

Applying (ICTs) for Entrepreneurship and Empowering of Rural Women

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Abstract

In this article, after state a brief history about complementary of agricultural, industrial and information revolutions in history of humankind, and importance of rural development and human development and situation of women specially rural women in these processes, introduce a brief history of Telecommunication and Internet, importance of ICTs in re-shaping of human societies, concept of empowerment of rural women, situation of women and girls in Iran specially in rural regions, gender and agriculture in information society, loops of household production in rural regions with emphasis on women works, model of empowerment of rural women through employment, different approaches and rationale for supporting women's entrepreneurship in different schools of development and growth, importance of statistics on women's entrepreneurship and problems in data collection, a brief statement of some national and international projects that have focused on ICTs for rural women in different countries and continents, potential strategies and approaches for improving access of women to ICTs, five areas that need to be targeted in any ICTs project to create an environment where women stand to directly benefit from ICTs as much as men, state situation of rural women in Turkey in accessing to ICTs in their development affairs, livelihood information cycle in rural regions, important informational needs of rural people, system elements of implementing ICTs for diffusion of innovations in rural regions, challenges of agricultural sector in new millennium, and situation of ICTs in management of development process. in the end of article, conclusion and recommendations from discussions in situations of Iran, specially rural regions and women in those conditions. This article is part of a research titled: ((Studying role of co-operatives in entrepreneurship and agricultural development in conditions of globalization of economics (Case Study: South – Khorasan Province)) that by the author have been done in Islamic Azad University_ Birjand Branch – Birjand. Iran.

Key words: ICTs, Rural, Women, Entrepreneurship, Iran

Introduction

The world is in the midst of a knowledge revolution, complemented by opening up entirely new vistas in communication technologies. Recent developments in the fields of information and communication technology are indeed revolutionary in nature. Hundreds of millions dollars are being spent on Information and Communication Technologies, reflecting a powerful global belief in the transformation nature of these technologies. By definition, Information and Communication Technologies (ICT) are a diverse set of technological tools and resources to create, disseminate, store, bring value-addition and manage information. Interestingly, ICT, when used as a broad tool for amalgamating local knowledge incubated by the communities with information existing in remote databases and in public domain, heralds the formation of a new class of society in the Knowledge Society. Knowledge thereby becomes the fundamental resource for all economic and developmental activities in the knowledge society of which women form an equal part. Knowledge networking opens up a new way of interactive communication between government bodies, NGOs, academic and research institutions, and the civil society. It helps

communities, both men and women, to take appropriate steps to recognize and document the knowledge they possess and in reflecting this knowledge in a wider social domain for directed change through the use of information and communication technologies.

Entrepreneurship is a key element of growth and development prospects for all countries, and it is most relevant to transition countries. Countries which create good conditions for SME development have higher growth rates and better development prospects. Longer-term trends indicate that during the 1990s the gap between men and women's entrepreneurial activities widened in transition economies. The situation of Women Entrepreneurs differs from country to country and depends on progress in the process of building a market economy. Accession countries in most cases do better than other economies in transition. The very low level of entrepreneurial activities in most countries in of the most the Asia and in the Caucasus is an indicator of slow progress in building market economies. Women face not only general barriers for SMEs (weak institutional support to SMEs, lack of access to credit) but also gender specific barriers – such as lack of collateral due to uneven sharing of privatization gains, lack of networks and traditional views on women's roles. They have greater difficulty in obtaining credit, finding business partners, getting information on business opportunities. The gender gap in Women's Entrepreneurship is bad economic policy for a country. But it should also be seen in the context of United Nations principles of gender equality. Self-employment and entrepreneurship are increasingly important for women as a way to ensure income from work in the context of declining job security and flexibly of work contracts across the world. Rapid growth of women's self-employment and entrepreneurship confirms that this is an important avenue to improve women's employability. This avenue is widely recognized at the global level. Fostering women's self-employment and entrepreneurship was also acknowledged as a policy priority for regional .development Access to financing is a major challenge to starting a business, especially for women. Gender specific barriers include the traditional views on women's role, but also in many countries the lack of collateral. In countries of Middle East , women's opportunities for entrepreneurship were strongly affected by a clear gender bias in the privatization process, in these countries; problems with the implementation of equal rights to land and property still exist. Mainstreaming gender into financial measures supporting SMEs, but also targeted programs, such as special credit lines and micro credit schemes for women entrepreneurs, as well as raising women's awareness of their rights, are some of the policy options. Addressing the "gender divide" in access to ICT is another challenge. Without equal access to ICT women entrepreneurs risk becoming marginalized in the new technology driven economy. There is thus a call to better use the existing experiences of countries to address these two challenges.

