Role and relevance of business incubators in ICT led global educational system: case for eco-enterprise village

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Abstract

Role and Relevance of Business Incubators in ICT led global educational system: case for Eco-Enterprise Village

Following paper presents the case of Business Incubators (BIs) as future educational and learning centres. It explores the question of how feasible and relevant is this concept andt how they can be designed to deliver educational & training programmes that meet the requirement of knowledge economy by suitably preparing youth to face the challenges of the global market. *Business Incubators are businesses aiming at nurturing and establishing other businesses. They are considered to be an excellent tool for Small and Micro Enterprises (SMEs) development. Targeted assistance at small entrepreneurs & start-up businesses- help them grow and graduate to mature enterprises. According to ILO estimates 300 million jobs have to be created world over in the next 5 years. As many as 45 million young people enter the job market annually, at a global level. There are three different kinds of BIs and they are public, private, and university based BIs and are commonly classified by ownership. In the IT-led global knowledge village, there are seamless potentials for study, earning a degree and education outside of the college campuses. Virtual campuses are the reality today. What are needed then would be centres for imparting practical lessons on commercialising the knowledge, innovative ideas, and technical skills. Also it is important to impart real training in starting, managing, making profit and pursuing the growth of enterprises & ventures that a youth entrepreneur could launch. In the knowledge economy, BIs can be real learning centres. Also, technological and academic oriented knowledge & literacy is not the only skill required for attaining success, set-up a business or getting a well-paying job in the new knowledge based global economy. But what is required are a set of skills called 21st century skills, which can be well delivered through BIs, when they are turned as educational centres. The paper also presents a BI model, which has an objective of building businesses with a strategic orientation towards environment and sustainable development. The BI design presented is called as Eco-Enterprise Village.*

Key words: Business Incubators; Micro, Small and Medium Enterprises; Information & Communication Technology; Education and Training; Eco Enterprise Incubator

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The concept of a BI is very simple and appealing. A business incubator is something like a premature infant incubator in a paediatric ward. However, the paediatric incubator attempts to nurse a premature infant baby, so that it may survive its own. Whereas a BI nurtures a company, which is at its infancy, to a stage till, it could successfully stand-alone and survive in the market place. (White, 2006) As the phrase itself implies, BIs are programmes intended to help small businesses get off the ground. According to Antal Szabo, former UN Regional Advisor & Scientific Director ERENET, 'Business Incubators are businesses aiming at nurturing and establishing other businesses'. (Szabo, 2010) They are multitenant facility providing affordable space and an environment that promotes the growth of small companies.They provide both services and rental space to start-up companies. The services typically include administrative help, consulting, and referral. Incubator programmes are managed both by public and private agencies.

BI programmes are often called as "new entrepreneur creation projects" or new enterprise development programs. They help develop new entrepreneurs and enterprises as well as provide support to start-ups businesses to survive and be in the business on a sustainable basis. (Bayhan, 2006) Some of them have been built upon a kind of real estate business model. A large area of office space between 30,000 to 50, 000 sq. feet is what is required, to house up to 40 start-up businesses. A number of additional revenue generating activities within the BI can also be planned. They include education & training programs; networking event; exhibitions etc apart from gains from equity partnership. Present paper explores how business incubators can be designed to deliver educational & training programmes that would meet the requirement of knowledge economy needs by suitably preparing youth to face the challenges of contemporary global market.

Why Business Incubators needed in the information economy?

Within the framework and compulsions of the global market, it is almost impossible to accomplish the sheer number of tasks that need to be accomplished in the time frame available today for the start-up businesses. Successful entrepreneurs of the past several decades shows that they did not need incubators to come up, grow and diversify. Great entrepreneurs of yesteryears had an advantage of time, which is not available in today's information economy which is led by various components of Information and Communication Technology(ICT) which is faster. Challenge before an entrepreneur is to make claim in the market space, build a brand, and launch a company at the earliest in nanoseconds. There is no space for much experimentation. So how does an entrepreneur with a great idea accomplish this? Looking for help from a successful incubator is a solution. Whether it is office space, back office support, packaged finance, key personnel, marketing plans or leveraging investor relationships and past success; an incubator is essential to the current ICT led information economy.Traditional companies could always use the services of lawyers, agents, accounting firms, consulting companies and other services. Needs of the companies in the "new economy" are perhaps slightly different and require an even greater specialization and knowledge. Packaged services to those desirous start-up enterprise clients have thus emerged through business incubators. (Brandt, 2000) Here come the definition offered by Antal Szabo becomes relevant that BIs are businesses aiming at nurturing and establishing other businesses.

