Participation as if People Mattered – Negotiating Technology in the Afghan Education Sector

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December 11, 2012

Abstract

The importance of a participatory component has become broadly accepted in today's international relief and development programs. Accordingly, most organizations dealing with technology-use strategies in the education sector in Afghanistan, highlight concepts like 'empowerment', 'Afghan ownership' and 'partnership' in their project descriptions. Local stakeholders are to a certain degree involved in decision making and implementation. However this does not necessarily include the anticipated users or those later in charge on the ground. A governmental representative is often 'local' enough. The essence of the participatory approach lies according to Morris (2003) in "working with citizens to determine their needs [..] rather than imposing an intervention" and to regard people as agents rather than objects. Yet the definition of participation ranges from the idea that all stakeholders should take part in decision making to a more narrow concept of extracting local knowledge to design programs externally.

This limited participation is in the case of ICTs often further reinforced by technology being seen as a black box with a pre-defined optimal application that needs to be built up and taught by the technology experienced West to those in need of development. The introduction of ICTs is often even motivated by particular ideas about how the technology should develop or support certain educational practice and organisational structures.

This paper questions current participation practice in the area of ICTs and Development (ICT4D) and asks how technological solutions could to some extend be disconnected from Western dependencies to facilitate sustainable local solutions corresponding to local needs and capacities. Examples are drawn from existing case studies as well as from interviews conducted by the authors between 2007 and 2012 in Afghanistan with actors from various educational projects including laptop and tablet projects, mobile-phone projects, infrastructural projects and others at literacy centres, schools and universities.

1 Introduction

This article wants to"pay closer attention to who is participating, in what and for whose benefit" as Cornwall (2008) suggests, in the area of ICT projects in developing countries. It starts with an introduction to different definitions and categories of participation in the literature to then take a closer look at how participation is interpreted in ICT4D projects and which aspects might be of particular relevance. Finally it demonstrates by different examples from ICT projects in Afghanistan, how multi-dimensional participation is and which role technology plays in enhancing or preventing participation.

2 Background

2.1 Participation

The top-down approach popular during the early days of what used to be 'modernization' and is now called 'human development' had shown little improvement for the situation of the poorest. When a call for more participation started in the late 1960s, it represented a challenge to the promotion of free market economics in 'Third World' nations. Yet a growing awareness formed during the late 1970s, that developing countries were held back more by poor policies than by a lack of finance for investment (Dollar and Svensson, 2000), and resulted in a stronger focus on bottom-up approaches, poverty reduction and government participation. Participation started to hit mainstream development practice and soon entered what Leal (2007) calls "the pantheon of development buzzwords, catchphrases, and euphemisms" to accompany *sustainability*, *capacity building* and more recently *local ownership*.

During the 1990s concepts of *empowerment* and *participation* had become undisputed parts of NGO work and development aid in general. Setting up conditions for a strong involvement of local people in development activities and the provisions of facilities to support this involvement was no longer seen as a radical call for social transformation, but indeed seemed to harmonize with official development policy. With this human centred approach, also referred to as human development came the understanding of development as capacitating, following Amartya Sen's Work on capacities and entitlement, concentrating on the potential of development to promote enabling (Pieterse, 2001). Sen's Capabilities Approach became highly influential for policy debate in human development and the creation of the Human Development Index (HDI), which had been introduced in 1990 by the UNDP as an indicator to measure development.

At the same time the field of development and its tendencies towards defining 'others', identifying their 'problems' and legitimising 'professional' interven-

Figure 1: Ladder of Participation (Arnstein, 1969).

tion in their daily lives (Thompson, 2004) had increasingly become subject of critical analysis. For some critics, the representational knowledge of professionals is or can be opposed to the situated, local knowledge in grassroots initiatives; however little changed in the fact that it was still mostly developmental professionals conceptual foundations that legitimate discourses and shape interventions (Sachs, 1992).
Today the call for a greater public involvement in decision making and project implementation seems to have lost most of it's attraction and often seems to be little more than a standard phrase. 'Participation' has its place in every project proposals and projects design across all sectors, regions and scopes, from the World Banks Structural Adjustment Programs to micro-development initiatives (World Bank, 1998; Crocker, 2007). Participatory methods, trainings, frameworks and guidelines fill bookshelves and websites, leaving the impression that participation is just another 'social-skill' for aid workers that can be learned and trained. The concept of participation has been opened to a rather expandable interpretation, the lack of a clear definition of what participation means led to its increasing use as a buzzword, "reduced to a series of methodological packages and techniques" (Leal, 2007).