Research Method

This article is part of a research titled : ((Studying role of co-operatives in entrepreneurship and agricultural development in conditions of globalization of economics (Case Study: South – Khorasan Province))) that by the author have been done in Islamic Azad University_ Birjand Branch – Birjand, Iran.

Empowerment of Rural Women in Iran

Empowerment of rural women is an important thrust area of many rural and agricultural development programs implemented by various governmental and non-governmental organizations in Iran. In Iran's rural society, every family can be counted as a production unit. These production units are small so that in the past, the kind of products that they used to produce and the amount of those products were most of the times the functions of each family's consumption and demand. In addition to meeting the domestic needs of the family, these products have found their way to the larger markets at the national and international levels. Rural women have always been an important foundation of these production units. Without the presence of rural women, the economic structure of the family could not and can not become sustainable. The participation of rural women in economic activities is an undeniable reality. Iranian rural women are active in economic activities such as agriculture and handicrafts. These activities let them play an effective role in reducing production costs and increasing family incomes, in addition to attending to their children and household. Therefore, gender concerns are mainstreamed in the agricultural extension process to ensure that women receive information relevant to their work. About 50 per cent of Iranian women live in rural areas. Almost 100 percent of these rural women participate in agricultural activities and cottage industries. Women's share in agricultural labor is stated to be at 40 percent. This figure does not

take into account their activities at the household level, including vegetable gardening, flower production, etc. which supplement the family income. In today's Iranian society, women demonstrate that they have capabilities and potential talents, which, under proper conditions can greatly contribute to national health and economic development. Hence, enhancement of women's participation in economic activities is one of the most important objectives of many governmental organizations, including Deputy of Extension and Farming System (Anonymous, 1998; Worldbank, 1994). In particular, extension system targets rural women through increased participation in decision-making, organizing them into self-help groups, building their technical competencies on skill-based technologies and their leadership abilities.

In order to develop knowledge, skills and attitude of rural youth in agriculture, The Ministry of Jihad-e-agriculture will organize vocational and technical training courses in agriculture with the help of National Organization for Vocational and Technical Education. (Shabanali Fami, 2003). (Mirzaei, . 2003)

Iranian agriculture and telecommunication

With an area of 1.6 million square kilometers, Iran's population is 70 million, 33% of which live in 64 thousand villages. Most of the villages are thinly populated, so that the population of 60% of the villages is less than 100 individuals, and that of only 5% of the villages are above 1000. The Iranian's average per capita income was US\$2,401 in 2006, and normally the rural per capita income is about 75% of the average national per capita income. Agriculture sector, considered as the major sector with regard to rural activities, contributed to 11% of GDP. For communication, Iran's statistics are as follows: (1280 telephone lines per thousand individuals, (264 mobile telephone lines per thousand, (382 internet users per thousand, (4110 computer systems per thousand . Government's programs for telephone and cell phone development privatization as well as expansion of internet service providers throughout the country show a promising future with respect to rapid development of internet and telephone in Iran. Focusing on connecting villages to telephone lines and covering villages by mobile network is among the priorities of the country. One of the most significant points to attend is the process of focusing on village development in Iran after the Islamic Revolution of 1979. The trend of focusing on village development in the past 30 years can be categorized in two parts:

A. Development of physical infrastructures and services of the villages, specially attended in the first and second decades of the revolution. The Islamic system has particularly focused on rural areas to reduce the disparities/differences between rural and urban access to various services including roads, drinking water and power, so that now all villages have access to municipal roads and electricity and most have access to safe drinking water. Other economic and social services have also been developed rapidly in the rural areas. This period is known as Rural Construction era among the Iranian.

B. In recent years, further foci were made mostly on economic and social development, and inter alia, on skill development, modern technologies and production investments. Among them, extensive programs of the government for ICT development in villages could be mentioned. In this period of villages development characterized by special attention to people participation in rural management, development of knowledge and technology, especially Information & Communication Technology (ICT), human resource development and economic development particularly employment generation and poverty alleviation, desirable accomplishments have been achieved in each of the said areas, some of which could be presented to mention a few: in below:

1. Formation of Islamic Village Council (IVC) in all inhabited villages, and formation and start-up of executive management, known as village management (Dehyari), in 21 thousands of villages the member of which are elected by the IVC.
2. Connection of all inhabited villages to telecommunication network.
3. Expansion of skill training and employment creation.
4. Quantitative and qualitative development of production cooperatives in rural spaces.
5. Organization of agriculture sector graduates for rendering technical and engineering services to -rural producers in the mold of private companies supported legally by the government.
6. Special programs on ICT issues have been designed and are implemented by the related ministry. Those programs that have been started around 10 years ago contains of 3 significant phases:

Phase one: Modeling

In this phase, the first ICT center was established in Gharnabad in north Iran by a university professor and his colleagues, who were originally from that village, and some rural ICT centers were gradually established in a few other villages with the help of government support. The following email addresses could be referred to as some examples.

www.gharnabad.ir

www.soh.ir

www.abthane.ir

www.shahkooh.com

www.masoole.ir

In these pilot centers the following possibilities and services are rendered:

1. Data on agriculture production market.
2. Data on various services able to be provided with farmers by the executive organs of the government.
3. Internet communication services.
4. Initial courier and banking services.
5. Various trainings on computer, internet, English language and sometimes practical/work skill training for the youth and women.
6. Reflection of local news, for the rural people to be able to use these sites via internet.

Phase two: Establishment of Rural ICT Centers in 10000 Villages by 2010

At present, about 4600 villages have been equipped with these centers, and the number of these villages planned to grow to 10000 by 2010 (20% of the inhabited villages of Iran). The management of these centers rests on the private sectors of the village itself, or the surrounding villages and cities, and the government helps them in this context to become autonomous gradually. It is anticipated that such centers are funded on the gains earned from rendering services to rural people.

7. From here on, the circumstance/manner of information preparation and usage of national rural ICT that executive programs of which are being developed gets more important for I.R.Iran. From the one hand, this network provides the ground for the rural people activities and their use of ICT services, and on the other hand, it provides the possibility of giving the information and services of private and public sectors active in rural fields.

History and current status of rural women in development

Nowadays, the importance of rural development and its role in the development and progress of countries and especially developing countries is critically believed. Historically, the isolation of women from the mainstream economy and their lack of access to information because of societal, cultural and market constraints have led them to become distant from the global pool of information and knowledge. This distance is reflected in the levels of empowerment and equality of women in comparison to men, and has enormously contributed to the slow pace of development in South. It is now a well understood fact that without progress towards the empowerment of women, any attempt to raise the quality of lives of people in developing countries would be incomplete. There is an increasing amount of evidence which substantiates that societies that discriminate by gender pay a high price in terms of their ability to develop and to reduce poverty. Ironically, the importance of bringing a gender perspective to policy analysis and of designing development tools and interventions is still not widely understood, and the lessons for development still need to be fully integrated by the donors and national policy makers. In the context of knowledge sphere, the issues of gender equality, equity and empowerment of women become even more significant as women have a strategic role in incubation and transfer of critical knowledge which often forms the blue print of survival for communities to adapt and minimize their risk in adverse circumstances. Women, because of their biological and social roles, are generally more rooted than men in the confines of their locality. They are therefore more aware than men of the social, economic and environmental needs of their own communities. Women have been the traditional incubators and transfer media of knowledge relating to seed preservation and storage, food processing, indigenous health practices. Such forms of knowledge are often contextual, rooted in experience and experiments, but are non-codified. Therefore it is essential that any knowledge sharing mechanism recognizes the value of knowledge possessed by women and provides space for value-addition and the amalgamation of women's knowledge in the global knowledge pool. This

condition forms the basis of evolution of women as equal contributors and end-users of knowledge in a knowledge society.

Different approaches and rationale for women's entrepreneurship

Approaches and rationale for supporting women's self-employment and entrepreneurship differ. The growth approach emphasizes women as an untapped source of growth for the economy as a whole. The 'job creation' rationale, links the support to women's entrepreneurship to broader strategies to combat unemployment. The poverty alleviation rationale emphasizes self-employment as an economic survival tool for poor women and their families. Efforts to promote women's entrepreneurship stem also from a commitment to women's empowerment. These rationales reflect different policy priorities and can lead to different approaches in policy implementation. When each stakeholder focuses narrowly on one approach, without coordinating its efforts with those of others, gaps can emerge, resulting in policies that are not effective. many NGO-based programs to support women's self employment target poor and vulnerable women and are typically based on 'poverty alleviation' of empowerment' approach. But without strong linkages to the government decision-makers who set the economic policy agenda, such programs risk to further isolate poor and marginalized women, instead of helping them to integrate into larger economic system (UNECE 2004).

New methods in agricultural continuing education

Because of huge development of communication possibilities using the internet, in our days, the farmers have the possibility to access a huge collection of information, in various formats, regarding the great area of agriculture. The management of these data and their results are the product of time consuming and expensive procedures, the incomplete or inappropriate processing of which, slows down the overall research effort. The crucial role of managing the results of the agricultural research relates strongly the agricultural research to the use of computers and specialized software in order their processing to become complete, and their storage and utilization easier.

