



Gender Equality  
through ICT Access and Appropriation:  
Taking a Rights-Based Approach



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IT for Change





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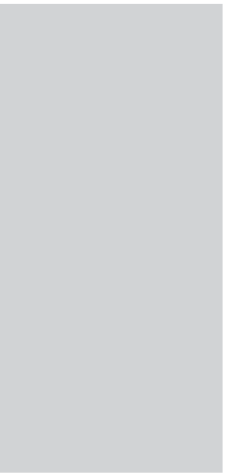
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*This paper explores the meanings of women's empowerment and gender equality in the information society, looking at the opportunity for progressive change and critically unpacking the Information and Communication Technology for Development (ICTD) discourse on gender and development. It also seeks to articulate a rights-based framework to policy and action that takes on the specific question of what models of access and connectivity will work for the marginalised peoples and countries, in a manner that promotes gender justice. The paper was written for the United Nations Global Alliance for ICT and Development (UN-GAID) Annual Meeting and Global Forum 2008.*

## The Gender Transformative Opportunity in the Information Society

The strong case for a gender perspective on access and connectivity is backed by the global consensus articulated in the WSIS Geneva Declaration (WSIS 2003), which recognises both the potential of information and communication technology (ICT) to promote “gender equality and empowerment of women” and the “enormous opportunities for women” in the information society (IS), as well as the challenge in harnessing such potential towards promoting these goals.

What may be such potential, and the attendant challenges, is worth articulating. The fundamental potential for women's empowerment lies in the new possibilities that the IS contains for social transformation. Such transformative possibilities derive from the new techno-social paradigm<sup>1</sup> of the IS. This paradigm, also implied *inter alia* in the description ‘the network society’, is underscored by the oppositional proclivities of ICTs to democratise as well as centralise resources and power. The epochal times we live in are characterised by the mutually reinforcing phenomena of economic globalisation and information society. The centralising tendencies of new ICTs have given a new lease of life to the hegemony of capitalist forces, and this connection has been the subject of much analysis.<sup>2</sup> The shrinking space for, and force of, social policy implied in economic globalisation has had a pernicious impact on women's interests. At the same time, in this global information society context, totalitarian states and fundamentalist forces have also used ICTs to centralise their power through surveillance and controls on citizen freedoms and through use of new forms of media, respectively. It is important to remember that these phenomena have important gender implications in the ways in which the economic and social lives, including bodily security, of women get circumscribed.

1 This techno-social paradigm is characterised by new social processes that are co-constituted by new technologies, which represent an inter-mediate form between the ‘technical’ and ‘social’. After a certain degree of social appropriation and acceptance/integration, these processes appear to be as simply ‘social’ as all the print technology-based processes appear to us today.

2 For example, Manuel Castells (1996) discusses the rejuvenation of capitalism in *The Rise of the Network Society (The Information Age: Economy, Society and Culture, Vol. I)*.

On the other hand, ICTs can be seen as harbingers of new freedoms for women. The IS enables new “states of being and doing”<sup>3</sup> (Sen 1985, 204) and, in this, heralds a new paradigm of freedoms. It enables women across geographies to connect and engender collective identities; it offers spaces for their self expression and action that transgress social and cultural boundaries; it makes possible journeys to explore new identities; it creates new meanings of citizenship through avenues for voice, agency and participation in the public sphere; it breaks the barriers to learning and knowledge imposed by literacy- and print technology-based systems and affirms alternative constructions of reality beyond the written word. Gender theorists are of the opinion that for the project of women’s empowerment, ICTs need to be seen not just as tools; they are in fact a new grammar (Menon 2006), of both a new language, and a new social reality. For women, ICTs mediate a new social image and provide opportunities for assuming new social roles, breaking out of traditional orthodoxies, as software engineers, knowledge workers, ‘infomediaries’, telecentre operators and social entrepreneurs. The symbolic dimensions of such new roles challenge entrenched gender inequalities in existing institutions and contribute significantly to shifts in local gender norms.

For development goals, and from an institutional perspective, ICTs can be seen as architectural building blocks for new social systems and as system integrators. As building blocks, they allow institutions to reinvent themselves and reconfigure the existing system logic – allowing development processes and structures to coordinate intuitively, creating possibilities for decentralised design and decisions, and expanding institutional capabilities for accountability. From a citizenship perspective, these attributes of ICTs enhance the democratic potential of the development endeavour through new modes for participation and citizenship. This is apart from the many efficiency-inducing characteristics of ICTs that are well recognised.