In trying to define the meanings and practices of 'participation' several scholars have over the years made the effort to create typologies of participation, from Arnstein's (1969) ladder of participation, Jules Pretty's (1995) typology of participation to Sarah White's (1996) typology by interests. Andrea Cornwall gives a comprehensible overview over several of these typologies that define participation from different perspectives. The probably best known is Arnstein's ladder (see figure 1), looking at participation from the perspective of those at the receiving end, while Jules Pretty addresses more those applying participatory approaches and what motivates them.

Pretty's types range from manipulative and passive participation, to interactive participation and finally self-mobilization. Both Arnstein and Pretty go from control by authorities to a control by the people or citizens (Cornwall, 2008). Sarah White (1996) on the other hand concentrates on the different interests that stakeholder groups have in participation, pointing out conflicting ideas and the role participation plays in the whole process.
While these typologies give a good impression on what participation can be or how it might be utilized, when set in context, participation can not be categorized into 'strong' or 'weak' so easily. Developing projects engage in most cases a variety of different actors or groups of actors who bring different perceptions of participation into the process. Different types of participation may thus be possible or useful - for different actors - and necessary at different stages during the process. What the aforementioned typologies do not categorize so clearly is the crucial question: who participates? (Cornwall, 2008). Who counts as a community representative, or in an even broader sense as 'local'? Social, ethnic or gender categories may be labels allocated by the aid industry, but are not necessarily seen as primary distinguishing feature by people themselves. Much depends on the participants and their agenda, whose voices are heard and considered and even what reason might exist for a deliberate non- participation.
A third aspect Cornwall looks at, next to how participation is applied and who participates, is the question what people participate in and who participates at which stage of the project. Many projects combine different participatory approaches in terms of who participates as well as concerning types and activities. Some aspects may be decided and implemented entirely by local stakeholders, while other leave little space for involvement. Cornwall gives several examples throughout her paper to show how participation is always about strategic choices, how forms of autonomous participation are as much part of 'development' as 'invited participation'. She suggest 'clarity through specificity', participation made more transparent by a clearer distinction between different forms of participation, at different stages. What are people enjoined to participate in, what reasons are given for participation and who is involved as much as who is absent. These question will be examined with regard to ICT projects in development in general and examples from Afghanistan in particular.

2.2 ICT for Development

ICT4D stands for the application of information and communication technologies for international development and was established as an independent academic field – or rather 'label' as ICT4D scholars still come from a wide range of disciplines – during the early 1990s. ICT4D as a distinct area of practice and research evolved around the same time as discussions raised about the 'digital divide' – a term used to refer to the growing differences

