Labouring Women, Enterprising States – A Research Study on Women, Information Technology and Narratives of Entrepreneurship

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Forthcoming, 2014
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This research study, carried out by IT for Change in partnership with Dr. Lisa McLaughlin, Associate Professor, from Miami University, Ohio (United States), explores the structural-institutional facets of the relationship between women entrepreneurs, ICTs and the mainstream discourse on entrepreneurship. The research study was carried out between 2010-12 and studied women entrepreneurs in the two Indian states of Karnataka and Kerala – representing two contrasting ICT ecosystems – the former dominated by big private players and the latter dominated by a welfarist state. One of the key findings of our research is that, for ICT enterprises to fulfill the feminist agenda of empowerment and agency, the notion of enterprises has to be re-conceptualised. So far as the concept of 'ICTs for women's enterprises' remains bound to instrumental approaches, the socio-political agency of women as workers and citizens entitled to economic justice will not be realised. The research also pointed to the need for women's civil society organisations to play a key intermediary role in enabling women to effectively harness the economic empowerment possibilities opened up the emergent techno-social paradigm, going beyond the 'ICTs-as-tools' approach. This draft research report is under finalisation, and will be published in early 2014.

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Chapter I - Introduction

The narrative of empowering women through expanding their access to Information and Communication Technologies (ICTs) is enmeshed in the wider Information and Communication Technologies for Development (ICTD) discourse whose genealogical roots can be traced to the grand theories that profess ICT 'solutions' to development problems. In these theories, empowerment mediated by ICTs tends to be defined through neo-liberal imaginaries.

On the other hand, critical Information Society (IS) theories do emphasise the restructuring of economic and social relationships in the IS; thus problematising power and opening the doorway for feminists to re-examine the 'opportunity' questions within, and in relation to, the wider economic context. It thus becomes necessary to unpack the economic empowerment promise of ICTDs from the feminist perspective, and locate the alternative frameworks that make it possible for women to claim economic agency. The present research concerns itself with this question in the context of women entrepreneurs using ICTs, and women ICT entrepreneurs.[1] Related to the question of economic agency, and equally critical, is the issue of women's journeys as socio-political subjects.

This chapter begins with exploring the notion of women's work and its peculiar reconstitution in the IS. This forms the background from where we can more closely observe the focus of our research – the ICT enterprises that have afforded opportunities for women to be a part of the work force in new ways. The ICTD framework that largely anchors the women entrepreneurs, is examined for its overall nature and location of women in it. The various enabling factors for ICT mediated women's empowerment is analysed. Next, the concept of empowerment vis-a-vis entrepreneurship is unpacked for its location in specific political economy realities and the resultant implications for women is examined. The chapter ends with an elaboration of the research problem.

Women's work and the Information Society

The feminist unpacking of the 'opportunities' of globalisation is critical to understanding women's work today. The economic and political aspects of globalisation and restructuring has meant a number of things for women's work. The production processes have undergone change and

1 The research concerns itself with both categories of women entreprenures – those whose enterprises are based on ICT related work, largely within ICTD initiatives, and those who are engaged in diffferent kinds of enterprises and use ICTs for their business needs.

disaggregated with a 'global assembly line' in place (Cohen, 1998). The 'third world' countries have witnessed greater feminisation of the labour force as women constitute a more cheap and flexible labour supply. While the workforce participation of women has increased, the quality of the jobs provided has declined. Typically, these jobs are low paying, temporary and with very little prospects for advancement. Also, the bulk of the jobs off-shored, especially in the manufacturing sector, have been low skill, monotonous jobs. Even in case of the formal sector jobs, the move is towards more 'informalisation' with greater subcontracting and decentralisation. In such a scenario, the issue of decent work has gained importance. The burden on women has also increased because of other related factors, such as the contraction of social security systems and welfare policies, increase in male migration for seeking employment, and so on. With not much change in the division of work within the household, the 'care' responsibilities lie disproportionately on women. In the Indian context, where women increasingly join the workforce at different entry levels and with variegated skill sets, it became imperative to apply the feminist lens to the issues concerning women's work. Accordingly, scholars have critically looked at macro-economic trends regarding women's work in both rural and urban areas, case studies of export oriented industries and condition of work for women in these, the labour legislations, the impact of globalisation on women's work and so on (Jeyaranjan and Swaminathan 1999; Swaminathan, 2009; Priyadarshini, 2011; Neetha, 2002; Srivastava and Srivastava, 2010).

More recently, work related concerns and opportunities of the women workers in the IT sector has attracted the attention of both IS and feminist scholars. The 'global' determining the 'local', and the mutual constitution of globalisation and ICTs have had an impact on women's work in the IS. The IS framework enables us to hypothesise alternative ways in which women can exercise their economic agency within the limits of the current political economy dispensation. As Saskia Sassen says, “there is no doubt that cyberspace brings new opportunities for women both in business domains and in larger civic as well as home settings. For instance, in highly digitised sectors, women as professionals have experienced new opportunities and they may fight for greater equality with men in these economic sectors,but they do so largely within the confines of existing hierarchies of economic power. In this regard it may be naive to overestimate the emancipatory power of cyberspace in terms of its capacity to neutralize gender distinctions” (Sassen, 2002).

Elaborating on the possibilities of actualising women's empowerment, Sassen highlights the importance of conversion of institutional domains into 'micro-environments with global span'. This, according to Sassen,would imply that “technical connectivity will create a variety of links with

other similar local entities in other neighbourhoods in the same city, in other cities, and in neighbourhoods and cities in other countries. A community of practice can emerge that creates multiple lateral, horizontal communications, collaborations, solidarities, supports. It can enable women (or female ‘subjects’ generally) to pursue projects not easily accommodated in their local, often limiting and oppressive, situation”.

In the context of the software outsourcing industry in India, Upadhya (2006) describes the job market as “highly fluid”, marked by high attrition rates and job insecurity. There is a fair degree of “spatial mobility” and the workers tend to be young and willing to move frequently, one of the reasons why the workforce is more flexible in this industry. Global systems of management are applied to the industry with the result that there is “individualisation of work”, with increased emphasis on personal responsibility of the employees towards the given tasks. Long working hours is another characteristic of work in the industry. Hence, we see that work comes to take on specific traits in the IS, reconstituting labour in terms of both time and space and through specific management practices. These peculiar traits of the industry have a gendered impact that often leads to marginalisation of women.

McLaughlin and Johnson (2007) look at the nature of recruitment of women workers in the IS, which tends to bracket women as 'information workers'. Even though women have benefited from the new jobs in the ICTs, women are largely “clustered within the category of numerically-flexible, low-skilled, and casual and subcontracted labourers who are stereotyped as docile”. The ICT service sector, retail and financial services industries, wage telework, call centre work, and electronics assembly are some of the areas that have become increasingly feminised. Hence, the work opportunities that ICTs have provided have to be de-constructed.

In this global logic of ICT work, women's work in India has had complex and often contradictory trajectories. In her study of teleworkers in Mumbai, Ghotoskar (2000) lists the advantages and disadvantages that women face in the ICT sector while recognising the difference in the nature of work that women may take up. Telework, specially home-based telework, has allowed women to better manage their multiple roles, afforded a stress-free environment and provided an opportunity to 'make a dent in the market' as entrepreneurs. On the flip side, as women lost out on office camaraderie and workplace relationships leading to increased isolation and because of the greater job insecurity and increased laxity and even lapses in the payments by clients, the invisibility of women in public and social spaces was reinforced. Similarly, in a study focussing on the software

industry of Kerala, Arun and Arun (2002) point out that while ICTs have provided new jobs and increased income and skill enhancement opportunities, they have also reproduced some of the larger gender inequities. For instance, most of the women interviewed for the study felt that the appraisal systems were not completely objective and the need to be flexible vis-a-vis work place (frequent travels) and time (long and extra hours) burdened women more than men as they still continued to perform their traditional roles in the household. The increase in women's workload due to their participation in the IT sector as well as their continued household chores has been also been emphasised by Kelkar et. al. (2005). Among other things, the authors speak of the glass ceiling that exists in the IT sector with very few women in the higher positions. Ng and Mitter (2005) in their study of call centre workers in Malaysia and India, point out that despite the various stress inducing factors linked to call centre work (surveillance, night shift, fast paced work structures) and the mundane, low end nature of work, most women stated that they enjoyed their work. The income gave them freedom and autonomy and they felt that they had learnt new skills.

We see that the IT sector, while opening up new vistas for women's economic participation and mobility, has also led to reiteration and sometimes intensification of some of the unequal gender norms prevailing in other work domains and in the society at large. The present research seeks to extend the gender-based inquiry of the nature of women's work in the ICT sector to the field of enterprises. There has been an increased interest in the area of enterprises in the knowledge or information economy and the increased opportunities that these hold for women to be a part of the labour market either as entrepreneurs using IT or running IT based enterprises. This is an emerging area of research where the scope of women's participation is seen as being enhanced because of the particular 'women-friendly' forms that work takes in the context of ICTs. For instance, in the GRACE (Gender Research in Africa into ICTs for Empowerment) research programme, a number of entrepreneurial interfaces with ICTs have been explored – the use of Internet for marketing by Egyptian artisans, the relationship between mobile phone usage and the emerging women entrepreneurs in the Senegalese fishing industry, the contribution of mobiles in the success of Kenyan women entrepreneurs, the patterns of Internet use of business women in the textile sector in Cameroon, the mobile pay phone business for rural women in Uganda, and so on (Buskens and Webb, 2009).

Enterprises, as a route to empowering marginalised women, has been part of the post-90s development discourse. The roots of the development community's interest in women's empowerment through ICTs can be traced to the Millennium Development Goals (MDGs). What

this has meant in concrete terms can be gauged, for instance, from the various uses that ICTs have been put to, in the South Asian region, for furthering women's economic empowerment (Gurumurthy, 2004). These include: connectivity and access to information about livelihoods and enterprises; data management and creation of data repositories; linking women producers to global markets; efficient communication for micro-enterprises; opportunities for skill-building and employment; and opportunities for self employment.

However, these possibilities still need to be situated within the wider debates around the political economy of ICTD – its origins and policy pathways. McLaughlin[2] notes that the partnerships forged between various international bodies, governments and NGOs on the one hand and corporates on the other, to address the 'digital divide', has led to the corporatisation of development. In fact, as Gurumurthy and Singh (2009) point out, such has been the sway of neo-liberalism in casting the mainstream discourse on ICTD, that it has been naturalised in the field as 'common sense'. The intertwining of the development discourse with ICTs in the 2000s has mainly been the story of market-based models for delivering development. Hence, "through a corporate-partnerships-based ICTD, technology and marketing experts from the North [are] to build capacities in the South, authoring road maps on everything – from how to achieve MDGs to how to make e-governance plans".

Despite the market-based origins of the ICTD framework, ICTs, as we know, do provide adequate scope for envisioning alternative, democratising models, as has been amply demonstrated by a number of initiatives' in the areas of governance and gender justice ((ibid). Taking full cognisance of the progressive potential of ICTs, the present research looks at how they aid entrepreneurial development for women in the IS.

Women entrepreneurs and empowerment through ICTs

Before going into what the existing literature has to offer on the question of women's empowerment as entrepreneurs in the IS, it would be fruitful to look at the macro context of the IT industry inIndia. "In India, the IT industry is extremely reliant on export markets, which discourages inter-firm linkages and innovation-led future growth of the industry" (D'Costa, 2006). Limited employment generation, dominance of a few large firms, and dependence on less skill-intensive segments for revenues are some of the other growth concerns (Chandrasekhar, 2005; Saith and

2 See *www.itforchange.net/sites/default/files/.../Locating_gender_**Lisa**.pdf*. *Retrieved 12 September 2012.*

Vijayabaskar, 2005). India's IT industry has not developed extensive linkages with the domestic market and, therefore, its impact on productivity improvements in other sectors such as manufacturing is not very high (Joseph, 2006;Ilavarasan and Levy, 2010).

Women entrepreneurs using ICTs are located in different kinds of organisational structures, with varying business models. While some women entrepreneurs are engaged in manufacturing and services and use ICTs for their various business needs, others have begun their entrepreneurial journey as 'beneficiaries' of ICTD interventions – either of the state or private organisations. While the former engage directly with the market, the latter have a somewhat amorphous relationship with it. The literature on women's enterprises and ICT are mostly in the ICTD sphere, and there has been very little research around the question of ICT enterprises run by women.

