of support by the CAPTURED project the three CAPTURED partners have achieved commendable results. In Ghana UDS has been able to develop curricula for both MPhil and PhD studies that are well-drawn. Students are highly motivated and appreciate the use of local resources, local knowledge, and local leadership in the development planning process instead of relying heavily on mainstream scientific principles. The content and delivery to a very large extent meets the expectations and students feel very satisfied with the program. In India all planned capacities have been achieved: setting up and running a PhD research program, designing and delivering a series of core courses and capacitating partners; and finally outreach in rural communities. The core program allowed I-AIM to resource the partner Universities, colleges and government organisations with development materials and programs around ethno-botany and health provision. The PhD program engaged topics that are relevant for renewing the health situation of people and domestic animals of the rural areas in India. In Bolivia AGRUCO was able to establish a learning community interested in subjects like inter- and intra-culturalism, inter-scientific dialogue, inter-civilizational dialogue, participatory research methodologies that recognise the wisdom of indigenous peoples, decolonization, integrative logical understanding of history and culture, and transdisciplinarity. The AGRUCO team managed a mayor achievement by formulating a “Continuous Education Program” containing technical training on Operational, Intermediate and Advanced level, a bachelor, a specialization, a Master, as well as a PhD Program.

The three cases tell three different stories where the same general problematic was translated in very different ways. The CAPTURED partners had an agility and competence to stay attuned with partners and networks, and decide on opportunities that presented themselves to intensify and deepen results. This strengthened capability to relate with the external world, acquire mandate, funds and backing was a key factor to explain successes. In all the three cases we also see a clear element at the start where CAPTURED has built on achievements of COMPAS and other projects and networks.

Ten lessons learned are formulated that emerged from the CAPTURED experience and can guide future similar initiatives. They are summarised as committed leadership, continuity in funding and creating a network with expert support, design a capacity development process, interact and deal with context, make a clear choice on the main research principles underpinning the research approach, prefer in-country training, design working principals for endogenous education and research, learn by doing and work towards self-supportive institutions.

The main conclusions of the End Evaluation are that the CAPTURED project provided a clear return on investments, illustrated the emergence of innovative trans-disciplinary research practices, established three PhD Research Programs that are grounded in endogenous frameworks, managed to design and conduct innovative educational programs, and institutionalised the practice area of endogenous knowledge and related EE and ER in their respective organisations and networks. The Evaluation also noted that

whereas in the South the interest for endogenous development related higher education is increasing, the interest in the North is weak, which risks to loose valuable endogenous knowledge.

The main recommendations are: consolidate with external academia and accredit research protocols, create a 18 months transition phase to design an up-scaling phase, expand the group of actors in a next phase, formulate a research program that deepens and validates the material produced by CAPTURED, build on the CAPTURED practice of transdisciplinarity, and acknowledge the role of constructivism in science for innovation. Specific recommendations are formulated for nine potential different actors that could engage in a next phase.

Síntesis en español

El Proyecto Construcción de Capacidades y Teorías para Universidades y Centros de Investigación en Desarrollo Endógeno Sustentable (CAPTURED) empezó en 2008 y está actualmente en su quinto y último año (2012/13). El proyecto fue financiado por el Ministerio Holandés de Asuntos Exteriores y la Dirección General para la Cooperación Internacional (DGIS/DSO-00). Este involucró la Universidad para Estudios de Desarrollo (UDS) en Ghana como el agente principal de gestión, en apoyo con AGRUCO de la Universidad Mayor de San Simón (UMSS) de Cochabamba en Bolivia y el Instituto de Medicina Integrada Ayurveda (I-AIM), una iniciativa de la Fundación para la Revitalización de las Tradiciones Locales de Salud en Bangalore, India. En cooperación con COMPAS y la Fundación ETC se constituyó un apoyo exterior que fue parte del diseño del programa así como un Consejo Internacional de Monitoreo que cumple el rol de consejero del programa.

Después de cinco años de apoyo del proyecto CAPTURED, los tres socios CAPTURED han alcanzado importantes resultados. En Ghana la UDS ha sido capaz de desarrollar un currículo para ambos estudios MPhil y PhD que están bien diseñados. Los estudiantes están altamente motivados y aprecian el uso de los recursos, conocimientos y liderazgo locales en el desarrollo del proceso de planeamiento superando la dependencia de principios de la ciencia occidental. El contenido y la entrega satisfacen en gran medida las expectativas y los estudiantes se sienten muy satisfechos con el programa.

En la India todos los resultados planeados han sido alcanzados: implementando y efectuando un programa de investigación de Doctorado, diseñando una serie de cursos centrales y capacitando a los socios; por otra parte las comunidades rurales con las que se trabajó han sido capacitadas. El programa ha permitido al I-AIM apoyar a las Universidades socias y a las organizaciones gubernamentales con materiales de desarrollo y programas relacionados con la etnobotánica, vinculado la educación en temas de salud. El programa de Doctorado incorporó temas que son relevantes para mejorar la salud de las personas y de animales de grandes áreas rurales de la India. En Bolivia, AGRUCO fue capaz de establecer un aprendizaje en las comunidades interesadas en materias como la inter e intraculturalidad, el diálogo intercientífico, el diálogo intercivilizatorio, establecimiento de metodologías de investigación participativas que reconocen la sabiduría de los pueblos indígenas, la descolonización, el entendimiento con un enfoque histórico cultural lógico, y la transdisciplinariedad. El equipo de AGRUCO gestionó un logro mayor habiendo formulado un Programa de Educación Continua con un programa de capacitación a nivel Técnico Operativo, Medio y Superior, una Licenciatura, una especialización, una Maestría y un Doctorado.

Los tres casos cuentan diferentes historias donde el tema general fue tratado de forma diferente. Los socios CAPTURED tuvieron una notable agilidad y competencia para identificar nuevos socios y redes, y decidir sobre oportunidades intensificando y profundizando los resultados. Esta aptitud fortalecida para relacionarse con el mundo exterior, recibir mandato, fondos y respaldo fue un factor clave para explicar el éxito. En los tres casos vemos un elemento claro al inicio, donde CAPTURED ha construido sobre los logros de COMPAS y proyectos y redes ya establecidos.

Diez lecciones aprendidas son formuladas y emergen desde la experiencia de CAPTURED. Ellas pueden guiar iniciativas similares futuras y se pueden resumir en los siguientes términos: i) compromiso de liderazgo, ii) continuidad en financiamiento iii) creación de redes con apoyo técnico, iv) construcción de capacidades y su incidencia en procesos de desarrollo, v) interacción con el contexto, vi) decisión sobre los principales principios de investigación sustentando el enfoque de ésta, vii) preferencia por la capacitación en el país sede del proyecto, viii) diseño de principios de trabajo para la educación e investigación endógena, ix) aprendizaje de la practica, y x) construcción y fortalecimiento de instituciones autosuficientes.

Las principales conclusiones de la evaluación final son que el proyecto CAPTURED tuvo un efecto altamente positivo que justificó plenamente la inversión, que se expresa en la emergencia de prácticas innovadoras de investigación transdisciplinarias, establecidas en el marco de tres programas de investigación de doctorado que se basan en los marcos teóricos de desarrollo endógeno, habiéndose diseñado y ejecutado programas educativos innovadores en las áreas de conocimiento endógeno relacionados a la educación y la investigación endógena en sus respectivas organizaciones y redes. La evaluación también señaló que, mientras que en el Sur el interés por el desarrollo endógeno relacionado con la educación superior está aumentando, el interés en el Norte es débil y tiende a decrecer con el riesgo de perder la visibilidad y aprendizaje de conocimiento endógeno valioso.

Las principales recomendaciones son: i) consolidar articulaciones con el mundo académico externo y los protocolos de acreditación de investigación, ii) crear una fase de transición de 18 meses para el diseño de una fase de crecimiento de escala, iii) expandir el grupo de actores en una siguiente fase, iv) formular un programa de investigación que profundice y valide el material producido por CAPTURED, v) expandir la práctica CAPTURED de transdisciplinariedad, y vi) reconocer el papel del constructivismo en la innovación relacionadas con la ciencia. Recomendaciones específicas son formuladas por nueve actores potenciales diferentes que podrían participar en una próxima fase.

List of abbreviations and acronyms

AFSA	Association for Food Sovereignty in Africa
AGRUCO	Centro Universitario Agroecología Universidad Cochabamba (Bolivia)
CAPTURED	Capacity and Theory Building of Universities and Research Centres in Endogenous Development (www.captured-edu.org)
CDI	Centre for Development Innovation (part of Wageningen UR)
CECEIR	Centre for Continuing Education and Interdisciplinary Research (UDS)
CECIK	Centre for Cosmivision and Indigenous Knowledge
CIKOD	Centre for Indigenous Knowledge and Organisational Development
COMPAS	Comparing and Supporting Endogenous Development (www.compasnet.org)
CU	Christ University (Bangalore, India)
DGIS	Netherlands Ministry of Foreign Affairs, Directorate General for International Cooperation
DSO-00	Social Development Department, Education and Research Division (DGIS)
ED	Endogenous Development
EE	Endogenous Education
ER	Endogenous Research
ETC	ETC Foundation Netherlands (http://www.etc-international.org)
FRLHT	Foundation for Revitalisation of Local Health Traditions (Bangalore, India www.frlht.org)
I-AIM	Institute of Ayurveda and Integrative Medicine (an initiative of FRLHT)
IDH	Impuestos Directos a los Hidrocarburos (Fund in Bolivia which finances educational programs)
IK	Indigenous Knowledge
LA	Latin America
MoU	Memorandum of Understanding
SDC	Swiss Development Cooperation
SGS	School of Graduate Studies (UDS)
ToR	Terms of Reference
ToT	Training of Trainers
UDS	University of Development Studies (Tamale, Ghana, www.uds.edu.gh)
UMSS	University Mayor San Simon (Cochabamba, Bolivia, www.agruco.org)
WINHEC	World Indigenous Nations Higher Education Consortium

1 Introduction

From 2008 to 2012 an international project has been going on: The Program for Capacity and Theory Building for Universities and Research Centres in Endogenous Development: CAPTURED. This project was funded by the Ministry of Foreign Affairs, Directorate General for International Cooperation, Social Development Department, Education and Research Division (DGIS/DSO-00) in The Netherlands. It involved the University for Development Studies (UDS) in Ghana as main implementing agency, in cooperation with AGRUCO of the University Major San Simon of Cochabamba in Bolivia and the Institute of Ayurveda and Integrative Medicine (IAIM), part of the Foundation for Revitalisation of Local Health Traditions in Bangalore, India. Cooperation with COMPAS and ETC foundation and expatriate support has been part of the program design. An international advisory board monitored the project and advised on a yearly basis.

The project was based on an agreement between UDS and DGIS and subsequent MoU between UDS and the other partners mentioned above. The project was carried out in line with the objectives and budget as specified in a project document that was agreed by DGIS as the basis for the funding (see annex V: Documentation).

The CAPTURED project scheduled an End Evaluation in the last year of its project period (2012), for which a Terms of Reference was formulated (see Annex IV). In all three countries a Country Evaluation was conducted, producing three Country Evaluation Reports (executive summaries in Annex I-I-III). Based on the three reports the present Synthesis Report is produced.

The Synthesis Report presents the methodology of the evaluation (Ch. 2), the main findings (Ch. 3), and finally analysis, lessons learned, conclusions and recommendations (Ch. 4). Annexes are provided with the summaries of the three Country reports (annex I-I-III) Terms of Reference (annex IV) and Documentation (annex V).

2 Methodology

Based on the ToR a Work Plan was made for the country evaluations. This work plan was tailor made to the circumstances in the three cases and minor adaptations were included. The methodology was made in such a way that the perspective of the different stakeholders was made explicit and the capacity development activities and results in function of endogenous education and research assessed. The main elements of the methodology were:

- Documentation review;
- Interviews with key informants and group interviews applying Appreciative Inquiry and reconstructing together the Theory of Change;
- Collect and assess data on curricula innovation, quality and quantity of acquired capacities of University staff applying the five capabilities model and Appreciative Inquiry;
- Triangulation and validation of findings.

The evaluation questions for the present evaluation are (based on the ToR):

- A. To what extent have the planned activities been carried out and the results and outputs as mentioned in Log frame been achieved?
- B. What is the reason and justification for not fully achieving the results and outputs?
- C. Which products and outputs, which were not specifically planned, have been achieved?
- D. Have the activities been carried out in an efficient way? (Quality of management and scientific support staff, timeliness of decision making, quality of reports, flexibility and adaptability of implementation).
- E. In what sense have the capacities of the participating institutions for carrying out Endogenous Development (ED), Endogenous Research (ER) and Endogenous Education (EE) been enhanced (specify: knowledge, skills, attitudes, aspirations and number of staff; availability of appropriate research methods, educational materials, institutional support and organizational modifications).
- F. How have the results of the program been received by the traditional knowledge community, University, the University staff and students involved in the program, policy makers, other Universities with which cooperation took place?
- G. How much spin off and outreach has the program had so far and what are the perspectives for such spin off in the pilot region and beyond?
- H. Which of the approaches and experiences can be used on a larger scale in the pilot region and beyond?
- I. On the basis of the experiences, what should be the orientation, scope and strategy for future activities in ED, EE and ER in each of the three lead institutions, for intraregional and intercontinental cooperation and for up scaling the activities?