Different approaches to the material (e.g. theoretical, practical, problem solving or memorization approach) can favor particular media. Similarly, the evaluation method selected (multiple choice, essay, oral test, self evaluated) could also influence the choice of media. Because of new spectacular evolution of multimedia technologies, we can say that in present, all types of media need, at least in developing phase, computer interference.

Common experiences and needs - women's entrepreneurship worldwide

When asked about their biggest concerns in running their businesses, women all over the world identify five major issues. Women share concerns about the following five challenges:

- 1. Access to information:** Women want better access to education, training, and counseling.
- 2. Access to capital:** Access to capital is a very important issue for many women business owners, who often lack formal education in financial matters and who may face gender-based barriers to accessing financing.
- 3. Access to markets:** Women want better access to existing ways of sharing information about programs and services that are available to all businesses, such as government procurement and corporate purchasing opportunities, as well as opportunities for international trade.
- 4. Access to networks:** Women want full access to business networks such as industry-specific and general business associations.
- 5. Validation:** Women want to be treated seriously as business owners.

If these five areas are addressed by those involved in business development issues (be they government agencies, NGOs, large corporations, or business associations), then women's business ownership will not only continue to grow, but will thrive even more strongly. Unleashed and unfettered, women's entrepreneurship can provide the fuel for economic growth and opportunity for communities around the world.

Table1. Ideas for increasing interaction with subject matter using different media

Media	Activities
Print	<ul style="list-style-type: none"> - self-assessment activities - interactive exercises where learners are instructed to perform an activity and report it - questions about the content submitted to the teacher - feedback mechanisms between the student and teacher - possible examination questions
Tapes	<ul style="list-style-type: none"> - pose questions for individual consideration or for group discussions at the end of sections - build in exercises - ask student to repeat words, phrases, sounds etc. aloud
Radio	pre-recorded program as above
Radio live broadcast	<ul style="list-style-type: none"> - as above, but also request learners to send in comments (writing, recorded in audio-cassettes) which are announced/ discussed in following broadcast - incorporate a phone-in session for questions, discussion
Video cassette	<ul style="list-style-type: none"> - include short segments with clear stopping points for discussion, thoughts, writing etc. - build in questions and activities for viewers
Television	<ul style="list-style-type: none"> - short segments with clear stopping points for discussion, thoughts, writing etc. - build in questions and activities for viewers - use listening groups of just students or with tutors for discussion of interpretations, thoughts etc.
Video-conferencing	- arrange segments with clear stopping points for discussion, thoughts, writing etc. which could involve student listening groups
Computer	include exercises with feedback mechanisms (message of encouragement)
Internet	<ul style="list-style-type: none"> - same as for print and audio and visual if these features are used - ask students to conduct research on Internet from sources other than course Web pages

ICT and women entrepreneurs

Major benefits of ICTs for women entrepreneurs include increased access to information and networks, reduced costs of business transactions, and increased access to regional and global markets. For the majority of women with small or home-based businesses, access to ICTs has the greatest immediate potential in terms of access to information and networks and reducing costs. In the developed region, women's current ability to access national, regional, and global markets using ICT may be limited by factors such as

infrastructure availability and the sector location of the business. However, international experiences provide examples of innovative ways for businesses in traditional sectors to use ICTs to expand their market outreach. In addition to improving women's ability to run their businesses, new technologies also represent powerful tools for use in promoting women's entrepreneurship in the business community and the policy arena. One approach is the use of ICTs to raise the visibility of women business owners in the wider business community. At the same time, the barriers that affect women's access to ICTs also prevent women entrepreneurs from transferring these opportunities into benefits for their businesses. Cost is particularly relevant for women entrepreneurs because of the financial resources required to equip a

business with computers and other ICTs. Women business owners, due to their limited access to finance, have more difficulty than men in making such investments. Therefore, women's limited access to finance directly affects their ability to access ICTs. Another dimension of women entrepreneurs' ability to harness the full potential of ICTs relates to the sector location of their enterprises. Many women owned businesses are concentrated in sectors with more limited possibilities for ICT use. Businesses that provide products and services such as groceries and other retail products or hairstyling may not benefit from ICT-based methods of product innovation, and may also be less suited to e-commerce. Nonetheless, even entrepreneurs in "low-tech" sectors can use ICTs as a way to market their goods on the global market, as demonstrated by the examples in the box on global markets. Still, the kinds of businesses typically operated by women can limit the range of opportunities available to them to benefit from ICTs. Therefore, promoting women's entrepreneurship in technology intensive sectors must be an important part of any strategy to facilitate women entrepreneurs' access to and use of ICTs. Successful women in ICT fields can serve as examples to aspiring business owners that technology is indeed a "female" domain.