There seems to be a broad consensus that association with ICTs is correlated to identity construction; often leading to higher self-esteem as well as social status. Illavarasan and Levy's study (2010) on ICT use among the urban micro-entrepreneurs in Mumbai and the connection of this use with business stability and growth, found that ICT use by women enterprises increased with rising income. Computer training was seen as an important pre-requisite for business success by women. It was found that the motivation for using ICTs, particularly in the case of women, was linked to an increase in 'status' and 'power'. Hence, "the more positive a woman micro-entrepreneur feels about her status and power because of her business, the more she will be motivated to use ICTs for business"(ibid).

Heeks and Arun (2010) in their study of the IT units of the *Kudumbashree*[3] poverty alleviation programme of the Kerala government also make the connection between a change in women's self-perception and ICTs. Women, in this case, felt that it was because of the nature of ICTs related jobs, that are associated with modernity and progress, that they could sense an increase in self-esteem and self-confidence as they had found greater 'respect', 'recognition' and 'acceptance' in their families and community. Similarly, Parthasarathy and Srinivasan (2006) point out that the success of the SARI project (Sustainable Access in Rural India, Tamilnadu) lay in enabling new roles and work for women, creating new networks with government officials and elites, and helping them establish new support mechanisms for the operators outside of their families. They note that

3 *Kudumbashree* is the poverty alleviation programme of the State of Kerala that also aims at women's socio-economic empowerment through engaging them in small and micro-enterprises.

“there were normative changes in terms of the social status of kiosk operators and in the definition of 'acceptable' work for women”(ibid).

In their study of how gender dimensions and social relations are impacted within a 'gender-neutral' project framework of *Akshaya*, the e-literacy programme of Kerala, Mukhopadhyay and Nandi (2006) found that though the percentage of women entrepreneurs was low, the women who did participate in the programme felt that they had made gains in both business and their 'social standing'.

Notwithstanding the fact that there may be variations in the actual nature and extent of change, the potential for personal and social transformation when women entrepreneurs use ICTs, seems to have some validity. It is this connection that informs development initiatives seeking to 'put ICTs in the hands of women' through the 'enterprise' logic. A number of different interventions – by different state governments, NGOs and the private sector – have been the subject of research studies that seek to expound in greater depth how this connection actualises, and examine the determinants shaping the extent and nature of this gender based power-shift – both in the realm of the individual and the social.

For example, Heeks and Arun (2010) look at the *Kudumbashree* enterprises as 'social enterprises'[4] that have accrued some development benefits for the women. It was found that at the end of the programme, women had gained skills related to computer operations, hardware and software maintenance, managing and supervising. Half of the women interviewed felt that they had built entrepreneurial skills. The physical assets were built in the form of computers and other ICT hardware that were owned cooperatively, but these had to be constantly upgraded owing to the rapid pace of technological change. Though women did not report growth in business linkages outside government officials who procured work for the *Kudumbashree* units, they did find their position change vis-a-vis the family and the community. This impacted gender relations to some extent as most women felt that they now had a greater say in the family decision-making. Hence, the authors felt that empowerment had materialised for women involved in the *Kudumbashree* IT units, in the

4 The *Kudumbashree* enterprises qualify as social units because they fulfil the three criteria cited by the authors – “they are enterprise-oriented; they have social as well as business aims (such as encouraging savings, alleviating poverty and addressing female unemployment); and they are socially-owned in the sense that they are co-operatively owned by women from poor communities”.

form of skills, assets and income, social capital and a set of psycho-social empowerment attributes such as “new attitudes, new confidence, new status, new roles and new identity”.

Mukhopadhyay and Nandi (2006) list a number of factors that have created obstacles in way of women benefiting from the *Akshaya* programme – lack of independent financial resources or assets, reliance on other women household members to undertake domestic responsibilities and lack of sustained support from male household members to help pay back loans and manage the business aspects. In the view of the authors, gender imbalances can be corrected by making the project design sensitive to gender issues and by a responsive bureaucracy. In this analysis, project design and the bureaucracy or project supporters emerge as vital factors in making an ICTD project empowering for women.

Some authors have also pointed out the importance of larger enabling factors for women to be able to utilise the opportunities provided by the ICTD phenomena. In their study of ICTD initiatives, *Akshaya* in Kerala and i-community in Andhra Pradesh, Thomas and Parayil (2008) stress on the importance of 'capabilities', both at the level of the society and the individual in order to process the accessed information into useful knowledge. Some of the factors listed by the authors as being conducive to building capabilities for women in case of Kerala were “an environment generally encouraging of women’s education and social participation, and active involvement of *panchayats* and local activists in the *Akshaya* programme”. IT for Change's case study[5] also highlights the fact that the e-literacy programme of the Kerala government, *Akshaya*, has been able to capitalise on the higher educational levels of women, while also being attentive to differential social locations of women and using the existing governance institutions. Thus, the policy context and vision of IT diffusion that takes into account the issue of 'capabilities' would be more conducive to women entrepreneurs.

It has been also pointed out that women may not always be able to renegotiate gender-based norms and new found skills in IT may not necessarily be enough to disrupt deeper social structures. Gender-based social norms at the household level as well as in the labour market become a significant determinant of empowerment outcomes when it comes to women-run IT enterprises. In her impact analysis of the ICTD initiative in Seelampur (New Delhi), Sreela Sarkar (2010) looks at the nature of work opportunities for women post-ICT trainings. These women, mainly from the

5 http://www.itforchange.net/Akshaya_e-krishi Retrieved 13 September 2012

Muslim community, engaged in two kinds of work, apart from their household chores – pink collared jobs in the service sector and home based occupations like sewing, embroidery, etc. linked to the existing small scale manufacturing units of the area. Sarkar demonstrates that the promise of ICTs remained unfulfilled on both counts – gainful employment or change in social status. In fact, women who started teaching computer use in their houses after the computer training found that such home-based work was considered as leisure time occupation, an extension of household labour, and was hence devalued. Arun and Heeks (2010) have also recognised that the prevailing gender norms are reflected in the fact that it is mostly men who hold the important positions in the *Kudumbashree* programme and that women often described their own aspirations and expectations in relation to their "triple burdens" as "wife/mother, worker, community member".

An analysis of five ICTD initiatives in India[6] by IT for Change (2008) throws light on the various factors that support gendered outcomes. Acknowledgement by the project facilitators of women-related issues and an assessment of gender relations in the local context are the pre-requisites for 'gendering ICT spaces'. In the absence of a conscious design, this was achieved through the efforts of the women actors. These spaces, as new local structures where women become enterprise managers facilitated "changes to women's identity, create(d) new spaces for women's local leadership and set up a precedent for new social roles for women" and also encouraged women's involvement in the developmental processes. However, the research study demonstrated that gendering ICT spaces through such roles, may not necessarily to empowering outcomes.

It was found that institutional measures involving "contextual innovations that are constantly being reassessed and fine-tuned"(ibid) strengthened the process of gendering. Hence, while the commitment to gender equity needs to be formalised, the importance of 'vibrancy, dynamism and ingenuity' cannot be overstated, keeping in mind the emergent nature of the ICT field. To ensure empowering outcomes for women, reigning in the vested interests of private players was found to be an important pre-requisite. Similarly, premature emphasis on financial viability of individual enterprises was found to have detrimental effects. The limitation of pitching financial sustainability as a desirable short term goal in the case of ICTD programmes has also been pointed

6 The five ICTD initiatives studied were - Rural eSeva in West Godavari district, Andhra Pradesh ; E-Krishi within the context of Akshaya, Kerala ; DHAN Foundation in Madurai, Tamil Nadu ; Self-Employed Women's Association (SEWA), Gujarat ; and, Kutch Nav Nirman Abhiyan (or Abhiyan) in Kutch district, Gujarat .

out by others (Toyama et al., 2005).

The concern of the current research is to explore women's economic roles in this emerging development sphere mediated by ICTs. However, it should be noted that the sector itself is diverse in terms of the multiplicity of both actors and ideologies. In *Locating Gender in ICTD Projects: Five Cases from India* (IT for Change, 2008) four different frameworks for ICTD initiatives have been identified based on their basic approaches and orientation. These include: ICTs as a vehicle for market extension; ICTs as efficiency enhancing tools for development institutions, including of the government; ICTs as community-centred development tools that can be used to specifically address education, health, livelihoods, agriculture, and other goals, and; ICTs as a new strategy for empowerment that can shift social power relationships and facilitate institutional transformation towards the realisation of rights of marginalised groups. The gender focus of the projects themselves can vary, from perceiving themselves as gender 'neutral' to targeting women as beneficiaries to consciously seek women-specific empowerment goals. Hence, women have become ICT centre operators 'fitting into' a variety of models as entrepreneurs running the centres. These projects have been initiated by a variety of organisations and the project orientation and ethos play a significant role in determining the experiences of women in their roles as entrepreneurs.

Towards a conceptual framework – A feminist critique of women's empowerment through ICT enterprise

What the literature review in the previous section reveals is that the mainstream ICTD discourse has a key role to play in structuring gender norms and practices in women's encounters with ICTs in the economic sphere,To unravel this connection further and examine the empowerment question, we believe it would be instructive to look at the conceptual and theoretical arguments in the body of feminist work concerning the deployment of micro-enterprise as a development tool and women's empowerment strategy.

Micro-enterprises as a method of work has been of special interest to the development community because of its connection with economic empowerment. The “Pro-poor-growth studies” approach has espoused a strategy of linking small businesses in the informal sector, employment, and poverty reduction (Jutting, Parlevliet, & Xenogiani, 2008 in Ilavarasan and Levy, 2009). Micro-enterprises along with micro-credit and Self Help Groups (SHG) have been seen as powerful poverty eradication strategies that especially target women.

However, promotion of entrepreneurship as the dominant approach in poverty alleviation has been critiqued by several authors. It is contended that micro-enterprises, micro-credit and SHGs are part of the development discourse that values individual over collectives and puts its faith in "entrepreneurial capitalism and market forces" (Oxaal and Baden, 1997). It has been pointed out that in advocating "a diminution of the state and its disengagement from the terrain of economic activity" such a development approach shares common ground with neoliberal ideology (Elyachar, 2002). The onus of empowerment in this approach, is transferred to the marginalised communities themselves – with enterprise as the method and the state in a facilitative role. In such a scenario the questions that Elyachar asks become pertinent – "Is empowerment, then, a new frontier for capital accumulation? Are the poor the real capitalists? Do the survival practices of the poor represent the new emerging market?"(ibid).

Speaking specifically of women, Sharma (2011) remarks that while micro-credit can be a survival tactic, it can hardly support enterprises by poor women who have "no specialised skills, have few assets, little capital, entry barriers, low production and meagre earnings." To link such interventions to long term development, let alone structural change, is a fallacy. In fact, entrenched in the unequal power structures of the global and local, these measures discipline women into "efficient economic actors to be inserted in to market economies" (Lairap, 2000, cited in Sharma, 2011).

McLaughlin (2012) echoes similar sentiments, "it is cause for concern when mainstream gender and development policies and practices focus on "unleashing" individual women's entrepreneurial energies and mainstreaming women into corporate-led public-private partnership initiatives instead of confronting structural inequalities which establish women as the preferred labourers in the lowest ranks of occupations associated with new technologies".

This 'Self Help Group' route to development and its gendered premises and fallouts have been summarised by Devika and Thampi (2007) in their critical assessment of the *Kudumbashree* programme. Their study points out that the limitations of such enterprise-poverty alleviation programmes aiming at gender justice, stem from their location in a specific empowerment regime. Unlike feminist interventions, such programmes combine developmental and gender justice goals and women's empowerment gets defined in relation to family or community well-being. It is assumed that this will create a 'virtuous spiral' and women will get greater bargaining power within the household. The authors assert that the family/community units cannot be regarded as "conflict-free zone where the gains brought by women in income and well-being are directly and

fully translated into a greater range and freedom of choice". Hence, while such programmes do accrue socio-economic benefits for women, the problem is that their success depends heavily on favourable familial and social conditions.

