a development research programme

Management of knowledge for development: meta-review and scoping study

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About IKM Emergent

In April 2007, a five year research programme was approved for funding by the Directorate General for International Cooperation (DGIS), part of the Dutch Ministry of Foreign Affairs. The programme, Emergent Issues in Information and Knowledge Management (IKM) and International Development, will be known as the IKM Emergent Research Programme.

The objective of the programme is to improve development practice by promoting change in the way the development sector approaches the selection, management and use of knowledge in the formation and implementation of its policies and programmes. It aims to achieve this by:

- raising awareness of the importance of knowledge to development work and its contested nature;
- promoting investment in and use of Southern knowledge production of all types and origins;
- creating an environment for innovation, supported by research on existing and emergent practice, for people working in the development sector to raise and discuss means of addressing these issues; and
- finding, creating, testing and documenting ideas for processes and tools which will illustrate the range of issues which affect how knowledge is used in development work and stimulate thought around possible solutions.

Colophon

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Abbreviations

AKIS	agriculture and knowledge information systems
ALNAP	Active Learning Network for Accountability and Performance in Humanitarian Action
EADI	European Association of Development Research and Training Institutes
DFID	Department for International Development, UK
GC	gestion de la connaissance
HIV/AIDS	human immune virus/acquired immune deficiency syndrome
ICTs	information and communication technologies
ICT4D	information and communication technologies for development
IDRC	International Development Research Council
IKM Emergent	Information and Knowledge Management Emergent Research Programme
IT	information technology
KM	knowledge management
KM4D	knowledge management for development
KM4Dev	online community on KM4D at www.km4dev.org
LDDA	Learning before, during and after
MDGs	Millennium Development Goals
NGO	non-governmental organization
OED	Operations Evaluation Department, World Bank
SADEV	Swedish Agency for Development Evaluation

Executive summary

The development sector has not yet fully appreciated the strategic importance of knowledge to its work and because of this, has not developed effective responses to the knowledge asymmetries within and between organizations. Even where the strategic importance of knowledge to development is appreciated, development actors are struggling with the practical challenges of organizing and using information and knowledge. A substantial amount has already been written on knowledge management in development, including a number of literature reviews. Consequently, this paper will draw on existing literature reviews rather than repeating this exercise, providing a 'review of reviews', and supplementing it with linkages to other fields.

This study explores the theoretical and conceptual background to the challenges facing the broad field of knowledge for development. It starts by providing an outline of the broad knowledge for development field, tracing its origins both within and outside the development sector (Part 1) and placing particular emphasis on the practice-based view of knowledge. Next, it provides an overview of stages and models of knowledge management (Part 2). These stages and models are of key importance as they show the perceived trends in knowledge management. A substantial part of the paper is devoted to a meta-review of literature reviews focusing on knowledge management for development (Part 3), identifying the main issues which need to be addressed in further work on this subject, and exploring differences in knowledge management approaches beyond the Anglo-Saxon discourse (Part 4). The next section (Part 5) goes on to draw the findings from all the other parts of the working paper to identify key issues that need to be addresses in future research in the areas of:

- The Northern, Anglo-Saxon bias in the dominant knowledge management for development discourse;
- Knowledge management in different constellations of development organizations;
- The human face of knowledge management;
- Knowledge asymmetries; and
- Evaluation and impact assessment of knowledge management.

The final section comprises a summary of key issues, and conclusions.

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Introduction

> *Knowledge is like light. Weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions of people still live in the darkness of poverty.* (World Bank 1999).

This *IKM Working Paper* explores how knowledge is applied within development as a whole and, in particular, the role of knowledge within development organizations. It is based on the premise that the development sector has not yet fully appreciated the strategic importance of knowledge to its work and because of this, has not developed effective responses to the knowledge asymmetries within and between organizations. Even where the strategic importance of knowledge to development is appreciated, development actors are struggling with the practical challenges of organizing and using information and knowledge. As a result of this, Northern development organizations of all types often lack adequate knowledge of not just the Southern realities that they aim to change but, as importantly, also of the perception of those realities by local populations and by local intellectuals. This is a fundamental issue that affects the potential effectiveness of all development work (IKM Emergent Programme Summary, Powell 2006, Molenaar 2006).

This working paper has been written by members of Working Group 3 of the IKM Emergent Research Programme. It is a key scoping study in the development of the Working Group's further research over the next 5 years. It was necessary to start the Working Group's activities with such a study. Although much has been written about the role of knowledge in development over the past few years, this working paper is one of the first efforts to scope and review the broad field of knowledge management for development. This paper draws on existing literature reviews rather than repeating this exercise, providing a 'review of reviews' or meta-review, and supplementing it with linkages to other fields, including:

- Generic or mainstream knowledge management which is largely focused on the business sector;
- Home-grown approaches in the development sector, such as the agriculture and knowledge information systems (AKIS) approach; and
- Related approaches from information management for development.

This study explores the theoretical and conceptual background to the challenges facing the broad field of knowledge for development. It starts by providing an outline of the broad knowledge for development field, tracing its origins both within and outside the development sector (Part 1) and placing particular emphasis on the practice-based view of knowledge common in most development circles. Next, it provides an overview of stages and models of knowledge management (Part 2). These stages and models are of key importance as they show the perceived trends in knowledge

management. As part of this, developments in the fields of information management and information and communication technologies (ICTs) for development are also considered. A substantial part of the paper is devoted to a meta-review of literature reviews focusing on knowledge management for development (Part 3), identifying the main issues which need to be addresses in further work on this subject, and exploring differences in knowledge management approaches beyond the Anglo-Saxon discourse (Part 4). Part 5 then goes on to draw the findings from all the other parts of the working paper to identify key issues that need to be addresses in future research. The final section comprises a summary of key issues, and conclusions.

Part 1: What is knowledge management for development?

For the purposes of this working paper, knowledge management is defined as:

> *encompassing any processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise (Quintas et al., 1996) whether these are explicitly labelled as 'KM' or not* (Swan et al., 1999).

The mainstream knowledge management literature reflects a dichotomy between a community networking approach and a cognitive network model based on information technology (IT) and information processing. This is indicative of the:

> *Division of interest in the field of knowledge management in the exploitation of knowledge through technical means versus the exploration of knowledge, which heavily focuses on people and interactions (in which case IT may, or may not, be enabling)*
> (Alvesson and Kärreman 2001).

We would here like to specifically state that, in our view, knowledge management should be considered as relating primarily to the *social* processes and practices of knowledge creation, acquisition, capture, sharing and use of knowledge, skills and expertise, and not to the *technological* component of this which needs to support the social process and practices. Based on this generic definition of knowledge management, knowledge management for development thus involves processes and practices concerned with the use of knowledge, skills and expertise within the development field.

Development is understood to be a process involving a broad palette of human factors, concerned with individual people living in very different conditions across the world (Unwin 2007; see also Laszlo and Laszlo 2003). As such, development efforts are aimed at strengthening people's abilities to respond to the challenges they encounter in their environment at individual, family, community and wider societal levels (Britton 2005). These conceptions of development are very much influenced by

Amartya Sen (1999) who has conceptualized development as freedom of opportunities and capacity to act by the poor. Development is a process of empowerment of marginalized people, which involves the transfer, development and leveraging of knowledge in such a way that they are better informed of their personal development possibilities and livelihood opportunities, and better equipped to capitalize on these. From this perspective, development initiatives can succeed only if there is a thorough understanding of the cultural and socio-economic environment of the intended beneficiaries: development depends to a large extent on how well knowledge of these factors is applied (Powell 2006, Ferguson and Cummings 2007). Indeed, the widespread uptake of knowledge management approaches in development organizations can be broadly attributed to the intrinsic affinity between knowledge and development (Quaggiotto 2005). Given this affinity, knowledge management is becoming recognized as an important discipline in the field of development cooperation, and over the past decade has continued to gain momentum.

In the field of development cooperation, knowledge management broadly emerged some ten years ago, when the World Bank launched its knowledge management strategy in 1996, followed by the publication of the seminal World Development Report 1998/99, 'Knowledge for Development' (World Bank 1999). The justification for the World Bank's knowledge strategy was to provide decision makers with the knowledge and ideas for more successful policies, and equipping them to address the problem that:

> *We don't yet have all the knowledge we need to address some of the major challenges before us.* (quoted in Parker 2000: 233).

The practice and study of knowledge management derives from the business sector, and builds on the knowledge-based view of the firm (Grant 1996, Spender 1998). In this perspective, an organization's competitive edge is determined by the continuous generation and synthesis of collective, organizational knowledge (Brown and Duguid 1998). The development of knowledge alone however is not sufficient; an organization must also command 'the ability to effectively apply the existing knowledge to create new knowledge', taking action based on its knowledge-based assets (Alavi and Leidner 2001: 108). As such, knowledge management focuses explicitly on the design of organizational processes in such a way that the benefits of organizational knowledge can be maximized in terms of its innovation potential and competitive advantage.

Prior to business-oriented knowledge management approaches, knowledge management for development 'pioneers' had been exploring innovative ways to align development interventions with their knowledge needs. For instance, Bellanet, a former secretariat of the International Development Research Council (IDRC), Canada, has played an important role in facilitating the interest in knowledge management for development, developing tools and methods to familiarize development agencies with more collaborative learning approaches from the late nineties onwards. In the late eighties and early nineties, researchers at Wageningen University, The Netherlands were experimenting with systems to map and explore the 'social organization of innovation' through AKIS in

a knowledge management for development approach which might be considered knowledge management *avant la lettre*. Core to this AKIS approach is recognition of the level of mutual interdependence among the actors and their practices on the agricultural development scene. The synergies developed through systematic networking effectively support learning for innovation, and contribute to the development of new, people-centric ways to tackle development problems more effectively (Ferguson and Cummings 2007). Overall, the 'networking for learning' approach enshrined in the AKIS approach shows many similarities to the conception of a community of practice developed by Wenger (1998), Brown and Duguid (2001) and others in mainstream knowledge management (Cummings and Van Zee 2005). Moreover, it harbours many of the characteristics of the practice-based approach to knowledge management (Gherardi 2006, Patriotta 2003, Orlikowski 2002) which will be described in more detail below.

A practice-based view of knowledge

A core characteristic of the practice-based approach is that it emphatically takes into account the specific context in which knowledge is localized. The individual's practices, situated at a community level, form the central pivot of knowledge creation. If there is a sufficient connection between practices and contexts, meaningful knowledge flows can occur (Ferguson 2007). This in turn allows for situated learning, the process in which knowledge is appropriated and applied in the practice central to the individual's needs at a group or community level (Spender 1996, Brown and Duguid 2001).

The practice-based approach and situated learning comprise a particularly relevant perspective for knowledge management for development because they inherently include the social context in which knowledge is generated, developed and applied. As a result, they allow for the co-existence of different knowledge paradigms – scientific, tacit, indigenous, spiritual – as harnessed by the broad range of stakeholders in development cooperation. This practice-based approach may well offer useful perspectives for the development of the conception of 'multiple knowledges' on which the IKM Emergent Research Programme is focused.