within societies as well as globally in access to computers and the Internet (see for example Hoffman and Novak, 1998; Norris, 2001). New technologies received a prominent role within development initiatives during the 1990s to tackle development targets such as education and economic growth. They "supplied a new tool in search of a purpose" (Heeks, 2008).
Telecentres in rural areas were the first prominent examples of ICT4D initiatives (see Wellenius, 2003; UNESCO, 2006), but after a short enthusiastic introduction many examples proved that even if the delivered systems work technically, they often failed to make the intended contribution (Ratan and Bailur, 2007). The new technology had a mission, not only to provide access to information, but to change the way information was received and processed, or as Avgerou (2001) put it, "not only ICT is an imperative for taking part in the global economy, but there are standard ways that it should be used, and specific organisational features that it should aim at supporting." The perspective of ICT innovations as the diffusion from advanced economies, adapted to the conditions of developing countries Rogers (1995) involved the problematic assumption that the material/ cognitive entities that comprise ICTs and associated practices are adequately independent from the social circumstances and it was questioned whether they can be transferable, more or less intact, into any other society (Avgerou, 2009).
Another problem that few studies addressed was the question how small scale ICT projects can increase complexity of services and sustain them over long periods with appropriate resources, including money and people (Walsham and Sahay, 2006) as it is one thing to set up a telecentre but another one to create a self-sustaining long-term facility. Telecentre owners made only a few dozen dollars per month, but costs of hardware, electricity, connectivity, and maintenance went into hundreds (Toyama, 2010). Technology is largely developed and produced to amplify shareholder interest in profit, which means that on a global scale hardware tends to be designed for people working in air-conditioned offices with cheap and stable AC power and a broadband Internet connection. Software tends to be developed for the audiences with the greatest disposable income and in languages understood by the worlds largest, wealthiest populations (Toyama, 2010).
Nonetheless seems the increasing number of public-private partnerships in developing countries including those run or sponsored by Cisco, Microsoft, HP and others still be guided by the idea that ICT per se will lead to development. In a similar way, United Nations' statements on ICT4D often approach technology as empowering in itself (McLaughlin, 2005). Some critics argue that with initiatives delivered by private-public partnerships resources would preferably be used for projects where the private sector can see potential profit in, leaving areas with few investment prospects out of the picture (Leye, 2007). But the likely shift in the influence of these partnerships is as Leye (2007) observed obvious by the numbers: whereas Microsoft since the launch of its Unlimited Potential program in 2003 with its goal

"to increase computer literacy among all members of the population" (Microsoft, 2003), had spent a total of US $152 million in grants, UNESCOs International Programme for the Development of Communication (IPDC) had since 1981 only been able to spend a mere US $90 million.
More recent ICT4D 2.0 innovations (Heeks, 2008) are more likely to occur on a smaller scale, either in adapting or applying existing technologies. The focus of ICT4D initiatives today lies in constructing reliable new techno-organizational structures within a given local context. The tension here is brought by wishing to standardize ICT systems for efficiency and comparability in different settings and the difficulty in imposing identical standards on the different local contexts.

3 Aspects of Participation in ICT4D

Participation in the design and implementation of ICT4D projects can occur at various levels. As Pretty's typology (Cornwall, 2008) suggests, participation can range from information sharing, to information gathering, participation in selected decision-making up to participation in project design, systems design, and project implementation. Equally various roles can be assigned to the in most cases pre-defined stakeholders, from being a source of information, to an active contributor or one of the decision makers. In the following section the authors discuss various aspects of participation that are of particular relevance in the ICT field, and moreover address some less common perspectives on participation that are characteristic for dealing with complex technological systems in a developing country context.

3.1 IT Literacy

Paolo Freire defines the need for humans as 'beings for themselves', "development can only be achieved when humans are 'beings for themselves', when they possess their own decision-making powers, free of oppressive and dehumanizing circumstances; it is the 'struggle to be more fully human' " (Freire, 1970). What he described in his book Pedagogy of the Oppressed already more than 40 years ago is that the poor and marginalized can and should be enabled to conduct their own analysis of their own reality. But participation needs practice and positive experience with getting involved and expressing one's view on things. Especially in countries with strong hierarchical structures and the often unquestioned acceptance of 'higher ranks' decisions. This conception of facilitating empowerment is relatively easy to understand when talking of freedom of speech, educational reforms or the right to vote.
It it harder to grasp however when dealing with interconnected technological systems whose inner workings and configuration is even in developed countries only understood by few. The possibility of participation in ICT4D is in