Unit of analysis

CAPTURED especially worked at University level. The program innovated by redirecting Higher Education to bring on board endogenous development into curriculum, teaching, research and learning. Therefore, the unit of analysis was the performance and capacity of the Universities involved in the initiatives.

Main methodologies

CAPTURED has a main result area on capacities, for which an evaluation model was applied called the five Capabilities Model (see below). In addition, a main value is the recognition of endogenous knowledge as a central element. Therefore, the evaluation applied a specific evaluation approach: Appreciative Inquiry (AI). Both methodologies are presented below. It is important to note that the two methodologies reinforce each other in the sense that changes in capabilities were further probed by AI before continuing with the

analysis of areas where capabilities were lacking behind with respect to planning or the need for new capabilities to deal with emergent issues.

Five capabilities model to assess changes in capacity

The five Capabilities (5 C) model is a model to analyse capacity, capacity development (CD), support to CD and how to include CD into planning and M&E. The model is based on extensive research by ECDPM and associates¹. The model is used by DGIS (donor CAPTURED) as the main model for CD. The five C framework distinguishes capacity as 'producing social value' and five core capabilities that together result in that overall capacity. Capacity, capabilities and competences are seen as follows:

- Capacity is referred to as the overall ability of an organisation or system to create value for others (like the capacity of CAPTURED partners to deliver education and research that includes EK in innovative ways).
- Capabilities are the collective ability of a group or a system to do something either inside or outside the system. The collective ability involved may be technical, logistical, managerial or generative (i.e., the ability to earn legitimacy for ER and EE amongst external actors).
- Competencies are the energies, skills and abilities of individuals, including attributes of leadership (like EK analytical and writing skills of PhD students or leadership provided by CAPTURED representatives).

The five capabilities are: (I) capability to act and commit; (II) capability to adapt and renew; (III) capability to relate to external actors, (IV) capability to balance diversity and achieve coherence, and (V) the capability to produce services and products.

A recent reference document for all experiences in applying the 5C model to planning, monitoring and evaluation is the document "Bringing the invisible into perspective. Reference paper for using the 5Cs framework to plan, monitor and evaluate capacity and results of capacity development processes", available at www.ecdpm.org/5Cs

Appreciative Inquiry

Appreciative Inquiry is an evaluation methodology introduced by Cooperrider et al (2008) that seeks to first explore successes and understand why positive results have been achieved. Only after a shared reconstruction how these results were achieved, the evaluators and the evaluatees will proceed by exploring why other results were not or only partly achieved. The methodology also allows the evaluation to be informed on unplanned results that emerged in the course of the project life.

The AI methodology implies that the evaluating team sees its role as that of an informed facilitator providing the structure for a process of common sense making. Appreciative inquiry 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 is a social construction occurring through the involvement of multiple constituencies each representing different perspectives. It is socially situated and is mediated through participants' previous knowledge and experiences. One key element therefore was the progressive deepening, validation or refuting of first findings with other stakeholders and the joint reflection of first findings and validating lessons learned. This provided the basis for recommendations that were based on a joint reflection process.

¹ Baser & Morgan: Capacity, Change and Performance, (2008). See also www.ecdpm.org/5Cs.

3 Findings

Firstly, an assessment is given in § 3.1 of the results and the process of institutional development, educational development and research innovations as undertaken by the CAPTURED partners to summarise the situation as per end of the project period. Following the ToR the assessment is presented as per the four main objectives of the project. This is followed by an assessment of the evaluation questions in § 3.2.

3.1 Summary results end of project

After five years of support by the CAPTURED project all three CAPTURED partners have been able to achieve commendable results. They can be summarised as follows:

Objective 1: Building capacities for an Endogenous Development (ED) program

In Ghana the project has almost completely achieved this objective. The PhD curricula were well developed and are in place. The admission of PhD students has gone on steadily and the number stands now at above 50 PhD students (see Table 1, p. 10). Despite a slow take off the program is now fully operational and both staff and students are moving on at a pace acceptable within the challenges of research for PhD theses. There is an appreciable number of students admitted and at various stages of completion. Some of the MPhil students have submitted their theses for examination. However, the targeted expectation of peer reviewed publications is not yet achieved. The students are at different stages of their research and thesis write-ups. First graduations will take place in the second half of 2012. Some specific results for Ghana: 1) program accredited and run by the School of Graduate Studies (SGS); 2) availability of a wide range of teaching/learning resources that include books, journals, CDs, multimedia appliances; and 3) joint production of sources books: Learning Together 1 and 2; "Our Sciences": Indigenous Knowledge Systems of Northern Ghana.

Also in India this is a main outcome of the CAPTURED project. In India the CAPTURED project was developed in an organisation with well-established structures, which allowed growth and drew on a sound research infrastructure. It was therefore possible for I-AIM through CAPTURED to initiate a developmental sequence across three progressive areas reflected as interacting streams. These three progressive areas are: 1) foundation of theoretical framework; 2) Research; and 3) Course Development through outreach that extended to partners, who also became involved in outreach. This model has been appraised as coherent and is outlined later in the country report (Theory of Change, § 4.1). All planned capacities have been achieved: setting up and running a PhD research program (planned: six, delivered nine PhD students), establishing supervision committees for each research that include relevant disciplines, designing and delivering a series of core courses, and capacitating partners.

In Bolivia this objective was reached by systematically designing concepts, theories, methodologies and tools based on intra- and intercultural education as well as endogenous development to improve educational programs and participative research. AGRUCO worked mainly in four areas to achieve this objective: 1) Develop integrated education packages based on interactive social action research called "formación continua intercultural descolonizador"; 2) strengthening the capacities of lectures and researchers in EE and ER; 3) integration between training, research and development efforts at field level, especially with those categories of the population that have been excluded for centuries from mainstream political life; and 4) improve the cognitive basis for EE and ED through exchange and systemisation of experiences. For an overview of all results: see annex V Bolivia Country Report. The Bolivia case illustrates a situation where the political environment was very favourable to establish new education and research standards that recognise the importance of EE and ER. In interviews with externals it became very clear

that a new paradigm was present in the Bolivian society in which endogenous knowledge and initiatives are acknowledged and included in policy, education, research and development.

Objective 2: Establishing linkages between Universities and capacity building in ED

In Ghana this objective has been achieved. UDS had started training with NGOs and established a number of contacts. Students went to the INDO-Ghana study and conference visit where they presented their proposals for sharing with participants from other countries. Also two public lectures were delivered by the Indian partner FRLHT for the Medical School faculty and graduate students in 2010 and lectures provided to graduate students at AGRUCO, Bolivia. In Ghana there is still, however, a need to intensify linkages between UDS and indigenous experts both in and outside of Ghana.

In India five collaborative research programs were planned, but nine were established in total. This also included new fields like the partnership on veterinary research with the University Tamil Nadu Veterinary & Animal Science University (TANUVAS), which was taken up as a jointly taught module that has now been taken into their mainstream veterinary training curriculum. Another interesting collaboration was established with the Christ University (CU) in Bangalore. Through this collaboration an anthropological approach was designed to understanding botany developed in a module for enrichment and discovering local knowledge. There is also a short two day course on ethno-botany that is included in the development of the medicinal garden on the CU campus. After the start-up of this program there have been requests for its extension and the plan for the next phase is to run it as a ToT so that other University partners can take it up as an addition to their existing programs. I-AIM also had exposure with the other two CAPTURED partners and I-AIM hosted two research seminars, which was beneficial for the PhD students in terms of being able to present and strengthen their research.

In Bolivia this can be observed as a main result of the CAPTURED Project. There is wide range of leaders from social movements, NGO's, civil servants and other development related agencies that have benefitted from the new educational and research programs designed by AGRUCO in the past five years. Curricula have been designed and successfully applied whereby inter- and intra-cultural education, trans-disciplinary research and dialogue between EK and "Western science" is accommodated. Planned results have been achieved and actually at such a level that additional results can be assessed that were not anticipated at the start. A new vocational training (PFCID) was designed and is delivered at three levels (technical, licence and post grade). The PFCID program was recognised as eligible for funding from the national hydro-carburant fund (IDH). AGRUCO organised some 20 workshops and events where the CAPTURED approach was shared and extended in networks and social movements (regional as well as national), including academic and government partners. In Bolivia NGOs are playing a less important role in recent years. Indigenous organisations have agreements with AGRUCO, detailing number of students for technical studies that can benefit from the new curricula.

Objective 3: Evolution of networking, collaboration and sharing systems on experiences in ED

In all three cases the evolution of networking and sharing on ED experiences can be noted at appreciable levels. In Ghana, this objective has been largely achieved. The Ghana Country report provides twenty concrete collaboration partnerships or networks. The inter country network is well developed and key NGOs like CIKOD and CECIK are well integrated into the UDS program. There are also more internally established networks since the mid-term review. There is, however, still room to be exploited in expansion to include other experts and institutions both in Ghana as elsewhere in Africa. Also in India I-AIM is networking on ED with an expanding range of Universities. In India the Evaluation noted a wide range of NGOs and government organisations involved in the outreach function. MoUs have been signed with five Indian Universities. For Bolivia the Country report provides a rich pallet of established networks and partnerships. There are for instance six agreements with social movements and nine academic partnerships that were established the past five years. Six video documents have been made that were shown at national television stations.

Objective 4: Up-scaling capacity building and establishment of programs for ED related research

Linkages between the consortium partners have been firmly established, although language problems exist between the Hispanic and Anglophone partners. Joint supervision of PhD students seems to be an opportunity for further inclusion in the programs, especially between India and Ghana.

At UDS the Ghana Country Evaluation noted 11 concrete ED research activities that involved up-scaling of activities. It has to be noted, however, that the UDS program has not been able yet to initiate collaboration with any other University on the continent to establish a similar program. In Ghana this objective has especially been reached in the last years of the project. There is quite an improvement of progress in the area of student progress towards completion of their PhD studies since the mid-term review (see Table 1 page 10). For Ghana it can be affirmed that the content of CAPTURED curricula for both MPhil and PhD studies are well-drawn and suitable for the programs. The content and delivery of the CAPTURED programs are within expectation. Students are highly motivated and appreciate the use of local resources, knowledge, and leadership in the development planning process instead of relying heavily on mainstream scientific principles. The Ghana Country Evaluation also identified eight challenges that UDS faces. UDS will need additional support in the form of capacity to supervise PhD students and assure that they graduate before having a strong capacity to meet the high demand for ER and EE. It will be only with the graduation of the PhDs students that UDS will have true ED staff to fall back on.

In India CAPTURED allowed I-AIM to resource the partner Universities, colleges, NGOs and government organisations with development materials and programs around ethno-botany and health provision. The strongest amongst these was the ethno-veterinary work which produced modules for a new distance education program for veterinary post graduate work. The other programs have primarily been additive enrichment that has been taken up into mainstream courses. The demand is becoming difficult for I-AIM to meet, necessitating a change in strategy to do it through a ToT program supported by practical resourcing with botanical materials and perspective on Indian folk medicine and manuscript medical heritage. What is notable is that the outreach initiated through I-AIM in the CAPTURED program is being extended by the partner institutions through innovative curriculum programming where students use the practical resources to start-up home herbal gardens as well as to explore primary health care with villagers.

The Bolivia experience was especially interesting for the other CAPTURED partners in terms of its outreach towards rural social movements and its political impact. In Latin America (LA) a partnership was signed with the Universidad San Antonio de Abad del Cuzco (Peru) which resulted in 51 graduated students in “inter-culturality, indigenous development and climate change”. There is also a new and active membership by AGRUCO in the LA network of social scientist, and linkages with UNESCO, COMPAS network, and Universities in Canada and New Zealand.

3.2 Reporting back to the evaluation questions.

- A. To what extent have the planned activities been carried out and the results and outputs as mentioned in the Log frame been achieved?

In Ghana most of the activities have been carried out and outputs have been achieved. Whereas the degree of results varies between the four main objectives, the overall result is commendable. The outcome of establishing a PhD school at UDS has been achieved in a way that largely meets the expectations at the start of the project and which can be illustrated by a range of well documented quantitative and qualitative institutional indicators (c.f. Country Report). The outcome of establishing linkages with local communities has been achieved to a lesser degree. Through CAPTURED UDS also

started to become engaged in policy influencing. These last two outcomes were achieved to a lesser degree than anticipated, as the accent was given to the first outcome. A specific result worth mentioning is the library of the Graduate School, where CAPTURED virtually has set up a new library with relevant ED literature.

In India most of the objectives outlined in the program have been achieved with significant extensions, particularly in the area of partner engagement in training and in the formalising of curricula materials for training programs. This is best accounted for in the way that the CAPTURED program developed around a well-established and integrated framework that was village practice informed and partnered at the outset. This led to the establishment of sound and coherent foundations for the core materials to resource the PhD program that developed as the core of the CAPTURED activities feeding back into foundations and been taken up and out into courses and outreach that also reached back into the very community structures and partners with which the initial program was build. In this way the unique and involving strategy produced an endogenous program that has intellectual coherence and reach into other Universities and Colleges partnered activities. The assessment of the I-AIM team and evaluators is that the output of the CAPTURED program has established a platform to deepen and broaden this program in significant ways.