Yochai Benkler (2006) for instance discusses how the shift in networked information results in several changes within democratic societies, which include “enhanced autonomy” through improved capacity to do more for themselves and more in loose commonality with others without being constrained in their relationship to the market economic system. Benkler also asserts that in the “networked information economy”, there is an opportunity like never before for improvement in the normative domain of justice. These aspects are significant to our global efforts to make connectivity work for addressing development priorities and gender justice in LDCs (least developed countries) and SIDS (small island developing states).

For sustained institutional change, gender activists have advocated the need for both an assertion of demands by women for their rightful entitlements from the state and a transformation of institutional structures in ways that are responsive and accountable to women’s demands (Rao and Kelleher 2005). By privileging collaborative and communitarian practises, and promoting open and inclusive institutional forms, the IS offers the structural underpinnings for sustained institutional change towards gender equality. Thus, from a gender equality standpoint, the democratic propensity of the IS translates into prospects for equal participation and citizenship by opening new doors for agenda-setting in governance, for seeking entitlements and being active agents of change. Initiatives in community radio, video, and computing, as well as governance systems built on IS possibilities (taking a more systemic view of what is generally referred to as e-governance) in which women have participated, bear witness to the promise of a new, inclusive citizenship for women. This area of entitlement to full citizenship in fact represents cutting edge work on gender equality in recent times;<sup>4</sup> hence the directions for policy and action require to follow from the intersections between the gender and citizenship discourse and IS concepts.

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3 The phrase is adapted from Amartya Sen’s ‘capability approach’ to development. Sen (1999) argues that enabling such states of being defines ‘capability’, which provides a new basis for development policy.

4 See for instance, Jayal (2003).

## Moving Beyond the Plug-in Model

Most governments in the Asia-Pacific region have taken the single-track approach of 'plugging in' to the promise of the global information economy with focus on job creation in the IT and ITES<sup>5</sup> sectors. This *per se* is an important IS aspect, and from a standpoint of policy support for gender equality, focus on equal opportunity in education, employment and enterprise is an important imperative. The IS opportunity for gender, however, is greater than just more jobs in the global information economy. It lies in the myriad possibilities for breaking away from old social equations that are unequal and unjust. The new meanings of participation, empowerment and citizenship in the IS thus demand that we work on policy principles of inclusion with a conscious bias for equitable and gender just social outcomes, in addition to economic gains.

Access and connectivity must be seen not just in terms of access to IT jobs or to basic IT skills, but through the lens of 'appropriation', where people and communities can create contextual meanings and self-directed uses of ICTs. Appropriation includes making communities familiar with the possibilities of the IS without taking for granted what technologies ultimately offer. Providing access, in this sense, means enabling appropriation through processes that (re)position women and other marginalised groups from passive 'users' to active co-creators of the technology – creating new technology meanings and new technology uses. This is a time and resource intensive process and cannot be short circuited through simple strategies of 'access' to the dominant model of technology devices, connectivity, existing content and applications. Essentially, the investment is for a process of acculturation: not of the acculturation of the community to the IS possibilities but rather, of making ICTs and the Internet relevant to their needs. This can be called 'acculturation' of the IS phenomenon to local and contextual realities. Such investment, especially in the context of developing countries, is not possible without a strong role for the public sector and for communities and needs to be positioned centrally in the existing mainstream development work in these countries. This is significant since much of information and communication technologies for development (ICTD) discourse and action has taken place at some distance from traditional development activity.

In accounting for gender justice, such an approach to appropriation requires that we move beyond looking at women as a proxy for the 'social' considerations of a dominant model. Treating social aspects as residual to dominant economic growth considerations is an approach much critiqued in development and gender theory (Mkandawire 2006a). The specific contours of a gender-just approach to the IS need to evolve from the specific meanings of women's empowerment, on the one hand, and the IS context and opportunity, on the other. Providing connectivity cannot be seen as an end in itself. More importantly, the 'demand' for connectivity (which results in 'effective access' and contextual appropriation) arises through complex processes of systemically integrating ICTs within social contexts. Women are not likely to 'need', and therefore much less likely to demand, connectivity unless it makes meaning in their lives. This meaning and the gains for gender justice, come with creation of new systems and building of new institutional ecologies, and are relatively resource and time intensive, with no ready 'revenue models'. Therefore models that can address the needs of a majority of women in LDCs and SIDS require that we see connectivity as a catalyst of change in local institutions and socio-economic systems that leads to transformation and power shift. Such models need to be backed by a vision that recognises, and invests in (the actualisation of), access as a right.

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5 IT-enabled services.