Part 2: Models of knowledge management for development

Many different models exist in terms of the phases by which knowledge management has developed as a discipline, and the phases by which it is introduced within the organization. Common characteristics can be recognized across the board, as will be discussed below. Although these models relate to both adoption of knowledge management as a whole and to the adoption within organizations, there are a number of common characteristics. These common characteristics also have implications for knowledge management for development.

In generic or mainstream knowledge management, one of the most influential models describing the phased adoption of knowledge management within organizations is that of Pan and Leidner (2003). They argue that the adoption of ICT-enabled knowledge management comprises three stages. The first stage involves the implementation of an *overall infrastructure*, the basic exchange technology platform. Once this is in place, the next stage can be introduced, which comprises the provisioning and facilitation of effective *linking mechanisms* between people and between communities. These are likely to comprise business-relevant activities and platforms, providing employees with incentives to participate in knowledge management efforts by offering them more effective access to task-related knowledge. This stage tends to focus on the transfer of information and the production of explicit knowledge. Recognition of the different values and cultures in an organization begins to permeate the knowledge strategy. The third stage takes this a step further, and focuses on *systematic support to sharing in communities*, based on common knowledge rather than geographical or cultural commonalities. In this phase, cross-organizational, global knowledge sharing in specific knowledge niches becomes possible, and ICTs play an auxiliary role, enabling the natural flow of knowledge creation through informal, self-organizing communities. This framework for analyzing how knowledge management develops within organizations is particularly interesting when comparing it to knowledge management for development. For example, cross-organizational, global knowledge sharing is one of the raisons d'êtres for knowledge management in the development sector. Interestingly, a number of development organizations, such as the United Nations Development Programme (UNDP) (Henderson 2005) and SNV, the Dutch Development Organization (Van Leeuwen *et al.* 2007) have both *started* their knowledge management strategies with global knowledge networks

Alavi and Leidner (2005: 114) describe knowledge management as involving at least four key processes, comprising the components of knowledge *creation, storage/retrieval, transfer* and *application*. In a development context, this is particularly pertinent because a lack of reliable ICT infrastructure (addressed in phase one) in many Southern countries hampers the implementation of a basic knowledge management approach. Moreover, knowledge sharing skills and capacities are often weak, and networks in need of strengthening (addressed in phase two) before bridges can be built to others. Without these elements, it continues to be a significant challenge to overcome differences in culture and in values, and to convince people of the value of participating in and actively contributing to knowledge sharing activities. A key to the development of sustainable communities (phase three) is their capacity to respond to members' needs, and their capacity to identify the means and people by which to do this (Ferguson and Cummings 2007).

At the level of knowledge management as a discipline, Huysman et al. (2007) present the field of knowledge management as having evolved in two waves. Ferguson and Cummings (2007), Snowden (2002) and Laszlo and Laszlo (2002) identify three generations, while Koenig (2005) identifies four stages. These different approaches – summarized in the table below – share common characteristics in terms of what these 'generations' involve.

Author(s)	Keywords			
	1st generation	2nd generation	3rd generation	4th generation
Huysman et al. (2007)	Epistemic objectivism; IT-determinism	Social embeddedness; immersion in practice; communities of practice		
Ferguson and Cummings (2007)	Knowledge as a commodity; ICTs, knowledge databases, portals, clearinghouses	Knowledge sharing; case studies; 'best practices'	People-centric, practice-based approach; knowledge processes embedded in organizational processes; inter-organizational communities of practice	
Laszlo and Laszlo (2003)	Distribution of organizational knowledge, through technology[1]; focuses on standards and benchmarks	Knowledge creation to satisfy organizational needs; organizational learning and value creation [2]	The 'knowledge of evolution'; knowledge related to corporate citizenship and its impact on global development; participatory forms of engaging in meaning creation	
Snowden (2002)	Structuring information for decision support; computerization of business processes	Tacit-explicit knowledge conversion	Context, narrative, stories, content management. Builds on complex-adaptive systems theory	
Koenig (2005)	IT-centric: codification of intellectual capital; Internet and intranets; best-practices	Introduction of human and cultural dimensions; the learning organization; tacit knowledge. Intra-organizational communities of practice	Content management and taxonomies	The importance of extra-organizational sources; situated, contextual knowledge. Inter-organizational communities of practice

Table 1: Different views on generations of knowledge management (source: author)

All these models identify an evolution from an ICT-oriented, knowledge codification approach, towards a more people-centric orientation in which narrative, context, processes and communities play a

[1] Based on McElroy (2000)

[2] Ibid.

central role. This reflects an epistemological shift, from an objectivist perspective to a practice-based perspective.

The importance of such models of the phased adoption of knowledge management is that they can help an organization determine the nature and type of knowledge that is key to its core processes, and design appropriate responses. By determining its 'knowledge position', the organization is better equipped to identify where the knowledge needs of the individual and the collective need to be supplemented. In line with this, a knowledge management strategy can be designed which matches these needs, defining the requirements for its supporting information systems (Alavi and Leidner 2005). To do this in an optimal manner, it is important to take a long-term, 'holistic approach' to knowledge management, considering both the epistemology, the knowledge needs and resources, and the most relevant tools and approaches to meet or capitalize on these. In other words – thinking about a 'fourth generation' approach, even if the organization is only at 'step one' of its implementation. In addition, it helps organizations to understand that knowledge management is much more than technology acquisition, a confusion which still abounds.

The development of knowledge management from the first – ICT-centric, objectivist – to the fourth generation – practice-based, community driven – has positive consequences on the 'epistemic diversity' (Molenaar 2006) enshrined in knowledge management for development discourse, allowing for other knowledge systems and the specific socio-cultural backgrounds of communities to be taken into account. The practice-based view of knowledge, as introduced above, adopts a community perspective, and the contextual embedding of knowledge determines its relevance. This means that 'imported' knowledge is irrelevant unless it recognizes and is aligned with the multiple knowledges of the intended beneficiaries. This has important consequences for knowledge-oriented development initiatives, which continue to emphasize the export of knowledge, rather than fostering local knowledge development capacities. The practice-based view of knowledge opens up new avenues for tackling the power/knowledge (Foucault 1977) inequalities that development interventions aim to address. Only within a framework respectful of diverse epistemologies, can development impact be realized (Ferguson 2007).

Information management and ICT4D

Two other traditions, that of information management for development and also ICTs for development, have implications for knowledge management in the development sector. Information management for development precedes knowledge management for development, and continues alongside it, while ICTs for development started at roughly the same time.

The role of ICT4D in information management has enjoyed prominence for a long time. Information management has been described as a process of capturing, storing, categorizing, retrieving and disseminating information that an organization generates, in the course of executing its functions (Sanchez 2006). In the development sector, there has been an exponential growth of information

which has created demand for ICT tools to manage development information. Paradoxically, however, the availability of new information technologies such as the World Wide Web have stimulated the creation of even more information and created the need initially for information management, and more recently, knowledge management. ICTs, both old and new technologies, provide the tools which make it relatively easy to store and access and communicate vast quantities of information which modern organizations require (Courier 2002). Several critical themes have emerged from the literature in the discourse about ICT4D and information management, including the need to contextualize ICT usage, the importance of local knowledge, and the challenges of access and capacity building (Davies 2006). The access debate has featured several dimensions, one being the digital divide discourse which is linked to issues of connectivity, and another being access to development information which is linked to 'infostructure' issues. The unequal power relations between partners in the development sector because of unequal access to development information has come out strongly, especially from both developing country-based and progressive Northern-based writers (Zeleza 1996, Powell 2003, 2006). With regard to capacity building, the concept of technology stewardship (White *et al*. 2007) has been proposed as a possible solution, through its ability "to build bridges between the technology and our human needs". Others have also noted the great potential of using technology stewardship to create international development community of practice groupings around specific themes or subjects (Rambaldi 2007).

Part 3: Review of reviews

Over the past ten years, numerous reviews have been conducted both in the sphere of knowledge management and knowledge management for development. While the former generally harness a thorough theoretical view on knowledge management, based on corporate evidence, they neglect a number of critical development-related issues such as inclusion. The development tradition, however, might be categorized as empiricist, strongly embedded in practice and providing limited contributions to theory development. In the meta-review to follow, we will identify the main aspects discussed and omitted in some of the most important reviews in knowledge management for development.

What knowledge? Whose knowledge?

The most recent review in the field of KM4D is ***Knowledge and Learning in Aid Organizations*** by **Krohwinkel** (2007), commissioned by the Swedish Agency for Development Evaluation (SADEV). Its overall purpose is to contribute to shaping the agency's future evaluation agenda, identifying knowledge gaps and emerging issues, as well as exploring how knowledge and learning for development can be strengthened. The particular strength of this study is the approach by which this is done: it advocates a stronger link between theory and practice, and consequently provides a convincing theoretical and methodological analysis as a basis for its practitioner-orientation (see for instance the helpful table and discussion on organizational knowledge and learning research,

Krohwinkel 2007: 9, modified from Easterby-Smith and Lyles, 2003). In doing so, the author outlines 'a basis for a more systematic approach to the assessment and learning in development cooperation' (p7). While earlier reviews often do provide a theoretical introduction (Ramalingam 2005, Pasteur 2002), their ultimate aim is generally to provide practical guidelines for development organizations, which leaves a number of the more fundamental theoretical issues unaddressed. Krohwinkel's study, while positioned in a specific evaluation context, sets the pace for filling this gap.

The key findings of this report 'reflect the evaluation context in which the report is crafted' (Krohwinkel 2007: 24), and as such, the overall recommendation is that the evaluation of organizational knowledge and learning needs further deepening, both methodologically and in terms of their focus (see Krohwinkel 2007: 25, table 1). This can be drawn into a broader research agenda which articulates key development considerations, such as: the need to analyze systemic power structures in the aid chain; the need for more systemic approaches to knowledge and learning in development organizations; and the need to reveal and overcome inconsistencies in terms of causalities and instrumental logic in organizations.

This review reflects a thorough theoretical analysis of organizational learning and a convincing translation into the empiricist embedding which it targets. The author argues that:

> *one of the largest current challenges of practitioners working with organizational development in aid organizations is to ... reconsider the basic question of who is to learn what from whom?*

and that 'the deliberate choice of "boundary-spanning" concepts like "harmonization" and "dialogue"' could be one way by which this might be addressed (Krohwinkel 2007: 25). These questions pave the way for an exploration of the role of cross-organizational communities of practice and epistemic communities in terms of enhancing development organizations' capacities to support knowledge and learning processes. Therefore it is somewhat surprising that it omits two important theoretical underpinnings: first, an epistemological grounding, although the main theoretical framework points in the direction of the practice-based perspective. Second, and linked to this, an analysis of the role of communities of practice in cross-organizational learning.

The latter is addressed in a number of the other reviews included below, for instance Perkin and Court (2005).

Towards the management of knowledge

Hovland's (2003) ***Knowledge management and organisational learning: an international development perspective*** is an insightful overview of the role of knowledge and learning in development organizations, presenting the themes pertaining to this topic in different types of organizations in a clear and structured manner. Worth mentioning is the useful annotated bibliography

at the end of the document, testimony to the thorough review which the author has undertaken in preparation of this report.