The authors state that the characteristic features of the *Kudumbashree* programme – "emphasis on self-help, heavy dependence on an innovative bureaucracy, its state-oriented conception of civil society, and its notion of group interests as basically a collection of individual (familial) interest" – is reflective of the empowerment regime of the liberal developmental state. And, the ideal citizen of such a state would be "less the fully enfranchised citizen" and "more the self-supporting consumer with sufficient purchasing power". Among other things, the absence of an oppositional public sphere has led to inadequate problematisation of the nature of women's work. As the authors state, "workers' rights are progressively being replaced by opportunities for income generation in this new discourse of empowerment. The question - aren't women now working for longer hours in return for relatively less income? (that is, income that could have been forthcoming had women offered their labour in other opportunities in the market)- appears to be increasingly glossed over. The question of the double burden and women's lack of leisure is hardly ever raised in discussions around female-oriented poverty alleviation". Hence, the dominant macro-economic development thinking has appropriated poor women's collective enterprise (read labour) as a tool for poverty alleviation, through a neo-liberal ideology of empowerment.

Given that the ICTD initiatives for women's empowerment ride on the entrepreneurship model, it is important to juxtapose development discourse in ICT policies and programmes with the enterprise discourse in development. A feminist conceptual framework on ICT enterprises would require invoking not just the emancipatory potential of ICTs alone. It would imply a conception of women's ICT enterprises through alternative economic approaches that also place women's political agency at the centre. Alternate SHG models, for example, offer a vision of such an approach. Grass-roots models of Myrada (Karnataka), DHAN (Tamil Nadu) and SEWA (Ahmedabad) have attempted to provide women "an identity, solidarity and institutionalised agency" through savings, credit and enterprise management. While livelihood concerns were the rationale for formation of these groups, they also took form of social collectives that questioned entrenched power relations (Sharma, 2011). In fact, only an integrated view of the causes and solutions to the various vulnerabilities that women entrepreneurs face, both as women and as well as entrepreneurs, will succeed in meeting the goal of gender justice.

Currently, most of the ICTD initiatives proceed from, and have found, a natural home within the rhetoric that exhorts ICT enterprises as a way to empower women. We have seen that the ICTD models differ in their relationships with the market, some more mediated than others, and a generalised 'hold-all' discourse around empowerment through enterprises that ignores the specific 'empowerment regime' moorings, will not serve the purpose of gender justice. We can argue that for ICT enterprises to truly fulfill their promise of women's empowerment, they have to be rescued from the neo-liberal discourse on both ICTs and enterprises. In this context, through raising an old feminist concern in a new avatar, we seek to locate the economic agency of women entrepreneurs in the IS.

If women can, and are, using enterprise as a method of work, intermediated by ICTs, to claim economic agency, then it becomes pertinent to look at the institutional forms, economic arrangements and wider socio-political factors that enable this. The present study seeks toexamine this question through a case study of women entrepreneurs using ICTs in Karnataka and women ICT entrepreneurs in Kerala. In both cases, the attempt is to unpack women's economic agency for neo-liberal conceptions of empowerment, and a market based logic of development.

A logical extension of exploring the economic agency and empowerment of women would be to look at the the political context of empowerment that is invoked time and again by the state, market and the civil society. In our study, we seek to de-construct the narrative of the three agencies vis-a-vis ICT-enabled women's empowerment using the critical feminist lens. What kind of empowerment regime can enable economically empowered female subjects of the IS to enter the threshold of an identity and status as socially empowered citizen-subjects? Thus, it would be important to examine the journeys / potential journeys of women from being subjects of top down enterprise discourses to becoming citizen-entrepreneurs, socially empowered to negotiate and claim their rights.

The two Indian states where the study has been carried out, Karnataka and Kerala, provide different socio-political contexts to the research problem. While Karnataka, more specifically, Bengaluru, is a globally recognised IT hub, the IT industry in Kerala enjoys a unique position owing to the general lack of industrial growth in the state. Karnataka's IT policies have been oriented towards corporates, and women entrepreneurs' IT skill enhancement has rarely been a concern. In such a

scenario, it is civil society organisations like AWAKE[7] that have assumed the responsibility of training women entrepreneurs. Hence, AWAKE became the entry point for our research in Karnataka. In Kerala, the state's involvement in training women in IT and supporting women's entrepreneurship through various programmes has been well-recorded. To understand the whole universe of women's entrepreneurship therefore required us to look at the specific role that the state has come to play in framing women entrepreneurs through these programmes and initiatives. The question of women's agency and empowerment is located in these contexts. The next chapter looks at the issue of methodology in further detail.

7 Association of Women Entrepreneurs of Karnataka (AWAKE) is a not-for-profit, Non Government Organisation (NGO) which works for women entrepreneur's economic development. A number of projects have been undertaken by AWAKE for business counselling and skill training in the urban and rural areas of Karnataka. The organisation is run by women volunteers who are themselves involved in various kinds of enterprises. In AWAKE, the women were trained in ICT skills under the HP Entrepreneurship Learning Programme (HELP), which was initiated in 2007.

Chapter II - Methodology

The present research concerns itself with the empowerment and agency question of women entrepreneurs in the Information Society (IS). The subjects of this research are women entrepreneurs who either use Information and Communication Technologies (ICTs) in their businesses, or run ICT enterprises. The role of the wider socio-political institutions in enabling women's empowerment in the IS is also sought to be analysed. These questions have been explored specifically in the context of Karnataka and Kerala. An initial scoping of the field and our pre-existing knowledge in the domain of ICTs emerging from our engagement with the area for the past ten years, was used to determine the entry points for our exploration of the research problem in both sites. Hence, it was an informed hunch that in Karnataka, women entrepreneurs' experience with ICTs would be largely mediated through a civil society organisation, while in Kerala the programmes and initiatives of the government would play a large part. However, even though the entry points were pre-determined, the field defined itself as the research progressed.

The research, in seeking to study a phenomenon in two discrete sites, lent itself best to a 'case study' method. Case study as a research method aids an inquiry where the boundaries between 'phenomenon' and 'context' are not well-defined (Yin, 1984). Further, this approach allows one to 'draw on multiple perspectives and data sources to produce contextually rich and meaningful interpretation' (Padgett, 2008). This research sought to examine women entrepreneurs' experience with ICTs in the two sites of Karnataka and Kerala. The field work that was necessary to develop a case study at these two sites was undertaken between July 2010 and November 2010. Below is an account of each site/case vis-a-vis the primary actors/respondents who were interviewed for the research, and the research tools that were used.

Karnataka

Bengaluru has had a global presence as a centre of ICTs – fuelling not only big corporate presence but also IT start-ups in this sector. The government, taking full cognisance of this, had laid out a 'Millennium IT Policy'[8] in 2000 for attracting investment, encouraging the industry through tax rebates and increasing employment opportunities in the sector. The plan also included decentralisation of the industry to bring into the IT fold, cities other than Bangalore. One of the objectives is thus described - 'to utilise the power of Information Technology in the overall goal of Government of Karnataka in eradicating poverty and empowering women'. This was to materialise

8 http://www.nriforumkarnataka.org/policy/Information%20Technology%20Policy.pdf Retrieved October 18 2013

in their role of tracking and monitoring the poverty eradication programmes in the urban and rural areas, creating a Management Information System (MIS) for the *Panchayati Raj*[9] institutions and through employment and training programmes for youth.

Ten years down the line, the enthusiasm over this growing/sunrise industry has understandably continued. However, the content related to social responsibilities in the 2000 policy document has been edited out of the latest policy document (2011)[10]. The document stops short of recognising any role of IT, or the IT department, in animating any social change

It is in this IT context that our study sought to locate women entrepreneurs' agency and empowerment, and how these may have been influenced by the use of ICTs in Karnataka. In seeking women entrepreneurs who may have used ICTs for their business purpose, we were guided to Association of Women Entrepreneurs of Karnataka (AWAKE). AWAKE is a not-for-profit, Non Government Organisation (NGO) which is 'devoted to the development of entrepreneurship among women.'[11] To meet this stated objective, a number of projects have been undertaken for business counselling and skill training in the urban and rural areas of Karnataka. The organisation is run by women volunteers who are themselves involved in various kinds of enterprises. AWAKE has a wide network of national and international partners and affiliates in the form of government agencies, banking institutions and other NGOs. Prior to the HP Entrepreneurship Learning Programme (HELP) under which the women entrepreneurs in AWAKE were trained, the organisation's involvement with ICTs had been preliminary. For instance, in 2000, under the *Swabhimana* project, a workshop was conducted on 'IT related business ideas and e-commerce'.

The ICT training, imparted under the HELP programme of AWAKE, was initiated in 2007. Hewlett-Packard (HP) conducts this programme 'to support the growth of micro-enterprises in communities across Asia-Pacific and Japan experiencing high levels of unemployment or economic decline '[12]. Under this programme, a cash grant for infrastructure development was given to

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9 This refers to the local self governance institutions in India, which were granted constitutional status under the Constitutional (73rd Amendment) Act 1992.

10 http://www.advantagekarnataka.com/images/pdf/Informanton%20&Communications%20Technology%20Policy%202011.pdf

11 Taken from the website of AWAKE, www.awakeindia.org.in .

12 Taken from http://www.hp.com/hpinfo/socialinnovation/help.html

AWAKE by HP and a 'training of trainers' programme was also conducted. AWAKE, as a partnering NGO, in turn, trained women entrepreneurs in these ICT skills. The main topics that were covered included basic introduction to the ways in which Microsoft Office can be best utilised by the entrepreneurs, and using various ICT tools for business needs like communications, financial management and marketing. The pedagogy used was non-conventional and the teaching was mostly done in the form of story telling with demonstrations and class activities.

Apart from perusing relevant documents and the website of the organisation, two office bearers (the President and Secretary) were interviewed in order to gain insights about the larger vision and the day to day functioning of the organisation. In-depth interviews were conducted with these women, whose long association with the organisation and their own experiences as entrepreneurs were deemed very useful for the research.

AWAKE became our field contact, and our research sample of women entrepreneurs were those who were willing and available for interviews, from the pool of women entrepreneurs recommended by AWAKE. In all, fourteen women who owned different kinds of enterprises in Bengaluru were interviewed. Aruna[13], Lakshmi, Malathi and Divya owned units producing processed food products. Sunita, Tara and Sita owned a garment production unit, a boutique and a beauty parlour, respectively. While Sonia taught arts and crafts, Mangala planned to open a pre-school. Anuradha sold plates and bowls made of areca nut leaves and Hemakshi was involved in business related to infrastructure provisioning for petroleum and retail outlets. Finally, Kavita, Shyamala and Radhika were all involved in ICT related businesses. All the businesses were micro enterprises and/or small scale. Two women – Malathi and Hemakshi – were sole earners in their family.

Data was collected through semi-structured interviews from these women entrepreneurs. The interviews were conducted in Kannada as the women were more comfortable in Kannada than English, and care was taken to maintain a conversational style through out the interview. After their initial curiosity about the research was satisfied, women opened up and answered our questions- often volunteering information and impressions that they thought would help us in our research. The questions mainly related to their training in ICTs, their current use of ICTs (both personal and

13 The names of the women entreprenuers who participated in the study , except the office-bearers of AWAKE, have been changed, to protect their identity.

official), the present and potential business benefits in using ICTs, their expectations from AWAKE, and their future visions for their businesses .

The research also required us to probe the 'government speak' on women entrepreneurs and ICT use. In order to explore the nature and extent of ICT penetration in the government's programmes to support women entrepreneurs, and also the general support extended by these government departments to women entrepreneurs, representatives from two government departments – *Stree Shakthi* and the Women Development Corporation (WDC) – were interviewed.

Stree Shakthi is a programme started by the Department of Women and Child Development, Government of Karnataka, in order to 'empower women economically and socially by organising them in self help groups.'[14] This programme was launched in 2001 and since then, around one lakh[15] thirty thousand rural *Stree Shakthi*[16] groups have been formed. Through this programme, women are encouraged to participate in income generating activities and for better marketing facilities. Furthermore, skill development training is imparted to women through government training organisations such as Centre for Entrepreneurship Development of Karnataka (CEDOK) and Rural Development and Self Employment Training Institutes (RUDSETI), or through banks. The programme also gives financial assistance by giving incentives on savings of the Self Help groups (SHGs) and by subsidising interest rates on the loans taken by these groups. WDC also facilitates bank loans for women entrepreneurs and provides skill training.