Access to ICTs is the starting point of a new set of capabilities; and this perspective implies that ICTs are not instruments for material gains alone, but seen as expanding “valuable states of being and doing” (Sen 1985),<sup>6</sup> just like literacy and education. Lack of access then implicitly becomes capability deprivation, to be responded to from an ethical and a rights standpoint. As per United Nations Development Programme’s (UNDP) Human Development approach (Fukada-Parr 2003) built on Sen’s capability framework, such capability-providers and rights are an important basis of development policy and development expenditure.

So – what are the ICT policy requirements for addressing such ICT appropriation that move beyond a ‘plug-in’ model?

- ICT policy formulations need to pursue social imperatives – public services, development delivery, community managed information systems, etc. – as much as they address economic priorities – jobs, local enterprise based initiatives, access to commercial services through telecentres, markets for ICT consumables, etc. In negotiating both these sets of objectives, the policy process often faces trade-offs, which need to be political choices driven by the socio-political priorities of the particular society and not just by the dominant market fundamentalist ideology of the ICT sector.
- At individual and community levels, access models cannot be designed purely from the perspective of markets serving a ‘spontaneous’ demand for ICTs. Models built on an entitlements and rights-based approach, where policy privileges a public goods basis for regulation and investment decisions, will serve the larger public interest in reaping the IS advantage for development and social justice. Gender concerns must be included from the design stage of such access models, where women’s rights are intrinsic to the rights-based framework underpinning ICT policies.

The IS opportunity to address challenges of poverty and inequity is situated within a highly competitive global environment that demands a careful orchestration to balance macro-economic policies around trade, investment and technology, and social policies on health, education and empowerment of the marginalised, in a context of often reduced national policy choices. Research from United Nations Research Institute for Social Development (UNRISD) (Mkandawire 2006b) indicates that even in democracies, especially the fledgling ones, policies are not socially inclusive and their relationship to democracy has been problematic due to their neo-liberal orientations. The present global economic regime and its ideological content are therefore not easily amenable to making the democratising proclivities of the IS work specifically to meet challenges of poverty and inequality in LDCs and SIDS. Building an inclusive, people-centred and development-oriented information society, as envisaged in the WSIS declaration, clearly poses a tremendous challenge within this macro context. The current economic regime seems only to address exclusion – gender-based and others – by making allowances on the margins in an one-off manner, rather than dealing with social inclusion in any sustainable systemic way. The latter approach requires an architectural blueprint in which progressive social considerations are part of the brick and mortar of our societies.

In relation to LDCs and SIDS, the global-local policy continuum in fact poses specific challenges. Despite an increasing recognition in policy circles in developed countries about the value of public connectivity infrastructure, the policy prescriptions for developing countries are usually only in terms of deregulation and market-mediated access. Developing countries cannot move towards ensuring broadly distributed, universally

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6 Amartya Sen’s capability approach is instructive in the access and connectivity discourse and provides the basic rationale for public provisioning.



accessible public Internet access unless the 'public value' of the Internet<sup>7</sup> is recognised for addressing development challenges, making way for public investment and community involvement in ownership. A recent article, giving the example of how planners are considering making use of India's extensive public sector railway network to deliver Internet connections to remote villages, argues for hybrid public private infrastructure, with due public investments (Shanmugavelan 2008). Such a model is very much in keeping with the shift in development thinking for transfer of ownership of development activity, funded by public monies, to communities. UNDP's research on community-owned connectivity networks that are relatively inexpensive may be instructive in this regard (Ó Siochrú and Girard 2005). It needs to be emphasised that the gender and development concerns of the vast majority in LDCs are unlikely to be addressed in the absence of a public goods approach to basic ICT provisioning.

The Bottom of the Pyramid models (BOP) for connectivity do not necessarily work in favour of local communities. As was argued recently in the 'Solution Exchange' e-list (a UN initiative in India), "Every rupee spent on mobile communications in a rural village leaves that village and is not recirculated within the community".<sup>8</sup> This transfer of surplus out of the community is a serious issue in the connectivity and access discourse. The alternative to the bottom-of-the-pyramid (BOP) approach, community-owned wireless networks that can also provide local Voice over Internet protocol (VoIP)- based telephone, circumvent corporatised models and open up a huge scope for marginalised populations and women's groups to own and shape local ICT-related processes (Ó Siochrú and Girard 2005). While investments in infrastructure are indeed critical, financing models need to prioritise such alternatives.

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7 The Council of Europe (2007) uses the term 'public service value of the Internet'.