practice often said to be limited to IT literate participants. This is certainly true for several aspects of ICT projects, that require technical skills on different levels. However while there is evidence that participatory elements in ICT4D raise the level of IT literacy, there is often a barrier of expected skills necessary for participation that excludes the future users entirely from the process. Pre-project IT literacy can not be the main qualifying condition to be eligible for participation, especially if capacity building in this area is the goal.
Ratan and Bailur (2007) observe that "ICTD projects often champion 'welfare-based' initiatives to the extent of undermining the agency of the local population" and not recognizing the diversity of the stereotypically used notion of 'development'. There is surprisingly little attention drawn to the question whether part of the lack of sustainability of many these 'welfare-based' ICT initiatives is indeed the lack of adequate technological training and experience on the ground. It can be argued that this gap could be reduced through prior IT training of the stakeholders. Which on the other hand increases the risk, that the input to the participation is driven by the received training, as Dichter (1989) observed "when asked what it is they need, they will feed back what they have in effect been taught to need" (cited in Bailur, 2007).

3.2 Role of the Target Group

Heeks (2009) differentiates between three levels that the target group – he refers to them as "the poor" – can been involved in the innovation process in ICT4D. These levels also describe to some extend the level of participation:

1. **Pro-poor** projects are designed for the target group, but geographically outside the target area and without direct participation of the target group. Participation only takes places in what Arnstein calls Tokenism: consultation and information sharing at a stage when most project details have been decided by the implementing organization and been approved by a funding body.

2. **Para-poor** projects engage the target groups in the design process in the same way as it has been done with clients in the software industry for decades; by conducting interviews and collaboratively describing the problem and the proposed solution. This approach is usually the most difficult and costly one as it combines often conflicting expectations and preferences. It is also harder to estimate the costs and submit a proposal with a clearly defined agenda for funding, as outcomes are ideally not determined in advance but are developed in a collaborative process.

3. **Per-poor** projects are driven and steered directly by the target group. External IT experts are consulted whenever seen as needed by the

target group. This 'self-mobilized' approach usually starts with small scale local projects, that can help mobilize similar initiatives by passing on innovative ideas with a low barrier for participation.

As for *participation*, these approaches are not mutually exclusive. Depending on the project, each of the above can make sense to a certain degree at the various project levels, one can be generated by another or reinvented by different group of stakeholders.

3.3 Target Group of ICT4D initiatives

The target group of development initiatives is often described as "the poor and the marginalized" (see for example Heeks, 2009; Cornwall, 2008). Using ICTs to reach a certain development goal often involves the training of users other then the intended group or makes additional training necessary for maintenance and support. For example an mHealth program that is implemented to inform about HIV infections through mobile devices is being maintained by a local IT team and not by the group targeted by the health initiative. Also to run a telecentre or PC lab, computer administration work and trainers are necessary to minimize or ideally eliminate long-term dependence from an aid organization. The development of technical, educational and institutional infrastructure bears a higher potential for an independent long-term operation, but those projects are much more likely to address the already advantaged urban elite. This means that in the case of ICT4D training we often find that groups receive benefits that are already in a privileged position, like university graduates of technical study programs.
Accepting that without the support of the 'local elite' ICT4D project risk a very short life-span is as important as the fact that participation is necessary on more than simply a technical level to ensure there is a demand and there will be an acceptance of the service. Community participation in ICT project design includes critical attention to the 'who participates', as in technology projects it indeed often tends to be a very small, elite minority. Participation needs to bridge multiple divides here: techie versus non-techie; rich versus poor; often a Western versus non-Western mindset; urban versus rural and men versus women, all need to be considered (Heeks, 2008).