The representatives of the Department of IT, Bio-Technology (BT) and Science and Technology (S&T) were also interviewed. The changing content of the IT policy has already been discussed in the beginning of the chapter. Rural BPO (Business Process Outsourcing) is one of the projects on the anvil to create employment in the rural areas. Under this, Business to Business services will be provided in the rural BPO units. The state government will act as a facilitator and subsidise costs like initial capital, training of personnel, rent of the building housing the enterprise and Internet connectivity.

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14 Retrieved from the website of Department of Women and Child Development, Government of Karnataka, http://dwcdkar.gov.in/

15 One lakh refers to 100000

16 *Stree Shakti* refers to a Karnataka state project under which rural women are formed into collectives. The main activities these collectives (locally known as sanghas) do, are savings and credit.

We tried to interact with government officials engaged in this area, in order to get a better understanding of the 'government speak' on women, ICTs and entrepreneurship. Though an in-depth interview would have been desirable, most government officials were often unable to commit for longer duration. The brief interviews focused mainly on the current and future programmes to support and encourage women entrepreneurs and the role of ICTs and ICT-enabled models for the same. The respondents were also asked to give their views and notions around ICTs and women's empowerment.

Kerala

Amongst the Indian states, Kerala has stood out both for its high human development index related to women, such as literacy level, sex ratio, maternal mortality rate, etc.[17] and also for its long standing e-literacy programme, that is now almost a decade old. In Kerala, it is the government that is the main provider of ICT education, training and services. This is mainly done through the various programmes initiated by the Kerala State Information Technology Mission (KSITM). KSITM is the nodal agency for implementing the various programmes of the Department of Information Technology. One of the objectives of the KSITM includes 'ICT dissemination to bridge the digital divide'.[18] Accordingly, the *Akshaya* programme was initiated in 2002 to increase ICT use in Kerala using the telecentre approach. The programme has evolved from its initial emphasis on e-literacy and has come to take on the delivery of a variety of government-to-citizen services.

For the purpose of the research, government officials holding different kinds of portfolios within the KSITM, including *Akshaya* and *e-Krishi*, were interviewed. The implementation of the *Akshaya* programme at the district level is carried out from the District Collector's office. Accordingly, the officials responsible for implementing the *Akshaya* programme at the District Collector's Office in Kollam were interviewed. Kollam was referred to us by KSITM officials as it houses some of the successful centres.

More recently, attempts have been made to increase the synergies between the *Akshaya* programme and *Panchayats* especially in the light of the increasing government to citizen service roles that the *Akshaya* units have come to play. Hence, we interviewed the *Panchayat* President of a village,

17 Refer the Human Development Report (2005) published by the State Planning Commission, Governement of Kerala. Available at www.planningcommission.nic.in/plans/stateplan/sdr_pdf/shdr_kerala05.pdf

18 Taken from http://www.itmission.kerala.gov.in/vision-statement.html

Cherukkala, within Kollam district. In-depth interviews were conducted with all the officials to gain insights about the vision of the ICT programme, the evolution of the programme and the scope for women entrepreneurs' economic and social empowerment within the programme. The interviews were mainly conducted in English.

Akshaya entrepreneurs, both from Thiruvananthapuram and Kollam, were interviewed. In Thiruvananthapuram a focus group discussion (FGD) was conducted with four *Akshaya* women while in Kollam three women entrepreneurs were interviewed – Shantha, Manju and Eliyamma. Malayalam, the local language of Kerala state, was used to converse with the women,who mainly spoke of their experiences as *Akshaya* entrepreneurs running IT enterprises, the benefits that they have accrued in the programme, and their future dreams.

Women engaged in the IT units of *Kudumbashree* also form a crucial part of the universe of women entrepreneurs in Kerala. *Kudumbashree* is a state-run poverty alleviation programme in Kerala in which women's micro-enterprises are used as the main strategy towards realising the dual objectives of poverty eradication and women's empowerment. Some representatives of the programme were interviewed. One IT *Kudumbashree* entrepreneur, Savita, was also interviewed in Thiruvananthapuram, where we focussed on understanding Savita's specific experiences as a *Kudumbashree* entrepreneur.

To obtain a variety of perspectives from women belonging to different socio-economic strata who have come in contact with various kinds of training conducted by KSITM we probed two more sets of respondents – a fisher women's Self Help Group (SHG) from Poovar village, Thiruvananthapuram and students from Trivandrum Women's College.

Women who are engaged in fishing and processing of fish products in Poovar, a fishing village couple of hours away from the main city of Thiruvananthapuram, had been trained by the KSITM for six months in basic computing and use of Internet. Our FGD, through which we interacted with 20 such women from Poovar, aimed at understanding women's opinion on the location of ICTs in their own lives and the importance of ICTs to their livelihoods, and their thoughts on whether ICT training would help them in the future. Finally, two more FGDs were conducted with the faculty and students of Trivandrum Women's College – wherein training programmes were being conducted by KSITM, in ICTs and other areas such as communication and public speaking .

As in Karnataka, in Kerala as well, we interviewed the representatives of the Women's Development Corporation (WDC), a state agency whose mandate includes economic empowerment of women through meeting the financial and training needs of women entrepreneurs.

Conclusion

The present research is attuned to the specific requirement of analysis in case study method – that is, maintaining the holistic integrity of each of the cases (Padgett, 2008). Inductive processes were used to arrive at the larger findings. As discussed in the last chapter, the current research locates itself in the Southern feminist epistemic tradition. In our research, the feminist approach to analysis has been more intuitive than procedural. It is also fruitful to lay down some of the challenges/limitations. Firstly, most women in Kerala were interviewed in the presence of government officials, who were invariably males. The Poovar SHG was the only exception. This inhibited women to speak their mind freely and owing to lack of time, we could not carry out casual conversations that could have solved this problem to some extent. Secondly, in the case of Karnataka, the sample was not representative enough as most women belonged to relatively privileged socio-economic backgrounds.

Chapter III - Economic empowerment and agency – Exploring opportunities for women entrepreneurs in Information and Communication Technologies

In order to analyse the economic agency of women entrepreneurs, we need to lexamine how ICT mediated opportunities present themselves in women's own local contexts. Greater insight will also be gained by exploring the institutional arrangements afforded by the state, market and civil society that frame women's socio-economic realities -- impacting both women's agency and their pathways to empowerment. This chapter examines these issues with respect to the women entrepreneurs interviewed for this study, in Karnataka and Kerala.

Karnataka

The opportunity question as framed by AWAKE

In Karnataka, AWAKE[19], a Non Governmental Organisation (NGO) working with women entrepreneurs' professional development, became the starting point for our exploration into the questions of economic empowerment and agency for women entrepreneurs. Women entrepreneurs engaged in different kinds of manufacturing or services enterprises had been trained by AWAKE in ICT skills.

AWAKE saw ICT training as the next logical step in supporting professional development of women entrepreneurs. It was felt that ICT skills would help women in a variety of ways – 'women entrepreneurs need support in activities like buying and selling, maintaining client relationships, keeping accounts and managing a communications database' (Rajeshwari[20], the Secretary of AWAKE). The use of ICTs for marketing was emphasised, especially in the context of global markets and presence of online trading platforms. However, it was pointed out that ICTs may not be useful for everyone. Hence, women engaged in 'pickle making', for example, 'may only need computers occasionally and could rent/lease them if necessary.' In fact, ICTs are not introduced in

19 Association of Women Entrepreneurs of Karnataka (AWAKE) is a not-for-profit, Non Government Organisation (NGO) which works for women entrepreneur's economic development. A number of projects have been undertaken by AWAKE for business counselling and skill training in the urban and rural areas of Karnataka. The organisation is run by women volunteers who are themselves involved in various kinds of enterprises. In AWAKE, the women were trained in ICT skills under the HP Entrepreneurship Learning Programme (HELP), which was initiated in 2007.

20 Name not changed.

the initial stages of the business counselling programme at AWAKE. It was introduced only if the 'counsellors thought it was relevant to the business that women have.'

AWAKE runs a similar programme in rural areas of Karnataka for women entrepreneurs. However, the approach in rural areas tends to be different where the objective is 'to cover as much as possible so that the rural people become computer-literate.' This is done through four day intervention classes and follow up sessions. While the main classes focus on 'creating inclination', the follow-up classes are for more practical uses like helping women entrepreneurs in creating brochures of their products, sending emails and so on. It is also felt that the ICT programme can help the women entrepreneurs from rural areas to connect to urban centres like Bengaluru . Revathi, President of AWAKE, explained it as follows,

> 'The introduction of ICTs in rural areas serves the purpose of bridging the urban-rural divide. We encourage women entrepreneurs in rural areas to overcome their technology-related inhibitions and to use it for their personal and business needs. I think there are a lot of potential entrepreneurs in places like Davangere and Belgaum[21].'

The ICT skills that were imparted included the basic Microsoft Office package, Internet browsing and email. The training was seen as one more contributory element in the different entrepreneurial professional development programmes. The approach tended to be individualised transfer of skills with their utility expressed in terms of specificities such as type of business, the scale of business, the location (urban or rural) and so on.

As the organisation providing the scarce social capital that women entrepreneurs need, AWAKE felt that they could further facilitate women entrepreneurs' development by holding virtual counselling sessions, networking with entrepreneurship cells in colleges, conducting online courses, forging partnerships with training institutes, etc. AWAKE sees possibilities in interactive websites and marketing portals. However, Rajeshwari expressed fear of exploitation by external marketing networks and cited this as a reason for AWAKE's tentative steps towards negotiating with such private platforms for marketing. She explained,

> “We have explored tie-ups with marketing portals like India Mart, Fabmart, etc. We are

21 Davengere is a district in central Karnataka while Belgaum is a district in North Karnataka.

> still negotiating on the price that they charge for their services. However, I fear that if we do get involved with these companies, we will lose ownership over our network of women entrepreneurs. We do not want these women to be exploited by these portals. Some of them take forty percent as commission. This will be too steep for our entrepreneurs. These portals need a huge investment and they come with certain risks."

AWAKE recognised mobiles as the next frontier in ICTs, specially in the context of the needs that a 'global entrepreneur' may have, because of which it is planning to introduce a new project called HP-LIFE. Rajeshwari elaborated on the components of the project,

> "This programme would have modules like ' how do I use a PDA' etc. With respect to use of mobiles, they would need advice on what kind of mobile to buy (with features of double SIM, extra memory card, which can store pictures of their product etc.)"

Women entrepreneurs : Experiences of ICT training and use

The present section looks at the ICT opportunity question as expressed, both in its fruition and failure, by the women entrepreneurs who were trained by AWAKE. Fourteen women who were interviewed for this research owned different kinds of services and manufacturing micro-enterprises in Bengaluru. Aruna , Lakshmi, Malathi and Divya owned units producing processed food products. Sunita, Tara and Sita owned a garment production unit, a boutique, and a beauty parlour, respectively. While Sonia taught arts and crafts,Mangala planned to open a pre-school. Finally, Kavita, Shyamala and Radhika were all involved in ICT related business. The age of the women ranged between 35 to 45 years.

With the exception of Sarla, who did not have access to the Internet, most of the women who were interviewed, had access to both Internet and mobile phones. In spite of this, these women had seldom used computers and the Internet prior to their training in AWAKE. The notable exceptions were women like Kavita, Shyamala and Radhika who had computer- related or web-based enterprises. The training at AWAKE, which consisted of Office package and basics of e-mailing and Internet, did open up women's possibilities of using computers for their business needs. As Sonia, who runs a learning centre for arts and crafts, put it, 'AWAKE taught us how to operate the computer and use it in our business. We learnt the use of e-mails, how to use the Internet to track our orders, build contacts and search for new designs.' Anuradha, who manufactures arecanut leaf plates and bowls, reports that she now knows how to 'contact suppliers through the Internet.' This

sense of having learnt something useful in the training programme is communicated by almost all women.

The training at AWAKE and the use of computers by others (mostly husband and children) in their immediate environment has informed women's general perception of ICTs and their functionalities. More relevant to our research, however, is the impact of training on women's perceptions of the use of ICTs for their own enterprises. Though it was a generally held belief amongst the women entrepreneurs that ICTs could help them run their business more efficiently and also aid in growth of their enterprise, the 'how' of it continues to be vague. In Sonia's words, 'It will be good to learn about the possibilities that technology presents. Though I have not used it yet, I am sure they will be of use in the future.' (This connection between ICTs and ascriptions of possible progress or change, of course, is well-acknowledged in literature.[22])

Specific insights on the connection between business growth and ICTs were made by some of the women we interviewed. Some women thought that ICTs as a tool that would come in handy, only if their business reached a certain scale. For example, Anuradha said,

> 'I believe that computer technology and electronic media are useful. However, they become useful only when business becomes big enough to enter the international market. Once we are ready to export, websites become relevant. Till that point is reached, technology is not of much use.'