8 Ben Grubb posted this message on 13 March 2008 in the thread 'Re: [se-ictd] Query: Campus and Community Radio- Advice. Reply by 19 March 2008'. The message is archived at <http://www.solutionexchange-un.net.in/en/ICT-for-Development/The-Mailgroup.html>

## Access and Connectivity from a Gender Perspective

### What We Seek to Achieve from 'Access'

The goal of ICT access for women through policy intervention can be multifarious. It may be to increase acceptance of ICTs among women; train women in using ICTs; build women's capacities, entrepreneurship skills and networking opportunities; or increase women's access to ICT-based services. However, 'empowerment' does not necessarily ensue in the achievement of these goals, crucial as they may be. Gender power shifts are essentially a transformative agenda requiring sufficient attention in terms of progressive policies and resource commitment for institutional change. Such fundamental shifts for women's empowerment and gender equality in the IS may be conceptualised along the following trajectories arising out of a rights-based 'provisioning' of access at community, collectives,<sup>9</sup> as well as individual levels, as a basic requirement:

- To build new organisational systems, with digitally revitalised government and civil society organisational work processes and development service delivery, that allow development organisations to leapfrog intensive human resource requirements in meeting mandates for wide outreach and greater participation; and to enable women's enterprises and livelihoods support structures to gain in operational efficiencies and build institutional capabilities for greater accountability.
- To catalyse a new community informatics (Gurstein 2000) structure that democratises local information and communication systems. In the emerging socialscape which potentially allows ICT appropriation by women and other marginalised groups, it is possible to imagine new information channels that displace the stranglehold of elite information and communication brokers at the local level. Such innovative possibilities include community created, managed and monitored information systems that can be used both to assist public institutions in better targeting and delivering of services, as well as to extract accountability from these institutions. A new informatics structure will also imply local media acquiring new dimensions through 'sub-altern counterpublics' (Pavarala and Malik 2007) and the legitimisation of women's perspectives and knowledge.
- To construct new knowledge processes that privilege critical and collective pedagogies through which poor, marginalised women are able to enjoy new knowledge modalities. These can be seen as replacing top-down, prescriptive community organising by development agencies, providing illiterate women and their collectives new ways of learning and sharing and kindling solidarity through collective reflection and action (Swamy 2007).
- To invent new institutional alternatives to enable social inclusion – by providing the *de jure* right to information its *de facto* counterpart in institutional transparency (through information 'push' using digital information systems); by creating the information and communication infrastructure to promote decentralisation in governance; by achieving greater parity of participation in developmental processes; and by enabling a new networked partnership between government and non-governmental players. Information society possibilities are seen as having great import for the project of social justice by scholars like Fraser (2001)<sup>10</sup> and Benkler (2006). The multiple and non-linear impacts of

<sup>9</sup> Women's collectives are considered one of the most important planks of empowerment and development.

<sup>10</sup> Nancy Fraser (2001) observes that the emergence of the knowledge society makes a bi-focal perspective on construing redistribution and recognition as two mutually irreducible dimensions of justice – possible and necessary.

democratisation of public information can place a much needed pressure on the supply side and provide spaces for structural changes in the relationship between the community and the state, dramatically changing power relationships between poor marginalised women and development institutions.

### Key Considerations for Building Access and Connectivity Models

From a gender perspective, especially in addressing the needs and conditions of LDCs and SIDS, access models need to be built over some key tenets derived from the above analysis of IS possibilities for gender equality, which are different from the major considerations for building access and connectivity system that are most prevalent today.

***Collective rather than individual modes of access to and appropriation of ICTs are likely to effect empowerment.***

The dominant approach to ICT access is based on individualised and market-mediated models. For instance, most telecentre initiatives co-opt individuals who are most able to afford the infrastructure, space and equipment costs and within the social context, seen as best capable of 'managing the telecentre'. This undermines the participation of the poorest, most marginalised sections of the community in the information society 'opportunity structure'. In fact empowerment, in its interpretation as an individual and largely economic phenomenon, limits the possibilities that ICTs hold to challenge social relationships and create new meanings and institutions. Oxaal and Baden (1997) critique the watered-down definition of empowerment in development discourse wherein it is seen as an individualised and de-politicised process that is valued purely in terms of economic outcomes. Taking from Young (1993), they note, "empowerment is often envisaged as individual rather than as collective, and focused on entrepreneurship and individual self-reliance, rather than on co-operation to challenge power structures which subordinate women ... fit[ting] together with the belief in entrepreneurial capitalism and market forces as the main saviours of sickly or backward economies, and with the current trend for limiting state provision of welfare, services and employment" (Oxaal and Baden 1997, 5).

