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Knowledge sharing, information management, communication and IT within WASHCost

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The WASHCost Project researches the life-cycle costs of WAter, Sanitation and Hygiene (WASH) services in rural, peri-urban areas and small towns in Burkina Faso, Ghana, India and Mozambique. The rationale is that WASH governance will improve at all levels, as decision makers and stakeholders analyse the costs of sustainable, equitable and efficient services and put their knowledge to use. WASHCost applies action research and initiate learning alliances to address the immanent lack of costing information on quality WASH services. At the end of five years an Internet based body of information must be available globally to support decision makers in the field of unit costs for WASHCost service delivery. Interactions between stakeholders are at the core of WASHCost. It follows that social learning, knowledge sharing and creating space for dialogue and joint reflection are essential to the project achieving its objectives. WASHCost is a human endeavour acknowledging that through sharing information, knowledge is 'co-created' or 're-created'. This means that what people and groups know from experience, they share with others, especially with those who need to make use of it. These interactions are at their most effective when they are face-to-face. However, this is not always possible in a four-country project with global ambitions, and the project thus makes full use of simple, intuitive, virtual and mobile tools. This paper addresses knowledge sharing, information management, communication and IT within WASHCost and includes pointers about how to choose, design, understand processes and apply technology. This is done along the below sections on various 'no brainers' and 'statements' or 'explanations', leading up to an amalgam (section 9) of how issues are addressed in WASHCost and some observations 18 months underway the project along issues on information management and 'lessons learned by the KM pioneers'.

1. Introduction: how WASHCost shares information

The WASHCost project (2008–2012 www.washcost.info) aims to identify the real disaggregated cost of WAter, Sanitation and Hygiene (WASH) services in rural and peri-urban areas up to small towns, and the range of physical, social, economic and political factors that influence those costs. The project will collect and collate information relating to the real disaggregated life cycle costs of WASH service delivery to poor people. The work will involve decision makers and stakeholders in analysing this data and support them to use it in the planning and governance of WASH service delivery. WASHCost will embed improved pro-poor decision-making processes in lead WASH organisations through a platform that brings stakeholders together to discuss WASH service delivery (WASHCost 2008).

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The WASHCost project aims to apply policy focussed action research and initiate learning alliances that focus on life-cycle unit costs for WASH services[1] – in short all costs expressed in money to start and keep a quality service running – in rural and peri-urban areas and small towns in Burkina Faso, Ghana, India and Mozambique. At the end of five years a body of information must be available globally and accessible by Internet to support decision makers in the field of unit costs for WASHCost service delivery. Success is based on social learning and behaviour change with respect to the use of unit costs throughout the whole development chain (see section 8). WASHCost envisions conjuring this change by sharing knowledge, generating information, building skills and exposing sector professionals to policy and practice to gain experience.

WASHCost is an endeavour acknowledging that through sharing knowledge is 'co-created' or 're-created'. This means that what people and groups know from experience, they share with others, especially with those who need to make use of it. Some arenas in the development chain might benefit from a dialogue designed to start a learning process. Others need training in communication or information tools and research methodology.

The interactions through which these exchanges take place are at their most effective when they are face-to-face. However, this is not always possible in a four-country project with global ambitions, and the project thus makes full use of simple, intuitive, virtual and mobile tools. To support information management and social learning, WASHCost provides a newsletter, group email and a wiki, which is a collection of interlinked web pages where each author can build upon what others have written and acts as the project Intranet. Tools and approaches must relate to and fit human activity.

2. No brainer: knowledge can only be volunteered

WASHCost is teamwork and focuses on communication to share knowledge and develop insights together, especially through face-to-face communication. It is an empirical law of the knowledge management discipline that – short of torture – 'knowledge can only be volunteered' because knowledge resides in people's heads (Suarez 2006). Volunteering ones 'own' information and knowledge is essentially based on a feeling that is gained by sharing and on the trust that arises from constructive dialogue.

Knowledge that is volunteered needs to be 'translated', 'documented', 'converted', and 'crystallised' into information (Weggeman 1997, 2006). To capture story lines from face-to-face events and dialogues and to question processes that may hinder the project, WASHCost uses 'process documentation' to share knowledge and insights, encourage regular reflection and to manage information with others.