The review contains a number of important implications which contribute to theory building in the field of development. The first is Hovland's identification of the different objectives of knowledge management in the development field and in corporate settings. Knowledge management and learning in development are aimed at realizing the Millennium Development Goals (MDGS) and poverty eradication strategies of individual developing countries. This goes far beyond internal efficiency and competitive advantage, the most important drivers for knowledge management in the corporate sector. Hovland therefore argues that knowledge and learning interventions should contribute to improved responsiveness, partnership and policy influencing. However, whether and how such interventions are indeed contributing to the above-mentioned goals is not analyzed.

This introduces another important implication, also addressed in Krohwinkel (2007), namely the complexity involved in determining impact of knowledge and learning interventions, and the insufficiency of extant measurement approaches. In this context, Hovland quotes that evidence of socio-economic impact:

> *is something which is most frequently requested by funding agencies, most frequently promised by evaluators and least frequently delivered in evaluation reports.* (Horton and Mackay 1999, quoted in Hovland 2003: 10).

This is partially the result of diverging knowledge and learning approaches between stakeholders involved in knowledge and learning interventions; these are generally focused on *internal* needs of organizations, and as such address needs that differ significantly from those of constituents' and donors'. Therefore, new models are needed to ensure that different contexts and different knowledge systems are, in fact, taken into account.

A third important implication is the need to foster 'situated learning' approaches, moving beyond one-way information flows and examining *and supporting* the knowledge bases and systems of Southern stakeholders. Knowledge and learning strategies need to reflect the contextual differences of their intended beneficiaries because:

> *the best KM, learning and evaluation strategies in the UK are not necessarily the best KM, learning and evaluation strategies in Uganda. Different groups and organizations (whether they are different due to political circumstances, economic resources, culture, social background or religion etc.) may have different associations in relation to concepts such as 'leadership', 'cooperation', 'information', 'sharing' and 'monitoring* (Hovland 2003: 8).

In line with this, it is worth mentioning her sceptical comment that not all situations of poverty are in fact related to issues of information and knowledge, but are linked to wider political realities. This

introduces a healthy dose of realism into the development sector, which has embraced 'knowledge' as the magic bullet and seems to be expanding KM4D initiatives more quickly than it has been able to develop reliable measurement models to determine to what degrees the approach is, in fact, delivering on the expectations.

Hovland's (2005) review identifies a number of relevant concepts for fostering a stronger 'learning' approach to development: web-thinking versus step-thinking (a participatory partnership approach versus an ex-post evaluative approach), centric-out knowledge needs and bottom-up knowledge needs. Moreover, she finds some relevant gaps in the literature that, to this day, have not yet been addressed. These relate to the question whether KM and learning can:

- Improve agencies' responsiveness to development problems;
- Enhance their impact on policy processes;
- Improve the translation of policy into practice; and
- Contribute to bridging gaps in decision-making processes and include more Southern engagement.

The review provides an insight into the relevance of knowledge management and learning for development practitioners and the main issues to which these can be applied. Two flaws can however be identified, both on a theoretical level. First, the review consistently presents 'knowledge management and learning' as parallel concepts. The two are inherently strongly related, but knowledge management is about more than organizational learning. The former involves consideration of the core organizational processes, what strategically relevant knowledge is required throughout these, and what management structures can support its optimal generation and sharing; whereas the latter involves an operationalization of knowledge management approaches throughout the organization.

The link between the two is almost implicit in this review, discussed explicitly in only one paragraph:
Challenges and advantages of KM are naturally related to challenges and advantages of organizational learning, and in the international development field these two sets are often examined together (Hovland 2003: 2). It is precisely the difficulty which organizations have in terms of *managing* their knowledge needs and resources, and the challenges of implementing learning organization-wide, which justifies a more in-depth exploration of this link and their interdependence, rather than being presented as an assumed twin concept.

A second minor theoretical drawback involves the learning model presented in the paper, which does not entirely match the (implicit) epistemology she harnesses[3]. The learning model Hovland presents is the double-loop learning approach, drawn from Argyris (1992). Single-loop learning involves a simple

[3] But this may have to do with the timing in which the paper was prepared (2003), which predates the wider penetration of the practice-based approach into mainstream knowledge management literature.

feedback mechanism, linking outcomes back to the theory informing them, while the organizational norms remain unchanged. Double-loop learning involves an iterative learning cycle, whereby *espoused* theory of action (the norms, strategies and assumptions instructing human conduct) is informed and altered through the theory in *use* (the tacit assumptions informing action). This occurs when existing cognitive and institutional resources do not suffice to address complex issues; the organization's basic assumptions are challenged and revisited as insights develop, changing existing norms and premises in order to solve the problem at hand (Patriotta 2003: 19-21). This is a *cognitive* view on knowledge, which implies that 'all types of action have a cognitive basis, and organizational cognition is an extension of individual cognition' (Patriotta 2003: 23-24). However, the view presented by Hovland in fact is more akin to the less well-known *practice-based* view on knowledge, which is informed by such organizational epistemologies as presented by Cook and Brown (1991), Brown and Duguid (2001) and comes to expression in interaction, especially through communities of practice (Wenger 1998). In the practice-based view, knowledge is informed by and gains meaning in practice and in relation to its context (Gherardi 2006, Patriotta 2003, Orlikowski 2002). Moreover, this perspective involves a change deriving from community interaction (whereas the cognitive view involves a change primarily at the individual level, which in sum leads to changes at the organizational level). Hovland's recommendations to foster a more context-sensitive, community-oriented approach to learning and to knowledge strategies, calling for alternative knowledge systems, are grist to the mill of this practice-based approach.

This point illustrates a key issue in the literature of knowledge management for development: it tends to harness a pragmatic approach without thoroughly exploring the theoretical underpinnings. While this is understandable in a field characterized by urgency and pressing humanitarian issues, the effectiveness of development interventions would benefit from a more thorough understanding of organizational dynamics, based on stronger linkages between organization theory and its empirical implications. Especially in the field of development – as Hovland demonstrates – knowledge is a critical resource for fostering more inclusive empowerment and participation responses. In such an environment, it is all the more important that management implications are adequately understood, explored and only then translated into practice.

Embedding learning interventions in a coherent KM approach

Organizational learning is a topic given much attention in the context of development. Like Hovland (2003), Pasteur's (2004) ***Learning for development: a literature review*** echoes the importance of organizational learning in terms of improving development performance and impact. Pasteur's review explores what this means, and how it translates into practice. Increasingly, development organizations state their intention to improve their learning or even become a 'learning organization', but have little clue as to how they should in fact realize this aim. Therefore, Pasteur's review continues to be of interest to many, even three years after its publication.

Pasteur introduces the development process as 'non-linear, unpredictable and poorly understood' (Pasteur 2004:5). As a result, development practitioners are expected to improvise, dealing with new situations with which they are not yet familiar. Consequently,

> *when individuals are in the position of doing things they have little experience with or have never done before, effective learning is clearly a critical skill*
> (Vaill 1996, quoted in Pasteur 2004:5).

This calls for the ability to innovate, whereby knowledge is translated into new insights and action. While such skills are developed at an individual level, it is through partnerships and collaboration that more profound insights can be gained pertaining to the causes of development problems, and changes can occur.

Similar to the above-mentioned reviews, this paper focuses strongly on one particular aspect of knowledge management – in this case, organizational learning – and describes various theoretical learning approaches, including systems thinking, single- and double-loop learning and the learning cycle[4]. With her review, Pasteur makes an important contribution to the better understanding of the different approaches to knowledge and learning, and their relevance to development organizations.

However, the weak point of the review is that the author neglects the link to the broader organizational strategy, or the implications for the *management* structures of the organizations. In fact, Pasteur expresses that these are less important than the tools and methods by which one decides to support organizational learning. However, if knowledge is acknowledged as a key component of development work, and learning is so important, this would imply that the organization's management needs to be structured in such a manner to optimize the flow, the sharing and the development of knowledge.

This is precisely one of the key pitfalls of many knowledge management for development approaches – they generally explore only components, tools, or methods, rather than harnessing a holistic approach, and designing and equipping its management structures accordingly. Therefore such approaches are likely to succeed only partially, within niches of the organization, rather than realizing the 'learning organization' as a whole, with benefits for its employees and its development constituents. For an organizational learning strategy to succeed, and to avoid being dismissed as a 'fad', it needs to be embedded in a knowledge management approach, and the management implications need to be taken into consideration.

This shortcoming is most explicitly illustrated by the following:

[4] See: Senge 1990, Argyris and Schon 1978, Pedler and Boutall 1992

> *The implications of this type of learning for an organization are less to do with knowledge management systems and processes, and more concerned with developing new tools for dialogue and holistic analysis, and attitudes and skills for working collaboratively*
> (Pasteur 2004: 6).

Indeed, knowledge management as a (technology) system was abandoned when the 'second generation' evolved. However, as illustrated above, organizational learning is an outcome of (successful) knowledge management, and an organization's ability to achieve this depends on how this is organized and managed as a *process*. While tools can and indeed do play an important auxiliary role in this, they are insufficient if one is to achieve organization-wide effect at a strategic level (see for instance Alavi and Leidner 2001). Unfortunately, the field of knowledge management for development focuses almost exclusively on the development of tools and methods, seeking toolkits, how-to guides and handbooks on how to implement knowledge management and organizational learning (see also Cummings 2006, discussed below), while the 'management' component (not to mention theory development) is neglected. As Alvesson and Kärreman (2001: 1000) point out, 'people interested in knowledge management typically find the knowledge part of the concept more intriguing and … more important than the management part', not to mention the preference for tools and methods to deal with this knowledge, over organizational mechanisms and processes to organize it and facilitate its effective flow.

This is also acknowledged in Krohwinkel's (2007: 12) study:

> *Although the main focus remains on the development of technology for effective handling of data, the recognition that knowledge transfer involves extended interpretation processes rather than simple information communication has led to a certain rapprochement between the knowledge management and learning organization fields. Knowledge management initiatives are increasingly seen as parts of larger organizational strategies aimed at creating climates and cultures that facilitate sharing and collective learning from experience.*

Conclusively, a much more thorough understanding of management implications is needed, viewed in knowledge terms, in order for organizations to become more effective in their implementation of knowledge management approaches. This involves identifying the unique knowledge assets of the organization, exploring the key organizational processes, and identifying how this knowledge can be streamlined in support of these processes, towards optimal achievement of organizational and, in this case, development goals.

Towards a mutual learning approach

One of the most influential reviews of the past few years, especially within development organizations, has been Ben Ramalingam's study (2005) ***Implementing knowledge strategies: lessons from international development agencies*****.** Based on 13 short cases, it explores eight core issues

pertaining to the knowledge management, along the spectrum from the theoretical introduction of knowledge and learning, to organizational embedding and external aspects of knowledge strategies. These issues come together in a comprehensive Knowledge Strategies Framework, which maps out *organizational knowledge*, *organizational links*, *organizational contexts*, and *external factors*, and provides the backdrop for the study's recommendations.