Sonia echoed a similar sentiment: 'We will be able utilise the opportunities that technology provides, once we build a brand name for ourselves.'

Perception of ICT related efficiencies and utility was different, perhaps understandably, for women who were running ICT related enterprises – Kavita, Shyamalaand Radhika . The office bearers of AWAKE, Rajeshwari and Revathi[23], who had larger businesses, also seemed to recognise the manner in which ICTs had led to enhanced productivity. They felt that ICTs could help organise the various enterprise functions more efficiently, ease financial management and help network with

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22 See Ilavarasan, P. and Levy, M. (2010), 'ICTs and Urban Microenterprises: Identifying and Maximizing Opportunities for Economic Development ', Final Research Report, Canada: IDRC.

23 Name not changed.

clients. For instance, Rajeshwari, the Secretary of AWAKE, elaborated,

> “In my business, I use the computer and the Internet to maintain accounts, for communication and for research and analysis. It is especially useful for me, since most of my clients are Multi-national corporations (MNCs). Previously, I was maintaining accounts without ICTs, but now, it has become much easier to do so. Specific computer software is available for this purpose.”

Hence, while women did see the utility of ICTs for their enterprises, they felt that the relevance would increase only after expansion of their enterprise. Women who could more easily integrate ICTs in their enterprises were those who had longer association with ICTs and also perhaps a head start owing to their privileged socio-economic position.

While women do see a value-added role for ICTs, the actual experiences of using ICTs have varied. We see that most women entrepreneurs who had been trained by AWAKE felt that they had learnt some amount of ICT skills that had possibilities of serving their business needs.

For instance, Divya, post her training at AWAKE, devised a system to surf the net.

> 'I make a note of the websites that I come across while watching TV. I put it down in a notebook, in case I forget the exact IP address. Later, when I check my emails and have some free time, I go on to these websites and see if they are useful.'

However, while women use computers, surf the Internet and even use top end mobile phones at home, for their business purposes, they do not venture much beyond accounting packages. Those who did experience benefits and were able to articulate the opportunity angle, were the exceptions. Sita who runs a beauty parlour, stated that 'I use the computer only to generate bills for my customers' and Aruna said: 'I find computers useful for storing important information about accounts, stock, etc.'

In response to questions about the patterns of email usage, many women said that they did not use emails for business use. Hence, even though women are aware of facilities like email, the use of email for their business remains unexplored.

It can be concluded that even when ICT based skills were taught, women could not translate these into opportunities for business growth. This point gets further clarified when we look at the experiences of the women entrepreneurs who tried to set up a website for marketing their products – marketing being one of the most important business needs identified by women. Most women either expressed a desire to set up a website, or had already experimented with creating a website, to market their products more effectively. It needs to be pointed out that Anuradha and Tara were the exceptions to the rule – in not prioritising a website. Anuradha felt that the question of a website was a 'secondary issue'. She stated,

> "One has to first take care of the production flows. Creating a website alone is not enough. In case, the website is able to generate a demand for the product then one has to have the product ready. If one fails on this account, it will be harmful for the reputation of the enterprise."

Aruna , Sonia, Malathi and Sita wanted to create websites but had 'not done it yet'. It can be noted here that while Aruna had just started her pickle business, Sonia did not have regular access to computer and the Internet. Sita, whose current use of computers is limited to printing bills and playing music, wanted to know how to go about creating websites and had few questions,

> "Do we need an Internet connection to create and maintain a website? Can we create a website even if we do not have sufficient knowledge about how to go about it? Do we need to avail services from an outside agency or can we learn to do it on our own?"

Shyamala, who herself designs websites, felt that it is easy for the entrepreneurs to market their products through websites. She explains, 'Having a website allows customers to see all the products that are available and place orders online. It makes marketing products far easier than carrying all the products for door-to-door marketing.'

Radhika , who runs computer training programmes, did not find it very useful to create a website.

> "I tried to open a website for my business. It was a very small and simple website that I had built on my own. However, I feel that it has not helped me in any way."

Hemakshi relates the problems that one encounters in the process of getting their own website:

> “For small and micro entrepreneurs who are interested in creating a website for their business, hosting of the website is a big hurdle. If they outsource it to a small local agency, it costs them up to Rs. 5,000. Another concern is that these agencies do not give the host password and stop responding to follow up requirements after some time. The website perpetually shows 'under construction' status. There are also big companies which provide these facilities. However, these are not financially viable options for these entrepreneurs.”

It is clear from the above, that most women are interested in employing ICT tools like websites. However, there is a lack of support structures which dissuades them from using such tools and even when they start using them, they face a number of challenges that they are unable to resolve at an individual level. Clearly, AWAKE's ongoing hand-holding attempts have not been adequate.

Women entrepreneurs outlined some of the factors that can enable women to harness the advantages of the ICT based training in AWAKE. These were expressed by women in terms of their expectations from AWAKE.

Kavita suggested that AWAKE should take on the role of e-marketing for women entrepreneurs, both in rural and urban areas. While commending the quality of the products manufactured by women in the rural areas, she said that since rural women cannot even afford to buy a computer, the intermediary role of AWAKE could become the vital support structure for their development. Kavita reported that there is enough enthusiasm amongst the women for such marketing solutions.

> “In my conversations with rural women entrepreneurs, I have often found that they are very eager to know how to market their products through websites. They are excited by the possibilities the Internet presents. In fact, I raised this issue with AWAKE and suggested that they should create a platform for e-marketing for these women, for a nominal charge. This will be very helpful for these entrepreneurs.”

Women entrepreneurs like Anuradha, Sonia, Lakshmi, Radhika, Shyamala and Tara expected AWAKE to fulfill its role of ICT skills-training more rigorously. For example, Shyamala said that “AWAKE should conduct more training sessions to enhance our learning. At our present competency level, we can only use facilities like email.” Some articulated specific needs that relate to the businesses that they are involved in. Hence, Radhika said: 'I want to learn more about computer aided graphic designing. However, I am not aware of who I should approach for such

training.'

Women's expectations about ICT training from AWAKE dovetailed with the other expectations they expected AWAKE to fulfill, as an intermediary organisation. Hence, women entrepreneurs like Mangala, Aruna and Sita wanted AWAKE to provide support that extended way beyond ICT skills-training. This includes provision of infrastructure like computer labs. Mangala said: 'Everyone does not have a computer at home. To practice what they have taught us, we need to go to other computer centres. It would be beneficial if they could extend the training for a longer period.' While Aruna wanted AWAKE to provide loans, Sita felt that the organisation should provide vital information that an entrepreneur requires. She stated:

> "Often, we don't know where to collect crucial information. For instance, information about certain kinds of loans and schemes that are specific to women entrepreneurs. If we need to know about these, we do not know who to approach."

Some even saw AWAKE as a reservoir of important social capital. For example, women entrepreneurs felt that AWAKE could potentially help them in marketing their products. Divya said: 'AWAKE can provide us marketing support. It has such an extensive network.'

We can observe that while AWAKE perceives ICT related skills as yet another skill set to be transferred to women entrepreneurs for their development, women themselves see the skills transform into opportunities only with an active intermediary role of AWAKE. The various factors that are needed to facilitate women's business growth need to be seen in the larger context of state support to the women entrepreneurs. This will be dealt with in the next chapter.

Kerala

The opportunity question for women entrepreneurs in the programmes and initiatives of the state

In Kerala, the state is the main provider of ICT education, training and services. This is mainly done through the various programmes initiated by the Kerala State Information Technology Mission (KSITM). KSITM is the nodal agency for implementing the various programmes of the Department of Information Technology. The objectives of the KSITM include 'ICT dissemination to bridge the digital divide'.[24] Accordingly, the *Akshaya* programme was initiated in 2002 to enable an expansion in citizens' ICT use, in Kerala. The programme has evolved from its initial emphasis on e-literacy

24 http://www.itmission.kerala.gov.in/vision-statement.html

and has come to take on a variety of government to citizen services.

The officials of the programmes holding different portfolios were interviewed for the purpose of the research. Additionally, women engaged in the IT units of *Kudumbashree* also form a key part of the universe of women entrepreneurs in Kerala. (*Kudumbashree* is the poverty alleviation programme of the state government of Kerala where women's micro-enterprises are used as the main strategy for both poverty eradication and women's empowerment, as explained in an earlier section of this report).

In Kerala, the responses to women's location in the whole ICT ecology of the state were invariably foregrounded by comments on the position of women in Kerala. All the respondents pointed out the strong status that women have historically enjoyed in Kerala society For instance, according to the Director of the *Akshaya* programme, K.M., "women in Kerala have been have been much more advanced than women in the rest of the country" and that "Kerala women enjoy an equal status with the men". Expanding on the reasons for this, A.K., the Principal Secretary to the IT department, said:

> "Part of it is also the legacy of the matrilineal system which existed earlier, especially amongst the Hindus. Moreover, Kerala has been a society which has historically taken up causes of marginalised segments of society like the lower castes, tribes, and women."

Despite his agreement with the general advanced status of women, K.M felt that "women are too family-centred" and that "they tend to sacrifice their career for the sake of their family". He however added that women did possess the "potential, capability and skill set to take over at any time".

The Women Development Corporation (WDC) representatives also concurred with this view that women were largely absent from public spaces, However, unlike Director of Akshaya, they located the reason in the prevalent 'culture of Kerala':

> "In Kerala parents are not ready to let women engage in the public domain. That is the main challenge that we face in getting women to participate in our programmes. Though the government gives certain advantages to the women, the parents are reluctant because they fear harassment at time of marriage."

This, somewhat paradoxical, social status of women marked the Kerala landscape in which ICTs were introduced. Women were seen as suitable for the IT industry in many ways. A.K opined that women are the ideal workers for the IT industry in Kerala since “the attrition rate is lower amongst women and they are more committed to work. The likelihood of getting organised and creating difficulties is also less in case of women.” The IT industry in Kerala had come to employ women, who are 'equally if not more educated than men on an average in Kerala'[25] and has thus able to absorb the 'un-utilised human resource'.

Women have come to manage more more than fifty percent of the *Akshaya* centres, and the IT units of *Kudumbashree* are solely run by women. Additionally, some women (like the Poovar fisher women) have encountered ICTs in the various extension programmes of the government. What has been the vision of the government *vis-a-vis* the ICT mediated opportunities for the women entrepreneurs?

A.K. felt that ICTs had subtly changed gender norms regarding work. It was with the coming of the IT industry that 'industries or companies were allowed to function beyond 10 to 5 kind of hours and women were permitted to work around the clock'. It was felt that with the opening of IT Parks, which have been planned in order to decentralise the IT industry, and *Kudumbini*, a 'household BPO concept', more and more women would be encouraged to work. However, he stopped short of hailing ICTs as 'harbinger of something revolutionary'. He opined that the progress has only been marginal and that 'one has to wait and see'.

C.K.P, the Consultant to the e-krishi programme[26], pointed out the commercial opportunities for women in the programme. Aggregation of produce from different farmers and their online trading

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25 According to 2001 Census, 1,36,951 males are literate in Kerala as opposed to 1,48,203 females. The trend is replicated at the level of 'graduate and above' where 6,99,841 males fall in this category as opposed to 7,43,208 females. Data retrieved from, http://www.censusindia.gov.in/Census_Data_2001/Census_data_finder/C_Series/Literates_and_educational_level.htm (Last accessed on 12 October 2011)

26 Explaining the model of *e-krishi*, C.K.P, the Consultant to *e-krishi*, stated that *e-krishi* is, 'basically a web-based transaction platform for buying and selling agricultural commodities and bypassing the middleman.' Recently, this programme has also undertaken collection of information on agricultural attributes in a particular district.

is one of the components of the e-krishi programme. C.K.P informed that 'in many cases men are not interested because the quantity is too small.' He noted that women could play an important role in such scenarios.