Cornerstone results and outputs in India were the establishment of cheap technology for drinking water, researching effective village based malaria prevention practice, exploring wider holistic health concerns with health producing and curative medicines, addressing dietary deficiency producing concerns as in the case of iron and anaemia, setting priorities for conservation and verification of changing plant uses as species become more rare, probing a pressing need for authenticating plant drugs and quality, and pharmacology efficacy in biodynamic practices. These research focus areas in the PhD program have been expanded to include partnered research, materials and course development for a revival of ethno-veterinary practices and was further extended to a dairy co-operative partnership program to resolve the problems of milk quality and costs related to veterinary treatment.

In Bolivia the majority of planned results and products were achieved at the end of the program. In annex V of the Bolivia Country Report the details are provided of results with students, lecturers and researchers, the eight new special study profiles in UMSS, six new developments at the Master level, five new educational trajectories in the PhD program and especially the encouraging results with the technical trainings. The PhD program will need stronger theoretical and epistemological foundation in the coming years.

B. What is the reason and justification for not fully (or partly) achieving results and outputs?

For Ghana the majority of outputs and results have been achieved as illustrated above. In India there is only the MoU with the University of Peradeniya, Sri Lanka that was planned and not achieved (however, one Sri Lankan PhD student is coming from this University). In Bolivia, the planned results were achieved. In addition a number of other results that were not planned were achieved as well (see below C). In Bolivia the PhD program was established with a delay due to internal reasons (UMSS does not have a PhD tradition) and the priority to start with technical and undergraduate courses that meet the demands from the field.

C. Which products and outputs, which were not specifically planned, have been achieved?

The CAPTURED project has contributed in all three cases to additional result not anticipated at the start of the program. In Ghana CAPTURED gave rise to other PhD programs of recent times in UDS; contributed to the formulation in 2008 of the first Research Ethics Policy of UDS; helped UDS to establish standards and practice in qualitative research and study beyond the conventional focus of Universities on quantitative

research and methodologies and the program has helped lead the way in terms of the ability of UDS to carry out inter- and trans-disciplinary research. With CAPTURED UDS started the Harmattan Series, a research sharing and policy forum, which has now been institutionalised within UDS as it is run by CCEIR. Another additional result is the start of the Millar Institute for Trans-disciplinary and Development Studies (MITDS), a significant induction. This Institute is duly registered and is currently seeking affiliation with UDS to offer Degrees at all levels up to PhD in Culture and Development through trans-disciplinary studies. CAPTURED has contributed to these additional results in terms of identification and acceleration of results. But these results cannot be fully attributed to CAPTURED; also other UDS programs contributed and / or external factors played a role.

In India an additional result was the feeding back through a certificate program on medical plants and primary health care practices. The feedback courses allowed village health workers to have confidence in their own knowledge but also to take up both old and new knowledge practices with confidence in their endogenous coherence. Notable here are water treatment and the treatment of anaemia both of which fed back from PhD research as this was developing. This is unusual in PhD research and is a telling characteristic of the CAPTURED program in India as is how the feedback courses also brought additional knowledge that was ploughed back into the I-AIM data bases, research program and agenda. What appears to have developed through the CAPTURED program is a trans-disciplinary expertise spanning research, curriculum development and institutional development in a coherent way. The core seems to be the trans-disciplinary research which has been called “translational” research. The translation of EK occurs as a village partnership process of contextual profiling that is taken up into research that models traditional practices using modern bio-technology such as DNA profiling to produce markers to ratify and extend endogenous practices. It is a quick and responsive process that has merely started at this stage, with a vast and expanding array of relevant work emerging.

Another expansion in India was the Panchakarma therapy with a new course, another integrative trajectory which is part of production of development materials into the strengthened modern practices in the Ayurveda hospitals. I-AIM did not plan to enter the dairy industry but was approached to do so out of the problem of chemical medical residues in the milk and the costs of veterinary services to community co-operatives where each participant owns only a few cattle. Of interest here was that the training methodologies in the dairy industry were very top-down and technically framed. And yet the community engaged practices were participatory and partner directed. What I-AIM appears to have contributed here is an improvement in animal health, a reduction in the residues in milk and an approach of working on the training that was seen as an endogenous process. Another additional result in the Indian PhD program has been the very successful publishing in peer review journals along with the production of three handbooks.

In Bolivia the Evaluation Team noted seven additional results that were not anticipated at the start. Remarkable ones were for instance the contribution in the formulation of the new Constitution (contributing in the part of intra- and inter-cultural pluri-lingual education and the rights of endogenous people and their knowledge). Another one was the contribution in the formulation of new laws like the “Ley No 037/2012-2013 del Marco de la Madre Tierra y Desarrollo Integral para Vivir Bien”, which benefited from the theoretical framework developed by AGRUCO. Another law where AGRUCO contributed with its EK conceptual framework was the educational law “Ley de Educación Avelino Siñani”, which introduced new concepts like education based on intra- and inter-culturality.

AGRUCO had a major role in the institutional changes taking place at the University Mayor de San Simon, a large University with some 65.000 students. Whereas AGRUCO forms part of the Agricultural Faculty, it had a lasting effect on other faculties like the Faculty of Social Sciences, as well as towards University units like the “Dirección Universitaria de Interacción Social de la Universidad”, the unit of Academic Planning, the unit of Deconcentration (linking the UMSS to the wider Bolivian society) and the unit Technical and Scientific Research. Another institutional effect that AGRUCO contributed towards was the shift in

pedagogic approach in UMSS from formerly mainly memorising knowledge towards competency based learning. These changes allowed UMSS to have a much stronger articulation of its mandate, function and role towards the wider Bolivian society, especially the rural population.

- D. Have the activities been carried out in an efficient way? (Quality of management and scientific support staff, timeliness of decision making, quality of reports, flexibility and adaptability of implementation)

Efficiency compares the results (effects, outputs) with the invested means and verifies if invested means could have been used for obtaining more results. Based on the verification of documents, reports, appreciation of students, background provided by management and feedback by other resource persons the End Evaluation observes that activities at UDS, I-AIM and AGRUCO as well as overall CAPTURED management have been operated in an efficient way. Reports are at international standards. The three teams have shown to be able to deal with emergent issues from their respective context and adapt the programs accordingly.

- E. In what sense has the capacity for carrying out ED, ER and EE been enhanced (specify: knowledge, skills, attitudes, aspirations and number of staff)

For Ghana this is the single best success area of the UDS CAPTURED program. The number of PhD students involved in the program and their positive attitude and inspiration towards the ED program is impressive and documented in the Country Evaluation Report. In Table 1 below an overview is provided. The MPhil program provided the leverage for the PhD Program. From the CAPTURED budget there were 12 students sponsored to the MPhil. In Ghana a curriculum of courses has been designed as part of the program. ED knowledge and skills are detailed in curricula that have designed ED competences with accompanied literature, guidelines, manuals, documentation and examinations. The UDS staff is interested in the program, as illustrated by the high number of UDS staff participating in the PhD program. Whereas ED education is well organised, the ED research component could improve with Research Protocols, stronger qualitative research competences, and combining quantitative and qualitative methods into a mixed methods design that meets research expectations. Amongst the wider UDS lecturer community investment could be made to achieve a better understanding of the program.

YEAR	CAPTURED SPONSORED	OTHER PROJECTS SPONSORED	SELF FUNDED	TOTAL NO.
2008/09	3	-	2	5
2009/10	4	1	-	5
2010/11	8	-	10	18
2011/12	3	1	9	13
2012/13	-	-	17	17
GRAND TOTAL	18	2	38	58

Table 1: UDS statistics on PhD in Endogenous Development

In India from the nine PhD students three are at the stage of their final writing up. All involved I-AIM staff has benefited from the program in terms of a stronger confidence in the relevance of carrying out ED, ER and EE, establishing a network in India, and aspiring to upscale the program in the next years (more details on capacities are given in the India Country Report § 4.1 and annex III). Researchers and trainers within the institute are all salaried staff. The research grants are being used to provide salaried support so that the Centre operates in an integrative way and in teams and departments that draw on and support each other through well-structured supervision teams. Most researchers take an extra year to complete their studies. Indian PhD students often take a 4th or 5th year to conclude their PhD.

There is wide range of capacities established through the CAPTURED program in Bolivia. AGRUCO staff feels confident to carry out ER, EE and ED, as illustrated by the changes in different capabilities (Annex III Country Report). They are having regular contacts with seven like-minded Latino social movements, have strengthened or established relations with Bolivian as well as international Universities, strong linkages with government structures at local, regional and national level, and strong linkages with development agencies and donors (for details and examples: see Country Report § 3.2). Representatives from social movements now actively take part in agenda setting for ER, advising on designing of relevant EE, providing students from their communities and hosting students at field level.

- F. Availability of appropriate research methods, educational materials, institutional support and organizational modifications.

In all three cases this was well documented and illustrated in the country reports (see annexes on documentation). The integration of research materials and development capacity to establish partnership and deliver on courses is probably the biggest strength of the CAPTURED initiative in India. This is most notable in the coherence of the model for endogenous knowledge and community managed health practices (ref. Annex II documentation and Annex V PhD research program India Country Report). Also in Bolivia the presence of appropriate research methodology, educational materials, institutional support and organisational modifications in AGRUCO as well as the University Major San Simon were well documented (see Annex II documentation with extensive literature overview and Annex V with detailed illustration in the four tables of the “fuerzas vivas” in ER methodologies, educational materials, institutional (especially political and academic) support and organisational renewal).

- G. How have the results of the program been received by the traditional knowledge community, University, the University staff and students involved in the program, policy makers, other Universities with which cooperation took place?

In Ghana the evaluation team suggested that there is a need for more clarity on the level of engagement that UDS likes to have with communities. UDS starts to formulate protocols on expectations and research procedures (e.g., developing an Indigenous research and ethics protocol with farmers and other rural representatives), feedback procedures from communities, sharing and validating of research results at community level, role of UDS, etc. As for UDS staff and students: the program was well received in the wider UDS community and is seen as an important achievement of UDS. In fact, various interviewees stated that CAPTURED has assisted the UDS in articulating a more clearer niche in its academic profile. Indeed, the relevance of the program can be noted amongst all stakeholders contacted. ED resonates amongst students, faculty, UDS management and the wider public. This is illustrated by the interests amongst potential PhD candidates as well as the present large group of PhD students. The Dean of Graduate School attests to CAPTURED as leading the way at UDS on a number of institutional performances (links to the field, qualitative research, intellectual innovations, etc.). Another teaching staff sees CAPTURED as a “force within the University” given the accomplishments so far. Relevance seems to be especially expressed at the UDS internal level. Although many UDS staff has entered the PhD program, it seems that the majority of lecturers not directly involved in CAPTURED do not have a good understanding of the ED approach. The Ghana Country Evaluation formulated a few recommendations to buy in more ownership in the coming years. There are external “supporters” for the programs established by UDS but the evaluation suggested to build more external “supporters” that can help UDS to further develop its ED practice and profile. External relevance could be related to ED and policy formulation, ED improving development results, ED marketed for other African Universities; exploring potential private sector clients, profiling ED further in African networks, and valorising ED in media and education.

In India traditional knowledge practitioners who attended the report back workshop on day III of the Country Evaluation presented themselves as part of the program and were concerned with the research

that was being done as well as being co-engaged with I-AIM in the strengthening of village based health delivery based on their traditional knowledge practices. Their knowledge practices were clarified and strengthened through the activities by I-AIM and fed back by the courses. Indian students in their appreciative comments reflected a strong identity and commitment with the research. In discussions it was noted that the scope and demand of the projects they were engaged in appear to be more substantive compared to a normal University PhD program. The evaluation team attributed this scope and depth challenge to the PhD initiatives being started up and needing to become more programmatic in the next round. But we also noted that the quality and debt of support in the supervision team was very well managed along with the links into indigenous practice and the reporting back of the PhD in community based training that was integrated and focussed around community concerns like water, health, and well-being as a whole. In India there was no discussion with policy makers during the evaluation but clearly some of the participants in the program and contributors to the seminars were drawing on policy challenges like the formulation of more inclusive regulations and the exemplifying of the efficacy in current practices that have not been researched and proven within the conventions of the day that are dominated by modern scientific technical medicine. I-AIM has developed partnerships with very reputed knowledge institutions in the country like the Indian Institute of Science, the National Malaria Research Institute, the Christian Medical College, Vellore, and the National Center for Cholera and Enteric Diseases. I-AIM staff is highly motivated and there is no distinguishing between staff and researchers as the research grant holders are taking in as staff for the duration of their PhD studies that are often extended into a fourth year write-up. Graduated PhD students will remain staff at I-AIM.