4 Participation Dimensions: ICT Case Studies on the Edges

From a project development point of view participation can be seen within two main dimensions: the degree of participation of the target group and the stage at which the participation is happening (compare figure 2). Projects are often designed in a way that is taking either dimension of participation to the extreme while neglecting the other, leading to unwanted, but as we

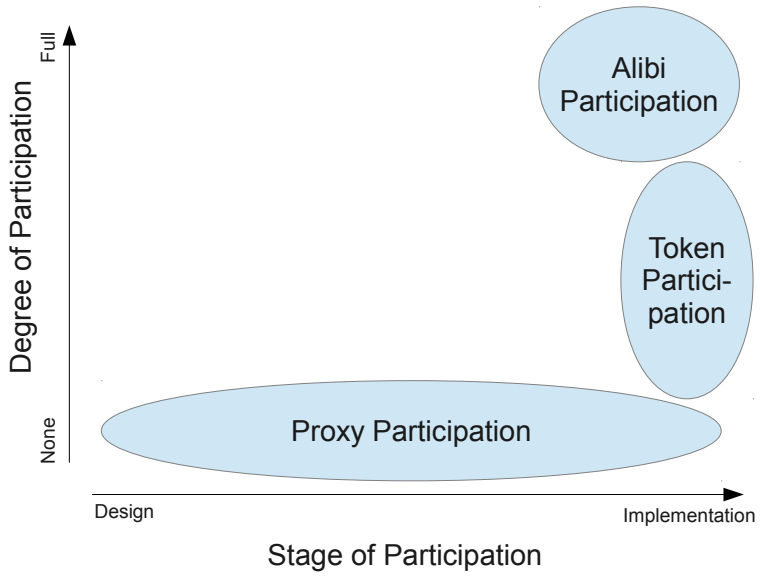

Figure 2: Dimensions of Participation: The Egde Cases.

want to show not necessarily unexpected results. The authors have reviewed several cases of ICT4D projects which showcase such edge cases of participation and will present a selection in the following. All interviews took place between 2007 and 2012, to protect the sources the names have been changed; additionally the authors decided that no detailed information on when and where the interviews took place would be given.

4.1 Token Participation

What is described by Arnstein as Tokenism, by Pretty as consultation or functional participation and by White as Nominal will here be called 'token participation'. This approach is probably the most common one in development aid, not only within ICT4D. Participation is facilitated only in the implementation stage to display inclusion while all decision are made elsewhere. Taking Heeks (2008) definition, this would be a clear pro-poor approach where a project is being designed in a top-down manner and then imposed upon the target group. ICT4D projects that would fall into the category token participation are at no stage up for discussion at the local partners level. Participation is interpreted as to show how a given IT tool is used, not if it is the right tool in the first place.

The following example is from an interview between the interviewer (I) and a project member (PM) of a education technology project. The PM describes the use of a software for parents that had been installed on the devices. The computers were primarily for children, but additional benefits

were hoped to be gained by adding content for parents. The interview took place some time after the equipment had been handed out and the software was not used by the parents as much as they had hoped for.

I: Did you get any feedback [from the parents] on whether [they used the software]?

PM: We got basic feedback from surveys, we think about two out of ten parents used it. With all the stuff that we undertook, we did not have sufficient outreach to tell parents about it. [...] We really should have had a big show assembly and present it to the parents. Because this is all so radically different to anything that they would have seen before. And particularly in [...] the provincial cities. [...]

I: So there was no introduction on that for the parents?

PM: No we had, in a couple of [cases] we got feedback from them. But we didn't really ensure there was sufficient outreach going out there. [...] We went, we talked with the parents and [...] and we checked that this was something they were interested in.

I: [...] That was when the contract was all signed obviously.

PM: Jaja, of course after the contract was signed. And the Ministry of Education said this is the school you go to. So go to [this] school, sit down with them, [...] and all, you know, seemed rosy. But of course it's pretty easy to be rosy and optimistic when you can basically say "hey, I'm going to give you free [technology]". You are not going to get many people go "well you know, that's very nice of you, but they're not really going to solve my problems. And here's the answer to my problems."

This example shows that formal approval by parents and teachers was obtained before the technology was introduces, but in a way that no resistance or criticism was to be expected. Stronger involvement would have been necessary, as the project member admits, to make sure people actually understand what it is they are getting and what can or can not be done with it. To actually involve people in the project design level however would have required and entirely different approach as this short interview section also shows. The implementation was scheduled, contracts were signed and schools selected before any interaction with the pupils, parents and teachers could take place.