The review harnesses a pragmatic approach rather than providing a thorough theoretical analysis of knowledge management for development. It is not entirely clear which epistemological perspective Ramalingam embraces, or which organizational knowledge management approach guides the study (although brief reference is made to Nonaka and Takeuchi 1995), and this would have been of benefit to the conceptual depth of the study. However, the study has made an important contribution to development organizations' understanding of the purpose and complexity of knowledge management for development, and provides helpful guidelines in terms of navigating the multiple dimensions which a successful implementation of knowledge management for development should take into consideration.

An earlier review of Ramalingam's study (Song 2005) argued that it insufficiently clarifies *how* organizations should go about following through the recommendations. However, this is precisely one of the study's strengths: it is not a 'how-to' guide, with such a guide's intrinsic weakness that oversimplifies the complex design and implementation of a knowledge strategy. Instead, the study outlines the main issues which organizations should take into consideration, and use as a yardstick to develop the approach which best matches their unique organizational needs. This cannot be benchmarked, blueprinted, or captured in 'best practice', but indeed can have effect only if it matches an organization's very specific needs, in consideration of their very specific stakeholders, and their very specific context. This is in fact one of the main messages of the review, and one of its main strengths: its acknowledgment that there is no 'one size fits all' solution.

Ramalingam's study contains two important theoretical implications, resonating with the practice-based approach to knowledge. First, Ramalingam introduces *mutual learning* as a condition for successful knowledge strategies (see also King and McGrath 2004). Mutual learning involves a two-way transfer of knowledge, based on the autonomy of recipients. With mutual learning, the specific context in which knowledge is localized is emphatically taken into account: the individual's practices, situated at a community level, form the central pivot of knowledge creation, exchange and learning. Only if there is a sufficient connection between practices and contexts, can meaningful knowledge flows occur (Ferguson 2007).

This has three important consequences in terms of knowledge strategies as well as development processes overall: first, it allows for epistemic diversity, acknowledging the different *knowledges* inherent to peoples and societies (Molenaar 2006). Not only the sender's knowledge, but also the recipient's local knowledge and knowledge paradigm is acknowledged and built into the equation. Consequently, where mutual learning occurs, the adverse effects of *power inequalities* inherent to

epistemic relationships have been overcome. If stakeholders recognize each other's autonomy and value, they can find the common ground or context which can facilitate a horizontal flow of knowledge, and start building a relationship based on trust – a key factor in terms of knowledge sharing (Renzl 2008; see also Jarvenpaa and Leidner 1999, Child 2001, Newell and Swan 2000). Third, through mutual learning, stakeholders gain a more thorough *understanding of the cultural and socio-economic environment* of the intended beneficiaries. Development interventions depend to a large extent on how well knowledge of such factors is applied (Powell 2006). Conversely, successful development initiatives allow people to participate actively and equally in decision-making processes that affect them – possible only if the appropriate knowledge is available to them (Ferguson and Cummings, *2007*):

> *Knowledge and learning strategies in development organizations need to be clearly and realistically positioned within the broader dynamics of organizational life, as well as in the context of international development efforts as a whole. Perhaps most challenging, but equally unavoidable, is the need to locate efforts in relation to the specific knowledge and learning needs of organizations and beneficiaries in the South, such that the idea of knowledge transfer to the South is increasingly replaced by learning with and from the South* (Ramalingam 2005: 38).

It can be concluded that mutual learning with Southern stakeholders is a key success factor not only for knowledge strategies, but also for development processes overall – and therefore strategies aimed at facilitating mutual learning need to be woven into the very fabric of the development organization.

However, it is not clear how knowledge strategies have so far contributed to mutual learning and, if they have, what indicators can be used to account for this. This brings us to the second theoretical implication of Ramalingam's study, which relates to *impact*. He argues that organizations:

> *Appear to place a greater emphasis on the potential of knowledge management rather than on the tangible benefits it has already achieved. This may be driven by necessity – a result of the specific stage of the knowledge programmes in question, or it may be due to a lack of (monitoring and evaluation)* (Ramalingam 2005: 25).

In other words, there is a need for *evidence-based* answers to the question of what knowledge strategies are achieving in terms of organizational *and* development impact. In order to do this, impact studies need to move away from such exogenous indicators focused on accountability, but rather should explore such issues as inclusiveness, responsiveness, mutual learning and epistemic diversity (see also Hovland 2003). To do this, new frameworks and mechanisms are needed. One of the reasons for the focus on the *potential* of knowledge strategies is probably that they are relatively new and the frameworks and mechanisms needed to develop an evidence-base have not yet been developed.

The next few reviews, addressed in summary, zoom in on very specific aspects of knowledge management implementation in development organizations.

Knowledge management – for development?

K**nowledge sharing: a review of the literature** by Jeffrey Cummings (2003), a report of the Operations Evaluation Department of the World Bank, explores, from an evaluation perspective, one of the core issues in knowledge management, namely how to manage knowledge sharing. He defines this as:

> *The means by which an organization obtains access to its own and other organizations' knowledge … (It) involves extended learning processes rather than simple communication processes* (Cummings 2003: 1).

Without adaptation to the local needs and practices, knowledge sharing interventions have little chance of success. This is an important observation and indeed sets the tone for Cummings' review, namely the acknowledgment of locality and epistemic diversity which, although not explicitly discussed in his review, is a critical and under-emphasized component of knowledge management for development literature.

The review and bibliography display an elaborate overview of the formal organization science literature; the theoretical embedding of this research might be said to be the strongest of the various reviews discussed in this paper. Overall, Cummings' paper is based on the view of knowledge-intensive firms (Spender and Grant 1996), and as a result he explores the implications for this view when transferred to a development context. From here, he identifies five primary contexts that affect the success of knowledge sharing implementations, namely: the relationship between the source and the recipient; the form and location of the knowledge; the recipient's learning disposition; the source's knowledge sharing capability; and the broader environment in which the sharing occurs. These, in turn, are affected by three variables: the form and location of the knowledge; the managerial practices determining the flow of the knowledge; and the specific knowledge sharing activities.

Cummings' review responds to the gap which Pasteur (2004) and Hovland (2003) leave unaddressed, namely the link between knowledge management and organizational learning, identifying knowledge sharing interventions as one of the vehicles by which knowledge management can be operationalized, and organizational learning achieved. Furthermore, he identifies the opportunities and constraints affecting this dynamic.

Despite its theoretical strength, a main shortcoming of this review is its link to the development context, which is not explicitly explored, despite the World Bank's mission of global poverty reduction and the improvement of living standards. This is, in fact, somewhat ironic because of Cummings'

specific identification of the need to localize interventions, relevant to the context and practices specific to the actors involved.

As Hovland (2003) identifies, the overall purpose of development is different to the private sector, namely the achievement of MDGs versus competitive advantage (although we would argue that development needs to be interpreted more widely than simply focusing on the MDGs). Given this difference in the overall purpose, interventions in the two sectors will differ in terms of their approach and their objectives. Therefore it would be interesting to explore how the above-mentioned contexts and variables, seen from an organization science perspective, are affected by specific development contingencies such as political interests, gender and power inequalities, geographical constrictions, budgetary considerations, public accountability, and so forth. Most particularly, the World Bank as a major donor with significant political clout has enormous power, both financial and moral. Therefore an exploration of the inherent power inequalities between the Bank and its partners, and how this affects knowledge sharing and learning interventions, is an obvious – but perhaps overly political – issue for further research.

The need to profile KM programmes

Worth mentioning in response to this is Sarah Cummings' (2006) review of ***Knowledge management in large development organizations***. The study comprises a brief theoretical review and a number of case studies, including four multilateral development organizations, one of which is the World Bank. An important finding in Cummings' research is that the impact of the Bank's knowledge initiative has been limited, despite their pioneering role in terms of knowledge management for development and even their efforts to evolve into a 'knowledge bank'. She notes:

> *Evaluations by the Operations Evaluation Department (OED) of the World Bank suggest that the Bank's knowledge initiative was timely and appropriate, but not linked to core lending and non-lending processes* (Cummings 2006: 37).

This is salient in that, despite the understanding present within the Bank regarding knowledge management and knowledge sharing practices as reflected in Jeffrey Cummings (2003) above, the organization was apparently unable to translate this into relevant practice or to maintain the high-level support and leadership. This is identified by Sarah Cummings (2006) as one of the pre-conditions for a (sustainable) knowledge management policy; other such factors include identifying clear internal and external motivations; addressing geographically dispersed and diverse knowledge sources; creating clear linkages between learning and knowledge management; and ensuring a knowledge sharing 'culture' is fostered.

We highlight three important findings from Cummings' (2006) study. First, she argues that, because of its preoccupation with tools and methods, knowledge management for development is at times competing with IT budgets, often losing out. Another consequence of this is a lack of systematic

comparison of which tools are in fact most effective for organizational learning interventions, and, at a higher level, for achieving organizational goals. This might be ascribed to the fact that tools are often implemented without a clear strategy on how they support knowledge processes that contribute to organizational goals. Second, in line with this, the measurement of impact of knowledge management interventions is problematic. This is partially due to the intangible nature of knowledge and learning, but also due to the positioning of such interventions often side by side with monitoring and evaluation activities, which makes the lack of systematic assessment mechanisms all the more noticeable.

The third finding is not explicitly expressed in Cummings' study, but relates to the need for clear positioning and profiling of knowledge management activities. This is illustrated in the case study of the UK Department for International Development (DFID), who in fact had a leadership role in terms of knowledge management for development, but never realized this and was certainly not able to exploit this to its organizational advantage. Many DFID knowledge management interventions were initiated but not always in a coherent, consistent manner. The organization did not look beyond its own boundaries, insufficiently linked up with other initiatives, lost its leadership position and overall displayed a lack of 'joined-up thinking', which diminished the effect of the programmes. Conclusively, if an organization is to be recognized as an important knowledge management for development actor, forging the necessary linkages to sustain this position, it is important to profile this strategy to the internal and external audience.

Finding the right approach

An alternative approach is harnessed by Borton and Robertson (Eds., 2002), who dedicate their organization's (ALNAP) Annual Review to an exploration of how knowledge and learning have contributed to improved performance. This is an interesting example of knowledge management profiled as an organizational priority, while at the same time providing interesting research findings and thereby contributing to the theoretical development of the field.

ALNAP's thorough report, entitled ***Humanitarian action: improving performance through improved learning***, analyzes and defines key concepts pertaining to knowledge management and learning, linking them to humanitarian aid. In such a field, where life-saving activities depend on the timely and appropriate responses of the relief workers, the importance of getting knowledge to the right place at the right time is evident:

> *The urgent need to tackle humanitarian and environmental crises, such as the Asian tsunami, the human immune virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic, or the rescue of refugees in Sudan – to name but a few examples – puts organisations under pressure to share knowhow quickly and effectively, so that the latest scientific research findings as well as lessons derived from previous projects are readily available*
> (Quaggiotto 2005).

In such a context, effective knowledge management can make or break humanitarian actions.