However, it must be noted here that even though it was felt that 'many of the centres are run by women efficiently and many of these women are more enterprising than the men', the fact that more than fifty percent of *Akshaya* centres are owned by women entrepreneurs cannot be attributed to programme design factors. As K.M pointed out,

> "I do not think we give any preference to women in our programmes. As it is, they are equal to the men and they do a fantastic job. We have nowhere stated that they will be preferred over men, though there is one column in the selection criteria which asks for the gender of the interested entrepreneur. Entrepreneurship needs to be seen in a larger context than the gender of the entrepreneur."

R.K the Director of KSITM, agreed with the above observation and stated 'though we have laid down the guidelines on how an entrepreneur should be selected, we have not called exclusively for women entrepreneurs. However, we do find that women apply in large numbers'.

It was observed that ICTs brought changes in other aspects of women's lives, apart from work. For example, C.K.P recalled that Internet-enabled chatting in *Akshaya* centres has become one of the favoured ways for communication for women whose husbands work abroad.

> "Most of the wives use the Internet to chat with their husbands who are working abroad, mostly the Gulf. A very high percentage of Mallapuram women are either using computers in their houses or going to the kiosks to chat.. On Fridays, all the *Akshaya* centres are full of women and children."

S.J, the District Collector of Kollam[27], perceived the work that women entrepreneurs do in *Akshaya* centres as a part of the larger project of emancipation. He made the following comment in the context of the data entry work done for various government programmes like the Mahatma Gandhi

27 The programmes of the KSITM are implemented through the administrative nodes at the district level.

National Rural Employment Guarantee Scheme[28] (MGNREGS) or the schemes for providing houses to those below the poverty line.

> "Women are directly or indirectly involved in the government project preparation and implementation. In the process, gender bias and gender discrimination can also be avoided."

To sum up, it was felt by the officials of the IT department that ICTs can, and already are, impacting the way women work, communicate and participate in the public sphere. Structuring of women's participation in governance opens up existing governance processes to contestations.

On the scope of work of women *Akshaya* entrepreneurs, the government officials talked at length. The *Akshaya* programme has come a long way from its e-literacy times, and at present a number of government-to-citizen services are provided through the *Akshaya* centres. The attempt here is, as KM said, 'bringing government closer to the citizens.' One of the important services provided by the *Akshaya* centres is e-payment. Various bills that have to be paid by the citizens can be paid through these centres for a charge of Rs. 5 or Rs.6. Various other services are also provided in these kiosks like railway reservations, net surfing, chat facility, retrieving previous years' question papers, and so on.

Help desks have been set up in public institutions like the police station to facilitate more 'citizen friendly interaction'. *E-Krishi* and *Ente gramam* ('my village') are other projects that have been recently begun by the KSITM through the *Akshaya* centres[29]. In order to fulfil these functions, women mostly have to learn data entry in specific interfaces. The *Akshaya* entrepreneurs had received initial training in what they call the 'e-literacy package'. This included the basic training in both Windows office packages and Open office packages. As and when new services were added to the *Akshaya* centres, the women were given training specific to these services.

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28 A wage employment programme of the Government of India See http://en.wikipedia.org/wiki/Mahatma_Gandhi_National_Rural_Employment_Guarantee_Act

29 *Ente gramam* is a web portal project where geographical, social and historical details of villages in each of the Panchayats are to be digitally documented in Malaylam language. This project is in its pilot stage and has been implemented in the Gram Panchayats and Municipality of Kannur District.

Skills acquired and experiences of women entrepreneurs

Capturing the diversity of women's voices was a pre-requisite to arriving at any conclusions regarding women's experience of ICT use in Kerala. For the purpose of this study, four interviews and four Focus Group Discussions (FGDs) were conducted. Voices of *Akshaya* entrepreneurs from Trivandrum were obtained through a FGD and three *Akshaya* entrepreneurs from Kollam were interviewed – Shantha, Manju and Eliyamma. To get the perspective of a *Kudumbashree* entrepreneur, Savita was interviewed. She owns a *Kudumbashree* IT unit in Trivandrum. Women who were engaged in fishing and processing of fish products in Poovar had been trained by the KSITM too. Their experiences were also collected through an FGD. Finally, two more FGDs were done with the faculty and students of Trivandrum Women's College where training programmes were being conducted by KSITM. The present section looks at the nature of work and the experiences of women entrepreneurs who have been a part of both the *Aksahya* and the *Kudumbashree* programme.

Both in *Akshaya* and *Kudumbashree*, women are mostly engaged in data entry assignments that the KSITM procures from various government departments. In fact, C.K.P informed us that almost 90% of the data entry work of the government is done by the women entrepreneurs.

> "We have arranged a lot of work, government work, for the centres - like ration cards, BPL list, MGNGREGS, EMS housing scheme, project related data entry, project preparation etc. For NREGS we made the database of families enrolled in NREGS. Database preparation was entrusted to the *Akshaya* Centres."

A.K outlined the nature of the IT work undertaken by such *Kudumbashree* unit.

> "The *Kudumbashree* units are involved in more lower end activities like data entry. They are also engaged in providing allied services for the IT companies and IT Parks like providing canteen services,etc. *Kudumbashree* units have taken up installation, servicing and maintenance of hardware parts. In rare cases, they are also involved in designing, filming, multimedia kind of activities."

In case of *Kudumbashree* the trainings had been task specific. As Savita, a *Kudumbashree* entrepreneur, informed,

> "*Kudumbashree* gives us software training for each work (job) as each work (job) has its own software. I started with what I knew. I learnt to do desktop publishing and then I started learning new software one by one."

Manju, an *Akshaya* entrepreneur, informed us that she was mainly engaged in 'data entry for e-krishi, Malayalam computing and *Ente gramam*'[30]. Eliyamma, another *Akshaya* entrepreneur mostly does work related to 'e-literacy and e-payment'. Once the e-literacy related work reached a stagnation point for most women entrepreneurs, it was e-payment that bailed out the enterprises. Shantha elaborated,

> "What next after e-literacy - this question always troubled me. Then, I got the opportunity to undertake the e-payment services in my *Akshaya* centre. The e-payment scheme included collection of bills for water, electricity and telephone services. My centre provides the *e-vidya* scheme and the Intel Learn programme. After e-payment, e-ticketing facility was announced. The *Panchayat* has allotted some space in their building for a centre, a help desk. We charge Rs. 5 for services there. We help people write up applications for various kind of schemes, for complaints, etc."

The *Akshaya* entrepreneurs in Trivandrum had also coursed a similar trajectory. They felt that 'the number of people learning (e-literacy) has been coming down. Now every house has a computer. It is difficult to persuade women who are housewives to come for training'. Hence their area of work has shifted to 'online payment, railway ticketing, tax, e-filing and so on'. Manju found 'online applications, subsidised training from *Panchayat* and e-payment commissions' as the most profitable.

In case of the *Kudumbashree* entrepreneurs, data entry assignments procured from various departments formed the core of their work. .

> "In the beginning we did a lot of data entry work and printing work. For example, we did the data entry and printing work for 'Agricultural Green Card' – this card is given by the government to the farmers showing their entitlements. We also did some data entry work

30 *Ente Gramam* which means 'My village' is a project of the Kerala State IT Mission which aims at creating local digital content in the local language, through setting up community web portals.

> for the Below Poverty Line survey and the *Ashraya* Project. *Ashraya* project identifies the poor and marginalised in the community."

In general, the women entrepreneurs felt that their economic and social status had increased after participating in the programmes. However, it is not ICT skills that are identified as opening opportunities for them. Instead, it is being part of the programme as a whole that has brought about socio-economic advantages. Manju said,

> "We were only housewives until the scheme was announced. But *Akshaya* gave us an opportunity to use our education,to go out and meet people and make contacts."

She further thought that *Akshaya* is not a business for her. It has provided her an opportunity to work along with her husband and to 'provide service to the locality'.

Like Manju, Shantha also felt that she had been 'a housewife until the introduction of the *Akshaya* scheme'. While her mother looks after the household now, she has...

> "… gone out and met people. I think I have won people's affection as I continually interact with them. My interaction is mainly about government services and schemes. I have also had the chance to visit most of the families of this *Panchayat*. I have managed to win their respect and affection- and this satisfies me."

One of the women entrepreneurs interviewed in Tiruvananthapuram felt that her 'personal relationship' had improved and that she had earned the faith of the households to an extent where 'if anyone is denied anything from the *Panchayat*, they come to me'. With respect to the relationship between the *Panchayat* and the *Akshaya* entrepreneurs, Shantha had the following observation to make:

> "I think that after the introduction of the e-payments scheme, and the passing of orders that enabled Akshaya centres to set up help desks, the Panchayats have started seeing us as an extension of themselves. We have got greater recognition for our work from the Panchayats."

While the above responses mainly related to shifts in social relationships, for Savita, the gains from

starting the *Kudumbashree* IT unit had mainly been economic in nature.

> “There are many things which we would not have been able to do before, but now we can afford these things. For example, now my daughter studies in an ICSE school. Had I not started this unit,she would have studied in a school with State Board. I can confidently say that my family has been able to progress a little.”

In terms of the future plans, most women wanted an expansion of their enterprise. So, an entrepreneur from Trivandrum wanted her *Akshaya* centre to grow and specialise into 'first floor Internet cafe and second floor services, marriage certificate, birth certificate, etc.' As Manju pointed out, the sustainability of the enterprise also depended on new programmes that government introduces. She noted:“I think new programmes will come up and then there will be more demand.”

Savita wanted 'to develop her business and lead a better life'. She did want to expand her business, but she explained the major impediments in her way.

> “I do not have much financial capacity. There is a limit to the amount of data entry work that can be done and each data entry work has a limited fee. I have to pay all my staff, pay for the maintenance and meet other expenses. After all these payments, I only get a small sum. I do want to expand my business but this can happen only if I have some loan facility from the government.”

Savita explained that she would also like to learn new software and new technology rather than 'just following the instructions of the programme'. She explained the utility of such learning:

“It is good to know about software related to our work. In fact the whole group that is involved in a particular work, should know the software. Then, even if some members are not present, the work will not get affected. We sometimes get stuck if there is an error since we do not know the software well. We get training only in operating the program. They don't tell us exactly how the software works.”

As for the marketing consortium proposed by *Kudumbashree* to procure work for the IT units, Savita was not very optimistic.

> “I do not know how effective it will be. The work agreement is given to the *Kudumbashree* head. I do not know if they will give us an agreement. I do not know how much importance they will attach to an IT unit. Will they give the same consideration to an IT unit as they give to an official? I don't think we will get the same recognition that a government official gets.”

She thought that 'even though we formed the consortium, confusion regarding future work remains.'

The Poovar fisher women

Both the young and old members of the Poovar fisher women SHG[31] felt that computers would help them get jobs. 'Most of the applications for jobs like for data collection for the Census, requires computer knowledge. We missed out on the Census job opportunity because we did not have computer knowledge', said one of the younger members. They also spoke of an upcoming port and possible partnership of the IT Mission with the Fisheries Department, which would bring jobs, and they wanted to be best prepared for these opportunities by learning ICTs. The older members saw an additional benefit in computer training – they could now monitor their children's online behaviour. However, it was felt that the training was too short.

> “They took away all the systems even before we could explore the Net. There are no Internet cafés nearby and the *Akshaya* centres charge Rs. 25 per hour. We are reluctant to go there alone and often it takes us more than one hour to surf and hence we have to pay more.”

The women felt that a diploma course or learning Tally (an accounting software) would be useful for them. They felt that their present levels of skills were insufficient to get them a job.

We see that in Kerala, women entrepreneurs from different socio-economic backgrounds have engaged with a number of programmes started by the KSITM or *Kudumbashree*. Much of the work involves data entry and is linked to the provision of government-to-citizen services. While women entrepreneurs of *Akshaya* and *Kudumbashree* initiatives have reported enhancement in socio-economic status, the Poovar fisher women feel short changed. As in Karnataka, the Kerala experience is framed by institutional factors. It is these institutional approaches that we delineate in the next chapter.

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31 100 members of the SHG had undergone ICT training.