Another example for token participation is drawn from an interview with Peter, an international technology consultant. He was at the time the interview took place responsible for the development and implementation of a software that was to be used by different governmental institutions. The

interviewer asked how he would make sure the software would be accepted and used, below is an excerpt from his reply.

> Peter: [...] If we consider ourselves as children and we consider the constraints that our parents put on us, we did not wake up in the morning and say: I want to be told when I have to go to bed. Did we? [...] And I want the constraints that my parents put on my life. We didn't do that. We thought we do best, in fact, frankly we couldn't understand how come our parents were still alive they were so stupid. Right? Point is, that [when] we're old enough to be parents we recognize that the child has its own agenda, which is not always, in fact most of the time not at its best interest, (laughs) especially in terms of survival. So there is, like it or not, a degree of parochialism required in this situation. Secretary Rice used to say there was a dark side to the Afghanistan compact. And that it was time we started to realize that and to impose it. So this goes down to those nasty words like conditionality. The acceptance of the system will come when they realize that's where the money comes from. No acceptance no money." [...]

Peters case shows a way of self-perception as an international expert that was evident in several interviews. Participation is less something that needs to be facilitated, but rather seen as an act of persuasion. The international community has the role of a parent that needs to lead the way for the child – in this case Afghanistan – and it has the means to enforce its conditions, at the inexperienced child's best interest. With a technology supporting the introduction of "specific organisational features" (Avgerou, 2001). And those who are supposedly in the centre of attention, become the weak point in an otherwise smoothly running operation.

4.2 Proxy Participation

What we characterized as proxy participation is another common form in ICT4D project, that is mostly combined with token participation but can also be a means for alibi participation (see next section). It often includes functional participation (Pretty, 1995) where local government or community representatives are included into some aspects of the project, while major goals are pre-defined by external agents. These proxy participants may be chosen for different reasons: they might be the most accessible ones, they might function as gate keepers to the necessary official approval or they might just be chosen out of an insufficient understanding of local procedures or the technical complexities that are involved.

The following interview was conducted with two young IT professionals at an Afghan university. As observed in similar contexts, even though they

express interest in getting involved in ICT related decisions and they are among the best trained IT personnel the university has, they feel held back by various external constraints.

I: Do you think the university understands how important it is? How important internet is even in Afghanistan for a university?

Khaled: I think they know, but not to that extend. They think Internet is only for checking Emails at most.[...] But its not only the management but also the lecturers, they don't know that because they are not research oriented. [...] [Today] most [students] are a little bit familiar with English, they know the importance of computer science and come of their own interest. But [when we were students] some people just wanted to have a certificate from any faculty and they were sitting with us in computer science. All this is progress, people are going abroad [...] the students understand importance of computers and Internet, only older lecturers don't. [...] I asked [the new students this year] why they want to be computer scientist. They have informed answers: create a new programming language, build a robot. Still they have no clear idea what that means but their vision is broad. In 2003 people would have said that they want to learn Office.

[...]

I: [Is the university] also paying for that [IT officer] position?

Noorzad: It is paid by outside. There is no money from university. Still we are losing many opportunities at the moment, still the old story is going on. That [the international organizations] bring lots of money in different offices, but they don't cooperate with each other and sometimes they don't invest in right people, duplicating the projects. But good point is we have [...] guys with experience in IT for many years [by now]. So we made different sections [...] the last target we want to enable all faculties, all departments to have the IT infrastructure, they should start their own research. [...] Maybe in 2 or 3 years.

[...]

Khaled: [...] Till now university should have been able to have their own web-servers, their own data centres, at least their own web platform. They don't have proper websites, they have no internal servers and they have not solved the issues of electricity. [...] So such thing happens and there is not a proper budget for.