Empowerment of women in the context of knowledge societies

Empowerment of women in the context of knowledge societies is understood as building the ability and skills of women to gain insight of actions and issues in the external environment which influence them, and to build their capacity to get involved and voice their concerns in these external processes, to make informed decisions. It entails building up capacities of women to overcome social and institutional barriers and strengthening their participation in the economic and political processes for an overall improvement in the quality of their lives. Knowledge networking offers the unprecedented potential to empower every woman, as each woman is a potential recipient and incubator of knowledge in a truly networked world. A range of ICT- models have been used to support the empowerment of women all around the world. In Africa, groups such as the Africa Women's Network of the Association for Progressive Communications (APC) have conducted training workshop to support electronic networking among women's group. In Uganda, the Forum for Women in Democracy uses the Internet and e-mail to research issues for the country's female MPs, and Women's Net is a similar initiative in South Africa.⁶ Knowledge networking catalyses the process of women's empowerment as it is based on the mechanism of knowledge sharing and provides avenues for women to come together, build up consensus on issues that affect them and act strategically to maximize benefits through different approaches elucidated in the subsequent paragraphs.

Knowledge Networks: alternate communication channels and information providers

Access to information can be seen as a central issue concerning empowerment of women. There are no worse forms of human rights violations than to be deprived of the ability to think, create and communicate in freedom. Women in developing countries, however have been traditionally excluded from the external information sphere both deliberately and because of factors which inherently work to their disadvantage such as little freedom of movement, low education-levels etc. Under such circumstances, it is not uncommon for women to be little aware of information relating to market economy and local governance processes, which impedes their process of empowerment. ICT however opens up a direct window for women to the out- side world. Information now flows to them without distortion or any form of censoring, and they have access to the same information.

The Mobile Ladies in rural areas of Bangladesh

Grameen Phone is a commercial operation providing cellular services in both urban and rural areas of Bangladesh, with approximately 40,000 customers. A pilot program of Grameen Phone, through the Grameen Bank and a wholly owned subsidiary called Grameen Telecom, is enabling women members of the Grameen Bank's revolving credit system to retail cellular phone services in rural areas. For the 800 Bangladeshi women who have been given cell phones on loan by the Grameen Bank, enables rural women to re-sell GSM cellular phone services in rural Bangladesh. Village women ò one per village ò can borrow enough money to buy a cell phone, then pay back the loan with revenues from sales of phone calls. The

instrument is more than a means of communication: it is being used as a weapon for empowerment to fight poverty. (For complete case study see <http://www.tele-commons.com/villagephone/>).

Gyandoot: a lifeline for Indian women

Gyandoot is an intranet project in Dhar district of Madhya Pradesh in India which connects 21 rural cybercafes called Soochanalayas. Each Soochanalaya provides services to about 10 to 15 Gram Panchayats, 20 to 30 villages, 20 000 to 30 000 in population. The net covers five out of 13 Blocks in the district and three out of seven tahsils in the district. The Soochanalayas are located on the roadside of the central villages where people normally travel. They together serve a population of over half a million. The services provided by it include stating farm gate prices of agricultural commodities, providing copies of land records, providing facilities to file applications for caste, income and domicile certificates, and landholders passbook of land records and loans through e-mails. Women benefit from such interventions as now they have a greater understanding and control over the local processes. They may file complaints regarding common public grievances through the net and an e-mail reply is assured within seven days. These complaints include hand-pump disorder, teacher absence, mid day meal sanction/disbursement, poor seed/ fertilizer, etc.

Connecting Communities in Andhra Pradesh in India

Andhra Pradesh State Wide Area Network (APSWAN) is the backbone network for voice, data, and video communication throughout the state of AP. This network connects the State Secretariat with 25 centers including all the District Headquarters towns. This is progressively connecting the campus network in the A.P. Secretariat and the Headquarters of various departments with Local Area Networks in District Collect orates and other district offices, thus forming the backbone for the Government Intranet. Apart from linking Government offices, the network is also offering connectivity to major educational and health institutions across the state. The services provided by APSWAN include Data Communication, Reliable and dedicated voice communication and Video transmission. Some of the applications of such a network would be Data sharing and interchange among different wings of the government resulting in effective, efficient and transparent administration, providing e-mail and Internet facility to all the departments and offices of the Government, and providing high quality video connectivity that helps in these applications pave the way for convenient "anytime, anywhere services" for the citizens. Women stand to benefit enormously from them as they now have the power to write directly to the chief minister, cross-cutting the hierarchical layers. In subsequent phases APSWAN would be extended to all the towns and eventually to all the villages, either with dedicated lines or Wireless or Dial Up facilities paving the way for remote governance by individuals. Source: <http://www.ap-it.com/apswan.html>