A 'collective' empowerment approach to ICT access, can catalyse social processes that lead to collective reflection about and action against gender-based discrimination and disadvantage. Women-owned telecentres are emerging as not only spaces for information access and communication, but also as 'assets' reordering power relations.<sup>11</sup> The opportunity for empowerment here is not just for individual women or only in entrepreneurship possibilities as is often associated with telecentres, but in the potential for the social mobility of women from marginalised social classes – women who may be severely circumscribed by patriarchal, caste and feudal hierarchies – to become new information nodes and intermediaries, and thus new loci of power in the community. For instance, telecentres owned and run by solidarity groups or grassroots collectives of poor, marginalised women bring new forms of visibility and status through the networks and linkages with external communities and agencies and thus create new identities for such women within the village system (Habib 2007). Women's radio and video initiatives also create such conditions of change; 'collective' listening – of their own community radio broadcasts is a practise with certain

11 The *Mahiti Manthana* project is one such example where telecentres are owned and managed by grassroots collectives of *dalit* women.

See [http://www.itforchange.net/index.php?option=com\\_content&task=blogsection&id=4&Itemid=65](http://www.itforchange.net/index.php?option=com_content&task=blogsection&id=4&Itemid=65).

grassroots women's groups who use the process not only as an affirmation of their own culture and knowledge, but also for an alternative public discourse (Gurumurthy 2004). Video production is no longer an expensive endeavour only for those with technical expertise in 'film making'; video now is a relatively inexpensive, peer-to-peer medium, and an iterative tool for collective self-expression rather than a one-time product.

Ensuring 'that inclusive' access models are meaningful to the poorest women, usually burdened by multiple disadvantages, is no doubt time-consuming and requires significant investment in resources and capacity building, but it constitutes the social engineering attempt to challenge hierarchical power structures in favour of new structures that destabilise the status quo and create transformatory spaces. The economics of making such appropriation of ICTs possible have therefore to be put in perspective against non-negotiable social and gender objectives, in the context of the extraordinary IS opportunity already described. Without discounting the importance of access to markets and to decent income-earning opportunities as one of the fundamental conditions for women's well-being, it is critical to engage with the realm of institutional transformation, envisaging ICT access for empowerment outcomes.

***The value of new technologies only becomes evident after a certain 'incubation' period, foreclosing 'ready demand'***

As discussed earlier, there has been much stress on promoting a demand-driven strategy in ICT diffusion — wherein it is assumed that ICTs are 'out there' and available to be put to valuable uses by all. As Mridula Swamy (2007) argues, this assumption is weak on two grounds. First, the technology is not 'out there' ready to be used by all. Software and hardware in their current forms are designed largely to meet the business needs of developed countries, and definitely do not take into account the needs of poor, non-literate, non-English speaking women in developing countries. Second, and a related point is, the poor in rural communities do not currently perceive value in new technology options and do not believe (rightly so) that these technologies, as presented to them, will change their lives. This is substantiated by the failure of many municipality connectivity projects in the US which did not first address the issue of relevant content and usage. Some non-profits are now developing a new approach, which the CEO of the US non-profit organisation OneCommunity describes succinctly – "We are planning for the adoption and usage on the front end. It's the opposite of 'build it and they will come'" (Fitzgerald 2008). If such insight informs the present situation in developed countries, building demand-led models in developing countries is obviously a non-starter, especially for marginalised groups.

Within current paradigms, new ICTs are completely alien to poor women's realities. Contextualised ICT interventions require public investments not just in ICT infrastructure, but in accompanying social processes that then together forge a new socio-technical ecology within which economic, social and cultural activity are reshaped and development processes and initiatives are redefined. As has been acknowledged in the business sector as the 'productivity paradox', the value of ICTs is demonstrated only over a sustained period of time. Demand generation requires a new process or system incubation period, only after which innovations start to deliver value in the existing social context and trigger a virtuous cycle between supply and demand, so that end users can directly begin to interact with and shape the techno-social system more actively. Simplistic 'demand-led' paradigms therefore need to be problematised in relation to new ICTs, placing the issue of 'gestation' for new institutional paradigms like telecentres, in perspective. We have to move beyond comparisons in this regard of the much easier 'acceptance' of the simple tele-voice value of

mobiles and radio, with 'poor demand' for the Internet, which are often made to 'prove' that the Internet is not relevant to most people in developing countries (The Economist 2005).