The various organizations representing indigenous people in Bolivia very positively reacted to the new educational offer at undergraduate and graduate level, as they never before enjoyed such an education facility. The evaluation also noted the appreciation by government representatives at local, regional and national level. The educational programs attract students from almost all faculties within the University San Simon. Lecturing staff from other Faculties confirmed the relevance and utility of the concepts developed by AGRUCO (see details Annex V Country Report). Other examples are the input provided by AGRUCO in the formulation of new laws like the environmental law on “la madre tierra” and the assistance to operationalise the concept of “vivir bien” or “well-being”. The first table in Annex V of the Country Report presents the details for each actor. Authorities of the University expressed their appreciation for the work of AGRUCO. The conceptual framework on EE, ER and ED had a major contribution to allow the University to reposition itself in new political reality in the country that has emerged from the constitutional process. The Rector of the UMSS also highlighted the importance of AGRUCO to establish new relationships with social organizations. AGRUCO became a communication bridge between the University and the indigenous and peasant movements at the national and regional level and in designing and implementing new graduate academic programs and technical trainings. Students also recognized the contribution of the conceptual framework developed by AGRUCO for understanding the new political reality and the importance of endogenous knowledge in education and research.

- H. How much spin off and outreach has the program had so far and what are the perspectives for such spin off in the three cases and beyond?

The outreach in Northern Ghana, Ghana and the African continent is clearly present and illustrated by the various contacts, partners, and networks presented in § 3.1 of the Ghana Country Report. Whereas these linkages are established, the capability to relate could be stronger for the Ghana case. When further defining the UDS niche of ED academic work, the related business case and requirements in terms of market-product combinations will be logically defined (see first recommendation Ghana Country report).

As for India, the spin-off is there as described in the India Country Report but what are the drivers and what is needed to maintain it in the coming years? Clearly the spin-off is part of the resourcing provided through the CAPTURED program. Two initiatives can be reported, one in the UK and one in the USA where

invitations were extended for training in holistic medication. In India, however, the CAPTURED support had a limited driver application and yet there was a much stronger take-up and expansion that happened in its own right through the practicality and appropriateness of the courses and material offered by I-AIM. What was notable in the veterinary sciences is that the community based herbal practices were initially independent from I-AIM but the groups involved were independently engaged in a networking activity.

In Bolivia the spin off in the legal framework has been already mentioned above. In addition, AGRUCO serves as an example of a Centre of Excellence for the University, setting quality standards for innovative education and research. The catalytic and facilitating role in the Latin America network is also a clear spin-off from the CAPTURED project, building on social capital from former COMPAS and other programs (see Theory of Change Bolivia case). These are a few examples of spin-offs. In Annex V of the Bolivia Country Report, in the third table eight different fields of spin off are presented at institutional, policy, legislative and social levels. The education and research work by AGRUCO supported through CAPTURED has contributed to a transformative change within the Bolivian society as the social movements of indigenous farmers and other representatives of indigenous movements were able to become more recognised and prominent in the political, academic and development scene.

Potential spin-off beyond the three pilots: see next chapter 4.

- I. Which of the approaches and experiences can be used on a larger scale in the pilot region and beyond?

As for the pilot cases: in the three Country Reports for each of the cases recommendations are made for expansion in their respective countries and regions. The wider application and utility of the learning pertaining from the CAPTURED pilot will be addressed in the next chapter 4.

- J. On the basis of the experiences, what should be the orientation, scope and strategy for future activities in ED, EE and ER in the three cases for intraregional and intercontinental cooperation and for up scaling of the activities?

This question will be addressed in the next chapter 4.

4 Analysis, conclusions and recommendations

4.1 Analysis

Assessment of the project environment (relevance of ED, the socio-political context and perspective of ED in the three cases, new insights and perspectives of international cooperation)

The project environment is understood here as the context in which Universities in the South are functioning. Academic institutions were introduced by colonial forces and have been largely dependent for decades on mainstream Western curricula and research protocols. At the start of the project in 2008 (main project document p. 3) it was assessed 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. However, population groups in many countries attach strongly to their own values and ways of knowing, social systems and spirituality as integral part of their culture and survival strategy. Unfortunately, the dynamics of indigenous knowledge is hampered by its marginalised position. Endogenous ways to learn and experiment and mechanisms for improving traditional values, concepts and practices by their knowledge holders have been weakened by mainstream development. Support by national and international agencies to indigenous knowledge systems remained very limited.

This situation resulted in a weak link of Southern institutions, including Universities, with the intricacies of the specific culture, ecology and economy in which they operate, from which their students originate and where their graduates are to work in the future. The context at the start was also characterised by the fact that even if Universities did have the intention to address ED and develop their capacities for EE and ER, they were faced with limited staff capacities, teaching materials, relevant theories and research methods.

It was in this context that CAPTURED was launched in 2008 as a pilot project for capacity and theory development to find ways and means to address the problems of limited training opportunities, materials and theory development for ED practitioners. CAPTURED was also designed to address the limited staff capacities in Southern Universities to address needs for ED, EE and ER.

Since the inception of CAPTURED the general context has changed. One of the main factors for understanding the rise of emergent economies like the BRIC countries has been described as the fact that development efforts were grounded and thoroughly based on their own values and priorities. The present context also sees the neo-liberal approach being challenged in a prevailing economic and financial crisis. Likewise, educational reforms in countries with indigenous peoples in Latin America are a trend in this region, as illustrated by the Bolivian case. Also in Africa there is a renewed positive energy based on own African values and priorities (e.g. Ellis “Season of Rains”, 2012; and the inaugural lecture of Dietz “Africa is on the rise”, 2010). It can be said that five years later ED has gained more momentum in the international arena for science and development.

For the general context it can therefore be concluded that the relevance of the ED approach has increased. The findings of the present pilot project indicates that institutional reform in the academia to position and ground ED in education and research is relevant for Universities that aspire to assist their respective societies, be they from the South or the North. These type of initiatives deserve support from development agencies for similar initiatives in the future beyond the three pilot countries.

In the project period also other new insights and perspectives of international cooperation emerged like the increased importance of food security, the establishment and strengthening of value chains that allow small farmers to access markets and the role of private sector. The Evaluation observed that the CAPTURED partners prioritized the establishment of EK inspired education and research in their respective countries. Linkages to other academic and developmental actors was not a priority in the project period, which can be seen as a strategic choice to first build up a good practice before engaging with other actors. In the design for the next phase it is suggested to consider stronger linkages with other actors and emerging trends (see recommendations).

Another contextual dimension is the historical factor. All three cases represent countries with a colonial history during which foreign knowledge systems were imposed, including education and research. Whereas on the one hand international scientific standards have to be acknowledged and stimulated in scientific practice there is also still a gap in various formerly colonised countries with recognising own underlying values and paradigms situated in cultural and historic diversity. This gap seems to be logically addressed through education and research that rediscovers and surfaces own values, knowledges and practices as illustrated in the CAPTURED project. This dynamic has to be addressed and operationalised in future research and education programs.

There seems to be a gap between mainstream scientists and scientists that include ED, EE and ER in their academic work. The latter have strong representatives in the partners that participated in CAPTURED. At least in The Netherlands the CAPTURED approach did not yet seem to resonate strongly with mainstream scientist. A further scenario seems to be rather South - South collaboration combined with the North learning together with the South. The dialogue South – South seems to be a logic next step as clearly positive energy exist amongst the Southern partners. They are already embarking upon the next steps to capitalise and deepen education and research based on EK. Universities in the South could unite and deepen the ED practice emerging from the CAPTURED and related practices. A link with the North remains important as well: if partners are prepared to learn together, there is much potential benefit for the South as well as for the North. The Netherlands, Switzerland, the USA, Canada, New Zealand, Australia, and probably also Nordic countries and the UK have programs on EK and may have interest in collaboration.

As for the specific Country context situations, the following can be observed:

In Ghana the inter UDS reflection processes and mechanisms on ED have been established and constitute an ED education and research practice. The intra reflection with ED communities elsewhere besides the two consortium partners has started but seems to have not reached the expected level and will need to be included as well. Only if both inter - and intra ED interactions are going on in a strong and interrelated way a reputed ED education and research practice can evolve. ED related to education and research practice where qualitative methods are being practiced, including the design of mixed methods with both quantitative and qualitative methods, could be a niche for UDS.

In India the rich Ayurveda body of knowledge provided a sound background for historically grounded health practices. Meanwhile, also in India there is a tendency to regard “modern” science as the mainstream for sourcing health practices and standards. Mainstream and endogenous have different positions and lack good exchange and dialogue or joint research. Only about 30% of the Indian population has access to government or private medical care and the other 70% relies on folk medicine. This points at the relevance to build on the one million folk healers of India and assist them in their practice. In the project period the position of the Government of India versus Ayurveda and folk medicine became more positive and I-AIM has been accepted by Government institutes as a Centre of Excellence, which is illustrated by the fact that the Centre receives funds from several ministries, an I-AIM board member was appointed as an advisor to the Prime Minister, and the accreditation for folk healers.

During the CAPTURED project period in Bolivia political events have generated significant changes like the creation of a new Constitution that recognizes the rights of rural populations that have been marginalized over centuries. This created a context that allowed educational organizations like AGRUCO and the UMSS to establish institutional changes. The political shifting context is presented at the left side in the visualization of the Theory of Change reconstructed with AGRUCO staff (Bolivia Country Report, Figure 1) and is a key factor for understanding how and why AGRUCO managed to be a promoter of transformational change within UMSS.

Assessing the project structure, coordination/management and international support

CAPTURED has one International Director. In each region of the CAPTURED project the Country Program is headed by a Regional Coordinator. The Regional Coordinator maintains direct oversight decision making powers regarding operationalization including finances, policy and processes. Every partner found its own fit to host the project, in the case of Ghana the UDS graduate school, in India IAIM and in Bolivia AGRUCO. In all three countries there is also a Board which provided strategic directions to the country project team.

International support was provided through the COMPAS program and expatriate support, which was much appreciated by all consulted stakeholders. It provided access to other networks, assistance to document experiences, support in lecturing ED courses, guidance for PhD students and strategic linkage with international actors interested in ED, especially in The Netherlands. The Theory of Change reconstructions also indicated strongly the importance of social capital build up through programs like COMPAS prior to the CAPTURED project period.

The Advisory Board, meeting once a year, has been very useful to guide the project strategically. The Board of Directors met each year three times for operational issues. ETC has administrated the funds with regular audit reports, which was much appreciated by all Consortium partners.

Capacity and Capacity Development

In § 3.1 and § 3.2 a summary is provided on results of capacity development in CAPTURED (reporting back to the first objective on page 5 and evaluation question E on page 10). The analysis of the five capabilities (see Chapter II this report for background on the five capability model and Annex III Country Reports for indicators that CAPTURED partners identified to calibrate and assess the five capabilities) revealed that in all three cases the capability to act was already quite strong at the start and remains a capability on which UDS, IAIM and AGRUCO can rely. It reveals a strong ownership and drive to be engaged in the ED practice and debates. All three CAPTURED assessed that they improved their capability to relate during the CAPTURED project period, acknowledging that this capability had to be improved in the course of the project period. This seems to express that the CAPTURED partners had to identify new actors and alliances in the process of establishing or renewing partnerships in their ED field of work. The cases also illustrate that CAPTURED partners relied on their other capabilities to improve the capability to relate.

The capability to produce was operationalized in the cases as their ability to 1) develop and provide new courses that allowed students to acquire ED practice and theory; and 2) their ability to conduct quality endogenous research. The main indicators applied in the three cases to assess these changes in these two elements and assess developed capacity were 1) number of staff to carry out programs for EE and ER; 2) number of staff trained and having the skills, attitudes and knowledge to do ED; 3) number and qualifications of supervisors for PhD researchers; 4) presence and clarity of HR policies to promote the academic careers of staff engaged in ED; 5) assessment of the revision of accreditation procedures to allow endogenous experts and ER methods to be used in education and undergraduate, MSc and PhD research; 6) number and quality of EE training modules; presence of adequate (participatory, combining qualitative and quantitative methods, etc.) ER methods; 7) presence and quality of protocols and budget for ED/ER/EE; and 8) links with likeminded NGO's, GO and other development agencies. In all three cases

this capability to produce relevant ED products and services was assessed as being quite good by the end of the project period. A benchmark result is the large number of PhD students trained and graduated, that will be engaged and employed in the three Universities. They will provide an even stronger institutional basis and capacity for ER/EE in the three CAPTURED partner organisations.

The Evaluation is of the opinion that the increased capability of all three partners to produce ED relevant EE and ER, as indicated above, would not have been possible without the other capabilities mentioned before. All three organisations found their own way to develop their overall ED capacity, building on capabilities that were already present to a higher degree at the start and use these to address weaker capabilities. The Country Reports provide more background how each CAPTURED partner improved other capabilities. UDS invested in a stronger capability to balance diversity and achieve coherence. In India the 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 remain by the end of the project in 2012 capabilities on which I-AIM can rely. This is probably also related to a clear choice for the health sector, which enhanced coherence. In Bolivia in addition to the capability to relate also the capability to adapt and renew was strengthened in the course of the project period. During the evaluation in Bolivia the combination of appreciative inquiry and the reconstruction of the changes in capabilities was recognized as revealing indeed the process through which the AGRUCO team has gone the past five years.