Chapter IV: Approaches of the State and the civil society organisations in enabling women entrepreneurs' empowerment

In the preceding chapter, an analysis of women's experiences in running enterprises after receiving training in Information and Communication Technologies (ICTs), led us to the conclusion that it is a plethora of intermediary factors that enable, or hinder women, from making full use of the opportunities that ICTs may provide. Structural factors such as existing gender relations in a given social context, women's specific location *vis-a-vis* class, caste etc. and the market arrangements within which women entrepreneurs find themselves operating, are all determinants of women's economic agency and empowerment. Can ICTs be a tool to overcome these structural barriers when the use of ICTs itself depends on one's position in the hierarchies of power? An enquiry into the role of the institutional factors, such as the state and Civil Society Organisations (CSOs), gains importance in such a scenario. The present chapter looks the existing approaches of state and civil society towards women entrepreneurs.

State approaches – Karnataka and Kerala

We have examined how the narrative of ICTs and enterprise for AWAKE has centred around entrepreneurial professional development. In AWAKE's mission, ICTs are conceptualised as an enabler skill-set to be imparted through a classroom set of techniques. The views of the representatives from two departments, *Stree Shakti*[32] and the Women Development Corporation (WDC), handling state programmes for women entrepreneurs stands in sharp contrast to this. The WDC and *Stree Shakthi* representatives we interviewed did not seem to have a well-considered view on the use of ICTs for women entrepreneurs. This is not surprising as it has been observed on many occasions that ICT interventions tend to be limited to big business in the IT department while the other departments mainly dabble with an experimental approach. The ICT application by the departments, other than IT, tend to be pilots and are rarely scalable[33]. The notable exceptions are the

32 *Stree Shakthi* is a programme started by Department of Women and Child Development, Government of Karnataka in order to 'empower women economically and socially by organizing them in self help groups.' his programme was launched in 2001 and since then around one lakh thirty thousand rural *Stree Shakthi* groups have been formed. Women are encouraged to participate in income generating activities and for better marketing facilities *Taluk Bahavans* are being built all over the state.(http://dwcdkar.gov.in/)

33 This point has been discussed in Singh, P. (2008) *Recommendations for meaningful and successful e-governance in*

e-Krishi[34] programme of Kerala and the Public Distribution System (PDS) in Chhattisgarh[35].

Karnataka WDC and *Stree Shakthi* representatives witnessed the opportunities for women entrepreneurs widen with the provision of marketing and financial support – such as building *Taluk Bhavans*[36] for women entrepreneurs for providing a space for selling their products, conducting exhibitions for marketing their products, mediating with banks to provide them loans and training them in entrepreneurial skills, (including the trainings on orientation, formation and running of SHGs).

In case of WDC and *Stree Shakthi*, the opportunity question came to be posed in the context of their programme for supporting women entrepreneurs more through marketing and financial measures than skills. Hence, *Stree Shakthi* focuses its training on orientation, formation and running of SHGs, book keeping or account maintenance, credit management and so on. Regarding the *Taluk Bhavan* initiative, the *Stree Shakthi* representative had the following to say:

> "We had to strengthen the marketing strategies of women entrepreneurs we had trained. For this purpose, we are constructing *Taluk Bhavans.* These will serve as a market complex where these women can come and sell their products. We are also planning to conduct exhibitions on a quarterly basis for women to market their products."

In the case of financial support, the WDC located itself as an intermediary.

> "The loan depends upon viability of the project report. Loans are given for a maximum amount of Rs.1 Lakh (100,000). The bank disburses the loans after scrutinising the project for its viability and profitability. They look at the capacity of the entrepreneur and the

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India, Bengaluru: IT for Change.

34 Explaining the model of e-krishi,C.K.P, the Consultant to e-krishi, stated that e-krishi is, 'basically a web-based transaction platform for buying and selling agricultural commodities and bypassing the middleman.' Recently, this programme has also undertaken collection of information on agricultural attributes in a particular district.

35 See, Dreze , J. Khera, R. (2010, 13 November), 'Chhattisgarh shows the way', in *The Hindu*, retreived from www.thehindu.com/arts/magazine/article881869.ece

36 This refers to marketing complexes at the sub-district level, where women entreprenuers can carry on their business activities.

> market situation of the proposed product. We give a referral and play the role of a facilitator. There is no direct involvement or direct cash transfer. It is totally left to the discretion of the bankers to accept or reject the projects."

As far as ICTs are concerned, their importance was recognised for marketing, mostly in the context of export needs.

> "Some of the women entrepreneurs, without a website of their own, find it extremely (hard) to market their products. Many of the women entrepreneurs would like to export their products. For this, ICT facilities are very important."

When it comes to the imagination of ICTs in women's entrepreneurial development, the stress seems to be on business process sequencing than on enterprise capabilities. The economic viability of any enterprise by women is seen as the touchstone of all training and support, whereas, capabilities in a longer term sense bring gains in productivity in a more invisible way. For WDC, ICTs come into enterprises not as a systemic enabler; the sustainability of the enterprise is all-important. The WDC representative opined,

> "Women may acquire a number of skills through these training programmes. However, till they are able to produce and market something successfully, there will not be any economic development. It will be of no use either to the nation or to the individual. We have to see whether the plans are locally relevant and sustainable in the long run."

The IT department officials of Karantaka felt that while schemes like rural BPOs, e-PCOs[37] would impact women positively, the department had not 'started anything exclusively for women. Any programme that we initiate is for both men and women. We don't discriminate on the basis of gender.' Hence, none of the schemes was 'limited to women'. This was the case because in their view 'technology has no gender.' More often, any benefit that might accrue to women would not be

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37 The e-PCO scheme aims at reviving the public call booths by providing Internet facilities in these centres. It is proposed that a thousand e-PCOs will be helped to become financially viable under this scheme. The IT department representative informs us that in the earlier *avatar* of this scheme (i.e., the public call booths) some of the PCOs had been reserved for women. He reckons that as a result of this earlier reservation, at least a hundred of these revived e-PCOs will be run by women.

because of the inherent design of the programmes initiated by the IT department but because of the general spread of ICT usage. Hence,

> “Probably in the next four to five years, with increase in Internet usage and through schemes like rural BPO, ePCO and the self-help groups, women entrepreneurs will be encouraged to conduct their business through ICTs and will start taking advantage of the ICT tools.”

It should be pointed out that women have been forthcoming in making use of the opportunities, even though these programmes did not necessarily have a gender focus. Out of the 1 Lakh youth who were targeted in the computer literacy programme in Karmataka, 40-45% were women. In response of women to the rural BPO scheme, there were lot of applications received from women and about 25% of the entrepreneurs cleared under this scheme were women.

We found out that the departments working with the mandate to aid the women entrepreneurs have not undertaken any ICT-enabled initiatives. On the other hand, the IT department considers ICTs to be a 'gender neutral' sphere and has an almost serendipitous attitude towards women's empowerment. We see that the stress is on ICT skills meant for individual use and individual growth rather than a technology that can enable institutional support structures to be extended to large number of women.

The lack of ICT-enabled innovations in providing support structures to women entrepreneurs reiterates the current discourse that favours technocratic solutions for every developmental problem of the day. It gives credence to the view of the IT department that ICTs are far removed from the social imperatives of the state. Stripping technology of any value and presenting it as 'neutral' is a dangerous trend which allows the state to limit itself to things like providing connectivity. Even here, the hope of the IT department was pinned on the private service providers' expanding networks. Between the pre-digital mentality of the departments related to women's development and the gender insensitivity of the IT department, the development agenda remains unfulfilled.

These contradictions flow from an understanding of the ICTs as a private rather than a public good. This understanding, shaped in the North and then transported to countries like India, privileges the corporatist frameworks. As opposed to this, ICTs informed by the principle of publicness would imply 'the spaces and means of deliberation, knowledge exchange and creation, and formation of

public opinion and policy options – social processes that are antecedent to and inform ICTD policy and practice' (Gurumurthy and Singh, 2010). To even begin conceptualising ICT-enabled platforms and solutions for structurally supporting marginalised groups, the notion of the 'public' has to be introduced in the ICT paradigm.

It would be interesting to note that while the state remains conspicuously silent on the issue of organising women around technological solutions that are embedded in the community, it favours collectives and SHGs when it comes to micro- finance schemes. How is it that collectives and groups are the favoured formations in one case and do not even enter the imagination in the other? Perhaps, the answer lies in the conceptualisation of the 'governed' by the state which is essentially neo-liberal in character. Hence, according to the dictates of the market, the governed subject is configured and reconfigured time and again. In contrast to the highly individualised conception of the entrepreneur, by both NGOs and the state, the women themselves have evolved a perspective that is more outward looking. They have explored arenas of collaboration with other entrepreneurs and formed themselves into groups and collectives. One entrepreneur from Karnataka proudly claims, 'we celebrated the women entrepreneur's day. I do not think people celebrate such a day – but we celebrated it.' Women have immense amount of faith in such collectives. One of the respondents passionately makes her point and asks us to imagine the power of the group, 'See, the entrepreneurs have been able to build a support system. The sky will be the limit if such women are trained properly. They are ready to learn, to grow and face the hardships that come their way.'

In Kerala, the state question becomes even more important because it is the state that is the main provider of ICT training and services, the women entrepreneurs are 'in the employ' of the state. However, before we go into the question of the role of the State in the context of Kerala, it would be useful to take a look at the 'Kerala model'. The rationale behind the different programmes and the choice of the particular structuring of these programmes was articulated differentially by the officials in the IT department (Kerala State Information Technology Mission) who we interviewed for the research. Differentiating the ethos behind the IT programme in Kerala from similar efforts in other states of India,A.K., the Principal Secretary to the IT department, said, 'maybe there is more emphasis on inclusion, and an effort at ensuring that the marginalised also benefit from IT in Kerala, than in other places where IT is seen purely as an economic vehicle.'

K.M, the Director of the *Akshaya* programme, also distinguished the IT enabled government to citizen service programme in Kerala from the other states. He regarded the *Akshaya* model as

'unique', one that 'needs to be nurtured'. He located the reason for its success in the way it is structured.

> "Unlike other government-to-citizen services networks in India, we are owned by the government up to the Block level. The last mile, the entrepreneur is the micro-entrepreneur. The difference is that we have access to the various government departments and they are our main clients. So we have the face of the government and heart of a corporate. That is the great advantage of the *Akshaya.*"

He credited the *Akshaya* entrepreneurs' 'corporate style of functioning' for the popularity of the programme.

> "The *Akshaya* entrepreneurs work round the clock. They are the real strength, the backbone of the whole process. Most of the *Akshaya* entrepreneurs give personalised service. The typical government philosophy does not operate here. Our work culture is very corporate. We treat the customer with a lot of care and treat them with the intention of getting more work from them."

Equating the ICT services with other basic services, S.J, the District Collector of Kollam, explained the thinking guiding the design of the *Akshaya* Centres:

> "The underlying concept behind the *Akshaya* model is that ICT services have to be made accessible like the other services are in Kerala. Just like a Public health Centre or a ration shop that exist within a radius of 2 or 3 km and serve 500 to 1000 families. *Akshaya* centres can be used to spread awareness about the use of computers and the Internet and they can also become centres for training people. The advantage of having a network of these centres is that they can act as regular training centres, so that people have continuous access."

Explaining the role of the government, S.J stated:

> "Government cannot invest a lot on such things. Typically, the government will provide some training facilities and assume facilitation role like - linking major industries, organisations and governmental departments to the *Akshaya* Centres."

Expanding on the theme of sustainability, S.J described the training process of an average *Akshaya* entrepreneur.

> "The two pre-requisites for a young entrepreneur wanting to open an *Akshaya* centre within the local community include 200 to 300 square feet space and four to five computers. After he gets trained by *Akshaya*, he will impart training to the people in the community through a fifteen-hour training module. People who want to continue their training beyond this period have to pay. The centre can also earn by charging for Internet usage and he can gradually add other facilities. It is estimated that the entrepreneur will earn back 60% of the initial capital that he had invested within six months and he will also have a regular client base within the local community. The *Akshaya* model was envisaged as an economically viable model."

R.K., the Director of KSITM, explains the model in the following manner:

> "Since this model runs on the Private Public Partnership principle, the economic viability of an *Akshaya* centre depends on the individual entrepreneur running it. We are trying to provide all kinds of support-like enabling services that they can provide in their centres. Using these services to the fullest capacity depends on the skill of the entrepreneur. In the same conditions some entrepreneurs do well while others do not."