How process documentation (see Box 1) is used in WASHCost is learned along the way, but it involves recording and disseminating discussions and debates quickly in words and pictures or video, so that those who were present have a lively record of this experience, and that their insights and creative thinking can be shared with those who are not present[2]. See, for examples, the WASHCost meeting reports at http://www.washcost.info/page/120.

Box 1. Working definition of process documentation

'Process documentation is a tool that helps project staff and stakeholders to track meaningful events in their project, to discern more accurately what is happening, how it is happening and why it is happening'.

Source: Shouten *et al.* 2007.

3. No brainer: the need to go explicit

To be shared with others, knowledge must be made explicit; that is, turned into clear and precise information. This contrasts with implicit or tacit knowledge that is locked in people's heads (Pels and Odhiambo 2005). Team members come and go over time and newcomers need rapid access to explicit knowledge, to update their level of knowledge and to support desired behaviour changes (IRC 2005, McLuhan 1962).

Rapid dissemination of insights and ideas ('short information loops') must be set up and promoted to avoid losing momentum and to encourage a more dynamic dialogue. The sooner team members evaluate and act upon valuable information the better. Process documentation is therefore at the heart of action research as it enables a stronger linkage between reflection and action. This is particularly important, given that WASHCost team members are separated by space, time and language, and that country teams interact with wider communities and will interact with future users.

WASHCost team staff already create a lot of information – make knowledge explicit –, most of which is in email or attached to it, because email is a tool all of them already know how to use. WASHCost aims to build upon this way of volunteering information from knowledge (Sveiby 2001, Visscher *et al.* 2006).

4. Statement: the IT dé facto backbone is the Internet

It could be concluded that essentially WASHCost is about communication, and that all non-face-to-face communication should be digitised to end up in the digital, Internet-based repository supporting the decision support tool to be delivered at the end of the project. Despite poor access to the Internet in some places and language issues, WASH-Cost wants to follow that line of thought as much as possible.

Having information available digitally is a prerequisite given the amount of data and information that a country team will collect and generate, and given that computers are probably used by all team members and the wider country audiences. The global tool that will eventually support decision makers in the field of unit costs is designed to make use of the Internet.

Not only are connections between people facilitated by the Internet (Skype, MSN etc.), but storage is also available aplenty (Gmail, Box etc.). The Internet is a major source of information sources (Wikipedia, etc.), but one where users have to be 'Internet savvy' since it is also potentially a source of misinformation. It is also a means of what is technically called 'asynchronous message exchanges', which means that the other person does not have to be there ('online') to answer straight away, but can answer messages in their own time. Systems using Internet are available in various shapes and forms, and have quickly become very familiar. Examples are email, SMS, Twitter (short web based messaging), websites, e-stores, group mail, bulletin boards and virtual private networks, TV channels and videos can increasingly be accessed over the Internet. Information that is shared in this way can be archived permanently.

WASHCost staff is assumed to already be users of the Internet. However, the technology itself cannot enforce knowledge sharing, or support information management, or initiate behaviour change and communication; the technology needs to be used (Nielen 1993). Some people are worried about using the systems because they fear that confidentiality will be breached. That is a real danger for WASHCost invoking knowledge or information hoarding.

However, staff must reflect on how useful various Internet based tools are for this project, rather than regarding their use as a matter of personal taste. The wiki pages for

WASHCost are internal to the team – and learning to use them together is part of the process of building mutual trust within the team. The data cannot be said to be 100% secure, but is not accessible to people without permission and a code. It is secure in the same way that other means of communication are secure. Nothing is 100% confidential including wiki sites but they can still be used sensibly with confidence.

5. Statement: folksonomy for tagging

A collection of information can be kept on a spectrum between perfect order (a well ordered library) and chaos (someone's desk piled up with paper) (Baranger 2001; Hofstadter 1979, Houghteling 2006). To be accessible, information has to be tagged. Tags help users to trace back / retrieve information. For example, the Universal Decimal Code (UDC) has been used for more than 100 years to categorise information. Libraries have their own standardised tagging systems for looking up books (IRC 2005). Telephone companies have directories and most individuals have tagged, alphabetical or chronological lists. People with good Internet access often have tagged information networks on social networking websites (Facebook, LinkedIn, Ning and Hyves), MSN or other messenger software, and mobiles. Tags are labels attached to information meant to ease retrieval.