The change model as applied in the CAPTURED cases, 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) thinking². These are described in the respective Country Reports with a visual overview. 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. Regular ToC visualization would typically present a flow of outcomes or pre-conditions that would be discerned into early, intermediate and final outcomes during the course of the project's life. Often different outcome pathways are described that take place at the same time and influence each other.

For Ghana the reconstruction showed that first an investment was made in the capacity of UDS to deliver quality education and research in EK and ED. This capacity was further operationalized in two pathways of EK and ED education and research. Also a third pathway of change emerged wherein UDS influenced policy. These three pathways reinforced each other and are expected to contribute ultimately to the well-being of the rural population. For this achievement a number of other actors are expected to contribute as well, including the rural population itself.

In the case of I-AIM the reconstructed change trajectory is described by a number of streams that continue to flow as depicted by the feedback arrows in Figure 1 of the Country Report. The first stream that started before the project in the mid 90ties was called "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 PhD research health practice was assessed empirically and situated in scientific research. This allowed a third courses 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 partner staff. Finally, partners were able to carry out outreach and contribute to quality health care based on revitalized Indian medical heritage. Building up what was already known into a bigger picture that was brought back and seen as relevant, particularly as a "green health emphasis" on preventive medicine, had the effect of increasing confidence at the village practice level. A main strategic issue was focusing on one working

² For a ToC introduction: <http://www.hivos.net/Hivos-Knowledge-Programme/Themes/Theory-of-Change>

area (health) that explained why I-AIM was able to make commendable results. In summary, the India case shows a methodology that allows science to go back to heritage and interact with heritage.

After five years of support by CAPTURED in Bolivia AGRUCO was able to establish a learning community interested in subjects like inter- and intra-culturality, inter-scientific dialogue, and inter-civilizational dialogue. The main actors applied participatory research methodologies that recognise the wisdom of indigenous peoples, the process of decolonization, integrative logical understanding of history and culture, and transdisciplinarity. AGRUCO also achieved a shift in the main concepts it is working with: from agro-ecology, biodiversity, sustainable endogenous development, and reciprocity towards indigenous economies, legal and political issues like plural-nationality, autonomy, plural legal systems, communitarian socialism, wellbeing, and other concepts. In this way AGRUCO has spread respect and social justice for EK at key institutional levels that address transdisciplinarity in the Bolivian case: education, research, policy and development. In summary, it can be stated that by 2012 AGRUCO is well positioned in the Bolivian socio-political context, has contributed to a mayor institutional impact within UMSS, has develop a set of innovative education programs at different levels and also has contributed in development efforts with impact at field level.

The three cases tell three different stories where the same general problematic was translated in very different ways. The CAPTURED partners had an agility and competence to stay attuned with partners and networks, decide on opportunities when they presented themselves (like political backing in Bolivia) to intensify and deepen results. This strengthened capability to relate with the external world, acquire mandate, funds and backing (see five capability model) was a key factor to explain successes. In all the three cases we also see a clear element at the start where CAPTURED has built on achievements of COMPAS and other projects and networks, especially in Bolivia and to a lesser degree in India and Ghana. This is another factor explaining success.

The next paragraph will provide conclusions and recommendations as identified by the End Evaluation.

4.2 Lessons learned, conclusions and recommendations

Summary of the main lessons learned by the CAPTURED pilot project

As CAPTURED was a pilot programme, it is good to understand how the project approached the challenge of capacity and theory development for incorporating ED, EE and ER and which lessons emerged from practice. The three cases provide more details, here a summary is given of a number of key general lessons. These lessons or guidance principals for “good ED practice in Higher Education” can assist other Universities (both South and North) interested to engage in an institutional transformation process that integrates ED in education and research. The cases also clearly indicate that each institution has to find its own way in their particular context and no blue print approach exists.

The following lessons can be formulated overall:

1. Committed leadership. Each of the three programme directors had an ED track record and they were dedicated to innovative endogenous development practice and the design of appropriate EE and ER. Each of them can be considered as pioneers with a national and international ED reputation. UDS, AGRUCO and I-AIM each have more than 15 years’ experience in ED on their own and have been in touch with each other through the COMPAS programme. The reconstructed Theory of Change clearly indicated that this social capital at the start was crucial. This background, combined with an openness to the situation of mainstream University institutions that were not always conducive for ER and EE as well as the fact that the three institutions formed an international program, allowed them to face the resistance of the mainstream tendencies in each institute and to formulate a constructive approach that was instrumental for

the pilot program as well as acceptable for their own institutions and likeminded organisations in their respective countries.

2. Continuity in funding and creating a network with expert support. The three institutions had been cooperating with each other before, had been interacting with expatriate support, had already built up a common language and interest, and were receiving funding for more than 15 years prior to CAPTURED. Developing an innovative vision, institutional capacity and operational materials for education and research is something that needs time, continuity of funding and personal engagement of individuals that take up leadership roles.
3. Design a capacity development process. Capacity development needs a process that recognizes present capabilities and allows to address weak capabilities to be able to develop overall capacity (see § 4.1 above). The development of the overall capacity to deliver innovative EE and ER was done by the three consortium organisations themselves.
4. Interact and deal with Context. The diversity of the contexts in which the partners functioned in terms of institutional and cultural background, size, lifecycle, ER experience, and funding base was high. This was seen as an asset. Each experience and proposal for further development of approaches was to be applied in a culture-specific way, and generic application was avoided. Ghana presented a case of a relative young and fast growing University with a strong development focus. The CAPTURED international director was at the same time pro-vice chancellor, which allowed him to manage the programme irrespective of possible restraints in the mainstream influence the University. India gives a case where the clear choice for one sector provided coherence. The importance of the changing political context in Bolivia has been illustrated in Chapter 3.
5. Make a clear choice on the main research principles underpinning the research approach. The pilot partners adopted transdisciplinarity and research practices that systematically carry out research *with* endogenous knowledge communities. The consolidated publications of the CAPTURED partners provide an extensive list of examples that illustrate the consequent and integrated way how the ER approach was designed, implemented, evaluated and improved during the project period. A few examples:
 - a. Accept both mainstream science and endogenous sciences as being very relevant and important for students to be trained in development and for research to contribute to development. See it as a scientific challenge to find the right balance between the two scientific traditions.
 - b. Take as starting point for theory development on EK the central hypothesis that globally, science has many faces and expressions as a result of historical and cultural diversity. EK is not just a collection of culture specific things that people know, but is an expression of endogenous science, based on its own worldviews, values, methods, accumulated knowledge and technologies produced by a specific endogenous knowledge community.
 - c. Build on approaches of transdisciplinarity as applied elsewhere and learn from experiences in other countries.
 - d. Assess research results not only by academic standards, but also by endogenous standards. Include the endogenous knowledge community in the research design and in the assessment of results (validity, relevance, applicability, ...).

- e. Document experiences and lessons in text books that interactively grow with the accumulated experiences and consolidate ER practices.
6. Prefer in-country training. Training facilities up till the level of PhD were created in-country. This enhanced cultural specificity and allowed students to combine study with field work. In Ghana this system also has made it possible for a substantial number of students to subscribe to the programme parallel to their work to a point that the PhD programme became self-supporting financially.
7. In endogenous education the following principals emerged as good practice:
 - a. Build on ways of learning of indigenous knowledge communities. Involve endogenous experts as co-learners and experts, expose students to living with the people and let them experience and assess the cultural reality;
 - b. Spend time and resources for interactive development of training modules by joining experiences of COMPAS and other experiences of each of the pilot organisations, exchange draft modules, testing them in each of the Universities and interactively revising and improving the Learning Together books during revisions with the Board of Directors;
 - c. Diversify education according to different needs and levels, like in Bolivia the design of seven different educational levels and in India education for ethno-veterinary practices.
8. In endogenous development the following principals emerged as good practice:
 - a. Establish strong link with field based NGO, CBO and associations of local healers or other traditional experts;
 - b. Establish and maintain links with political organizations if they support the ED approach (like in Bolivia the indigenous syndicates);
 - c. Establish and maintain links with Government agencies (India: Ministry of Ayush/forestry) Ghana Ministries of Education and Agriculture, Bolivia; Presidency and regional governors);
 - d. Take stock of problems and ideas of endogenous knowledge communities, share plans and preliminary results with endogenous knowledge holders;
 - e. Ensure that students are trained to become good ED facilitators.
9. Learning by doing. At the start of the programme there was limited mature material available in terms of ED modules and theories or methods. Each partner started with whatever they had so far, and shared this with other members. Expatriate support was exposed to each of these experiences and combined and synthesized them in draft training modules and theoretical concepts. These concepts were sub sequentially forwarded into intercultural dialogues of the partners and refined and validated.
10. Working towards self-supportive institutional development. Each institution has worked towards becoming self-supportive in terms of funding and expatriate support. The management of the program was in the hands of UDS in Ghana and regional directors in Ghana, Bolivia and India. Funding was done directly from DGIS to the partners, using ETC only to facilitate financial

transactions. No mainstream University of the North was involved to do accreditation or to transfer their own concepts.

The following conclusions are formulated by the End Evaluation:

Conclusion 1: Clear return on CAPTURED investments.

In all three cases CAPTURED partners have delivered the majority of the outputs and results scheduled at the start of the project. There is an impressive range of core professional and expansive learning materials in all three countries. The capacity of partners has been substantially strengthened to assure outreach of the programs especially in Bolivia and India. There is a large return on the CAPTURED investments as confirmed by partners and the observations from the End Evaluation. Whereas it is recognised that institutional changes only come about through long term support, CAPTURED illustrated that when social capital is present at the start lasting changes in norms and standards in education and research are possible within a time span of five year.

Conclusion 2: Emergence of innovative trans-disciplinary research.

The three cases all illustrate design and emergence of trans-disciplinary research in a translational and empirical approach that validates EK. In Ghana a range of EK areas are researched like agronomic and veterinary practices, health and spirituality. In India folk knowledge on health, Ayurveda and modern science provided orientation and enhanced insights that exposes health knowledge that is confirmed by evaluation respondents as being integrative, relevant and contributing to well-being of people. The approach resonates with the Indian contemporary history, heritage and context and has allowed for systemic changes in the health system in terms of recognition and inclusion of EK practices. In Bolivia AGRUCO achieved a shift in the main concepts it is working with: from agro-ecology, biodiversity, sustainable endogenous development, and reciprocity towards indigenous economies, legal and political issues like plural-nationality, autonomy, plural legal systems, communitarian socialism, wellbeing, and other concepts. The AGRUCO team managed a mayor achievement by formulating a “Continuous Education Program” that delivers graduates that cater for the new and urgent needs of social movements and government structures.

These experiences have been consolidated and documented in work of the CAPTURED partners together in the form of the production of the learning guides: Learning Together 1 and 2 and the book Towards Co-creation of Sciences with an articulation of the sciences in the three cases and operationalisation of trans-disciplinary research towards co-creation of sciences. A number of PhD thesis will become available in the coming years which will allow further validation and detailing of the learning guides. Volume 2 of Learning Together will benefit from the experiences of the PhD students.

Conclusion 3: PhD Research Programs are established grounded in ER frameworks.

All three cases show coherent new research schools established around the area of EK. In Ghana the CAPTURED project has made substantial progress along the pathway designed and is on course to be well established as a major academic program for UDS and other stakeholders. The students are on course to complete in between five to six years their PhD research and theses write-ups. The start was slow but students and staff have picked up pace and the rate at which most students are conducting their research is encouraging. In India the PhD program covers topics that are relevant for renewing the health situation of people and animals of the rural areas in India. PhD students are on track with their studies and the first three PhD studies are in their final phase. Cornerstone results and outputs were the establishment of cheap technology for drinking water, effective village based malaria prevention practice, wider holistic health concern with health producing and curative medicines, deficiency producing concerns as in the

case of iron and anemia, priorities for conservation and verification of changing plant uses as species become more rare, need for authenticating plant drugs and quality, and pharmacology efficacy in biodynamic practices. This has been expanded to include revival of ethno-veterinary practices and to resolve the problems of milk quality and costs related to veterinary treatment. In Bolivia the PhD program started only in the last year due to the strategic choice to invest first in a new educational program that catered for the emergent and urgent needs of social movements of formerly deprived parts of the population. However, also in Bolivia the research program is promising and innovative.

Conclusion 4: The CAPTURED partners managed to design and conduct innovative educational programs.

All three partners designed new educational programs that put EK at the centre. In UDS a range of courses and trainings for students has been designed allowing students to acquire knowledge, skills and competences to recognise, validate and build on EK. The training programs of I-AIM are grounded in a theoretical foundation of folk and Ayurveda knowledge that resonates by both formal and informal health practitioners. The AGRUCO team managed a mayor achievement by formulating a “Continuous Education Program” containing technical training on operational, intermediate and advanced level, a bachelor, a specialization, a Master, as well as a PhD Program. In all three cases but especially in India and Bolivia CAPTURED partners managed to design a pedagogy with participatory courses that are co-engaged and producing practical relevance.