BIs foster the growth of entrepreneurial companies, helping them continues to stay alive and grow during the initial period. They provide a number of services to their client companies. Services that are being provided include business 'support services and resources tailored to young firms for their growth and development. (IPI/IKED, 2005) BIs are considered to be an excellent tool for building a thriving SME sector. (Bayhan, 2006; Koshy, 2010) EBay and other successful Internet ventures needed incubators to gain financing and attain the market share that they currently enjoy.

Incubators provide access to suitable rental space and flexible leases and shared basic business services and equipments. They also provide assistance in obtaining the financing necessary for a company grow. It is the provision of management guidance, technical assistance and consulting tailored to young and growing companies make business incubator programs unique. (Smith, 2004 ; Whitepaper, 2008; NBIA, 2009)

Incubators differ in the way they deliver various services. Their organizational structure also varies depending upon the types of clients they serve. There are different types of BIs with differing goals that include diversifying rural economies, providing employment and transferring technology from universities and technology institutions. Incubator clients are at the forefront of developing new and innovative technologies, products and services, which could improve the quality of lives. (NBIA, 2009)

Business Incubators and Employment generation in the local market

Job creation is a global challenge. In this context, BIs can contribute in building youth entrepreneurship and youth owned companies so as to create employment opportunities in the local market, within the neighbourhood economy. Building *youth owned enterprises* is critical to innovation. Creation of jobs for the growing population can be addressed only by developing youth entrepreneurship as they could probably grasp global market dynamics and provide better enterprise leadership.

Youth can contribute to create competitive, efficient and innovative enterprises. Here comes the role of building a strong foundation in human resource development. For it is from this source that innovators & entrepreneurs have to emerge to make a difference. However youth who come out from the academic world need to be empowered for being self-employed, to start new ventures and commercialise their knowledge. Therefore, it is critical to direct them to the world of MSMEs to build an innovative, creative and competitive MSME sector. For the youth living in the information economy needs the institutional support system of BIs.

According to ILO estimates 300 million jobs have to be created world over in the next 5 years. As many as 45 million young people enter the job market annually, at a global level. Youth unemployment rates are three times higher than those of adults, as a worldwide average. Unemployed youth make up almost half of the world's total unemployed population. The rate of young people unemployed increased from 74 million to 85 million between 1995 and 2005. (ILO/09/39, 2009 ; GTZ, 2010)

Different varieties of Business Inucubators

Business incubators come in a variety of shapes and sizes in the modern economy. There are three different kinds of BIs and they are public, private, and university based BIs. BIs are commonly classified by ownership. Many of the BIs are attached to the universities, technical and technological institutes and management institutes. And most of them are under public ownership and are being run as not for profit initiatives. Numerous sets of subclassifications also exist, depending on their status as for-profit or nonprofit entities. (Zablocki, 2007)

First incubator in the history came up as a private initiative in the US. Often BIs come up with the support of the governments, LGIs (local government institutions). They could also be established as a CSR program. Bank Muscat in Sultanate of Oman set up a BI as part of their CSR initative.(Bank Muscat, 2010)

For Profit BIs are privately funded and managed. The Incubator Company has the advantage of taking an ownership position in each of the companies that it nurtures in their incubator and can have the share in the profit, once the harvest begin. BIs can accelerate the time that it takes to get products of a company reach the market in a very short time span. Often private BIs are being set-up by venture capital companies, entrepreneurs, and corporations. According to a study on US incubators, 24% of BIs there take equity share in the start-ups that they nurture. Whereas when it comes to specialized incubators, 72% of technology BIs take some percentage of equity in those companies. This has now come to be as a source of revenue for incubators especially for privately owned BIs. (InfoDev)