Young well educated computer scientists at public institutions often make the frustrating experience that ICTs are either given a very low priority or that decisions are made by their superiors who lack the understanding

and experience to judge what is necessary and appropriate. Almost identical projects are implemented twice at one university while fundamental requirements are ignored. But not only diverging priorities or personal benefits explain why the young professionals are excluded from project planning and negotiations between the institutions, donors and NGOs. They also seem to represent a threat to those in higher positions, who particularly in the area of ICTs often can't keep up with the "next generation" (who is in many cases only a few years younger). Ten years back, computer science students in Afghanistan were trained only on a theoretical level as real computer were expensive, power supply sporadic and Internet non-available. Additionally the majority of students had not chosen to be there [1]. Today most students have access to computers, mobile phones and internet and computer science ranks among the most popular subjects.

The interview below was conducted with an employee of an Afghan governmental institution, who was involved in the OLPC project. As a representative of his institution he was an important stakeholder for the project with considerable power, yet the project design didn't leave much room for negotiation. His main task was to advocate the project in his institution.

I: But what is the problem? [...][The people at the administration level] don't see that it can have an impact?

Mr. Daoud: Well it's really hard to give this message to the larger audience [...]. Because right now, and sometimes I don't blame politicians and the ministers and so on. Because 50 % of the schools don't have buildings. And it's really really hard to push this message. They will say that, come on, we don't have buildings, we don't have chairs to sit, and you are coming with these luxurious computers? But, I totally disagree with them. Because as Nicolas Negroponte, the founder of these laptops, he said something very good and it really touched me. He said that these computers [are] like someone needs food, you can not just say that no, food is not important for you. These computers [are] something like food. It's not something luxurious. [...] You can not provide these laptops to every kid, but to the amount that you can provide, let them provide. It's like food, you can not just stop someone from eating.

Mr. Daoud is a strong supporter of the project and felt not receiving enough backing by his institution. However, this interview section shows two things. First, that a lack of institutional support might be interpreted

[1] In Afghanistan students have to pass a competitive entrance-exam. If their results are too low for their preferred subject the university administration assigns them to a different department

as innovation-hostile by one side, but as reasonable doubt by the other. Second, it demonstrates how invited participation can lead to overreliance where the 'local partner' just repeats what he has been taught (Dichter, 1989), even if he shows understanding for the scepticism.

4.3 Alibi Participation

The opposite extreme of the lack of participation as described in section 4.1 is to use the participatory approach as an exit strategy in case of project failure. This is a rarely addressed version of participation as it looks very interactive from the outside and has a lot of similarities with a partnership on equal terms. The local project partners tend to be included at a time when the "what" has been decided by the implementing organisation and approved by the donor while the "how" is open to some discussion. ICT projects with alibi participation usually depend on long-term qualified personnel on the ground or ongoing costs that can only be covered for a limited period of time. ICT4D in general seem to attract this kind of exit strategy, as sufficient financial and professional support remains an unsolved problem for many cases and passing the buck to the local partners assures a "successful project completion". Additionally ICT projects are not necessarily managed by technology experienced personnel. As can be observed below, technologies are often treated as neutral, reliable tools with insufficient understanding of the various dependencies and complexities. At a first glance, alibi-participation offers strong involvement of the local partners and can even seem to lead to self-mobilization. Decisions are discussed, applications for further funding filed by partnering institutions on-site and responsibility gradually shifts to the local partner. But especially when dealing with complex technical systems, room for manoeuvre is limited as technical and financial dependencies remain.

In an IT infrastructure project in Afghanistan, a system for Internet access was installed at different sites, not fully taking into consideration that the implementation and maintenance on the ground requires highly skilled networking experts. To address the lack of qualified personnel, the implementing agency had sent some of the Afghan staff - some of whom had never worked in the IT sector - abroad for a course on computer networking. Asked who will maintain the local networks in the long run, a representative from the implementing agency admitted some concern.

Mr. Taylor: Network manager? Well Afghans, we'll have to find some. We actually do not have funding for salaries, you know, that is our big handicap, it's [implementing agency] policy. So we depend on finding cooperation partners and make a deal with them. [...] There are other projects that receive some

bandwidth from us, 1 Mbit maybe, and they pay the salaries in return for network management on the ground.