While the 'Kerala model' rests on the work of women's hard work or 'corporate style of working', we see that the gender question is formed only incidentally in this model. What happens to questions and issues around women's work? The women who we interviewed, while closely relating to the programme, rarely articulated their achievements in individual terms. The entrepreneurial arrangement thus affords hardly any flexibility for the women entrepreneur to set up shop elsewhere.

One of the most striking aspects of the whole ICT model in Kerala is the kind of work that is generally apportioned to women. Women mostly do basic data entry type of jobs, procured from the different government agencies by KSITM. The *Kudumbashree* entrepreneur also receive similar work. Even in the new phase of the *Akshaya* progamme where new government-to-citizen services have been added, the emphasis is on passive transfer of services rather than encouraging

entrepreneurial proclivities among the women entrepreneurs. One gets the sense that women are being recruited as 'generic labour' (Manuel Castells) by the state in Kerala with very little scope for expansion of their 'capabilities'. The gendered segregation of labour in the ICT model in Kerala is another aspect that needs to be explored. We see that women continue to inhabit the lower rung, caught in jobs like data entry.

Women are seen as 'more attractive for the industry to recruit'. Unfortunately this 'attractiveness' is a product of women's subordination in the sexual division of labour where women are seen as the flexible labour force that has the requisite 'soft skills'. We also find that there is an across the board attempt to differentiate the IT industries from others as the one with less labour 'troubles'. This again sits at odds with the labour movement history of Kerala which has been more progressive than in other states of India. One is tempted to assert that such a depoliticised notion of the worker has been possible only because the industry is IT and the worker is 'woman'. The patriarchal nature of the state is reflected in the vision of women's labour as the surplus labour at the disposal of the state and the corporates.

We see that such has been the social contract forged in the case Kerala that the state seems to have no obligation towards women as rights bearing citizens. Even when ICTs are harnessed, they are cast as corporate infrastructure rather than as public goods and the gender question gets subverted. The extraction of surplus labour from women for state infrastructure building is entangled with the state's vision of taking ICTs to the masses. This points towards a strategy of women's empowerment as a development project, which subsumes the empowerment question, and results in a progressive de-politicisation of the woman subject. On the other hand, in Karnataka, the key agencies have clearly fallen behind in this game and do not seem to even contemplate putting ICTs at the service of women's economic emancipation.

Role of civil society organisations – Whither civil society?

In Karnataka, we find that while AWAKE has been able to introduce a certain level of technology use amongst the women entrepreneurs in both urban and rural areas, this use has been rarelyinterlinked to their specific business needs. The experiments with IT-enabled tools such as websites have failed, and the reason for this is not merely the lack of requisite skills. While the emphasis of AWAKE remained on skill imparting, some of the women entrepreneurs, those who were more intensive users of ICTs, pointed out that AWAKE needs to redefine its role. They insisted

that AWAKE must become a platform for facilitating ICT-enabled tools and solutions rather than merely disbursing skills. This suggests role redefinition is a pointer to the way ahead for the CSOs that want to engage with the empowering potential of ICTs.

While the concept of entrepreneurship relates to the principles of individualism and the market, the support structures extended to the entrepreneurs, who are also citizens, need not be driven by similar principles, and even more so in the case of marginalised groups like women. NGOs like AWAKE that take on the role of economic empowerment of women through entrepreneurship have to be constantly aware of the peculiar context of the women entrepreneurs. The women entrepreneurs, while operating within the imperatives of the market, find themselves constantly disadvantaged by the virtue of their location at the margins. These disadvantages are articulated in the form of the lacking skill-sets. This often becomes the entry point for NGOs like AWAKE.

Our contention is not that NGOs and civil society actors do not recognise the above stated context. In fact, the very rationale for an NGO working with a marginalised group of entrepreneurs would be the need for providing support structures. However, when it comes to ICTs, this recognition is not very prevalent. The support, as we have seen in the context of AWAKE, is extended to individual entrepreneurs and is clubbed with other skills like account management. While it is true that all kinds of ICT-enabled applications must reach the women entrepreneurs, it can be argued that some ICT applications like skilled accounting pose lesser challenge for NGOs because of their widespread prevalence. The general inability of the NGOs to go beyond individual skill imparting, emanates from an understanding of ICTs as merely a set of tools and techniques as opposed to a technology which is both embedded in the social context and also changing the social context within which we operate. A greater understanding of the 'techno-social paradigm'[38] will lead to deeper, and critical, involvement of these organisations with the technologies.

One of the AWAKE office bearers expressed fear of exploitation by external marketing networks and cited this as a reason for their own tentative steps towards negotiating with such private platforms for marketing. In the era of increasing corporatisation of every production process and

38 The techno-social paradigm has been defined by A. Gurumurthy (2008) as being '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 .'

every conceivable product, the concerns of corporate control and exploitation are genuine and the point of vulnerability of the woman entrepreneur, thus exposed, is very real. However, while ICTs make the processes of corporate co-option easy, it is the very same ICT enabled processes that can be used to create strong, locally contextualised platforms for marketing, etc. The solution hence may not lie in shunning these networks altogether but in creating appropriate networks that enable the women to tap into opportunities from the market while shielding them from appropriation.

Chapter V: Conclusion

This research sought to re-articulate the question of women and work in the Information Society (IS) domain, through an examination of Information and Communication Technologies (ICTs) and enterprises. The case studies of AWAKE in Karnataka[39] and IT Mission in Kerala[40] were the starting points for our exploration of women's economic agency and empowerment. In locating the opportunity question for women as constructed by these programmes or initiatives, we found that it was filtered through hegemonic world views. The categories of women entrepreneurs and ICTs for women's enterprise, ride on the waves of current efforts around women's empowerment, that are caught between state imaginaries of women as quiescent and efficient sources of labour for development, and NGO strategies that modularise ICT training, packaging it as a one time skill imparting exercise which trainee-entrepreneurs may then choose to use.

In Karnataka, we found that AWAKE considered training women in ICTs, as one among the many other trainings it imparts for women's professional development. The elaboration of how this skill may translate into opportunities for women entrepreneurs was found to be mostly lacking. While the women entrepreneurs recognised that ICTs held some promise for them in the future, the current experiences in using ICTs had not yielded any perceptible benefits for them. For the women entrepreneurs, the fruition of the promised ICT opportunities was linked to the mediation role of AWAKE and here AWAKE's own reading of the ICT opportunity seemed to stop short of a strategic understanding. The organisation's liberal approach through training, mirrored a 'to-each-her-own' vision, but with the result that there was no effort to strengthen its own organisational effectiveness nor a sustained attempt to enable members to redefine their respective enterprises in relation to radical IT age possibilities. In Kerala, the *Akshaya* and *Kudumbashree* women entrepreneurs (the

39 Association of Women Entrepreneurs of Karnataka (AWAKE) is a not-for-profit, Non Government Organisation (NGO) which works for women entrepreneur's economic development. A number of projects have been undertaken by AWAKE for business counselling and skill training in the urban and rural areas of Karnataka. The organisation is run by women volunteers who are themselves involved in various kinds of enterprises. In AWAKE, the women were trained in ICT skills under the HP Entrepreneurship Learning Programme (HELP), which was initiated in 2007.

40 Kerala State IT Mission is the nodal agency for implementing the various programmes of the Department of Information Technology. The objectives of the KSITM includes, 'ICT dissemination to bridge the digital divide'. Accordingly, *Akshaya* programme was begun in 2002 to increase ICT use in Kerala. The programme has evolved from its initial emphasis on e-literacy and has come to take on a variety of government to citizen services.

former as telecentre operators and the latter as owners of ICT-based enterprises) are vital cogs in the giant wheel of the state's ambitious development plan that seeks to bring in e-literacy, government-to-citizen services and IT infrastructure, ushering in a new modernity hitherto denied to Kerala (a state with a primarily agrarian economy, historically).

The *Akshaya* and *Kudumbashree* women entrepreneurs in IT – tied as they are to the state programme -- find themselves in an interesting paradox. Their labour has been a much needed resource for IT infrastructure building, entrapped in state ambivalences around development ideologies that have used the rhetoric of empowerment to create a huge supply of free female labour for the state's developmental ambitions. Yet, for many of them, these state-led programmes have been vehicles for a new public life. However, where women trainees of state e-literacy programmes did not find themselves within state largess – as against *Akshaya* or *Kudumbashree* beneficiaries – the experience of marginality and systemic exclusion has only heightened. As the young girls of the Poovar fishing community who we interviewed testified, their ICT training has not brought them any employment opportunities, even if they are willing to travel to any place where opportunities beckon, to break out of their abject poverty.

Our second set of findings relate to the institutional arrangements that, in their framing of the woman entrepreneur, have either allowed or disallowed conditions for opportunity, empowerment and agency. In the case of Karnataka, we found that AWAKE's unimaginative approach to IT was replicated within the government departments handling the question of women's socio-economic development. While the officials we interviewed acknowledged the need for state investment in skill building marketing and mobilising finances for the women entrepreneurs, a strategic vision of realising the potential of ICTs in these areas, was missing. The IT department in Karnataka sought to separate the technical from the social and took the stand that 'technology is gender neutral'. This attitude of the state towards women entrepreneurs (who, as small time shop keepers, struggle within the highly competitive local markets with low skill IT work)stands in sharp contrast to the state support that is extended to big corporates that occupy global spaces.

While women have been part of the developmental IT project of Kerala, gender justice is not one of the primary imperatives in this mission. In fact, the development vision capitalises on the woman-friendly nature of IT work, but along the fault lines of class and gender, to construct empowerment differentially for girls and women of different classes. State programmes target girls in higher education, facilitating their entry into IT corporates as engineers, while providing low end

data entry jobs to the much needed army of women (and men) entrepreneurs mostly from lower classes through outsourced IT work that just about sustains the entrepreneurs in the public access *Akshaya* centres and *Kudumbashree* units. State 'support' in Kerala for women entrepreneurs in IT has thus meant deployment of women's labour for the developmental agenda of the state, leaving very little scope for women to emerge as a vibrant constituency of workers, and as rights-bearing citizens.

From our findings, we conclude that: for ICT enterprises to fulfill the feminist agenda of empowerment and agency, the notion of enterprises has to be re-conceptualised. So far as the concept of enterprise remains bound to instrumental approaches, the socio-political agency of women as workers and citizens entitled to economic justice will not be realised. Currently, women entrepreneurs – in neither state – are political in their public presence. They confront the market as entrepreneurs but lack the power, collective and individual, to negotiate with dominant forces. They occupy specific positions in the global and local hierarchies owing to their flexible labour, but do not enjoy the privileges of the much touted flexibility of being IT entrepreneurs.

We also submit that civil society support to women should be at two levels – to build IT related capabilities at the level of the enterprise that call for a longer term and sustained engagement with members; and inputs at the organisational level that enable women members engaged in ICT enterprises or enterprises using ICTs to see themselves as a collective who have common interests as the underprivileged labouring class of the information society.

The nature of ICTs and their unique propensity for self-actualisation and freedom thus requires a clear recognition of the female, rights-bearing economic agent, so that her enterprise (read labour) is not subject to state appropriation. In fact, we do think CSOs must provide the necessary ground for a collectivity to take birth that is critical and feminist. CSOs will have to address the question of economic empowerment in a manner that engages critically not only with educational and skill training for individual and organisational support and networking, but also with the macro policies of the state that structure ICT architectures.

Furthermore, in the mainstream developmentalist vision of the state, the question of economic empowerment is reduced to the question of opportunities to participate in the state economy, where the issue of deeply entrenched class and gender hierarchies is sidelined. As a result, there is an unequal distribution of the economic opportunities new ICTs offer. Consequently, we see the

simultaneous rise of a class of highly skilled women and the emergence of a class of women who are foot-soldiers for the information economy – accentuating existing socio-economic divides, and petrifying existing structures of stratification in society. Ironically, in the existing regime, the economic opportunity that ICTs offer for most women without the skills valued in the information economy is a Hobson's choice, especially as the state has not created adequate support structures to enable women from marginalised socio-economic backgrounds to fully avail of the opportunities that ICTs offer.

Finally, we have seen how the discourse of enterprise gets harnessed by the developmentalist state, to occlude women's recognition of their collective marginalisation. When women think of themselves as entrepreneurs (however small and threatened by the larger market forces), it is individualised ambitions of mobility that dominate their vision. It prevents women from recognising their position as part of a larger collective of women workers who are the foot-soldiers of an emergent informational capitalism.

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