Private Incubator fees can include a monthly service fee for various facilities provided such as telephone, computer usage, office space, and administrative services, as well as fees for professional assistance. Many of the for profit incubators accept outside investors. According to an estimate 15 to 20 percent of the US incubators are in the private sector. In the US, in terms of location, the bulk of BIs are urban (45%), then rural (36%) and suburban (15%). The main focus areas are: 43% Mixed use, 34% Technology and Targeted, 10% manufacturing, 6% Services and 7% Empowerment and others. (Lalkaka, 2001)

Financing business incubators

Traditional approach to financing a BI model is that of State owned BI model, where the government funds and manages a BI. Even today, gloabally, most of the incubators are founded and funded by the governements themselves. But the trend is fast changing with the role of the State in the business arena itslelf has changed. BI itself could emerge as an industry that build, nurture new businesses. In addition to the government sources, corporate sources such as CSR initiatives add to the range of funding for incubators. University incubators are mostly financed by the universities themselves and government/private agencies. Governmental departments, various State agencies local economic development agencies, local government intuitions(LGIs), financial institutions and others who want to promote and develop SME sector and facilitate job creation at local level also finance and supports BI projects. There are also particular businesses that want to tap the market of SMEs and entrepreneurs are also probable financiers of BIs, in order to build business relationship with incubator clients. Chambers of Commerce, Trade & industry associations, corporate and community foundations etc are examples in this regard. BIs could also expect support in terms of tax incentives, low interest loans and tax credits to entities investing in incubators. Private partnership funding is yet another method of financing, which is by way of raising money from a coalition of businesses and banks for operational funds. (Chandra, 2007)

The pattern of US incubator sponsorship is as follows, based on a NBIA report 2000: **(**Lalkaka, 2001)

Sponsor Percent **(%)**	
State/local/provincial government	24
No sponsor (independent)	18
Economic development group	18
Educational institution	20
Venture capital	8
Other	12

Other possible services and revenue generation avenues need to be explored for BIs to be self sustainable in the years ahead. This would also possibly attract more private participation in this industry. Some of the other possible revenue generation tools are providing skill development

and educational training programs through the facilities & by pooling skilled human resources at the disposal of a BI , organization of various networking events for the larger SME sector as well as start-ups such as exhibitions, seminars, conferences and industry oriented workshops.

Services provided in a business incubator

Initially, BIs used to provide inexpensive physical environment in old or vacant buildings. But BIs evolved over a period of time to concentrate on companies themselves, helping them to grow. A range of services was developed to assist small companies by providing shared support services such as:

- secretarial assistance
- receptionist
- access to photo copiers
- internet,-telephone ,fax, telex;
- technology transfer
- professional services like
- business planning
- legal
- accounting & marketing support.
- mentoring support
- help in fulfilling regulatory requirements
- help in the new firm getting registered
- help in company going public through IPOs and capital/share market participation
- Access to working capital is also arranged through provision of debt and equity financing, government grant/loan assistance, by connecting them to a financial network of angels, bankers, and venture capitalists. In the USA 33% of business incubators have in-house investment funds. (InfoDev)

History of Business Incubators

First incubator in the history came up as a private initiative in the US, in Batavia, New York in 1959. It began as a real estate venture. It was an attempt to utilize unused industrial warehouse building space, as a commercial venture and was pioneered by Joseph L. Mancuso. One of the first tenants at Batavia Industrial Center was a chicken company, which was into poultry production. (Asme) In 1951, Stanford University created a research park in an attempt to bring in companies that would develop research and commercialise them for their student base. Incubation pioneers appeared in Europe at the end of 1960s established as research parks and concentrated on building technologically oriented start-ups. (narmsp.sk)

The earliest BI programs focused on a variety of technology companies or on a combination of light industrial, technology and services firms. Such BIs are referred to as mixed-use or general incubators. Whereas recent years witnessed the emergence of new incubators that targets specific industry sectors such as food processing, medical technologies, space and ceramics technologies, arts and crafts, and software development. Incubator sponsors also started to target specific areas for instance micro enterprise creation, the needs of women and minorities, environment and telecommunication sectors.