***Cost-benefit and sustainability analysis for 'access models' need to be seen in terms of the extent of community appropriation of new ICTs<sup>12</sup>***

Investment models for access are by and large built on the *raison d'être* of revenues and financial viability. However, the embedding of ICTs within development contexts cannot be reduced to the profits that an individual entrepreneur will make. In fact, most existing telecentre initiatives have shown that user-fee driven set of services have failed to create much demand for ICTs in most local communities in marginalised areas. Further, such a thrust can compromise the development character of ICT models, which require a rootedness in the local context, and an inevitable path involving iterations for determining how poor and marginalised women can be part of the information society. Ananya Raihan<sup>13</sup> cautions against narrow, marketised approaches where the need to provide a plethora of services for telecentres leads to the prioritisation of those kinds of services that earn revenue and bring in clientele. Typically, this emphasis does not coincide with the needs of poor women. In fact, the 'online' elements of developing content and making available services, timely information and useful resources – in local public institutions as also telecentres (which need to be cast as new public resources), need to be matched with 'offline' components for building community stakeholdership and active partnership in the emerging changes in social processes and systems. Women's centrality in these complementary processes – online and offline – cannot be overemphasised. In developing country contexts, for a majority of women, the value for ICTs is intrinsically connected to how access can fill information and knowledge gaps, enable their communication and networking with external agencies for entitlements, how they can find a voice to represent their interests, and how they perceive a new political stake and a greater inclusivity created through the institutionalisation of ICT systems. Thus, the issue of 'sustainability' is not only financial, in terms of 'profitability' of the telecentre enterprise, but more importantly, social, developmental and cultural. Sustainability needs to be seen as a function of community appropriation of ICTs for a variety of self-determined uses.

### **Directions for ICT Policy Making**

As the information society builds around us and offers numerous possibilities including for gender justice, it is the nature of 'use' or utilisation of ICTs by the society that is likely to determine the nature and the terms of 'access'. Access does not necessarily lead to use; rather, the type and manner of 'use' gives access contextual meanings.

Whether ICTs are seen by policy-makers as consumables, or an economically productive good, or they are looked upon as tools of empowerment, social inclusion and citizenship, determines the nature of 'access' and connectivity models that will be developed. The ICT policy model today is largely one of market-based provisioning, with some regulation for protecting consumer interest. Some re-distribution of resources to the margins is also undertaken through universal service obligations and funds for ensuring connectivity to under-served areas, but within a market model.<sup>14</sup> An alternative will be to see 'basic access' required for

<sup>12</sup> Burch (2007).

<sup>13</sup> Ananya Raihan posted message on the Bytes for All Readers & Supporters Forum on 21 March 2008 in the thread 'RE: [bytesforall\_readers] Re: [BANGLA-IT] RE: Bangladesh Telecentre Network-more facilities than cyber cafes'. The message is archived at [http://tech.groups.yahoo.com/group/bytesforall\\_readers/message/11832](http://tech.groups.yahoo.com/group/bytesforall_readers/message/11832).

<sup>14</sup> For instance, allocation as per reverse auctioning for serving low revenue markets.

empowerment and inclusion as a right and entitlement in a welfarist framework (Gurstein 2008),<sup>15</sup> and treating basic connectivity as an essential public infrastructure, with its concomitant financing policies and regulation.

Thus, the emerging IS can truly benefit gender and development goals only if the specific meanings of ICTs in the context of 'gender and development' are explored, and policy making is based on such contextual meanings and use of ICTs. Only then can we move towards ICT models that shift power to those people and groups that are at present at the periphery of the dominant system, rather than further consolidating existing power structures, including those based on patriarchies, through such models. Indeed, the policy process in relation to access and appropriation of ICTs is marked by contestation, implicit in the emerging IS and described by Benkler as "the battle over the institutional ecology of the digital environment" (Benkler 2006, 383).

In light of the above discussions, if ICT policies in LDCs and SIDS have to further gender justice they need to be informed by the following imperatives, within an overall rights and entitlements based framework where markets are used to ensure ICT uptake, but not exclusively relied upon, and public investments in access and connectivity model remain important and central.

***Providing the best digital technologies that women need and not merely what can easily be provided by markets***

Policy processes need to take cognizance not only of gendered barriers to access, which have been studied and discussed extensively, but also the specific opportunities that have yet to be seized for gender equality. Policy frameworks need to harness the best that the digital era has to offer for advancing gender justice. The costs and skill requirements for most of these technologies are not that high if community-based contextual strategies for ICT appropriation are developed, with clear benefits in areas most important to women. Here it is useful to go beyond the binaries of old and new technologies. Community radio is now accessible to many grassroots groups thanks to digital technologies and the manner in which they have transformed the costs of radio programme production process. The same is true for video. New technologies are also highly malleable for contextual use and appropriation. Therefore, the policy issue here is that rather than slipping into clichéd categories of 'old' and 'new', we must create conditions that make contextual appropriation of all useful ICTs possible.