Application of ICTs by Agricultural Extension Service in Iran

The majority of rural population in Iran has limited access to agricultural information. However, bridging the digital divide between urban and rural areas has been a major challenge for authorities in Iran. Agricultural extension by its nature can have an important role in this regard. Results showed 80% of the variance in the policies which affect the application of ICTs by extension service could be explained by three variables, advocating the participation of rural population in ICTs project planning, open source system and the integration of conventional information delivery system with new ICTs. in order to deploy ICTS as an appropriate technology for extension service in Iran, financial, social, human and organizational sustainability should be achieved over time. Policies that provide affordable access to information need to be carefully identified and examined. Agricultural extension in Iran needs to address the policy and regulatory issues that impact on the use of the ICTs. The issue is not to replace the existing technologies, but the extension service should integrate the conventional information delivery system with new ICTs (GOLMOHAMMADI, 2007).

Five areas must be create where women stand to directly benefit from ICTs as much as men

1. Policy and Action – Legislative, regulatory and administrative policies must be adopted at the international, national, and local levels as well as in the workplace to ensure access to ICT for women and girls. Action is needed to make sure legislation goes beyond rhetoric and translates into real progress.

2. Research and Collaboration – Research needs to be directed at the issue of the identification of effective practices and programs for the use of ICT to benefit women and girls. It also needs to include women, which means academic scholarships, internships, and promotion of women faculty in ICT fields, as well as inclusion of women and other stakeholders in research design, implementation and analysis. We also need to understand better the systems for effective learning and training for women and girls.

3. Dissemination and Communication – Effective practices must be communicated broadly to allow for modified duplication and scaling up of success. This requires the collaboration of governments, international bodies, associations and organizations to develop methods of data collection and to monitor progress towards goals.

4. Resource Development – Creating the infrastructure necessary to increase access for women and girls to education and other economic, social, and political goals through ICT will require the collaboration of organizations and governments. The overall goal is to better identify and allocate limited resources to those areas most likely to use them effectively to benefit all, particularly girls and women.

5. Context and Culture – Female representation and participation in the education system as well as the information society are shaped by cultural influences from the media, parents, peers, teachers, co-workers, and others. In many ways this is the most pervasive and most difficult barrier to overcome, but it must be a central consideration in order to be effective in all other areas (Morrell & Huyer.2005).