In this context, the authors identify a number of specific constraints to learning in the humanitarian sector, including the tendency to approach each crisis as unique; the action-oriented nature of humanitarian work; the 'defensiveness' to critics, in view of the difficult work circumstances and the need to maintain public support; and a general lack of accountability. Nonetheless, a systematic analysis of learning styles and approaches is provided in order to present different ways to overcome these obstacles.

Given its thorough theoretical introduction and the identification of examples to underpin their evidence, the report does a convincing job in terms of underscoring the importance of knowledge management to humanitarian aid. However, it focuses strongly on one particular approach, namely 'Learning before, during and after' (LBDA). This is an approach whereby different learning methods (such as peer assist, after action review, etc.) are introduced in different stages of an intervention in order to ensure the inclusion of a learning component throughout and based on an iterative process. While this can be a valuable way to ensure knowledge and lessons are shared and learning is mainstreamed in organizational processes, it does not become clear from the review why this particular approach is favoured over others, and how ALNAP itself has learnt from its implementation. For instance, the study reports that:

> *As was found in the Annual Review 2001, promoting participation in planning and design has proved extremely difficult* (Borton and Robertson 2002: 138).

What approaches were applied to address this problem? Were communities of practice considered, to name an alternative possible KM mechanisms? Such questions are left unanswered, and as a result, their choice for LBDA comes across as somewhat random. Moreover, it indicates disconnectedness between the theoretical introduction and the research findings, to the detriment of what is otherwise a thorough report and an interesting read.

Overall, one is left wondering, what knowledge management approaches are most effective in a humanitarian context, and why?

Exploring power dynamics and hierarchies of knowledge

The importance of networks in terms of fostering participation in decision making and policy processes is underscored in Perkin and Court (2005), ***Networks and policy processes in international development***. As the title implies, this study zooms in on network dynamics, as these comprise a critical aspect of knowledge management (Cummings and Van Zee 2005). Networks allow peers to form *communities* in which knowledge needs pertaining to a field of practice are expressed and addressed, in which knowledge is developed and assumptions are verified. The central theme of the analysis is that networks have great potential to help civil society organizations (CSOs) influence

international development policy, but it is difficult to realize this potential because of the inherent pitfalls associated with networking (Perkin and Court 2005: 14), relating to issues such as participation, power dynamics, representation, sustainability, and so forth.

In response, the report explores the characteristics which contribute to a network's success in influencing policy, by undertaking a thorough analysis of the role of networks in policy processes, and the factors influencing and relating to this process. In summary, it includes 'ten keys to success (How to do it!)', an approach generally appreciated by development practitioners, because it provides 'flesh and blood' to an otherwise abstract discussion. Because the 'ten keys' remain at a fairly high level (often the problem with 'lessons learned' and other such generalizations), it avoids the pitfall of 'best practices' which implies that an approach that works in a particular context is replicable in another, irrespective of localization and context (see also Orlikowski 2002). As the authors emphasize:

> *It is important to remember that approaches based on knowledge gleaned in one country may not be appropriate to the situation of another country – and hence, such international networking creates problems of legitimacy and representativeness*
> (Perkin and Court 2005: 18).

Notwithstanding, the authors identify two general key stages in the policy formulation process:

> *…determining the policy options and then selecting the preferred option. … For both stages, policymakers should ideally ensure that their understanding of the specific situation is as detailed and comprehensive as possible – only then can they make informed decisions about which policy to … implement* (Perkin and Court 2005: 17).

In both of these stages, networks of CSOs can play a critical role in view of promoting pro-poor policy formulation:

> *Communicating grassroots and research evidence in order to enhance (policy makers') understanding of the specific situation, and using innovative means to link actors and ideas together and build a pro-poor consensus* (Perkin and Court 2005: 17).

However, this idealized approach to policy making and influencing insufficiently recognizes the political aspects inherent to the process, in which political interests and stakes affect the 'linearity' of the policy-making process. In reality, the process is more whimsical, subject to interests and negotiation. Moreover, this perspective implies:

> *That it will be possible, at some undefined point in the future, to have 'all the knowledge we need' and that only at that point we will be able to address the major challenges before us….Simply providing more and more information relating to a problem will not ensure that it is solved* (Parker 2000: 233).

Decision making is rather about finding out what works, using the information available, and making a pragmatic decision based on it.

Overall, Perkin and Court's report provides two important contributions to research on knowledge management for development. First, it emphasizes the need to include *localized knowledge* in networks. In other words, taking into account local contexts and local perspectives in terms of advocacy, in order to ensure that policies are relevant to grassroots development purposes. Second, it identifies the importance of *recognizing power dynamics and hierarchy* in networks, associated with membership and thereby issues of inclusion and exclusion. This brings forth the need to explore:

> *How it is that certain ideas come to be adopted as the dominant thinking in international development policymaking bodies* (Perkin and Court 2005: 29).

Part 4: Beyond Anglo-Saxon discourse

A literature review of knowledge management reflects different directions in knowledge management discourse according to geographical, cultural or linguistic traditions. In general terms, the dominant, Anglo-Saxon literature has a strong tendency to focus on practical aspects of knowledge management, such as tools and methods[5], deriving from good practices (Robert 2005). In this context communities of practice (Wenger 1998), for instance, play a critical role both in practice and in the literature.

Japanese knowledge management literature, dominated by the work of Nonaka (1994), reflects a philosophical dualism between the complementary, dynamic forces describing the interaction between human perceptions and the natural world, perhaps reflective of Zen-influenced Japanese culture. In this perspective, the observer and what is being observed (Powell 2006) are viewed as a dynamic unity. In knowledge management, this relates to the interaction between tacit and explicit knowledge, described in Nonaka's 'spiral of knowledge creation'. This cycle describes the conditions and modes by which knowledge is created, internalized and externalized, and through this process contributes to the redefinition of actors (see also Nonaka and Toyama 2003). Nonaka's (1994) famous SECI model describes the processes of *socialization, externalization, combination* and *internalization* by which this takes place in organizations. Finally, Latin literature (Francophone, Spanish, Italian), similar to the Japanese, takes a more metaphysical perspective on knowledge management. This literature focuses on the philosophical debate, exploring concepts (Robert 2005). Key terms in this discussion are '*capitalisation*' and '*valorisation*'.

[5] See for instance Alavi and Leidner's (2001) useful review of knowledge management and knowledge management systems.

These two terms have been the subject of discussion in forums such as KM4Dev [www.km4dev.org] on different occasions, because they prove difficult to translate. The concepts comprise a far richer connotation than their direct Anglo-Saxon counterparts ('capitalization' and 'validation') would suggest. Geneviève Georges' (2006) review ***Etude sur les changements d'attitudes necessaries à la réussite d'un project de gestion de la connaissance dans le secteur des ONG***[6] illustrates the limitations of the English language in terms of knowledge and knowing: the verb 'to know' refers both to the connotation of being acquainted or familiar with someone or something – as in the French *connaître* – as well as to the connotation of having a firm understanding of something – the French *savoir*, which has its etymological roots in *sagesse*, wisdom. In view of such asymmetries pertaining to key terms, one might understand the depth of the discursive differences.

The term *capitalisation* is introduced by Georges in the context of connecting (people) and collecting ('knowledges'). *Capitalisation* refers to the strategy which KM specialists adopt in order to maximize the organization's benefit from the type of knowledge which each of these approaches entails (see also Robert 2005). It comprises the dynamic by which 'knowledge capital' is harnessed in the organization's practice and structures in order for it to fulfil its tasks, and improve its products and services. As such, it comprises a process approach, indeed as a project of change:

The purpose of experience capitalization has only been achieved once a practice has actually been adjusted. (Manuel Flury to the KM4Dev list on 27 June 2007). In other words:

> *Capitalisation (sic) is a fairly comprehensive and systematic process of reflecting upon work, documenting it, stripping the lessons off (or explaining) their jargon and contextual information to make it accessible to others and eventually publishing/disseminating/sharing it with others. … (the term) falls close to the Spanish word 'Sistematización.*
> (Ewen Leborgne to the KM4Dev list on June 26, 2007).

The term *valorisation* builds on *capitalisation*, and is explored further in **Sylvie Robert**'s (2005) ***Le capital mémoire. Identifier, analyser et valoriser l'experience dans les institutions***. Again, the term cannot be translated one-on-one, but in this context, *valorisation* commands a sense of validation of intellectual capital, towards an organization's core needs. In other words, the process of *capitalisation* as described above comprises three phases: identification, analysis and validation. The latter however is not a simple activity, but comprises a wide number of knowledge-related components: sharing, reproducing, improving, innovating, reinvesting, making accessible, and so forth, down the line to 'materializing' and enriching.

[6] Translated as 'Study on the necessary attitude changes needed for a successful knowledge management project in the NGO sector'.

Overall, one might conclude that the Latin world of knowledge management (or rather: *gestion de la connaissance,* 'GC') tends to focus on the big picture, aiming to address larger chunks of a given subject, towards more comprehensive and abstract strategies (Ewen Leborgne to the KM4Dev list, June 26, 2007).

From a wider perspective, Georges and Robert do not agree on the relevance of these language-related issues. Georges, while recognizing the limitations which different language contexts might introduce to a discourse, concludes that the differences lie not so much in the French versus the English, but in the lack of overall clarity pertaining to the central terms in knowledge management. She quotes a research study focusing on precisely this issue[7], which in fact concludes that the epistemological differences between authors of a same language are equally important as those between languages. Robert, on the other hand, emphasizes that the Latin knowledge management literature does intrinsically differ from the Anglo-Saxon in that, through its philosophical approach, it takes into account more strongly the specific context and larger environment, rather than going for pragmatic, standardized approaches (Robert 2005: 73-74).

The implications of these translation issues for research are manifold. We will focus on the three most important ones. First, they illustrate the need to question established *discourse*, to encompass other perspectives and new discourses. Participation in dominant development discourse requires a particular mindset, jargon and intellectual baggage; this means it is inherently exclusive to those who do not command this knowledge – marginalized people, the supposed beneficiaries of development interventions. As a result, development discourse is dominated by 'experts', and maintaining the discourse involves maintaining the power structures and control which development precisely seeks to overcome (see for instance Mudimbe 1988, Escobar 1995, or more recently: Easterly 2006, Unwin 2007). Moreover, the discourse itself becomes the focus of attention (see also Foucault 1980), from the perspective of the 'experts', rather than the underlying situation, from the perspective of the people directly facing the challenges at its core (Ferguson 2007).

This has led to a perverse situation in which one particular culture, its values, and related knowledge systems are favoured over another:

> *Development has relied exclusively on one knowledge system, namely the modern Western one. The dominance of this knowledge system has dictated the marginalization of non-Western knowledge systems* (Escobar 1995: 13).

This brings us to the second point: the need to take into account *epistemic diversity* (Molenaar 2006). In this view, different discourses, indeed different *knowledges* can coexist, rather than placing a single knowledge paradigm at the heart of all development discourses. Indeed, effective knowledge

[7] Dening, A (2004) A study of concepts of Knowledge Management as Expressed in the French and English Languages. Thesis, University of York.

strategies depend on *situated learning* (Lave and Wenger 1991): the appropriation and application of knowledge in the practice central to the individual's needs. Without inclusion of the *knowledges*, 'situatedness' is insufficiently accounted for, and no knowledge sharing can take place.