It is worthwhile to unpack here the over-valuation of some 'simpler' ICTs, and the almost natural affinity that is often posed between women and mobile phones. It is beyond doubt that mobile telephony has brought the communication revolution closer to women and can set the scene for their engagement with other ICT possibilities. However, there are a couple of issues worth noting in this regard. A simple tele-voice service, which is what a mobile phone basically is, entails very little marginal cost for reaching the BOP, and can probably be provided to most people through the agency of markets. Telecom companies see these 'secondary markets' as a way to mop up additional revenue with little additional cost over their installed base. Other digital platform based services – like in areas of livelihood information, health, education, governance, etc. – are a different ball game altogether. One, they almost invariably need

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15 A posting by Michael Gurstein on 15 March 2008 on [governance@lists.cpsr.org](mailto:governance@lists.cpsr.org) cites a recent article that talks about how Internet access in Sweden should be treated as a service fundamental to public well-being. The message is archived at <http://lists.cpsr.org/lists/arc/governance/2008-03/msg00256.html>.

Internet-based back-ends, and so the mobile-Internet dichotomy does not really apply. Two, these services are both much more complex to organise and very specific to different groups of people, and they have to be designed in a highly contextual way for local impact and for addressing the needs of poor women and other marginalised social groups. Markets have little incentive to put in this effort, given the scant possibility of sufficient revenues to offset the high costs that such contextual services require. Developing such digitally mediated services therefore requires underwriting by public investments, which in fact is not often very high if community collaborative processes are appropriately leveraged. Further, the fact that mobile architecture is almost completely propriety and closed requires to be examined for the constraints it poses to ensuring low cost contextual services. This is an important ICT issue that will shape the real meaning of choice in connectivity and information services and activities.

It cannot be denied that ICT policies should promote easy-to-handle and cheap 'access' devices; so the real issue is not of the access device (mobile, PC, or an intermediate device) *per se*, but the underlying digital architecture used, whether it is open, as is the Internet, or closed and propriety, as are mobiles at present. To clarify this point, VoIP over simple Internet-enabled handsets can be a much cheaper tele-voice service option than traditional mobiles. Evidently, the mobile versus Internet dichotomy is false in terms of what is appropriate for disadvantaged countries and groups. Such a dichotomy only serves the dominant telecom paradigm to keep out alternative ICT options that may be more people-centric.

### ***Promoting people-centred instead of corporate-centred ICTs: Moving towards 'open ICT' models***

While the generally accepted policy recommendations to counter gender inequities in access – like Universal Service Funds (USF) support for rural ICT infrastructure, women-operated telecentres, separate women-only time slots in public access models, women-specific content and applications, affirmative action in IT training and jobs – are crucial, they may not by themselves address gender justice unless they are accompanied by a policy effort to democratise ICTs beyond dominant, exclusively corporatised ICT approaches that tend to provide 'modular services' focusing on revenue models, rather than allow appropriation of ICTs by the people. Policy must encourage progressive options that are open and collaborative within each layer of ICT ecology – like open source software, open content, and open access community based connectivity models, and open across layers, like between connectivity and services layers. In this context it is important to note, as mentioned earlier, that the mobile telephony platform, much celebrated in the context of marginalised areas and groups, is by and large not open between the connectivity and services layers, meaning that unlike in the Internet model, the connectivity provider controls the services provided and does not allow open access to all content and service providers. The deep implications of this in terms of ICTs being participatory and serving the full interests of people is mostly ignored by mobiles-for-marginalised advocates.<sup>16</sup> Telecom regulation must be more pro-active in pushing such open models that are more participatory and, in the mid- to long-run, less 'expensive'. Such people-centred telecom policies alone can move us towards the people-centred IS envisaged in the WSIS Declaration of Principles (WSIS 2003). Adoption of these 'open' models will strengthen the gender equality agenda by creating a new 'culture' of local appropriation of technology.

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16 The Google-led 'Open Handset Alliance' attempts to introduce an Internet-like open ecology to mobile platforms.

***Ensuring public investment to facilitate community capital for collaborative appropriation of ICTs***

The role of the public authorities in pushing the above mentioned open ICT models is not only regulatory, but also requires them to make necessary investments in providing or 'facilitating' such models. Connectivity systems require greater initial investments and most often need direct public support. Such public initiatives have taken shape in many developed countries. However in these countries, pushing open models in the software and content space is mostly considered from a regulatory standpoint in terms of a role for public authorities. In developing countries with much fewer resources and 'social capital', at community levels, it is important that public policies direct investments into facilitating communities – without being prescriptive – to develop contextual software, applications and content for availing the best advantages of the new technologies.