The task of building up these directories or tag lists is known as taxonomy and the resulting systems help users to manage the information maze (Miller 1956). To agree and apply taxonomy takes a lot of effort, and one cannot be sure it will ever be used. For example, the IRC International Water and Sanitation Centre website uses tag names for all its stories, and these are useful for finding stories on a topic. But often, the writer is undecided as to which tags are most appropriate, and sometimes none quite seems to fit the subject matter adequately. The alternative to a fixed taxonomy of pre-determined tags is to offer a good search engine combined with a 'folksonomy'. While the tag list of taxonomy is managed by one or a few people, in a folksonomy, you choose your own tag words for your documents.

The WASHCost wiki allows this kind of 'free flowing' tagging. A wiki page with a report attached can be tagged as 'report' or 'India' or 'knowledge management' or 'learning' or 'thought piece on IT', or all of these things. When a lot of WASHCost team members have tagged reports or pages freely, they have collectively generated a folksonomy. The wiki keeps track of all the tags and auto-suggests while the user types. By doing it this way typos are kept to a minimum.

Those who post material on the WASHCost wiki, and indeed those who read it and who have editing rights, can tag it as they wish. It means that when you have read an article, if you do not think that the current tags would help you find it again, you can add some more. For example, the readers of this article could choose to tag it as 'basic guide' or 'wiki' or even 'nonsense', if they felt that way. (If most users tagged it as nonsense, it would clearly be time to re-think and re-write.)

Technology also allows blogs and Really Simple Syndication (RSS) feeds to be based on tags. RSS is a protocol to receive updates from digital repositories by email or in a reader; in other words it sends a message with a link. More and more Internet-based application can be operated by email. This is convenient because a lot of people are familiar with email interfaces. If an email is sent to the wiki with a first line 'Category: This, That, MyBlog' the content will be tagged with 'This', 'That', 'MyBlog'. The tag 'MyBlog' is used to generate a RSS of the weblog 'MyBlog' and can be read by email.

6. Explanation: WASHCost-ers are good at . . .

WASHCost team members, learning alliance participants and wider communities are very good at talking and personal information management. Information repositories are often managed by interfaces like email software (propriety and Internet based), navigators like (Internet) Explorer and more sophisticated ones like 'the Brain', sticky notes, Facebook or tagging aggregating like del.icio.us and Diigo (http://www.diigo.com).

However, it should be noted that a purely personal approach to data storage can be a barrier to teamwork. For example, the email repositories of ex-staff are only ever searched when something really serious is at hand; they are never archived for active use. When a member of staff leaves, they take away most of their knowledge in their head and it becomes inaccessible to their former colleagues. The information they leave behind in their emails is almost as out of reach; it becomes buried treasure without a map.

Basic to managing personal email is a filing system, so that emails are stored in folders. Each person chooses their own folder names and structures. The WASHCost team uses email pooling and central group mail by Google. Google challenged common/traditional systems by only supporting minimal folders – like inbox and SPAM – but maximal tagging and search. As argued above, this represents a good and easy replacement for taxonomy and propriety email systems.

As backbone – the Internet – is needed for exchange through a propriety service or an Internet based email system. Some WASH colleagues who use Gmail or Yahoo have complete archives stored on the Internet, where the amount of free personal email space is almost outgrowing human capacity to use it.

In a similar way the WASHCost materials posted on the wiki are also stored on the Internet with the advantage that they can be located and used by any WASHCost team member with a password and permission to access the site. It is easy to see the advantages of this from the point of view of someone looking for information. But to make it work people have to post it there in the first place. WASHCost team members are invited to reflect on their information management habits.

What is recommended is a 'do, dump, delegate' – strategy. When WASHCost-ers come across information of (possible) valuable to the project, they should 'do' – i.e. they should store it on the wiki (by simply sending an email) or send it around to the email group (by simply sending an email). If they decide it is not useful then they can dump the information (no one gets to see it). Finally, they can delegate the task of archiving the

Box 2. Example email messages to collect information stored in personal systems

Dear All, This mail serves as a gentle reminder of reports, write ups, and other WASHCost documents for sharing and uploading on the wiki. For example I know X, Y, Z and A amongst others might have documents and reports on their laptops which would be useful to share. Kindly forward such items to me for uploading on the wiki. Hear from you all soon. Best, B

Dear All, As the office server is running at the moment, I will kindly ask all to share files with me through this group for filing and documentation purposes. I will send the narrative on the use of the file server soon. Hope to receive files from you all soon.