Third, and in line with this, the translation issue emphasizes the need for *mutual learning* in knowledge management processes. As elaborated above, mutual learning allows for horizontal flows of knowledge, in a shared context, whereby the autonomy and equality of stakeholders are recognized. This means that differences of context and language need to be acknowledged and overcome, in order to foster effective knowledge flows, leading to a thorough understanding of socio-cultural situations, and allowing for appropriate development interventions in response.

Part 5: Research issues in knowledge management for development

A review of knowledge management for development literature reveals that, contrary to mainstream knowledge management literature (see for instance Alavi and Leidner 2001), the theoretical basis of knowledge management for development is weak, and practice-based implementations prevail. This is probably because most of the commentators on this subject are practitioners themselves who are not aware of the range of theories which underpin knowledge management. This is further obscured by the multidisciplinary character of knowledge management. As a result, the knowledge management for development 'community' continues to focus overly-strongly on pragmatic issues pertaining to the implementation of knowledge management, such as tools and methods, good practices, cultural and enabling factors. This approach insufficiently accounts for intercultural and contextual differences, and insufficiently explores the implications of a knowledge-oriented approach at a strategic management level for the organizational processes.

For this reason, a future research agenda on knowledge management for development would fill an important gap by addressing the following themes:

- Research questions related to the Northern, Anglo-Saxon bias of knowledge management discourse;
- Research questions concerning the creation of knowledge in different constellations of development organizations;
- Research questions concerning the 'human face' of knowledge management;
- Research questions concerning approaches to bridging knowledge asymmetries; and
- Research questions concerning evaluation of knowledge management.

Each of these themes will be explored in more detail below.

Research questions related to the Northern, Anglo-Saxon bias in the dominant knowledge management for development discourse

Much of the literature on knowledge management for development originates in the North[8]. Nonetheless, there is evidence that other approaches to knowledge management are in existence, even though they have not been specifically labelled as such. Research in the field of knowledge management for development should be exploring these issues, in order to explore the relevance and validity of different approaches to local contexts. The paper has demonstrated that the Latin tradition of knowledge management has not developed parallel to the Anglo-Saxon tradition. For this reason, research should examine the development of knowledge management in other linguistic and cultural domains with a view to facilitating cross-fertilization between differing approaches.

Table 2. Research questions related to the Northern, Anglo-Saxon bias of dominant knowledge management discourse

Research question 1: What is the Northern, Anglo-Saxon bias in the dominant knowledge management for development discourse?
Research question 1a: What approaches to knowledge management for development have been development outside the Anglo-Saxon tradition?
Research question 1b: What other approaches to knowledge management for development – although not labelled as such – are in existence in the South?
Research question 1c: How can these other approaches to knowledge management be integrated into knowledge management for development?
Research question 1d: What are the cultural, linguistic traditions in knowledge management and how can translation between these domains enrich knowledge management for development?

Research questions concerning the creation of knowledge in different constellations of development organizations

Central to this paper is a pragmatic, community epistemology. This means that knowledge gains meaning through interaction in practice, and therefore has a social component. As such, an analysis of knowledge management for development needs to explore the different stakeholders in the 'knowledge process', to understand how they deal with knowledge in their organizational processes, and how they interact with their partners.

[8] Knowledge management theory with a specific 'Southern' focus is scarce, but see for instance the *Knowledge Management for Development Journal*, (2006, Vol. 2, No. 1) special issue on 'Effective knowledge sharing for development in Africa', http://www.km4dev.org/journal/index.php/km4dj/issue/view/6 and (2007, Vol. 3, No. 2) special issue on 'Knowledge sharing and knowledge management in Latin America and the Caribbean' (2007), http://www.km4dev.org/journal/index.php/km4dj/issue/view/11.
Further, Kasten and Illa (2005) introduce African knowledge management through the concept of 'Ubuntu' as a key African business practice.

The 'development community' involves a broad variety of stakeholders, from grassroots practitioners, to non–governmental organizations (NGOs), bilateral donor agencies and multilaterals. Most knowledge management for development strategies are – implicitly or explicitly – designed to strengthen Southern counterparts' abilities to respond more effectively to their daily contingencies, and participate more equally in decision-making processes. In reality however, this is rarely realized, and knowledge strategies contribute primarily to the organization's internal knowledge capacities, than to that of their counterparts (see for instance Ramalingam 2005). Where a Southern component is explicitly included, this still more often provides knowledge benefits to the donor or development organization than to the Southern development partners themselves. Indeed, their participation often proves instrumental (Engel *et al.* 2003) rather than driven by effective participation of all stakeholders in the development process. This is something that King identified in 2000 when commenting on knowledge management initiatives:

> *The agencies have not started with the dramatic knowledge deficits, nor with the key question of how knowledge management could assist knowledge development in the South. A continuation along their present trajectory will arguably be counter-productive; it will make agencies more certain of what they themselves have learnt, .and more enthusiastic that others should share these insights, once they have been systematized*
> (King 2000, cited in Kalseth and Cummings 2001).

Powell (2006) argues that this is a fundamental flaw in current understanding of how knowledge is presented and used in the development sector: the lack of consideration of knowledge recipients' skills to interpret and use the knowledge as well as their needs – not only in terms of content, but also the format:

> *If we are interested in applying knowledge to development problems, our concept of knowledge needs to extend to the user's successful receipt and understanding of such knowledge. Failure to achieve this means we may have created knowledge, but we have not created the conditions in which it can be applied* (Powell 2006: 520).

Consequently, development knowledge must be understood as a multi-agent construct, based on very different understandings, ideas and assumptions. In order to understand what 'knowledge management for development' means and involves for the different stakeholders, and how the interaction between them can be improved, it makes sense to explore the epistemological underpinnings of knowledge strategies within multilateral, bilateral, non-government and grass-roots organizations.

Table 3. Research questions concerning knowledge management in different constellations of development organizations

Research question 2: How do different constellations of development organizations cultivate knowledge creation, knowledge sharing and knowledge leveraging?
Research question 2a: What are the main objectives of knowledge management in multilateral, bilateral and non-government development organizations?
Research question 2b: What differences and trends can be identified in terms of the phases of development of knowledge management approaches, between constellations of organizations?
Research question 2c: What differences can be observed between knowledge management interventions in Northern versus Southern development organizations?
Research question 2d: How well-aligned are knowledge management for development strategies to organizational processes, and how can this be improved?

Research questions concerning the 'human face' of knowledge management

As identified in the review above, knowledge management has a tendency to focus on tools, good practices and (generic) methods, rather than organizational processes, based on knowledge needs of staff and partners. As a result, knowledge strategies often insufficiently take into account the human aspects of knowledge management, such as incentives, attitudes, language, culture and particular knowledge needs; they fail to capitalize on individuals' networks and social capital; and are unable to 'upscale' individual knowledge and learning to an organizational level:

Simply documenting, managing and archiving the abundance of knowledge generated by development partners and stakeholders is not enough. … Knowledge and evidence (of what works) need to be contextualized, enriched, interpreted, debated and disputed – 'set free', if you like – in order for learning to occur among a multitude of stakeholders with divergent interests and world views (Keijzer et al. 2006).

Table 4. Research questions concerning the human face of knowledge management

Research question 3: How are contextual differences accounted for in knowledge management interventions? How to align these in coherent strategies?
Research question 3a: How do knowledge management for development strategies respond to knowledge needs of development practitioners in the South?
Research question 3b: How do differences in language and culture among stakeholders affect knowledge management for development interventions?
Research question 3c: How can individual knowledge needs be aligned with organizational knowledge objectives and approaches?
Research question 3d: How can individuals in an organization be motivated to share and use knowledge in different contexts?

The human aspects of knowledge management are complex on two levels: first, at an individual level: this involves aspects of accounting for individual contexts, paradigms and capital, and responding to

these at an organizational level. Second, at an organizational level: this involves the complexities of managing the collective body of organizational knowledge, simulating 'organizational learning', and finding an adequate balance between *fostering* emerging knowledge and *managing* knowledge processes (Alvesson and Kärreman 2001, Thompson 2005, Huysman *et al.* 2007).

Research questions concerning approaches to bridging knowledge asymmetries

Over the past decade, many international development agencies have broadened their activity portfolios beyond financial support of development projects or programmes, focusing increasingly on capacity development and knowledge sharing. This trend is a response to the need for enhancing development understanding, expressed both within these agencies as well as amongst their constituents and partners (Cummings et al., 2006).

Despite such efforts among development agencies, as well as between the fields of development practice, research and policy, knowledge transfer between different parties and constellations is limited and collaboration is restricted. Mostly, there is a dearth of relevant knowledge reaching Southern stakeholders, and even less Southern knowledge flowing northwards. While many efforts to bridge this gap have been initiated, almost as many have failed[9].

Such knowledge asymmetries are problematic for many reasons. First, as indicated above, knowledge asymmetries lead to insufficient awareness of stakeholders' needs and contexts. NGOs assume they know the on-the-ground reality, design interventions based on their assumptions and as a result, fail to respond effectively to the problems which they perceive as most pressing. Second, there is a dearth of exchange of formal knowledge. Research findings fail to find their way to the millions of people who could benefit from this knowledge. Conversely however, important research findings from the South insufficiently penetrate Western journals; therefore their impact on the research agenda is limited, but further, responses to their situation remain outstanding: they simply don't appear on the research agenda, unless from a Western point of view. Third, knowledge asymmetries lead to unequal participation in policy and decision making processes – stakeholders are insufficiently equipped to participate in such debates and dialogues. All these reasons lead to inequalities in terms of opportunities for human development and livelihoods opportunities. If knowledge management for development is to become more effective, significant attention must be paid to overcoming knowledge asymmetries, and achieving a mutual learning dynamic.

[9] An issue of the *Knowledge Management for Development Journal* (Vol. 2, No. 3) focuses on the issue of 'Bridging knowledge divides'. See http://www.km4dev.org/journal/index.php/km4dj/issue/view/8

Table 5. Research questions concerning knowledge asymmetries

Research question 4: How do knowledge management for development strategies contribute to overcoming knowledge asymmetries?
Research question 4a: What knowledge asymmetries are there in development, and how can these be overcome?
Research question 4b: How can knowledge management approaches contribute to mutual learning?
Research question 4c: What is the role of multiple knowledges in overcoming knowledge asymmetries?