***Promoting the right to 'do and be'<sup>17</sup> on the Internet: Freedoms of expression and association***

On another level, 'effective access' for women also requires that the technology policy regime is built on the tenets of right to free expression and of unhindered social engagement, as well as to privacy, for all groups. These freedoms need to not just be promulgated but pro-actively supported by policy. For instance, many countries are still hesitant to allow community radio into the hands of community groups, fearing 'subversive' possibilities. (On the other hand, in India, which recently opened up the community radio sector, some governments are actively providing resource support for communities to set up their radios). Universal access is meant to enable universal 'appropriation' of ICTs by communities. New ICTs afford 'freedoms' at much higher and multifarious levels than community radio, and therefore it is important that policy makers learn to engage with participatory modes of communication from a community empowerment perspective, rather than moving towards tighter regimes of censorship and surveillance. Such controls undermine effective access to ICTs by women and women's groups. Content regulation, even where absolutely required, has to be mindful of this.

***Ensuring safe spaces for women on the Internet: The right to bodily integrity and autonomy***

Safety of online spaces is an important 'access' issue for women. Women's rights to bodily integrity and autonomy have to be reinterpreted and assured in digital spaces. Discrimination, sexual harassment and outright violence in and through online spaces interfere with women's right to 'access'. While policies need to deal with these issues, they cannot become an excuse for content regulation regimes that stifle the right to free expression and association.

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17 From Amartya Sen's expression, states of 'being and doing'. See Sen (1985).



## Applying a Rights-Based Framework for Gendering ICT Policies: A Concluding Remark

Relevant ICT policies on access and connectivity can derive only from larger socio-political issues and a thorough understanding of them. Critical in this is that the people, groups and countries that are currently marginalised are included not only just as the peripheries to the dominant model, but as owners and co-creators of new empowering possibilities that are very context specific. Understandably, progress in this direction will be slow, with multiple political and economic negotiations on the way. However, before embarking on any ICT policy process, it is important to take stock of where we stand and where we would like to head in terms of using ICTs to promote gender equality and development in the Asia Pacific region, especially among LDCs and SIDS.

The dominant paradigm that relies only on markets in the ICT arena, and is averse to any rights-based approach, basically follows from the premise that since markets have been bestowing unimagined goodies to those that they serve, it would be disastrous to intervene with their self-propelling force. However the limits of markets are fast being recognised for their inability to provide marginalised groups real and effective access to the opportunities that the IS promises, which as discussed are in the form of basic capabilities essential for equal membership in the emerging IS. What is therefore required is a rights-based approach to 'basic' access and connectivity, as a necessary though not sufficient condition for appropriation of ICTs and participation in the IS.

In ensuring this right, wherever possible, policies must leverage markets in the best possible manner to optimise resources and maximise opportunity, as well as to drive continued innovation. In fact, there is no necessary opposition between a market approach and a rights-based approach. In Costa Rica, for instance, a legislative exercise actually proposed a bill on 'right to access to the Internet' for the push for market liberalisation. The bill declared access to Internet services to be a matter of public interest; consequently, any person or enterprise, be it public or private, can offer Internet access services (Hoffman 2004). A rights-based approach merely defines the political priority of a social objectives, which can be achieved through markets as well as other means. However, the obligation of the state to uphold this right to 'basic access' means that necessary public investments have to be seen as long-term social and developmental investment that need to be made in many ICT areas. On the other hand, there are other ICT 'spaces' – for instance in business, entertainment as well as use among privileged groups and other areas – which can continue to be subjected primarily to market forces with due public interest regulation. In summary, considerations of social policy, and within it of gender policy, should go hand in hand with economic and business sector considerations in developing ICT policies, and not be an add-on to it. This calls for taking an entirely new look at the ICT policy paradigm, especially in the context of LDCs and SIDS where the hope that markets will serve marginalised groups is even less than in other countries.

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## About the Author

**Anita Gurumurthy** is a founding member and currently co-director of IT for Change, an NGO in India. Anita's core interests have included research and policy advocacy on development and social change, with focus on areas such as gender, public health, globalisation, and the information society. Anita is a member of the advisory committee of BRIDGE at IDS Sussex, a resource group on gender that supports policy makers and practitioners. She is part of the governing structure of the United Nations Global Alliance for ICT and Development (UN-GAID) as a part of its Champions' Network. Anita also serves on the the International Advisory Committee of the 'Public Access to ICT Impact' project, co-funded by IDRC and the Bill & Melinda Gates Foundation. Her recent book, co-edited with colleagues at IT for Change and published by Elsevier, is titled 'Gender in the Information Society: Emerging issues'. At IT for Change, Anita currently co-coordinates a policy research project titled 'Information Society for the South'. This project explores theoretical connections between social change within the information society context and three critical development areas – social policy, governance, and gender.