PS: X + Y, Please is it possible to get some pictures from you as discussed on Wednesday this week? Hear from you soon. Many thanks in advance and best regards, B

Source: Personal email by author.

material or sending it to someone else. Whatever the choice, the chosen action should follow consciously in the spirit of teamwork.

7. Explanation: the wiki page – folder analogy

The WASHCost wiki on the Internet (www.mywash.net) is a collection of pages users can type on. And other users can edit too, or add an image, change typefaces and add dynamic content. The page can be exported to popular interfaces like word and PDF or printed. Email with information can be send to and from that page. Of course, the pages are easy to search through and attached files are searched too, making it easy for users to make sense of what they find. Commenting and tagging a page is standard and users can be alerted through a blog or RSS.

A wiki page is like a folder, an address on your hard disk. But where the folder in your computer has a name such as C:/my-documents/all-zips/old-zips-2008, the wiki page has a URL (http://www.mywash.net/teamwork/all-zips/old-zips-2008). A wiki page has a name, can have files attached, can have links to other pages, be moved, has its name changed, can be copied or deleted, can be searched and locked, just as folders can. It is a collection of pages form a workspace which is also the level user access is managed at.

Wiki pages have exciting functionality. A page can be watched, edited, emailed to, tagged, aggregated in blogs and sent by RSS. Last but not least wiki pages can be searched, read, edited, printed and sent by Internet. Above all, pages have versions; it is easy to roll back. If a page is incorrectly edited or changed, it can be put back the way it should be.

The interface to operate with these pages, the wiki, is reasonably easy to learn because it is not that much different from using a word processor and it enables users to make sense of it; to make their knowledge explicit and to keep information up-to-date. Sometimes users add final information products on or to pages, and sometimes they use it alone and at other times with others. The wiki is much more dynamic than a folder. It is the WASHCost Intranet; the place that holds crucial information for WASHCost team members and the place where they share information internally.

A year underway the WASHCost wiki is used for reporting, issue lists, newsletter, planning, people and document collection, a glossary and even workshop agenda and materials. The latter is a nice example of staff developing workshop materials in the broadest sense and keeping it alive or using it after the workshop. Also, IRC staff is using the wiki more and more as easy extranet (see http://mywash.net/home).

Table 1. Folder – file/workspace – wiki page – file analogy.

Traditional server	MyWASH server
C-drive	http://mywash.net
Main folder	Workspace
C:\inco	http://mywash.net/teamwork or http://mywash.net/home
Sub-folder	Wiki page
C:\inco\meetings	http://mywash.net/teamwork/indexcgi?Meetings
Sub-sub-sub folder	Wiki page
C:\inco\meetings\2007\final	http://mywash.net/wiki/indexcgi?mywash_wiki_structure
File	Wiki page
C:\inco\meetings\2007\final\ inco-meeting-April-10	See: http://mywash.net/documents/index.cgi?LA_briefing_notes

8. Explanation: The WASH development chain

Within the WASH development sector the chain of institutional levels between the Millennium Development Goals (MDGs; http://www.un.org/millenniumgoals) and the grass root level can be depicted as in Box 3. It is important that information flows both in a top–down as well bottom–up (and probably around the middle) manner. Monitoring of the MDGs for example means that information flows upwards so it can be aggregated by the Joined Monitoring program (JMP).[3] MDGs as formulated in global arenas have to be translated and communicated to be understood on other levels. It is no secret that people at the grass roots do not know what the MDGs are. Knowledge (knowing how to do things) is not tangible and does not 'flow' but is locally re-created in learning processes by the people populating the various levels (Stiglitz 2000).

For WASHCost, a lot of communication will be at country level, and for Burkina Faso and Ghana teams, because of physical proximity, regional level. Each WASHCost country team creates a communication strategy carried forward by the country team communications staff. The global communications team will be instrumental and supportive in this. There is also a WASHCost global communication strategy focusing on communicating from national level upwards. This deals with information that needs to be made available globally outside the WASHCost team (for example what UN, bilateral and multi-lateral institutions need to know about WASHCost) and, crucially, what is necessary to share between countries.