The main partner in this project is an Afghan governmental institution, represented by Mr. Bezhan who had fully accepted his role as 'head of the responsible entity' and presented the project to the interviewer as mainly his own.

I: So you were writing the projects [...] and they only provide the money?

Mr. Bezhan: Ja. the projects are running by this department, so we are working closely with the [sites]. In every year, we have an inventory from [them], we know the requirements, then we are proposing in coordination with [the sites] to the [implementing agency], and [they are] providing the IT facilities.

[...]

I: And from the technical or from the software and configuration side, is that also done here, or does [the implementing agency] provide the ready configured servers?

Mr. Bezhan: The first time for [one site] it is run by an [external] company. But now the configuration, everything, we can do that. Because we have trained staff to do the configuration.

[...]

I: And who is doing the network administration at [the sites]?

Mr. Bezhan: For each [site] just we trained at least one person. We trained them, we send them [for the training abroad] and we trained them here [...]. At least we have one person to manage the network connection.

I: And now through this training they are all capable of doing the administration or are there many problems?

Mr. Bezhan: It's good but not all of them actually. Because those who are not computer scientists need more training to be able to manage the network.

I: So they get any support for the network management at the moment? [...]

Mr. Bezhan: Ja we have weekly teleconference for all of them. If they have problems they have to share with us, and we are helping them.

Mr. Bezhan avoids talking of "them" and "us" as most others did, instead by using "we" in cases when it's not clear who was responsible he emphasises his role as a relevant partner in this prestigious, extensive undertaking. As the main cooperation partner he held a respectable position,

being involved in meetings with important stakeholders on national and international level. He showed strong confidence that his team would be capable to maintain the system though repeated Internet outages at all sites suggested that this was not the case. When asking on-site staff about the project, we got less optimistic answers:

> Naser: The [implementing agency] people made it themselves most of the work. Just they come with one idea. You can bring a server here, that's not a problem, they have money, they can bring. But here in this side there was nobody to maintain the server, to work with that, to administrate the system. There was nobody. And they did not include in plan. We have now [...] very basic technical problems. They put firewall and the firewall is a simple PC. [...] If the connection number is very high, just the PC goes down and disconnect the people. [...] They have just money, ok do this do that. [...] Then the project will be finished and they have no one to pay. They don't think about what will happen after.

This is another example of participation only applied – and in this case over-applied – at the implementation stage without considering on the design stage "who defines what the initial community needs are" Bailur (2007). The reasons for such an approach vary: it can be a result of overestimating the technical skills of the target community, a lack of technical skills in the implementing organization or simply the awareness that an extensive training and preparation can not be realized with the available budget. In most cases as in the one displayed above, it is a little bit of all three.

5 Conclusion

So who is to blame if participation goes wrong? Is it the donors who in most cases suggest what kind of problems they would like to see being addressed in the proposals? Is it the "aid industry" whose actors don't want to risk their often well-paid jobs by admitting mistakes and pushing for changes? Is it the local governmental partners who suppress innovation for personal benefits or a fear of their position? Is it the self-exclusion, the deliberate non-participation out of a lack of confidence, a 'participation fatigue' (Cornwall, 2008) or other external constraints? Could they all have "done better"? We suggest in this paper that participation in ICT4D is all but straight forward and that typologies of participation can only tell one part of the story. Participation can happen from a very early stage, but fail to include those actors that will later be in charge. It can mean trying to include various stakeholders and realizing they have no interest in participating in something they can not relate to. And it can lead to acts of self-mobilization by

offering people opportunities, which they no longer have as soon as the technical and financial support stop. Participation is an open concept, but most projects are tightly bound to financial, spatial or time constraints whose sense or nonsense must be explored elsewhere. So while we support (Cornwall, 2008) in her call for a closer look at the "what", "who" and at "which stage" in participation, we want in relation to ICT4D also call for a greater awareness of the technology and the conditions it imposes for certain types of participation.

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