At Consortium level the partners made an exchange of teaching materials, development of teaching modules, cross visits of students, etc. A basis has been laid for future thematic cross cultural studies (e.g. on health, on land and water management, on institutional development of local knowledge communities etcetera). Common concepts and methods have been developed across the three regions.

Conclusion 5: Institutional anchorage of the thematic area of EK

In all three cases the practice area of endogenous knowledge and related EE and ER has been institutionalised in the respective organisations and networks. In Ghana UDS profiles itself as an expert University on African EE and ER. In India the recognition of folk knowledge and Ayurveda practices is illustrated by certification of folk healers, validation of endogenous knowledge through PhD research, policy informed on EK practices and new types of education taken up by a range of Universities and NGOs that respect and validate EK. In Bolivia AGRUCO became the nucleus of various networks, firstly within the Faculty of Agriculture, afterwards within the University of UMSS and with other Universities in Bolivia and also in Latin America. In the current political reality of Bolivia it is important to take the Well-Being discourse and ideology to a next level and AGRUCO contributed with a support to the Bolivian National Development Plan (NDP), the framework of Intercultural Governance, and other policies, programs and projects. The plural-national education system will future strengthen this process and AGRUCO provided an example that has the potential to be expanded in Bolivia and Latin America.

Conclusion 6: Weak interest in the North risks to loose valuable endogenous knowledge

There seems to be only lukewarm interest amongst Northern based academia in taking up the scientific paradigm shift by acknowledging the relevance of EK. At the same time Food Security is back on the agenda as food prices are raising world-wide. Half of the world’s food production is produced by small farmers (report Conference Seas of Change, 2012³) and their knowledge is not captured let alone acknowledged by regular academia. Funding for a next phase could link to this policy priority: local

³ <http://seasofchange.net/>

agriculture and livestock practices need to be supported if the world is to secure food production in the future. Exchange of EK at national and regional level seems to be a potential future program area.

There is a trend in the Western world of seeing science as a progressively dominating factor. It is also noted that mainstream science seems to be not ready to learn from EK and the practice emerging from CAPTURED. But we also know that innovation needs many actors, especially practitioners. Dialogue amongst different actors engaged in different types of knowledge is a key prerequisite for innovation, also in the EU. A few nucleus of Northern based research related to ED and transdisciplinarity are to be encouraged (Van der Ploeg in The Netherlands, Rist in Switzerland, Nicolescu in Paris, and some Universities in USA, Japan, Canada and New Zealand where initiatives exist to reform education and research to take on board the interests of indigenous peoples there).

Recommendations

Recommendation 1: Universities interested in ED can apply lessons learned from CAPTURED

The lessons learned formulated above provide guidance for those Universities that like to engage in - or support institutional transformation processes that redesign their education and research practices to include attention for EK (see ten lessons learned p. 19 - 21).

Recommendation 2: Consolidate with external academia and accredit research protocols

The books Towards Co-creation of Sciences and Learning Together provide a consolidation of the results of the CAPTURED project (see Annex V). These books may need further elaboration. Learning Together 2 is only a beginning, and Towards Co-creation of Sciences may need a second edition if the results of the PhD research come available in 2013/14/15. This will be a task a for a second phase (see below).

In addition it is recommended to produce publications in mainstream journals to expose the wider academic world with the results of CAPTURED. This will need a repacking and summarising of the results. Another area worthwhile to explore is accreditation of research protocols in practice areas of endogenous knowledge and research. This can enhance stronger quality control.

Recommendation 3: Create a 18 months transition phase to design an up-scaling phase

The pilot phase has delivered credible results that merit up-scaling. The results are commendable and the potential for up-scaling is clearly present. Up-scaling will need to be carefully designed and will take time from the CAPTURED partners and potential new partners. New partners that can extend and further validate scientifically the basis for a next phase can be found in Canada (program with "First Nation") and New Zealand (program with translational knowledge from the Maori society). The End Evaluation recommends as a priority for interested funding agencies to provide seed money for such a transition process. It would be a cost effective way for them to upscale the effects of their own funding. The transition phase would result in a program design document for approval by a consortium of donors and program partners. A ToR will have to be formulated on team composition, articulation and translation for up-scaling of lessons learned from the pilot and a formulation process in different regions. See also recommendation 4 and 5 below that can be taken into account for this recommendation.

Recommendation 4: Expand the group of actors in a next phase

The CAPTURED project saw a group of partners that was very engaged and constituted a group of 'like-minded' people. There was strong leadership in all three cases. For a next phase it is recommended to expand the group with other actors to assure more outreach possibilities. These actors could come from

different types of backgrounds like inclusive business, foundations, other academic circles, civil society or media. Similar scientific actors working on de-colonisation programs in Canada and New Zealand have been mentioned above. Also businesses interested in sustainable supply by produce from small farmers will have to engage structurally with representatives of small farmers to assure supply (like in the cocoa value chain Ghana).

Recommendation 5: Formulate a research program that deepens and validates the material produced by CAPTURED

CAPTURED has produced a rich package of documents and findings. This material can be verified and deepened by additional research possibly in synergetic relations with Northern based institutions. Also other disciplines could be involved like macro-economic research validating cost reduction that result from the findings of the health PhD research in India. If indeed water treatment measures can be taken with low cost measures or malaria can be prevented by considerable levels a considerable reduction of costs can be achieved that merits documentation and acknowledgement.

Recommendation 6: Build on the CAPTURED practice of transdisciplinarity

Funding agencies increasingly demand that their research and knowledge programmes are based on transdisciplinary design where not only scientific knowledge is applied, but also the knowledge of a range of other practitioners is acknowledged and included in the research design. Innovation is primarily driven by knowledge actors outside the science domain. Transdisciplinary research allows for a design where also other knowledge carriers are involved and embedded in innovation. CAPTURED shows how this can be done and combines different knowledge domains. The research in India for example shows how different knowledge domains were exposed to each other in the design made by I-AIM and its partners and resulted in co-created knowledge. This type of trans-disciplinary research merits to be stimulated as it allows society to innovate. In the same vein a next phase could consider to replicate the processes of participatory endogenous research rather than disseminate the outcomes in technological terms. The assistance for interested new clients to obtain an integrated capacity to design and conduct endogenous research as a trans-disciplinary discipline can be a product that CAPTURED partners can offer (see also specific recommendations in Country Reports).

Recommendation 7: Acknowledgement of constructivism in science for innovation

In constructivism social and economic science is based on perception of people and knowledge is constructed within social realities. The research practice emerging from the CAPTURED project underscores the importance of acknowledging that human beings act based on perceptual knowledge. CAPTURED has contributed to a stronger empirical foundation of this translational knowledge in the domains of health, agriculture, veterinary sciences and related domains. Trans-disciplinary science recognises and acknowledges beliefs and values of people that underpin their knowledge practices.

Lessons learned from CAPTURED are potentially contributing to stronger innovation. Innovation theory postulates that breakthroughs in innovation are mainly externally inspired, involving different actors active in the domain representing practitioners as well as external actors. For Western actors like donors and Northern Universities CAPTURED provides an interesting case of Southern innovations that have a potential to induce innovations elsewhere as well. Validation of findings can be best done in “protected” environments, like the PhD school of I-AIM, as to avoid influence from mainstream research that question ER. Post-Docs might be better placed compared to PhD students to be involved in this type of research as they are not preoccupied anymore to obtain their PhD degree. This will allow them to concentrate on content and dare to study topics that are not (yet) regarded as “scientific” by the mainstream.

Recommendation 8: In addition the End Evaluation made the following recommendations for different actors:

- (I)NGOs. NGOs have been involved in the CAPTURED program but to a lesser degree than anticipated by the evaluation team. A critical assessment of potential NGOs and partnering with key NGO's that can play a role in the next phase especially for the outreach and development activities seems to be important.
- Academia in the South. The three cases showed strong leadership in each of the cases. A next phase will need to see a new generation of Southern leaders taking the next steps forward. This will require a grooming phase and South-South collaboration. The potential in Latin America, Africa and Asia seems to be large. (In the Country Reports specific recommendations are made for each case.)
- Academia in the North. As argued above mainstream academia in the North seems to be rather hesitant to engage in endogenous research. The present Evaluation is a clear point in case that Northern academia should allow themselves to be surprised with a lead in the South as all three cases show convincing results. The benefits of co-creation in a diversity of sciences have been illustrated in the present End Evaluation.
- ED initiatives in the South. Numerous ED initiatives can be found in the South in countries like Thailand, Philippines, South Africa, Nigeria, Peru and Chile that coincide with the CAPTURED's approach. There is an international network for EE called WinHEC. These innovative initiatives provide a potential for synergy in the future.
- Policy makers. Policy makers can learn a lot from the results of CAPTURED, as it is rare to learn from projects with a high level of ownership that achieve effective institutional change. Policy makers should also take into account that endogenous knowledge is a public good that has a high potential for effective and culture specific development approaches, scientific diversity and poverty reduction, setting up regional and eco-specific food and health care systems. At the same time it provides a potential for innovation. These elements point to the importance of EK and its inclusion in future policy formulation.
- Nuffic. Nuffic as a lead agency in the Netherlands for Higher Education and Development Cooperation would be a logic entry point to upscale lessons learned and share the CAPTURED practice with like-minded Universities in the South and interested Universities in the North. Nuffic has a program called NICHE that assists Universities in the South which could assist in operationalizing EE, ER and ED within inter-University collaborations South-South and/or South-North. Another potential funding mechanism could be the future knowledge platform on food security that DGIS is currently designing.
- International agencies like UNICEF, WB, IFAD and FAO. FAO has initiated some 5 years ago a program called "Global Ingenious Agricultural Heritage Sites" (GIAHS) that recognises EK of farmers all over the world who have maintained agricultural systems that suit social, economic and ecological circumstances combined with a rich body of cultural and spiritual knowledge. The CAPTURED results would very well merge with this approach and FAO and IFAD could play a role in up-scaling and mainstreaming respect and awareness related to EK. The other organisations could be addressed in tailor made communications to inform them about the results achieved by CAPTURED.
- Funding agencies. Funding agencies that want to stimulate trans-disciplinarity as part of structural and deeper innovation can be inspired by the CAPTURED results. Domestic funding agencies in the three countries are already contributing and this should be encouraged in a next phase. Also funding agencies interested in assuring Food Security should contemplate partnering in a next phase with

CAPTURED actors as the knowledge of small farmers is being eroded while they still contribute half of the world food production. The Bolivia case showed a long term complementary partnership between AGRUCO and two funding agencies: DGIS and SDC. Synergy between donors in achieving long term institutional changes like the ones observed in CAPTURED seems a logic part of a next phase and it is recommended to organise a conference with interested representatives from the donor community to identify opportunities for up-scaling EE, ER and ED. A common topic could be support to decolonisation processes, supporting processes of co-creation of science and rediscovering own values and knowledge that can guide the articulation of new norms and standards in education and research. Potential donors can be those that have been involved in similar programs and recognise their responsibility and leadership to take the subject to a next phase, like the Dutch, Swiss, Scandinavian, UK , German, or Canadian funding agencies. Their position to ED varies and presently donors like the Canadian, German and Swiss seem to be more favourable compared to others.

- Private sector. In line with recommendation four it would be good to explore potential new partners from businesses that are open for new types of inclusive and social business. Funding for methodological innovation for sustainable value chains that prioritise involvement of small farmers is available in the coming years.

Other issues to be addressed for further strengthening ED practices:

The CAPTURED project has made important steps forward towards a ED practice that makes a difference for rural people whose cultural heritage has been ignored for long time. Still, a few issues and challenges remain to be addressed in the future. These are mainly related to the question: How can indigenous knowledge holders themselves stay in control of their knowledge, and yet share it with others for them to benefit from it? In other words: how can (collective) intellectual property rights of endogenous knowledge holders be protected or (in case it is at stake) be compensated for its use by others? It has been observed in the past that commercial organizations or others patent the indigenous knowledge that was exposed to the public domain.

Appendices

Appendix 1: Executive Summary Ghana Country Evaluation

Appendix 2: Executive Summary India Country Evaluation

Appendix 3: Executive Summary Bolivia Country Evaluation

Appendix 4: Terms of Reference

Appendix 5: Documentation

Appendix 1 – Executive Summary Ghana Country Evaluation

The Project for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) has started in 2008 and is currently in its fifth and last year (2012/13). The project was funded by the Ministry of Foreign Affairs, directorate general for international cooperation (DGIS/DCO-OC) in the Netherlands. It involved the University for Development Studies (UDS) in Ghana as main implementing agency, in cooperation with AGRUCO of the University Major San Simon (UMSS) of Cochabamba in Bolivia and the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bangalore, India. Cooperation with COMPAS and ETC foundation and expatriate support has been part of the program design. An international advisory board monitored the program and advised on a yearly basis.

After five years of support by the CAPTURED project the UDS has been able to achieve commendable results. It can be confirmed that the content of CAPTURED curricula for both MPhil and PhD studies are well-drawn and suitable for the programs. The content and delivery of the CAPTURED programs are within expectation. Students are highly motivated and appreciate the use of local resources, knowledge, and leadership in the development planning process instead of relying heavily on mainstream scientific principles. The content and delivery to a very large extent meets the expectations and students feel very satisfied with the program.