By 1980, there were only 12 incubators in the United States. Between the years of 1984 and 1987, the U.S. Small Business Administration developed several initiatives to build the incubator movement. (Asme) In the 1970s, the first incubator was set up in Australia and in 1974 in Asia . In the 1980s, incubators were opened in Scandinavia and in Germany. The first Latin - American incubator was created in 1986. The 1990s were a chance for Central and Eastern Europe, when those countries were faced with a transition from socialist model to market economy. In the former socialist countries of East Europe and Russia, incubators were being considered as a tool for building the private sector economy which was smaller in size prior to transition.

There are around 7000 business incubators around the world, according to an estimate. GCC has around 20 incubators. The first incubator in the GCC came up in the Kingdom of Bahrain, when it took initiative to set up a BI in 2003 with the support of UNIDO. Since then a number of other countries in the GCC set up incubators. The Sultanate of Oman also came forward and set up Knowledge Oasis Oman (KOM) as a joint venture with UK technology park programs.

(ALMUBARAKI, 2009) Eco- Enterprise Village (EEV) is an interesting concept with a focus on nurturing environment friendly enterprises. At present, more than 60 national and international business incubation associations and research and technological parks exist in the world, which actively support the development of new enterprises and regional economic growth. (narmsp.sk)

Business Incubators as a tool for SME development

Business incubators are an important part of the support infrastructure of SMEs in the world. Their greatest benefit is enhancing enterprise survival rate. Incubated companies have a considerably higher rate of survival. Studies have documented that Business Incubators enhance chances of firm survival by 80 to 85 percent. The establishment of new incubators peaked in 1987, and the new wave of economic development initiatives in the1990s focused on helping existing businesses survive and prosper in the face of global competition. Small business incubation is now a well-established and an accepted economic development tool. Incubators are now used to promote the growth of entrepreneurial ventures of every imaginable type.Incubation can be very useful for a new company, but they should have an internal business plan and management team as early as possible. (LABJ, 2000)

Education with a focus on employment

The high percentage of youth unemployment is being considered as one of the most serious concern and a barrier to economic and social development. In this context to promote and accelerate youth employment opportunities what is required is a multi--sectoral employment generation strategy. These strategies have to generate synergies among policies and institutions that are active in the economic, education, employment, and social sectors. (GTZ, 2010) Education is not yet employment-oriented as it should be.

Youth empowerment through education and employment demands greater attention. The unique position of education in preparing students for the competitive job market need not be overemphasized. The relevance of higher education in this regard is the extent to which the courses studied by students could readily and easily be fixed into the context of demanding

market conditions. The role of higher education in preparing youth for job market is becoming more challenging in the modern society. (Olufunke Akomolafe, 2009;Yorke, 2006)

It is often the current system of education that does not adequately prepare students to be self-employed. This could be mainly due to lack of educational programs in those lines. But the youth of today want to have focused education and training that have the potential to be applied in real life situations, empower them and enable them to take on the challenges of life, especially work related and finding a suitable career/profession that gives them satisfaction as well as income for their living. For instance, take the case of the youth population that wants to set up their own business establishments. How far today's educational system geared to train and assist them towards realizing their targets in life?

For the growing number of population, the solution for the unemployment problem is indeed self-employment through entrepreneurship development. After finishing formal education, young people should be able to consequently make successful 'transition to work' with the skills and knowledge they acquired (UNESCO, 2005). World over today, many graduates of higher education remains unemployed, some under-employed. Only a minority of them becomes self employed despite opportunities. What is required in this context is a new model of educational delivery that empowers a student to be self-employed, and to launch one's own ventures and commercialise knowledge acquired.

Entrepreneurs are plenty. And, youth have the potential to make a difference, if, appropriate support, assistance and encouragement are given. They have high aspirations, eager to experiment with innovative ideas and take risks to prove themselves. But, when it comes to launching a new venture, they need support. Though there are entrepreneurship development programs (EDPs) in select management institutes but their scope is limited in enabling youth to start their own ventures as they don't provide the support system that a BI do provide.