The country WASHCost learning alliances encompass participants up to national level and information has to be spread within countries. For this, country specific group mail and wiki workspaces are available. Training in the use, creation and/or management of information mostly known as capacity building' is organised on demand. The same set up developed for knowledge sharing, information management, communication and use of IT

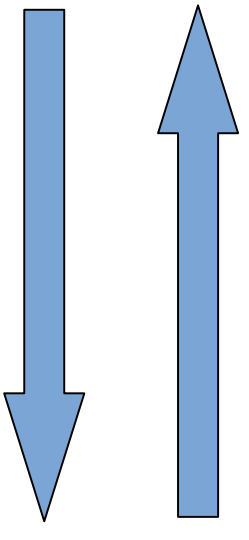
Box 3. Development arenas in the water, sanitation and hygiene (WASH) sector

Information flows

- The world community / humanity
- Millennium Development Goals (MDGs), Commission Sustainable Development
- United Nations / bi- and multi-laterals
- Continent-wide donors such as the EU and NEPAD
- World (water) forums / 'Water weeks'
- Regional bodies / Basin organisation

(sub)national level

- County/province/(mega) city level
- Urban/small town/peri-urban level
- Rural/community/grass root level



for the whole WASHCost team, is 'fractalised' (repeated at smaller scale) at regional and country level.

9. Amalgam

The above paragraphs broad brush the WASHCost operating environment in respect to knowledge sharing, information management, communication and IT use. Below the peculiarities and situation after two years is sketched out.

Behaviour change needed, and not only on costs

Just as the WASHCost project seeks behaviour change with regard to the use of life cycle unit costs and decision making, so too does the project require changes by WASHCost team member. Not only individual users, but the whole team needs to change behaviour with respect to sharing information. Poor access is not really an argument because WASHCost staff uses email. The WASHCost wiki can be operated by through email and is ready for use by mobile phones (see http://www.socialtext.net/exchange).

Knowledge sharing

WASHCost uses a learning alliance to get stakeholders, end users and beneficiaries involved from the start and break away from the traditional linear approach where results of research are communicated or transferred and then scaled up towards or after the end of a project. Knowledge sharing thus is not a one-off exercise but is built in to WASHCost from the start and continues throughout the project by means of multiple meetings, both face to face and over the phone. Inspired by KM4Dev sessions and IRC's long workshop history, the meetings have a dual aim[4]. First, workshops are on a topic with a certain purpose and second participants are familiarised with methods and tools, tips and trick, ice breakers and energisers and encouraged to use them themselves.

Knowledge management has more to do with managing circumstances (Pels and Odhiambo 2005) and instruments. Managing knowledge is a project-wide shared responsibility: in face-to-face meetings WASHCost-ers 'give and take'; in creating explicit knowledge WASHCost-ers add and edit together. Already, one year in WASHCost staff uses wiki, mobile phone messaging and Skype more and better. In respect to managing circumstances to enable and support and stimulate knowledge sharing, the 'end off inception phase' meeting and the 'expert meeting on WASHCost data' with their focus on discourse and narrative documentation rather than on lecturing and hand-outs are exemplary (Kurtz and Snowden 2003). The wider WASH community asked WASHCost to start a community of practice on life cycle unit costs, which can be seen as recognition of leadership.

Information management

The motto of the 6th Water Information summit in 2003 was 'Make information flow'[5]. As argued above, information has to flow up and down the WASH development chain to drive sector learning forward. At country level too, information has to flow within the country WASHCost teams and learning alliances.

Information management or managing information must be done effectively and efficiently. Instead of imposing an all-encompassing 'system', WASHCost builds on people's

existing pattern of behaviour using email. The crucial issue is to avoid relying on personal repositories with propriety characteristics, such as the C-drive of an individual computer or a personal email inbox. Instead, Google groups at various levels (country, sub-group and global) are used to make emails – and their attachments – flow. The wiki acts as the intra- and extranet; the place that holds crucial information. In addition WASHCost maintains a public website at http://www.washcost.info/.

The information generated and lessons documented during the WASHCost project must result in the development of a globally accessible decision support tool. Non-WASHCost-ers must be able to build on these lessons to make better decisions in respect to costing of WASH services. That is another reason to manage the WASHCost information carefully from the start. The first two years of the project focussed on inception, levelling with partners and developing a research protocol. In the third year of the project, information management will really get extra attention needed.

Evidence that the approach works can be found in the growing number of users and the growing number of workspaces. Also an adjacent project and IRC programmes start using the instruments effectively. The wiki has build in weekly statistics reporting on use where read and edit is reported per user per workspace and numbers are rising steadily.