The following conclusions were made:

1. The CAPTURED project has made substantial progress along the pathway designed and is on course to be well established as a major academic program for UDS and other stakeholders
2. The framework of working relationships and management systems have been put in place to ensure continuity of the project as a composite educational curriculum in UDS;
3. At the UDS there is an obvious value for money in the project as expressed by several stakeholders across different spectra of the project;
4. The students are on course to complete in between five to six years their PhD research and theses write-ups. The start was slow but students and staff have picked up pace and the rate at which most students are conducting their research is encouraging.

A number of challenges have also been identified. One main challenge comes from an age-old culture where staff and students are influenced by the traditional educational system which has low regard of Indigenous Knowledge and practices with consequent preference for exogenous development. Another challenge is the observation that by mid-2012 there are not yet enough UDS professionals with the orientation and belief in ED. This will require additional support in the short term to bridge the period until PhD students have finalised their studies.

The End Evaluation made 12 recommendations. The main recommendation is to decide on a clear UDS profile in terms of its ED academic niche. Three business cases are suggested as possible options. In addition, recommendations are given in view of establishing a PhD alumni network, clarify the PhD model, decide on a bridging model to face the teaching and supervision requirements in the short term; the future hosting institution; Curriculum Development for the lower tier, use of ICT, consolidate the international network; and consider the re-introduction of a course on Development Theory.

Appendix 2 – Executive Summary India Country Evaluation

The Project for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) has started in 2008 and is currently in its fifth and last year (2012/13). The project was funded by the Ministry of Foreign Affairs, directorate general for international cooperation (DGIS/DCO-OC) in the Netherlands. It involved the University for Development Studies (UDS) in Ghana as main implementing agency, in cooperation with AGRUCO of the University Major San Simon (UMSS) of Cochabamba in Bolivia and the Institute of Ayurveda and Integrative Medicine (I-AIM), based at the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bangalore, India. Cooperation with COMPAS and ETC foundation and expatriate support have been part of the program design. An international advisory board monitored the program and advised on a yearly basis.

In India the CAPTURED project was developed in an organization with well-established structures, which allowed growth and drew on a sound research infrastructure. It was therefore possible for I-AIM through CAPTURED to initiate a developmental sequence across three progressive areas reflected as interacting streams. These three progressive areas are: 1) foundation of theoretical framework; 2) research; and 3) course development through outreach that extended to partners, who also became involved in outreach. The integration of research materials and development capacity to establish partnership and deliver on courses is probably the biggest strength of the CAPTURED initiative in India. This is most notable in the coherence of the model for endogenous knowledge and community managed health practices.

All planned capacities have been achieved: setting up and running a PhD research program, designing and delivering a series of core courses and capacitating partners; and finally outreach in rural communities. Nine collaborative research programs were established. The core program allowed I-AIM to resource the partner Universities, colleges and government organisations with development materials and programs around ethno-botany and health provision. The PhD program engaged topics that are relevant for renewing the health situation of people and domestic animals of the rural areas in India.

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

Eight recommendations have been formulated: to document the I-AIM approach and apply it elsewhere in Asia; design a short introduction course, design a rural program with partners with outreach into education institutions; strengthen the PhD program; provide regular updates of manuals; formulate a PhD alumni strategy; revise, refine and update the theoretical framework underpinning CAPTURED; and consider the use of E-learning tools.

Appendix 3 – Executive Summary Bolivia Country Evaluation

The Project for Capacity and Theory Building for Universities and Research Centres in Endogenous Development (CAPTURED) has started in 2008 and is currently in its fifth and last year (2012/13). The project was funded by the Ministry of Foreign Affairs, directorate general for international cooperation (DGIS/DCO-OC) in The Netherlands. It involved the University for Development Studies (UDS) in Ghana as main implementing agency, in cooperation with AGRUCO of the University Major San Simon (UMSS) of Cochabamba in Bolivia and the Institute of Ayurveda and Integrative Medicine (I-AIM), based at the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bangalore, India. Cooperation with COMPAS and ETC foundation and expatriate support have been part of the program design. An international advisory board monitored the program and advised on a yearly basis.

After five years of support by CAPTURED in Bolivia AGRUCO was able to establish a learning community interested in subjects like inter- and intra-culturality, inter-scientific dialogue, inter-civilizational dialogue, participatory research methodologies that recognise the wisdom of indigenous peoples, decolonization, integrative logical understanding of history and culture, and transdisciplinarity. AGRUCO also achieved a shift in the main concepts it is working with: from agro-ecology, biodiversity, sustainable endogenous development, and reciprocity towards indigenous economies, legal and political issues like plural-nationality, autonomy, plural legal systems, communitarian socialism, wellbeing, and other concepts. The AGRUCO team managed a mayor achievement by formulating a “Continuous Education Program” containing Technical training on Operational, Intermediate and Advanced level, a bachelor, a specialization, a Master, as well as a PhD Program. AGRUCO became the nucleus of various networks, firstly within the Faculty of Agriculture, afterwards within the University of UMSS and with other Universities in Bolivia and also in Latin America. In the current political reality of Bolivia it is important to take the “Well Being” discourse and ideology to a next level and AGRUCO contributed with a support to the Bolivian National Development Plan (NDP), the framework of Intercultural Governance, and other policies, programs and projects. The plural-national education system should future strengthen this process and AGRUCO provided an example that has the potential to be expanded in Bolivia and Latin America.

The CAPTURED End Evaluation has identified the following challenges that AGRUCO faces:

- The process of qualification at postgraduate level, especially in the Masters has improved since 2010 but it needs a strategy to achieve a higher percentage of students' qualifications;
- The PhD program needs co-funding in order for PhD students to complete their research projects in the coming years;
- AGRUCO could increase its presence in the international scientific community by making a clear strategy in identifying partners who can contribute to the dissemination of scientific and other achievements;
- There is a potential for AGRUCO to work in new areas of knowledge and topics in coordination and complementarity with other partners, such as the health sector, technology, migration and urbanism, the multinational state, religion, and energy.

The CAPTURED End Evaluation has concluded that AGRUCO is well positioned in the Bolivian socio-political context, has contributed to a mayor institutional impact, has develop a set of innovative education programs at different levels, and also has contributed in development efforts.

The recommendations of the End Evaluation are: strengthening the up-scaling in Bolivia in the lower parts and other areas in Bolivia through a strategic selection of partners, strengthen the Latin America network; training of Latin American partners, further advance the theoretical and epistemological framework, ensure financial sustainability of the educational programs, and establish a communication policy with professional students.

Strengthening theoretical and epistemological approaches could consider a more thorough assessment of progress and future challenges. There is good progress in the conceptualization and operationalization of aspects of “vivir bien”, but the processing of these advances could articulate with current scientific debates in the fields of development studies, where for example the issue of decolonization has been present for decades. Discussions on the limitations of measuring development in terms of growth and “decrease” would be important to meet with “vivir bien” in public administration.

It is suggested to systematize the main debates outside AGRUCO / CAPTURED to better identify specific contributions that can be given. In the same vein it could be emphasized more what this means in conceptual, methodological and epistemological terms when abstracting from the Bolivian case; not because the case is not important, but because it would contribute to global discussions at appropriate levels and abstraction conditions.

Appendix 4 – Terms of Reference

1.0 Introduction

From 2008 to 2012 an international program has been going on: The Program for Capacity and Theory Building for Universities and Research Centers in Endogenous Development, briefly CAPTURED.

This program was funded by the Ministry of Foreign Affairs, directorate general for international cooperation (DGIS/DCO-OC) in the Netherlands. It involved the University for Development Studies in Ghana as main implementing agency, in cooperation with AGRUCO of the University Major San Simon of Cochabamba in Bolivia and the Foundation for Revitalisation of Local Health Traditions in Bangalore India. Cooperation with COMPAS and ETC foundation and expatriate support has been part of the program design. An international advisory board monitored the program and advised on a yearly basis.

The project was based on an agreement between UDS and DGIS and subsequent MOU between the other partners mentioned above. The project was carried out in line with the objectives and budget as specified in a project document that was agreed by DGIS as the basis for the funding.

2.0 Project origin and justification

Many Universities and research centres in the South use research methods, and teaching materials that are based on or borrowed from mainstream or Western sciences and technologies. This is generally being justified under the assumption that these sciences and technologies are universally applicable and relevant, irrespective of the economic, socio-cultural or ecological environment in which they will find their application.

Yet increasingly voices from the South as well as from the North express the need for research, education and project approaches that address the specific perspectives, needs and potentials of non-western societies and environments. In this way poverty alleviation and other efforts to reach MDGs can be responsive to location specific contexts.

Knowledge systems from Africa, Latin America and Asia have their own systematics, logics and theoretical backgrounds. They have their own worldviews, epistemology, methodology values and knowledge community. Hence they can be considered as sciences on their own. Indigenous bodies of knowledge are widespread but experience shows that they do not get recognition from formal scientific institutions, or support from governments. The need to revitalise Indigenous knowledge systems is felt widely in the partners' working areas and a number of promising initiatives are emerging from the efforts.

Hence, the need has been expressed for research, capacity building and development initiatives that combine elements of Indigenous knowledge with mainstream sciences, trans-disciplinary sciences and social learning with a participatory and actor perspective. This applies both to the South and the North but the need for adequate research and training materials is urgent for Universities and centres in Latin America, Africa and Asia. In these continents Indigenous knowledges play a prominent role in the lives of various population groups. All three continents share a history of colonial and post-colonial dependence during which most of their Indigenous knowledge and sciences have not been consciously developed.

Primary and secondary education, but also vocational training and teaching at colleges and Universities generally do not adequately prepare students to recognise, appreciate, use and improve Indigenous knowledge. This education often has the effect to alienate students from their own cultural roots and does not contribute to the enhancement of the dynamics of the Indigenous knowledge systems. Modern

education often makes the students ill prepared to work in their Indigenous environments. Often they are educated to embrace modernity and to reject Indigenous knowledge.

Modern knowledge, through the way it is presented in educational systems, generally substitutes Indigenous knowledge rather than that it complements it. Hence Indigenous knowledge is not systematically subject to innovative processes nor further developed through experiments, publications, and debates, like it is being done by modern knowledge.

The recent increase in interest in Indigenous knowledge and the increasing realisation of the limits of modern knowledge, coincides with a re-awakening of cultural identities and importance attached to Endogenous Development. The time seems ripe to systematically develop research methods, theories and capacity building materials that start with and build on Indigenous knowledges, and that complement them with knowledges from elsewhere.

At the same time, it is important to look for ways to integrate Indigenous expertise and experts in research and educational systems. Universities are usually not open to Indigenous knowledges and sciences. The standards and protocols used for accreditation and assessing research are based on international (external) parameters and criteria. A development towards an open/virtual University that accepts, incorporates and improves Indigenous knowledges and sciences is called for. This may require a rewriting of the University rules of the game and could possibly be organised per country, region or cross region. The model of an open University could be taken as point of reference.

UDSS, UMSS and FRLHT have been pioneering in endogenous research, training and development processes. They have built up a reputation in this field and have started collaborative activities with other research and development centres in their respective regions. This has generated a growing demand for support of research, capacity building and development activities. Through the COMPAS program they have established mutual exchange mechanisms. However each of these centres is faced with the difficulty of limited numbers of staff capable of handling this approach, lack of research methods and results, and has inappropriate or insufficient training materials for undergraduate and graduate staff development.

To address these issues this proposal aims at enhancing the capacity of these three pioneering institutions for them to serve as spear points for wider out-reach in their respective regions. The way to achieve this includes intensifying research and capacity building related to endogenous development; intra- and intercultural dialogue; the training and employment of additional staff; development of curricula and training materials; intensifying training at academic level through outreach activities and South-South and South-North exchange. To this end, in the context of the University Consortium for Endogenous Development UDS, UMSS, FRLHT and ETC/COMPAS have decided to intensify their cooperation and efforts and have formulated this proposal.

As the program is pioneering in addressing a worldwide issue to develop capacities in Universities to carry out and support endogenous development, endogenous research and education in their respective regions, the program is designed as a pilot and the general objectives and other elements of the Log frame have been formulated in that sense .

The CAPTURED program therefore should test the design of the approach of University reorientation and determine what can be adjusted in planning and implementation on the basis of the experiences. It should lead to valuable insight in the generalizability of the process and indicate what has been missing in the pilot study so that it can be added to the full-scale experiment to improve outcome of larger scale application.

3.0 Program Objectives

CAPTURED will specifically focus on capacity building of the institutions involved.

In the first 3 years it will focus on the capacity building of the three lead agencies, in the second part of the 5 year program it will outreach to 13 other Universities in the regions. In the period beyond 2011 it envisages to play an important role as a strategic international network for endogenous development.

Goal of CAPTURED

To enhance the capacities of Universities in the South to enable them to evolve programs (research, capacity building, and development) that will address poverty reduction, revitalisation of cultures and intercultural dialogues through Endogenous Development.

General objectives of the project are: Capacities for endogenous development related research, development, and training aiming at poverty reduction and revitalization of Indigenous knowledge systems built in 3 Higher Institutions in 3 *pilot areas* of Africa, Latin America, and India in 5 years.