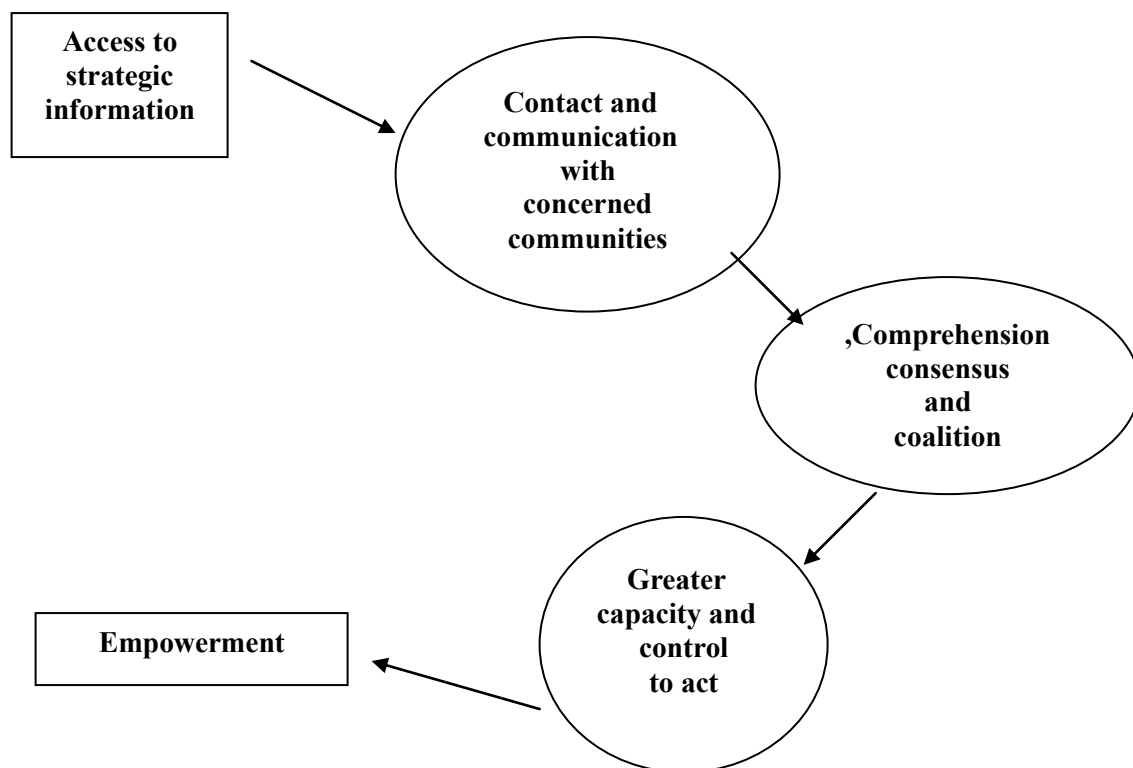


Figure 1. ICT women empowerment model (Nath. April 2002)

Conclusion and Recommendations

ICT technology as a key element of social and economic innovation is to be identified. ICT market offers good job opportunities and provides the share of women in this part, is still lower than the average and out rates and Not getting the company are very high.

The majority of rural population in Iran has limited access to agricultural information. However, bridging the digital divide between urban and rural areas has been a major challenge for authorities in Iran. Agricultural extension by its nature can have an important role in this regard. The one resource that liberates people from poverty and empowers them is knowledge. Possessing knowledge is empowering, while the lack of knowledge is debilitating. The potential of ICT for women in developing countries is highly dependent upon their levels of technical skill and education, and is the principal requirement for accessing knowledge from the global pool. The sophistication of any ICT infrastructure introduced into any environment becomes meaningless if women don't have the skills to operate the system and use it to their best advantage. This implies that the government and the NGOs need to focus on interventions, which lead to skill development and a rise in educational levels among women. It could be done through imparting of technical education on the use of ICTs as a part of both formal and informal educational systems and initiating distant-learning and vocational courses on the same. Women will not be able to benefit from knowledge networking processes unless specific ICT-models are created which are targeted to the needs of the local women community. In order to build effective and sustained engendered knowledge societies, it is necessary to involve strategic stakeholders from both the public and the private sectors. These could include government bodies, corporate firms, financial institutions and the NGOs. Fostering corporate partnership in ICT ventures and raising venture capital funds for social development projects become important lines of thought. This could be done through a plethora of ways such as ICT based advertisement, using existing corporate infrastructure for opening of Tele-centers, bringing about transfer of technical expertise from corporate to the development sector etc. Expectations are high when it comes to ICT opportunities for women in developing countries, including new forms of learning, education, health services, livelihood options and governance mechanisms. However, on a cautious note, it needs to be realized that information and communication technologies by itself cannot be an answer and elixir to all problems facing women development but it does bring new information resources and can open new communication channels for the marginalized communities. It offers new approaches for bridging the information gaps through interaction and dialogue, building new alliances, inter-personal networks, and cross-sectored links between organizations. The benefits include increased efficiency in allocation of resources for development work, less duplication of activities, reduced communication costs and global access to information and human resources. Come what may, these technologies have started to carve their impact on the villagers' lives as mothers do want their children to learn computers so that they can lead a better quality of life. Information and Communication Technologies (ICT) are for everyone and women have to be an equal beneficiary to the advantages offered by the technology, and the products and processes which emerge from their use. The benefits accrued from the synergy of knowledge and ICT need not be restricted to the upper strata of the society but have to freely flow to all segments of the female population. The gamut of areas in which ICT can put a greater control in the hands of women is wide and continuously expanding, from managing water distribution at the village-level to standing for local elections and having access to lifelong learning opportunities. ICT in convergence with other forms of communication have the potential to reach those women who hitherto have not been reached by any other media, thereby empowering them to participate in economic and social progress, and make informed decision on issues that affect them. ICT are for everyone and women have to be an equal beneficiary to the advantages offered by the technology, and the products and processes which emerge from their use. The benefits accrued from the synergy of knowledge and ICT need not be restricted to the upper strata of the society but have to freely flow to all segments of the female population. The gamut of areas in which ICT can put a greater control in the hands of women is wide and continuously expanding, from managing water distribution at the village-level to standing for local elections and having access to lifelong learning opportunities. ICT in convergence with other forms of communication have the potential to reach those women who hitherto have not been reached by any other media, thereby empowering them to participate in economic and social progress, and make informed decision on issues that affect them. Women business owners, in particular, seem to need even more support than their male counterparts for a number of reasons. Women experience more difficulties than men in getting decent jobs as employees in most countries, especially in developing countries. This is due to discriminatory practices, especially in the private sector, and gender barriers embodied in social norms and existing labor market institutions. Many women are turning to self-