Education transition in Delivery through ICT: learning for a knowledge economy

In the IT-led global knowledge village, there are seamless potentials for study, earning a degree, knowledge building outside of the college campuses. Virtual campuses are the reality

today. What are needed then would be centres for imparting practical lessons on starting, managing, and pursuing the growth of enterprises & ventures that a youth entrepreneur could launch. In the knowledge economy, Business Incubators can turn to be real learning centres. Each student need to identify commercial relevance of the knowledge acquired so as to survive in the highly competitive world. Educational establishments also could help students by way of setting up business incubation programmes to find commercial application of acquired knowledge.

Technological literacy is not the only skill required for attaining success and set-up a business or getting a well-paying job in the new knowledge based global economy. EnGauge of the North Central Regional Educational Laboratory (U.S.) has listed a set of skills that are required for the knowledge based information economy. Those skills are called 21st Century Skills. 21st century skills includes "digital age literacy (consisting of functional literacy, visual literacy, scientific literacy, technological literacy, information literacy, cultural literacy, and global awareness), inventive thinking, higher-order thinking and sound reasoning, effective communication, and high productivity". (Tinio, 2003)

Following table illustrates the skills required in the ICT led work places and knowledge economy.

21st Century Skills

Digital Age Literacy	
Functional literacy	Ability to decipher meaning and express ideas in a range of media; this includes the use of images, graphics, video, charts and graphs or visual literacy
Scientific literacy	Understanding of both the theoretical and applied aspects of science and mathematics
Technological literacy	Competence in the use of information and communication technologies

Information literacy	Ability to find, evaluate and make appropriate use of information, including via the use of ICTs
Cultural literacy	Appreciation of the diversity of cultures
Global awareness	Understanding of how nations, corporations and communities all over the world are interrelated
Inventive Thinking	
Adaptability	Ability to adapt and manage in a complex, interdependent world
Curiosity	Desire to know
Creativity	Ability to use imagination to create new things
Risk-taking	Ability to take risks
Higher-Order Thinking	Creative problem-solving and logical thinking that result in soundjudgments
Effective Communication	
Teaming	Ability to work in a team
Collaboration & interpersonal skills	Ability to interact smoothly and work effectively with others
Personal and social responsibility	Be accountable for the way they use ICTs and to learn to use ICTs for the public good
Interactive communication	Competence in conveying, transmitting accessing and understanding information

High Productivity	Ability to prioritize, plan, and manage programs and projects to achieve the desired results. Ability to apply what they learn in the classroom to real-life contexts to create relevant, high-quality products

Source: Adapted from EnGauge. North Central Regional Educational Laboratory; Victoria L. Tinio, ICT in Education, e-premier, UNDP-APDIP, 2003, p. 7

ICT oriented educational delivery and business incubators

An important aspect of Information and Communication Technology (ICTs) is its ability to transcend time and space. Online course materials, could be accessed 24 hours a day and 7 days a week. Radio and television and such other broadcasting technologies could also be made applicable. ICT-based educational delivery dispenses with the need for all learners and the instructor to be in one physical location-class room. Here comes the potential for BIs to work as the real learning centres for the enterprising youth population. In this context of business incubators can prepare students to be self supportive, and self-employed. While they acquire some of the business management techniques and much required as 21st century skills from a BI students could continue their learning that they could otherwise do from traditional college or a university through ICT modes and practical/applied educational programmes from a BI.

Also, ICTs can facilitate access to resource persons such as mentors, experts, researchers, professionals, and business leaders, from all over the world to assist enrolled students in a BI. Further, there is access to remote learning resources**.** With the Internet and the World Wide Web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at any time by an unlimited number of people.

Educational institutions have to prepare students to be entrepreneurs. In the context of growth of population and challenge of providing employment opportunities to them can be addressed by churning out graduates who can be self – employed with entrepreneurial and enterprise

management skills. The challenge hence is to have model that would combine education, learning and training with employment and enterprise creation. . In the information age, learning is much more collaborative and active process. Here, learners learn as they do and, whenever appropriate, work on real-life problems in-depth, making learning less abstract and more relevant. (Tinio, 2002) Education oriented business incubators thus appears to be a solution. As table above explained, 21st century skills can be imparted in a better way through educational centres located at a business incubator.