Research questions concerning evaluation of knowledge management

One of Ramalingam's (2005) conclusions, discussed above, is that knowledge strategies generally show promise of future potential – rather than conclusive evidence of success towards development efforts. Numerous causes can be identified as to why this is so. First, the relative novelty of explicit 'knowledge for development' strategies and, because of this, the lack of critical mass/impact evidence for research purposes. Second, the lack of effective measurement tools that go beyond output-based or anecdotal evidence, and which succeed in making outcomes plausible beyond a subjective narrative. Third, the elusive and often tacit nature of knowledge makes it very difficult to grasp concrete effect or even direct results from its application, in addition to which, knowledge is often compiled from diverse information sources and therefore the identification of a single source of provenance is in many cases complex if not impossible (Schilderman 2002). Fourth, and related to this, is the emphasis on control evaluation rather than on learning by NGOs and donors alike (Engel *et al.* 2003) which is problematic when addressing 'impact' of knowledge strategies: quantitative outcomes of qualitative results are difficult to come by or express. And finally, the concept of 'impact' – and the indicators for its measurement – needs to be redefined, to allow for the evaluation of knowledge strategies: traditionally, development is understood in the context of economic development, related to concepts of welfare and economic dynamics. However, this restricts the purpose of development to quantifiable variables such as capital accumulation (Laszlo and Laszlo 2002), rather than a process involving human factors, concerned with individual people living in very different conditions across the world (Unwin, forthcoming), seeking to participate more actively in processes that can improve their personal situation. Knowledge management for development focuses primarily on the latter – however, evaluation mechanisms still predominantly focus on the former, based on reporting frameworks designed for a service rather than a knowledge industry (see also Powell 2006).

The issues identified by Hovland (2003) as still outstanding all pertain to aspects of impact. She questions whether and how knowledge management strategies can be better aligned to the needs of intended beneficiaries in the South, how knowledge management can improve development organizations' impact on policy design and its translation into practice, and how it can improve Southern engagement in development debate. These issues are all still outstanding, and this is

problematic for three reasons. First, a fundamental political problem presents itself: to what extent do KM4D strategies recognize or address dominant power structures – i.e. are the poor being empowered through enhanced access to knowledge? Second, ethical questions pertaining to the reliability, purpose, means of collection and storage of knowledge are left unaddressed:

> *Knowledge can be created, omitted or withheld, suppressed, amplified or exaggerated, diminished or distorted. Such activities may arise by accident or mischance … but often manipulation is instrumental* (Land et al. 2007: 2).

Third, and in view of such reasoning, one might question the relevance, validity and objectivity of the knowledge provided by various development organizations – each with their own mission, driven through religious, cultural, humanist, or other convictions. Without insight into these questions, such strategies can be counterproductive to their purpose, and consequently they could be responsible for enlarging knowledge gaps and asymmetries, rather than closing them.

Table 6. Research questions concerning evaluation of knowledge management

Research question 5: What is the development impact of knowledge management?
Research question 5a: What indicators have been developed to measure the impact of knowledge management for development?
Research question 5b: How can non-linear evaluation/impact assessment of knowledge management for development be developed and what are their characteristics?
Research question 5c: What level of impact can knowledge management strategies hope to achieve?
Research question 5d: How are dominant power structures in development being addressed by knowledge strategies?
Research question 5e: Which knowledge management approaches have been most effective, and why?

Part 6: Summary and conclusions

This paper has sought to develop a theoretical framework of knowledge management for development, presenting the discipline and conducting a 'meta review' of the key reviews from this past decade. It is, however, faced with one intrinsic limitation in that much of the knowledge management for development literature originates from Northern sources. This reflects a vast and complex reality beyond the remit of this paper which we are unable to address here.

Several general conclusions may be drawn from this review. First, we identified that KM4D strategies are generally weak in terms of their theoretical embedding, often basing themselves on a cognitive approach, while displaying a practice-based view of knowledge. We argue that a more thorough

epistemological understanding and theoretical underpinning would benefit knowledge strategies, in that the complexities pertaining to epistemic and organizational dynamics might be better understood, and, therefore, translated into more effective knowledge interventions.

Second, knowledge strategies are often overly focused on tools, good practices and methodologies, rather than exploring organizational processes from a knowledge perspective, identifying how individual knowledge 'capital' can be harnessed at an organizational level, how and where the knowledge strategies can play a role in reaching organizational objectives. As a result, specific contextual aspects are neglected both within the organization and among development partners, obstructing mutual learning among stakeholders.

Third, there is limited overall understanding of what constitutes 'impact' from a knowledge management perspective, and what indicators and mechanisms can be harnessed to measure and demonstrate this. If it is not clear what knowledge for development interventions ultimately aim to achieve, there is little chance that coherent, purposeful approaches can be developed.

Fourth, we identified five main fields for further research, synthesizing these elements. These pertain to the intellectual traditions of dominant knowledge management for development discourse; the use of knowledge strategies in different constellations of development organizations; to human aspects of knowledge management, and the possibility of upscaling this to an organizational level; to the addressing of knowledge asymmetries, standing in the way of mutual learning; and to the impact evaluation of knowledge management for development.

As outlined above, there are many outstanding research issues pertaining to knowledge management for development, and the theoretical development of the discipline is still incipient. However, we believe that development is in fact a 'knowledge industry': the success of development initiatives depends on a thorough understanding of the cultural and socio-economic environment of the intended beneficiaries, and how well knowledge of these factors is applied (Powell 2006). Conversely, successful development initiatives should allow people to participate actively and equally in decision-making processes that affect them – possible only if the appropriate knowledge is available to them (Ferguson and Cummings 2007). As such, knowledge management for development is a field that will gain importance over the next few years. It can be safely stated that it will not be dismissed as a 'fad' and, similar to mainstream or generic knowledge management (see for instance Koenig 2005), it still shows steady growth. Knowledge management for development strategies are still eagerly being defined and rolled out among development organizations across the world, with ambitious budgets to match. Therefore, it is of critical importance that not just 'knowledge officers', but particularly managers and policymakers, develop a more thorough understanding of the organizational implications of such approaches, and develop more awareness of the epistemic diversity – the *knowledges* – local to their stakeholders: donors, other policymakers, and development practitioners in North and South. Thorough responses to the outstanding issues outlined above should receive far

more prominence in research agendas and become the focal point of inquiry. Through the issues identified and outlined in this scoping paper, we have attempted to kick-start this agenda.

References

Alavi, Maryam and Dorothy E. Leidner (2001) Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly* 25(1): 107-136

Alnap (2002) Humanitarian Action: Improving Performance through Improved Learning. Alnap Annual Review 2002. Alnap: London

Alvesson, Mats and Dan Kärreman (2001) Odd Couple: Making Sense of the Curious Concept of Knowledge Management. *Journal of Management Studies* 38(7): 995-1018

Argyris, C. (1992) *On Organisational Learning*, Blackwell, Oxford

Boissiere, Noel (2000) *Assessing the Impact of Information on Development: notes on the research and the case studies.* National Commission on Libraries and Information Science, Presentations at World Bank/IMF Regional Information Systems Conference, Oct. 11, 2000, Washington.

Britton, Bruce (2005) *Organisational learning in NGOs: creating the motive, the means and opportunity*. Praxis Paper No. 3, Intrac: Oxford

Brown, John Seely and Paul Duguid (1991) Organizational learning and communities-of-practice: toward a unified view of working, learning and innovation. *Organization Science* 2(1): 40-57

Brown, John Seely and Paul Duguid (2001) Knowledge and Organization: A Social-Practice Perspective. *Organization Science* 12(2): 198-213

Brown, John Seely and Paul Duguid (1998) Organizing Knowledge. *California Management Review* 40(3): 90-112

Child, John (2001) Trust – The Fundamental Bond in Global Collaboration. *Organizational Dynamics* 29(4): 274-288

Cook, Scott D.N and John Seely Brown (1999) Bridging Epistemologies: the generative dance between organizational knowledge and organizational knowing. *Organization Science* 10(4): 381-400

Contu, Alessia and Hugh Willmott (2003) Re-Embedding Situatedness: The Importance of Power Relations in Learning Theory. *Organization Science* 14(3): 283-296

The Courier ACP-EU May-June 2002

Cummings, Jeffrey (2003) *Knowledge Sharing. A review of the literature.* OED, World Bank: Washington.

Cummings, Sarah (2006) *Knowledge management in large development organizations, with a focus on bilateral donor organizations*. Desk study commissioned by DGIS, Ministry of Foreign Affairs, the Netherlands.

Cummings, Sarah and Julie Ferguson (2006) Bridging knowledge divides: the role of partnerships and cross-cutting initiatives. *Knowledge Management for Development Journal* 2(3) http://www.km4dev.org/journal/index.php/km4dj/issue/view/8

Cummings, Sarah and Julie Ferguson (May 2005), Guest Editors, Supporting communities in development: tools and approaches. *Knowledge Management for Development Journal* 1(1)

Cummings, Sarah and Kingo Mchombu (2003) Developing Evaluation Practice in the Information Sector. *Information Development* 19(2): 77-83

Davies, Jackie (2006) ICT in the Health Sector: Literature Review. (Prepared for InfoDev) www.asksource.info/res/ict/htm (accessed 8/12.2007)

Denning, Steven (1998) *What is knowledge management?* World Bank Knowledge Management Board, World Bank: Washington

Easterly, William (2006) *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. The Penguin Press: New York

Engel, P., Carlsson, C. and A. van Zee. 2003. *Making evaluation results count: Internalising evidence by learning,* ECDPM Policy Management Brief no. 16. ECDPM: Maastricht.

Escobar, Arturo (1995) *Encountering Development. The making and unmaking of the Third World*. Princeton Studies in Culture/Power/History. Princeton University Press, Princeton: New Jersey.

Ferguson, Julie (2005) Bridging the gap between research and practice: overcoming cultural barriers in a knowledge network. *Knowledge Management for Development Journal* 1(3): 46-54.

Ferguson, Julie (2007) *There's no such thing as a 'knowledge society'. Towards a society of knowledges.* Symposium on Evaluation in the Knowledge Society. European Evaluation Society/University of Southern Denmark: Odense 18-19 October 2007

Ferguson, Julie and Sarah Cummings (2007) Knowledge management in practice: The case of international development. In: Alex Koohang (Ed.) *Knowledge Management,* The Informing Science Press: Santa Rosa, California

Foucault, Michel (1977) *Discipline and Punish*. Penguin Books: London

Foucault, Michel (1980) *Power/Knowledge. Selected Interviews and Other Writings 1972-1977.* The Harvester Press: Brighton

George, Geneviève (2006) *Etude sur les changements d'attitudes necessaries à la réussite de la connaissance dans le secteur des ONG.* Méthodologies et technologies pour un développement durable. COTA asbl: Bruxelles

Gherardi, Silvia (2006) *Organizational Knowledge: the Texture of Workplace Learning*. Blackwell Publishing: Malden, MA

Gooijer, Jinette de (2000) Designing a knowledge management performance framework. *Journal of Knowledge Management* 4(4), 303-310

Grant, Robert M. (1996) Towards a Knowledge-Based Theory of the Firm. *Strategic Management Journal* 17(Special Winter Issue): 109-122

Grant, Robert M. (2002) The Knowledge-Based View of the Firm. In: Chun Wei Choo and Nick Bontis (Editors) *The Strategic Management of Intellectual Capital and Organizational Knowledge.* Oxford University Press: New York. pp: 133-148

Gwin, Catherine (2003) *Sharing Knowledge. Innovations and remaining challenges*. An OED Evaluation. The WorldBank: Washington D.C.