Communication

The WASHCost communication strategy ties the objectives to the way to communicate in the broadest sense. Communication is within WASHCost as well as to other stakeholders and audiences outside of the project. The strategy makes sense of this and defines communication objectives, principles and intended audiences. Planning and short-term objectives are developed throughout the project so that the project and teams remain responsive to new opportunities and developments. The strategy is the foundation on which communication is build. As such, it is a living document and is expected to change as learning happens.

The communication objectives as agreed in the end-off-inception workshop WASHCost are:

- Attract and maintain interest around the project in order to develop learning alliances with stakeholders who demand WASHCost information and who will continue WASHCost activities beyond the project horizon.
- Enable teamwork and cooperation throughout the project in order achieve milestones and inspire success.
- Facilitate wider participation in WASHCost in order to address sector needs and adapt information, tools, and processes to the concerns of users of WASHCost.
- Advocate (lessons and suggestions) for change so that WASHCost will have a positive impact on sustainable water, sanitation and hygiene services.
- Foster learning and continuous improvement within the project and sector in order to ensure that capacity to continue improving planning and management of WASH services beyond the lifetime or the scope of WASHCost.

Implementation and communication happens on a daily basis. The UBUNTU[6] group with representatives from all countries maintains communication plans, which define the way objectives are achieved in the project with all practicalities of time, space and language.

Information technology (IT)

Information technology (IT) has a hardware and a software component. Countries have a budget line for hardware. WASHCost has no intention or desire to manage hardware apart from personal computers and laptops. Hardware is instrumental and wiki use is based on Software As A Service (SAAS). As argued above the Internet is the de facto backbone of digital communication. As such, access to the Internet is a basic necessity, just as it is for email communication. In terms of IT, WASHCost steers towards effective use and combination of ready-to-use systems.

WASHCost team members will use software packages that are already known to them such as Outlook, Firefox, Ms Office, Open Office. There is a need for some specialised software for such things as publishing more complex documents (DTP software) and for audio or video editing. WASHCost has not standardised on these, although it is possible that a de facto standard may emerge as experience with them is gained. The WASHCost wiki (based on SocialText), the public website (based on eZ publish and the IRC portal) various email groups (based on Google groups), and Skype are interfaces that are new to many members of the teams. As explained above, these bring new functionality and the ability to work better together. It is important to understand that with new software, particularly with software that may introduce new concepts like a wiki, getting your hands dirty is the only practical way of learning how to do it. There is a limit to how much you will learn just by reading about it or hearing about it.

The URL http://www.washcost.info has been secured for the WASHCost public website. The wiki Intranet can be reached at http://www.mywash.net and http://www.washcost.org is to be used as URL for a WASHCost global community.

10. Observations after 18 months

Eighteen months into the project experiences have been gained on crucial information management issues which are described next and benchmarked against the lessons learned by the KM pioneers (Sveiby 2001).

Language

Next to French, Portuguese and English, the latter being the project working language, local languages and dialects play a major role. Research on the ground, fact finding missions, reporting, protocol testing, workshops and learning alliance meetings are all done in the language most appropriate. In the end, lively local or country dialogues on, and use of life cycle unit costs in WASH projects and programmes is the litmus test of success. When that takes non-English so be it.

Access

WASHCost struggles with two types of access. First, access to data, information and knowledgeable people on past and present projects and programmes as well as more aggregated information is difficult to come by. Sometimes it is just not there. Second, access to the Internet in the WASHCost countries is limited and its accessibility is also not seen as very important.

Although WASHCost primarily nurtures a country dialogue and all involved staff use email, access to data and information for the research purpose, both to the hard copy as

well as the digital format, is a major hurdle. A prime reason for WASHCost is the non-existence of quality disaggregated unit cost data and information on WASH services. WASHCost addresses this hurdle by building trust in the learning alliance and carefully assessed information before it is spread around.

Digital access, through the Internet, is crucial and addressed by investing in better connections. Reporting on 2008 was done by email and the wiki was updated centrally, in 2009 the responsibilities will be delegated to country teams. The reporting forms for the monitoring and learning cycle are set up completely based on the wiki.

Power and culture

Skewed power relations are addressed in the learning alliance to start with, but there is always the risk of elites kidnapping the discourse. At the heart of WASHCost is the aim for sustainable WASH services for the poor. Within the wiki all users have the same rights to edit, that is, management is kept to a bare minimum. The culture of knowledge and information hoarding is to be addressed in the learning alliance when paramount. Country teams are autonomous within the limits of project milestones and deliberately supposed to function within their own countries' specific power and cultural realities.