Business Incubator as future Education Centre

Considering the scope and potential of un-identified youth talent, there needs to be a much vaster network of BIs. These BI's could provide a diploma or degree in economic leadership, business & enterprise leadership to those successful candidates during the pre-incubation stage

A Business Incubator Model

Eco-Enterprise Village (EEV): Business Incubators for building environmentally focussed companies

Why Eco-Enterprises Business Incubator?

Eco-Enterprise Village (EEV) is a general type business incubator concept. It focuses on building & nurturing green oriented companies for whom environment-conservation and sustenance as core corporate strategy. It would help commercialise new technologies, new ideas and all kinds of innovative products and services, with a focus on contributing to sustainable & eco-friendly development.

Deterioration of the eco-system is a major issue that the world faces today. This is due to rapid economic growth and race for attaining much faster growth. In this race what is ignored is the environment. EEV- BI model is an attempt to build companies as partners in sustainable development with a focus on environment. Below is a list of few select sectors that would be nurtured and encouraged in an EEV- BI. They include the following, but are not limited the below list:

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- Solar technology Companies and alternative energy products
- Recycling industry, Waste management industry
- Information and Communication Technology units
- Public Relations, Advertising, Marketing and other such service sector units
- Business Process Outsourcing Units

Targeted population: Youth

Targeted population would be youth within the age bracket of 18 – 25. It would target youth population and imparts lessons, training, exposure, in-house networking possibilities, space and post launch mentoring assistance to up to 20 to 40 start-up ventures.

Features of EEV – Business Incubator

To be sustainable and to offer additional services EEV should have a space between 40,000 to 60, 000 sq. feet. EEV business incubator would have a focus on pre-incubation phase as a thorough preparatory period. During which an entrant entrepreneur will undergo rigorous training, coaching and s/he would be provided with opportunity for extensive interaction with the industry that prepares them as entrepreneurs as well as enterprise manager.

Figure 1 Eco-Enterprise Village features

Focus on education and training: Pre-incubation programs at EEV

The present education system, at all levels, is not tuned to produce ready to work and ready to perform graduates or students. It is a fact that the world of academics is different from the world of work. The EEV educational and training programs are designed to bring out youth ready to work for their own company. They would be taught and given certificates, diplomas or degrees as well. The training programs help them prepare themselves for the world of work and introduce them to demanding work site & enterprise management needs.

Educational, skill development and training programmes

Offering practical and applied education and training programmes for the youth and any other desirous entrepreneurs as well as anybody else would be a major part of EEV – BI programmes. A list of probable courses that would be offered include: Entrepreneurship development; enterprise management; financial management; accounts management; sales & marketing; communication for managers; and IT for enterprise managers.

Figure 2 EEV Education & Training Programs

This would essentially act as an additional revenue generation for EEVs, as such programs would be offered to youth in general as well.

Pre-incubation phase- focus on training

In addition to educational programmes offered to youth, there would be very specific Pre-incubation training phase which is being planned as a six month long training leading to a

diploma or post-graduate diploma in enterprise development and management, with practical and exposure programmes. Pre-incubation training is expected to be a very comprehensive training in all aspects of enterprise management.

Towards Incubation: Starting a venture and getting admitted to EEV Incubator

During the pre-incubation phase, training & preparatory period, an entrepreneur gets equipped to enter into incubation stage. Training and education, empowers them to perform their responsibilities. Once training period is over, which is compulsory, all the potential entrepreneurs then move to the EEV business incubator for which, EEV management conducts a crucial screening of desirous entrepreneurs and choose the apt on the basis of certain criteria that the management decides.

Assistance would be provided during the interim period in the following aspects:

- Developing a bankable Business plan
- Each candidates to be attached with a mentor
- Technology Selection & identifying partnerships
- Facilitating Business partnerships
- Seeking licenses/regulatory assistance

Incubation phase: Services available to incubate start-ups

Companies will be permitted to stay in EEV Business Incubator, to begin with, for a period of 36 months. Monthly service charge will be levied to a company for the period of first 12 months, and at a higher rate from second and 3rd years. EEV, Business Incubator management at its own discretion, as per the requirement, permit companies to extend their stay for a maximum period of another 24 months.