Hansen, Stephen A. and Justin Van Fleet (2003) *Traditional Knowledge and Intellectual Property*. AAAS: Maryland.

Hardy, Cynthia (1996) Understanding Power: Bringing about Strategic Change. *British Journal of Management* 7(Special Issue): S3-S16

Henderson, Kim (2005) The knowledge sharing approach of the United nations Development Programme. *Knowledge Management for Development Journal* 1 *(2):* 19-30 http://www.km4dev.org/journal/index.php/km4dj/article/viewFile/21/17

Hislop, Donald (2005) *Knowledge management in organizations*. Oxford University Press: Oxford

Holden, Nigel J. and Harald F.O. Von Kortzfleisch (2004) Why Cross-Cultural Knowledge Transfer is a Form of Translation in More Ways than You Think. *Knowledge and Process Management* 11(2): 127-136

Horton, Forest Woody (2000) *Defining and assessing the impact of information on development.* FID Publication No. 720, FID Occasional Paper No. 16, International Federation for Information and Documentation: The Hague

Hovland, I (2003) *Literature review knowledge management and organisational learning*. Working paper 224. ODI: London.

Huysman, Marleen, Marloes Agterberg, Bart van den Hooff, Maura Soekijad (2007) *Organizing Multi-Level Embeddedness of Networks of Practice*. Proceedings of OLKC 2007 – "Learning Fusion": Canada

Huysman, Marleen and Dick de Wit (2004) Practices of Managing Knowledge Sharing: Towards a Second Wave of Knowledge Management. *Knowledge and Process Management* 11(2): 81-92

Jarvenpaa, Sirkka L. and Dorothy E. Leidner (1999) Communication and Trust in Global Virtual Teams. *Organization Science* 10(6): 791-815

Kalseth, Karl and Sarah Cummings (2001) Knowledge Management: development strategy or business strategy? *Information Development*, 17(3): 163-172

Karsten, Luchien and Honorine Illa (2005) *Ubuntu* as a key African management concept: contextual background and practical insights for knowledge application. *Journal of Managerial Psychology* 20(7): 607-620

Keijzer, N., Ørnemark, C. and P. Engel (2006) *Networking for learning: The human face of knowledge management?* ECDPM Policy Management Brief no. 18. ECDPM: Maastricht

Kim, Jong-Ae (2006) Measuring the Impact of Knowledge Management. *IFLA Journal* 32(4): 362-367.

King, Kenneth and Simon McGrath (2004) *Knowledge for Development? Comparing British, Japanese, Swedish and World Bank aid*. HSRC Press: Cape Town

Koenig, Michael E.D. (2005) *KM moves beyond the organization: the opportunity for librarians*. World Library and Information Congress: 7th IFLA General Conference and Council. "Libraries – A voyage of discovery". August 14-18 2005, Oslo, Norway.

Krohwinkel-Karlsson, Anna (2007) *Knowledge and Learning in Aid Organizations. A literature review with suggestions for further studies*. SADEV Working Paper 2007:1. SADEV: Karlstad

Land, Frank, Urooj Amjad and Sevasti-Melissa Nolas (2007) The Ethics of Knowledge Management. *International Journal of Knowledge Management* 3(1): 1-9

Laszlo, Kathia Castro and Alexander Laszlo (2002) Evolving knowledge for development: the role of knowledge management in a changing world. *Journal of Knowledge Management* 6(4): 400-412

Lave and Wenger (1991) *Situated learning: Legitimate peripheral participation*. Cambridge University Press: Cambridge

Leeuwen, Arthur van, Annemieke Beekmans, Reintje van Haeringen *(2007)* Knowledge management to connect and strengthen people's capacities in Latin America. *Knowledge Management for Development Journal* 3(2): 85-94
http://www.km4dev.org/journal/index.php/km4dj/article/view/111/170

Mansell, Robin (2002) Constructing the knowledge base for knowledge-driven development. *Journal of Knowledge Management* 6(4): 317-329

Mchombu, Kingo (2003) Information Dissemination for Development: an impact study. *Information Development* 19(2): 111-126

Mchombu, Kingo (2004) *Sharing Knowledge for Community Development and Transformation: a handbook*. Oxfam Canada

Molenaar, Henk (2006) *Raising the Veils of Aid. Development and Diversity.* Paper presented at the international conference on Endogenous Development and Bio-Cultural Diversity: the interplay of Worldviews, Globalization, and Locality, Geneva, 3-5 October 2006

Mudimbe, V.Y. (1988) *The Invention of Africa.* Indiana University Press: Bloomington

Nahapiet, Janine and Sumantra Ghoshal (1998) Social Capital, Intellectual Capital and the Organizational Advantage. *Academy of Management Review* 23(2): 242-266

Newell, Sue and Jackie Swan (2000) Trust and inter-organizational networking. *Human Relations* 53(10): 1287-1328

Nonaka, Ikujiro (1994) A Dynamic Theory of Organizational Knowledge Creation. *Organization Science* 5(1): 14-37

Nonaka, Ikujiro and Ryoko Toyama (2003) The knowledge-creating theory revisited: knowledge creation as a synthesizing process. *Knowledge Management Research & Practice* 1(1): 2-10

Orlikowski, Wanda J. (2002) Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organization Science* 13(3): 249-273

Pan, Shan L. and Dorothy Leidner (2003) Bridging communities of practice with information technology in pursuit of global knowledge sharing. *Journal of Strategic Information Systems* 12: 71-88

Parker, Stephen (2000) Knowledge is like light – Information is like water. *Information Development* 16(4): 233-238

Pasteur, Katherine (2004) *Learning for Development: a literature review.* Lessons for Change in Policy and Organisations No. 6. Institute of Development Studies: Brighton Perkin, E. and J. Court (2005) *Networks and policy processes in international development: a literature review.* Working paper 252, ODI: London

Patriotta, Gerardo (2003) *Organizational Knowledge in the Making. How Firms Create, Use and Institutionalize Knowledge*. Oxford University Press: New York

Patton, Michael Quinn (2001) Evaluation, Knowledge Management, Best Practice, and High Quality Lessons Learned. *American Journal of Evaluation* 22(3): 329-336.

Powell, Mike (2003) *Information management for development organisations*. Oxfam GB: Oxford

Powell, Mike (2006) Which knowledge? Whose reality? An overview of knowledge used in the development sector. *Development in Practice* 16(6): 518-532

Quaggiotto, G. 2005. Elective affinities? Reflections on the enduring appeal of knowledge management for the development sector. *Knowledge Management for Development Journal* 1(3) 41-45 http://www.km4dev.org/journal/index.php/km4dj/article/view/98/158

Ramalingam, Ben (2005) *Implementing knowledge strategies: lessons from international development agencies*. Working paper 244, ODI: London

Ramalingam, Ben (2006) *Tools for Knowledge and Learning: A Guide for Development and Humanitarian Organisations*. ODI: London

Rambaldi, Giacomo (2007) Using a dgroup with third party online applications for a cause. *Knowledge Management for Development Journal* 3(1): 115-125 http://www.km4dev.org/journal/index.php/km4dj/article/view/98/158

Renzl, Birgit (2008) Trust in management and knowledge sharing: The mediating effects of fear and knowledge documentation. *Omega. The International Journal of Management Science* 36 (2008): 206-220

Robert, Sylvie and Annik Ollitrault-Bernard (2005) *Le Capitale Mémoire. Identifier, analyser et valoriser l'expérience dans les institutions.* Répères méthodologiques pour la capitalisation de l'expérience. Éditions-Diffusion Charles Léopold Mayer: Paris

Röling, N.R. and Paul Engel (1991:125-137) The Development of the Concept of Agricultural Knowledge and Information Systems (AKIS): Implications for Extension. In: Rivera, William M. and Daniel J. Gustafson (Eds.) *Agricultural Extension: Worldwide Institutional Evolution and Forces for Change.* Elsevier Science Publishers: Amsterdam – New York

Sánchez, S (2006). De la Gestión de la Información a la Gestión del Conocimiento: premisas y herramientas. Paper presented at the first workshop on: *The observatory as a tool for managing information and knowledge*. Caracas, Col., IICA - SELA - INIA - AN. Consulted on 25 Feb. 2007. Available at: http://www.sela.org/sela/ItallerSELA-IICA.asp#Programa

Schilderman, Theo (2002) *Strengthening the knowledge and information systems of the urban poor*. DFID/ITDG

Sen, Amartya (1999) Development as freedom. Oxford: Oxfrod University Press, xvi + 366pp.

Snowden, Dave (2002) Complex Acts of Knowing: Paradox and Descriptive Self-awareness. *Journal of Knowledge Management* Vol. 6(2): 100-111

Snowden, Dave (2003) Managing for Serendipity: or why we should lay off 'best practice' in Knowledge Management. *Journal of Knowledge Management* May 2003

Song, Steve (2006) Review of 'Implementing knowledge strategies: lessons from international development agencies'. *Knowledge Management for Development Journal* Vol. 1(2): 91-94

Spender, J.C. and Robert M. Grant (1996) Knowledge and the Firm: Overview. *Strategic Management Journal* Vol. 17 Winter Special Issue: 5-9

Spender, J.C. (1996) Making Knowledge the Basis of a Dynamic Theory of the Firm. *Strategic Management Journal* Vol. 17 (Winter Special Issue): 45-62

Swan, Jacky, Sue Newell, Harry Scarborough & Donald Hislop (1999) Knowledge management and innovation: networks and networking *Journal of Knowledge Management* 3(4): 262-275

Thompson, Mark (2005) Structural and Epistemic Parameters in Communities of Practice. *Organization Science* Vol. 16(2): 151-164

Unwin, Tim (forthcoming) *ICT4D*. Cambridge University Press: Cambridge

Unwin, Tim (2007) No End to Poverty. *Journal of Development Studies* Vol 43(5): 929-953

Wenger, Etienne (1998) *Communities of Practice. Learning, Meaning and Identity*. Cambridge University Press: Cambridge

Wenger, Etienne (1998) Communities of Practice: Learning as a social system. *Systems Thinker* Vol. 9(5):1-5

Wenger, Etienne (2000) Communities of Practice and Social Learning Systems. *Organization* Vol. 7(2): 225-246

White, Nancy, Beth Kanter, Partha Sarker, Oreoluwa Somolu, Beverly Trayner, Brenda Zulu, and Lucie Lamoureux (2007) Editorial: Stewarding technologies for collaboration, community building and knowledge sharing in development. *Knowledge Management for Development Journal* 3(1) 2-4 http://www.km4dev.org/journal/index.php/km4dj/issue/view/10

World Bank (1999) World Development Report 1998/99

Zeleza, Tiyambe (1996) Manufacturing and consuming knowledge, *Development in Practice* 6(4) 293-303

IKM Working Paper Series

Julie E. Ferguson, Kingo Mchombu and Sarah Cummings (2008) Management of knowledge for development: meta-review and scoping study. *IKM Working Paper* No. 1, April 2008, 45pp.