Relevance

Within WASHCost most information has to be re-created or co-created or re-discovered within an action research setting. The learning alliances members and project staff together decide what information is relevant. In this respect Stiglitz's (2000) article points strongly at the local aspect of relevance; information from India may be totally irrelevant for Ghana.

Lessons from the pioneers

Along the lessons by KM pioneers (Sveiby 2001), although formulated for organisations, below the knowledge management developments within the projects are looked upon. Assumed these lessons are valid, how did they work out for WASHCost?

Lesson 1: enthusiastic champions are needed and to be located

A lot of effort is put in listening to users and offering users hints and help on the spot when users run into trouble or try the described systems. Workshops are also meant to make project staff feel comfortable with tools and methods for knowledge sharing. WASHCost staff is encouraged to ask questions by phone, Skype and email.

As for the use of the wiki, some WASHCost staff is also involved in other IRC projects and programmes using the same wiki setup. Some early adopters experimented with wikis before they engaged in WASHCost. These champions 'spread the word', 'walk the talk' and are active wiki users themselves.

Lessons 2 and 3: build on existing core competence and address urgent strategic imperatives

As argued and described above lessons 2 and 3 are at the heart of the approach. The urgent strategic imperative of the project is the lack of data, information and capacity and partnerships

with local organisations which tap directly into the available competence. In the course of the project competences and imperatives emerged. The challenge to contribute from a communication and knowledge management perspective was to be timely. For IT use, being able to use email is the bare minimum competence and where needed that competence is build.

Lesson 4: firm commitments from the top

From the beginning of the project it was obvious email and face-to-face communication would be crucial; email because of the spatial separation and face-to-face to be able to much better understand each other and the project objectives. The project management showed leadership by using Google groups and the wiki intense; they decided to use wiki for reporting to the donor. The choice to use wiki for collecting the reporting forms, for monitoring and learning as approved by WASHCost management is another example of commitment from the top.

Having a bad Internet connection is no longer seen as a valid argument because the country team have budget to improve the connection. Since the MyWASH server is owned by IRC and not only set up for the WASHCost project, costs can be spread out and use will surely be beyond the project period.

Lesson 5: early quick wins neutralise the nay-sayers

As mentioned before the WASHCost project from the start encompassed a set of tools and methods for information management, knowledge sharing, IT use and communication. Definitively a quick win was the initiative to use wiki for the internal WASHCost newsletter. It helped the documentation and communication officers in the countries and global teams to get acquainted with editing through a wiki.

Editing, commenting and peer assist for this article was also done using a wiki.

11. Conclusions

Slowly but surely the approach chosen, methods and tools used and efforts made within the WASHCost project on knowledge sharing, information management, communication and IT use start to bear fruits and get recognition. As described the first year was dedicated to the inception phase; taking stock of the local WASH situation, building networks and alliances. The second year revolved around the development of a research protocol. In the third year the research must be carried out and embedding of learning has to take place. Knowledge sharing, information management and communication will be much more prominent. In year four embedding and capacity building will be strengthened and in year five the decision support tools – the WASHCost legacy – must be shaped.

As said the challenge to contribute to the project effectively and efficient from a knowledge management and communication perspective was to be timely in persuading staff to adopt new ways of working, of sharing, of managing information, of using IT; in short change of behaviour. The carrots are new and innovative and fun tools and methods for face-to-face events and use of IT. Getting dirty hands is the only practical way of learning how to do it.

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Notes

1. http://www.irc.nl/la on learning alliances.
2. http://processdocumentation.wordpress.com on process documentation.
3. The Joint Monitoring Programme for Water Supply and Sanitation is a programme co-funded by the World Health Organization and UNICEF. The goals of the JMP are to report on the status of water supply and sanitation, and to support countries in their efforts to monitor this sector, which will enable better planning and management. See also http://www.wssinfo.org/en/welcome.html.
4. http://www.irc.nl/page/3406 on WIS 6.
5. http://www.km4dev.org on knowledge management for development / KM4Dev list.
6. The UBUNTU group consists of process documentalists of all WASHCost countries plus the global team. They meet monthly to plan and reflect on what to document and produce reports, interviews, picture stories, short movies and an internal newsletter. They manage the website together. UBUNTU stands for 'working together'. See also http://en.wikipedia.org/wiki/Ubuntu_(philosophy)with a video of Nelson Mandela [Accessed 1 December 2009].

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