- Objective 1: To build capacities in 3 Universities for an endogenous development program within 5 years.
- Objective 2: To establish linkages between the Universities and field capacity building in endogenous development within the first 4 years.
- Objective 3: The three Universities evolve networking/ collaboration and sharing systems on the experiences from the endogenous development program in the last 2 years
- Objective 4: Up-scaling the capacity building and establishment of programs for endogenous development related research, education, and development in 4 to 6 other Universities or centres of learning in each of the 3 regions to start in year 5.
- Objective 5: Project Management and implemented established in year 1 and runs over the 5 years.

The sub-objectives, results, activities to be carried, outputs and means as well as the assumptions under which these can be realised have been spelled out in the log frame that is attached to this TOR.

4.0 Project implementation and available information

The project has been implemented since 2007 and has reported every six months to DGIS both in a narrative form where the specific activities, products, outputs and impacts have been reported and in financial terms, where the budget spending were specified. So far all reports have been approved and accepted by the Donor.

According to the reports, the achievements of the program and the budget spending are more or less in line with the plans. But there are variations among partners and among the different activities which are to be explained by flexible management in the differences in circumstances.

In 2011 the three partners have carried out an internal evaluation and reports of these evaluation studies are available for the external evaluators as relevant- but not exclusive- source of information.

The partners have kept files where the different reports, as well as the different products are available, which are open to the evaluators. The partners also have formulated the perspectives and preliminary plans for future activities in line with the experiences gained so far and in line with the changing contexts in national and international policies and changes in institutions for higher learning and research.

The outcomes of the external evaluation will also serve to modify these plans so as to include the learning experiences of the pilot project in the design and methods used in the follow up programs and initiatives.

The project partners will make available the following documents and materials:

- The formal DGIS project documents with its justification, objectives, activities, outputs and budgets. In an annex to this TOR the original log frame of the Captured program is included.
- Possible approved modifications of plans and budgets as specified by each partner.
- Copies of annual progress reports over the past 4 years.
- A brief historical overview: How did ED emerge in the program, what were the institutional barriers to overcome, how has that been approached and what are the present institutional strengths and weaknesses of the institution to carry out ED in education, research and development.
- A report of internal evaluation by each partner, describing the activities carried out, the outputs and results and impacts as seen by the partners, with copies of products (publications, training materials, course outlines, number of students and graduates, curriculums, institutional changes, research reports etc.).
- A list with suggested resource persons to be interviewed by the evaluation team, a contact person for the evaluation within the institution to provide logistic support and provide additional information will be provided as and when required.

5.0 External Evaluation

Purpose of the evaluation

The purpose of the evaluation of CAPTURED is to assess the results (products and impact), to learn from the experiences in terms of strategy and efficiency, and formulate recommendations about the possible ways in which the program activities may be continued in each of the three cases and about the options for mutual cooperation and up scaling of the program in the future. The purpose of the evaluation is a combination of a formative and summative evaluation. Formative in the sense that recommendations will be identified for possible ways of program continuation in each of the three cases. Summative in the sense that the CAPTURE project model itself is evaluated for (potential) up scaling in the future.

The *research questions* that follow from this purpose are:

- a. To what extent have the planned activities been carried out and the results and outputs as mentioned in Log frame been achieved.
- b. What is the reason and justification for not fully achieving the results and outputs?
- c. Which products and outputs, which were not specifically planned, have been achieved?
- d. Have the activities been carried out in an efficient way? (Quality of management and scientific support staff, timeliness of decision making, quality of reports, flexibility and adaptability of implementation).
- e. In what sense have the capacities of the participating institutions for carrying out ED, ER and EE been enhanced (specify: knowledge, skills, attitudes, aspirations and number of staff; availability of appropriate research methods, educational materials, institutional support and organizational modifications).

- f. How have the results of the program been received by the traditional knowledge community, University, the University staff and students involved in the program, policy makers, other Universities with which cooperation took place?
- g. How much spin off and outreach has the program had so far and what are the perspectives for such spin off in the pilot region and beyond?
- h. Which of the approaches and experiences can be used on a larger scale in the pilot region and beyond?
- i. On the basis of the experiences, what should be the orientation, scope and strategy for future activities in ED, EE and ER in each of the three lead institutions, for intraregional and intercontinental cooperation and for up scaling the activities.

Unit of analysis

Capture especially worked at University level. The program innovated by redirecting Higher Education to bring on board endogenous development into curriculum, teaching and learning. Therefore, the unit of analysis will be performance and capacity of the Universities involved in the initiatives.

Evaluation methodology:

The evaluation will use a mix of methods. It will involve field work in Ghana, India, and Bolivia. The evaluation methodology should be carried out in the spirit of endogenous development. It will make the perspective of the local knowledge communities explicit and assess the capacity development activities and results in function of endogenous education and research.

The methods will include:

- Documentation review (see end part 4.0, p. 4, especially external review 2011)
- Interviews with key informants and group interviews
- Collect and assess data on curricula innovation, quality and quantity of acquired capacities of University staff applying the 5 capability model and Appreciative Inquiry (see below)
- Triangulation and validation of findings
- Write shop methodology to document lessons learned

Evaluation team

It is proposed that in each of these countries an independent evaluator (regional evaluator) will be contracted with expertise and experiences in the higher education and endogenous development. Beyond that an international evaluator will be contracted who will join the regional evaluators in the field work in the three respective countries. On the basis of this TOR they carry out the field work in the respective regions: study the files and relevant literature on ED and development policy, interview key informants and have group interviews. They will verify quantifiable and qualitative information related to output and products that was the outcome of the internal evaluation and assess the quality and relevance of newly developed curriculums, teaching materials, research methods, publications. They make an assessment of the quality and quantity of the acquired capacities of University staff and on drawing lessons for the future in case the experiences will be applied on a wider scale.

Reporting

At the end of the field work in each of the regions the regional evaluator and international evaluator make a draft report on their regional findings and present this to the main stakeholders (University administrators, regional coordinators of Captured, teaching and research staff involved in the program, PhD students) in each region. After that the final regional report will be made between the regional and international evaluator.

The international evaluator will go through this process for Bolivia, for Ghana and for India and will subsequently make a draft synthesis report, which will be presented and discussed with the Board of directors of CAPTURED. The final report will be made after this meeting and be presented to the board of directors of CAPTURED.

The evaluators will make a report (maximum 20 pages for synthesis report and maximum 20 pages for each of the three pilot institutions) containing:

- Description of the methods used for the evaluation: Documents consulted, persons interviewed, methods of data collection and assessment, and the interactivity with stakeholders.
- A description and assessment of the process of institutional development, educational development and research innovations as undertaken by each of the partners.
- Assessment of the project environment (relevance of ED, the socio-political context and perspective of ED in the Universities in the region, new insights and perspectives of international cooperation).
- Assessing the project structure, coordination/management and international support.
- Assessment of the project activities, products, outputs and impact for each partner and for the program as a whole.
- Identifications of reasons for not having (or partly) successes and for achieving scheduled results.
- Lessons learned by the pilot program
- Suggestions for improvement and for future activities for each partner, for international cooperation and up scaling.

The synthesis report summarizes the conclusions of the three pilot regions and formulates general conclusions and recommendations for the way forward.

The final report will be not more than 20 pages and each of the regional reports shall not be more than 20 pages (specific information can be presented as annexes).

Time frame

- The regional evaluations may take 10 working days and shall take place in the months of May to August. The international evaluator team leader will participate in this activity for 7 days in each region.
- The presentation of the draft of the final report by the international evaluator to the Program Director latest by the 30th of September 2012.
- The final report will be presented to Program Director and BOD by October 1; 2012.

Evaluation Principals and Standards

Evaluation principles that will apply for this evaluation:

- ED is a central principle of the project. Therefore, in each country mission the evaluation should explicitly be open for endogenous ways of analysing, reflection and communication of findings. It also means that elements of self-evaluation should be built into the evaluation.
- Capacity building has been a core activity of the project and assessment of acquired capacities is a central part of the evaluation. Combined with the ED principle it is proposed to analyse changes in skills, competences, attitudes, capabilities and overall capacity with the principle that these were already to some degree present at the start of the project and/or might have been not recognised or acknowledged in the past.
- CAPTURE has worked on institutional development and innovation grounded in different societies. This means that the evaluation should be open for inter- and cross cultural differences in appreciating changes in institutional performance and differences in types of innovation.

The evaluation should maintain the following standards:

- UTILITY: To ensure that the evaluation will serve the practical information needs of intended users.
- FEASIBILITY: To ensure that the evaluation will be realistic, prudent, diplomatic and frugal.
- PROPRIETY: To ensure that the evaluation will be conducted legally, ethically, and with due regard for the welfare of those involved in the evaluation, as well as those affected by its results.
- ACCURACY: To ensure that the evaluation will reveal and convey technically adequate information about the features that determine worth or merit of the CAPTURE project.

Stakes, stakeholders, evaluation use and consequences.

The evaluation should take into account the stakes of the three country actors (UDSS, UMSS, FRLHT) and the project management and take care that the findings of the evaluation are presented in such a way that they can be used by the main actors and that these are aware of the consequences.

Evaluation approach

In view of the evaluation principals and standards it is proposed to apply a combination of Appreciative Inquiry with the Five Capabilities model. AI⁴ builds on successes by first having a strong understanding why results have been achieved before proceeding by analysing what could not be achieved. The 5 C model is a mainstream model at DGIS to analyse capacity and how capacities have been developed. It allows to analyse internal capabilities within an organisation or society as well as how these change over time when relating to the context and other actors (www.ecdpm.org/5Cs).

Program country evaluations.

The evaluation will start in Ghana (end June, first week of July) as this will allow also contact with the project management. Each country mission will be evaluated at the end of its program to see if improvements can be made in the design for the next country mission.

⁴ Cooperrider et al 2008: Appreciative Inquiry Handbook. Crown Custom Publ.

Program country mission (to be adapted according to each country preferences):

- Preparation (regional evaluator 3 days, international evaluator 1 day): read relevant background and project documentation, prepare logistics, etc.
- Day I: Briefing with country contact(s), Agree on logistics and documentation. Two evaluators and country contact prepare Day II
- Day II workshop with key partners. Creating a shared understanding of the evaluation methodology, timeline, calibration of indicators by participants, focus groups on key results achieved (intended as well as unintended), exchange, validation and summary.
- Day III-IV-V perspectives different stakeholders, resource persons, documentation, drafting of first findings
- Day VI Workshop with key stakeholders/project partners. Present key findings, reflect together in a joint analyses, formulate together lessons learned and best practice (apply write shop methodology), evaluate the country evaluation
- Day VII-VIII: write final Country case report

Appendix 5 – Documentation

Evaluation reports

- CAPTURED Country Evaluation Report Bolivia (September 2012, in Spanish)
- CAPTURED Country Evaluation Report Ghana (July 2012)
- CAPTURED Country Evaluation Report India (August 2012)

Project documentation

- Budget CAPTURED (Excel sheet)
- CAPTURED Project Proposal: A South-South research, education and development initiative involving Universities, Research Institutes, NGOs and local communities
- Captured year ending 2009 Composite Report
- Captured year ending 2010 Composite Report
- Captured year ending 2011 Composite Report
- Response to DGIS concerns (David Millar)

Publications

- Millar, Apusigah, Boonzaaijer (2012): Endogenous Development in Africa revisited. A systematisation of experiences. ISBN 9964-92-356-2
- Millar, Haverkort, Apusigah (2012): Learning Together. Developing Inclusive Knowledges and Sciences
 - Volume I: Concepts and Challenges in Endogenous Development, Education and Research
 - Volume II: developing inclusive knowledges and sciences. Towards operational methods for endogenous research, education and development
- Millar et al (2012): "Our Sciences". Indigenous knowledge systems of Northern Ghana.

For country related documents: please refer to the Country Evaluations.

This report provides the findings of the Synthesis Study of the CAPTURED Evaluation and is produced as part of the overall CAPTURED End Evaluation. After five years of support by the CAPTURED project the three CAPTURED partners have achieved commendable results. Ten lessons learned are formulated that emerged from the CAPTURED experience and can guide future similar initiatives. The main conclusions of the End Evaluation are that the CAPTURED project provided a clear return on investments, illustrated the emergence of innovative trans-disciplinary research practices, established three PhD Research Programs that are grounded in endogenous frameworks, managed to design and conduct innovative educational programs, and institutionalised the practice area of endogenous knowledge and related EE and ER in their respective organisations and networks. The Evaluation also noted that whereas in the South the interest for endogenous development related higher education is increasing, the interest in the North is weak, which risks to loose valuable endogenous knowledge.

The main recommendations are: consolidate with external academia and accredit research protocols, create a 18 months transition phase to design an up-scaling phase, expand the group of actors in a next phase, formulate a research program that deepens and validates the material produced by CAPTURED, build on the CAPTURED practice of transdisciplinarity, and acknowledge the role of constructivism in science for innovation. Specific recommendations are formulated for nine potential different actors that could engage in a next phase.

More information: www.cdi.wur.nl