Incubation phase services in Eco-Enterprise Village

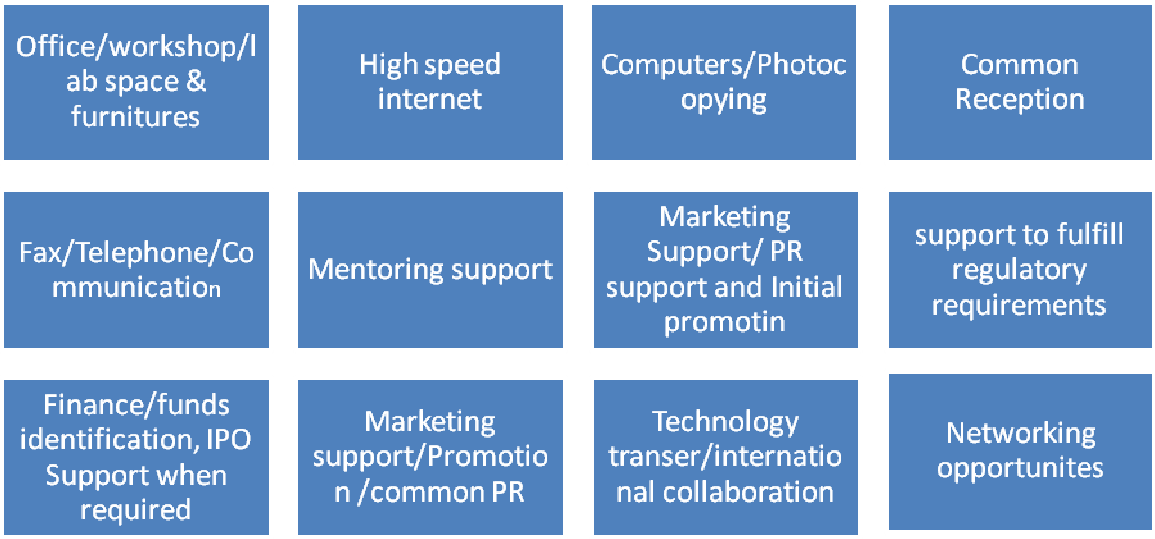

Figure 3 Services during Incubation Phase in EEV

Joining the EEV

- One time registration and joining fee (to be fixed)
- Will undergo a 6 months training program at EEV and get a diploma in enterprise development and management
- After 6 months they will be attached to a mentor, in addition to EEV staff who would assist the entrepreneur in setting up and running their companies
- Receive assistance in availing bank finances and other sources of funding
- Can take an office space as per the requirement at a cost which is fixed from time to time

Enterprise Resource Centre (ERC)

The EEV would house an Enterprise Resource Centre which would be a centre for providing various services to MSMEs and entrepreneurs. Following are some of the services that the ERC would provide:

Business and market intelligence: Resource centre would provide information pertaining to all aspects of market, finance, technology, changing policies, business rule and any other relevant information that are required for the enterprises. This service would be a revenue source for the EEV.

Market studies, reports and feasibility studies: would bring out regular market studies and analysis would conduct feasibility studies on projects as and when asked for on a fee basis

Business directories and publications: ERC would compile and bring out directories and other useful materials for business houses

Events: ERC would organize events such as exhibitions, seminars, conferences, workshops and other networking event on a regular basis

Conclusion

Business Incubator as detailed above can function on a sustainable basis and serve society, economy and communities in creating employment opportunities, building sustainable eco-focussed enterprises and thereby alleviate poverty and promote and assist in building a thriving Small and Micro Enterprise sector. If given an educational focus and provide it as a service that would be an additional revenue source for BIs. Together with business incubator services, educational programs for business leaders and services of ERC, the model of BI suggested here called Eco-Enterprise Village offer a promise to youth population to build sustainable youth enterprises.

What is needed in today's complex and challenging global market scenario for the youth population are institutions that would provide education as well as mentoring support to translate the knowledge acquired for commercial uses and youth coming out from academic world to be self-employed and start new ventures of their own on a successful manner. Business Incubator model, presented here with a focus on imparting educational and networking services by harnessing ICT tools could prove to be a panacea for some of the

challenges and issues of the modern times such as building a competitive SME sector, eco-friendly businesses, unemployment and building youth enterprises and entrepreneurship.

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