employment and small businesses as a means of economic survival. The experiences of transition countries suggest that one of the best ways to fight poverty is to increase employment through fostering small business. Promoting equal possibilities for both men and women in that segment of economy is essential for the overall economic development of these countries. Supporting women's entrepreneurship is particularly important since women are more affected by the new circumstances. Women are in a worse position than men in the field of entrepreneurship because they face gender-specific limitations as well as those affecting both genders. These gender-specific limitations are largely due to women's more demanding position in the family, which limits the time, energy and concentration they have available to pursue entrepreneurship. Therefore women have smaller incomes and lower productivity, since the time they can devote to business is limited by the time they must devote to the family. This unfavorable position often results in a lack of self-confidence, which is of great importance in entrepreneurship. This lack can prevent women from starting their own businesses. Even when they do, they may not want to take the risk of expanding their companies. With training and education and easier access to capital, women would be encouraged to enter into business more decisively and to bear the risks of business decisions on investments, production, and technology. Key requirements for that are favorable financing, sources, knowledge in the field of business, and other practical knowledge in economy and technical professions. Despite all the difficulties, many women have successfully managed their households for years. Why would they not successfully manage their own small business as well?

Entrepreneurship does not come automatically with liberalization and privatization. An entrepreneurial economy must be promoted through appropriate policies and adequate institutions in many areas, such as education and training and starting capital. In the case of promoting women's entrepreneurship, gender factors in economic policy at the transitional stage must be considered. These include gender aspects of fiscal policy, salary policy, labor market regulations, and social policy. To implement this policy, a state program for the development of female entrepreneurship is necessary. The first stage of such a program must involve research on business women and their status on the labor market, to be used as the basis for subsequent activities. Program should be support for women engaged in business, including small business, and the creation of favorable conditions, such as soft credits and tax benefits, for starting such businesses. The program must address issues such as training women in the economics of market conditions, in principles of business organization and management, and in legal issues. The implementation of such policies will support the processes of democratic development, economic development, and poverty reduction. Women's public associations must also contribute to the development of women's businesses. Assistance must be provided to increase the share of women in governmental bodies, thus facilitating the development and implementation of the gender policy.

A surprisingly high percentage (80%) of women business owners Iran in never use the Internet, let alone electronic commerce. The trend among younger and better-educated women, however, is to gradually embrace technology. Creating spaces for women in relation to ICT is very important. For example, start and launch specific professional training for women and Cyber cafes cultural women's groups seems to exclude that are very important. This is obvious that interest on TV In most rural areas is very high, but without the agency to facilitate development, ICT is only a short term entertainment leisure time. Therefore ICT should be included in other activities such as rural and agricultural development and marketing electronic acquisitions. For conclusion, many political challenges for women and ICT problems in connection with the cases 1) education, 2) the labor market, and 3) consumption, are required. ICTs are not all, but an important tool for rural development. it should be included as a part of rural development and promotion activities, for effective participation of women in rural areas. All aspects of ICT and economic and social benefit from ICTs requires immediate and decisive measures in many areas they that are used. Our system software must clear for new media and education system with their hardware systems. When we have information systems planning and creation, we must structure major technology consider the value of saying give hardware, software and human resources required in this field and to improve agriculture management, because the most important problems according to individual farmers and individual situations cited. Our system software must clear for new media and education system with their hardware systems. When we have information systems planning and creation, we must structure major consideration give the value of saying that hardware, software and human resources is required in this field.

By considering the above studies and results may be introduced following suggestions:

- The creation of a web hub for key stakeholders to communicate and coordinate existing global databases, assets, and knowledge, and to provide an internationally appropriate taxonomy and set of definitions;

- The formation of a Declaration of Agreement and Plan of Action which calls for a commitment to move beyond an agreement in principle to individual and organizational responsibility for action;
- An agreement to support existing efforts by promoting women's advancement in leadership, collaborating to expand programmatic impact and benefits to women globally, and partnering rather than creating new efforts that diminish resources;
- The gender digital divide is a centuries-old problem with a new face, but it also provides a new tool with which we might find new answers and needed energy. The problems do not seem to be going away, but neither are the men and women who are determined to create real change;
- Prepare and develop expanded community education and information communications technology;
- Creation and infrastructure development of IT field;
- Providing technology facilities so every region should be planned;
- Use of the technology characteristics, economic and social meetings with farmers to identify their needs and to provide services to these needs;
- Enabling poor people and middle classes of society to use information technology;
- Evaluation of information technology before and after using them;
- Presenting the results of using these technologies as practical and visible Template imaging activities developed countries in this field and transfer it to the situation of our country.

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