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*info*Dev

The *info*Dev Global Network of Business Incubators

The Information for Development Program *(info*Dev) is a partnership of public bilateral and multilateral development agencies, working in close cooperation with partners from civil society and the private sector, and assisted by an expert secretariat housed at the World Bank. Its mission is to help developing countries and their international partners use information and communication technologies (ICT) broadly and effectively as tools of poverty reduction, sustainable economic growth, and empowerment of individuals and communities. Its work is rooted in the conviction that information and communication are indispensable elements of effective and responsive institutions (including governments), markets and societies.

With generous support from the Government of Japan, *info*Dev has created an Incubator Initiative designed to support ICT-enabled innovation and business creation in developing countries, both to promote broad-based economic growth in those countries and to foster the development of ICT-related or ICT-enabled products and services for the poor. Our goal in this Initiative, as described herein, is not only to support a group of individual incubators in developing countries, but through this support to promote the growth of a vibrant global network of incubators and innovators who can learn from each other, support each other, and work together in creative ways to harness the power of ICT as tools of poverty reduction, growth, and economic and social opportunity for all.

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ABOUT *INFO*DEV

*info*Dev's approach to ICT in development is shaped by several distinctive elements:
- A strong emphasis on rigorous, field-tested knowledge of "what works" when using ICT to expand economic opportunity and reduce poverty.
- An ongoing commitment to knowledge sharing.
- An emphasis on "thinking outside the box" and serving as a test-bed for new ideas and approaches of *info*Dev consortium members.
- A determination to make *info*Dev activities directly relevant to the core development work of international donor agencies.

The challenge facing developing countries and the international donor community, is to understand and implement the specific sectoral applications of ICT that have been shown to have positive effects on core development goals, while at the same time creating the environment for the broader spread of ICT infrastructure and services across society and economy, so as to engender the broader beneficial effects of ICT and create information-rich societies.

Three Interdependent Themes:
In order to address these challenges *info*Dev's current work program is guided by three closely related themes, representing key challenges that face developing countries as they seek to harness ICT as a tool of opportunity for all.

Mainstreaming ICT as a Tool of Development and Poverty Reduction
Developing countries and their donor partners face strategy and resource choices on how to deploy ICT to serve development goals (including the Millennium Development Goals). To make effective decisions on ICT, however, they need more rigorous data and best practices regarding the intelligent, cost-effective use of ICT to achieve measurable results. The need for reliable data is particularly important, given that poorly designed ICT interventions can waste scarce resources and, in some cases, exacerbate existing inequalities. Through a rigorous program of field-based experimentation, research and analysis, *info*Dev is developing tools to assist developing countries and international donors to make smart choices about when and how to deploy ICT.

Enabling Access for All
If ICT is to be harnessed as a tool of opportunity and poverty reduction, access to information infrastructure, applications and services must be sustainable and affordable. Enabling ICT access for all requires governments to intelligently allocate public resources where necessary, while encouraging private investment wherever feasible. *info*Dev is helping develop effective partnerships for these purposes through a variety of mechanisms, including toolkits for regulators and policymakers; research on new models of public-private partnership to finance ICT infrastructure; and research, experimentation and analysis of technological innovations that can expand ICT networks, particularly in rural and underserved areas.

Innovation and Entrepreneurship
Private-sector investment and innovation will play a critical role in extending the opportunities of ICT to all segments of society. *info*Dev assists developing countries and the international donor community in maximizing the contribution and impact of the private sector through direct support for ICT-enabled innovation (the *info*Dev Incubator Initiative). It also supports this goal through research, policy toolkits, new partnership models, and networking among developing-country entrepreneurs, private-sector investors and the international donor community.

An Integrated Set of Knowledge Resources

*info*Dev's key strategic priority is to support the growth of an integrated set of knowledge resources directly relevant to the needs of its donors and their interlocutors in developing countries. These knowledge resources translate general global knowledge into actionable knowledge directly relevant to donors and developing countries policy-makers.

*info*Dev supports a targeted set of activities – workshops, expert consultancies, case studies, pilot projects, monitoring and evaluation exercises – that build upon and add to this knowledge base in an iterative and interactive fashion. In addition, *info*Dev supports the emergence of broader public communities of practice around these issues through online collaboration tools, targeted workshops and other events, and substantive and financial cooperation with key partner organizations that have rich knowledge resources on these topics.

THE *INFO*DEV INCUBATOR INITIATIVE

Background and Objectives
Developing countries face considerable challenges in promoting and sustaining information and communication technology (ICT) related innovation and new business creation, and in attracting broader private investment (local and international) to expand access to ICT services and applications and to grow ICT-enabled businesses in all sectors of their economies. To help developing countries meet these challenges, *info*Dev provides support for innovative approaches to expanding the role of the private sector in scaling up successful ICT applications, expanding ICT access, and harnessing ICT as tools of broader economic growth and efficiency, including support for ICT-related new business incubation through its Incubator Initiative.

In 2002, with support from the Government of Japan, *info*Dev launched its Incubator Initiative aimed at fostering entrepreneurship and private sector development in developing countries. This Initiative is dedicated to establishing a network of incubators to facilitate the emergence and development of small and medium size enterprises (SMEs) in developing countries that utilize ICT to improve performance and expand operations. With the completion of a new round of grant allocations in June 2004, the *info*Dev Incubator Initiative is supporting over forty incubators worldwide by: (i) providing the necessary financial and technical assistance to help existing business incubators improve and scale up their operations; (ii) facilitating the development of new business incubators in areas that are not currently served; (iii) encouraging innovative uses of ICT and entrepreneurship at the local level and based on local needs; and (iv) establishing a network of knowledge sharing among business incubators that supports SME development.

The Incubator Initiative complements and leverages the efforts promoted by the World Bank Group and other donors, in assisting developing countries by sharing international experience with them on ICT-enabled business incubators and providing initial funding supporting the establishment of local incubators.

> **Objectives**
>
> The Initiative aims at promoting economic growth by fostering private sector development through the following objectives:
>
> - Improve performance of existing incubators and developing viable programs in developing countries
>
> - Promote knowledge generation & dissemination: good practices, toolkits
>
> - Foster national and international partnerships and networks
>
> - Foster ICT-enabled innovation and development of a new generation of small enterprises as engines for socioeconomic development in developing countries

To complement this direct support to new and existing incubators in developing countries, the Initiative also focuses on strengthening networks of knowledge-sharing and mutual support among incubators both regionally and globally. To this end, working closely with a broad range of existing networks of incubator associations, science parks and other organizations promoting innovation and business development, the Initiative supports regional networking and knowledge-sharing initiatives among its supported incubators and other partners in each developing region. It is also supporting the emergence of a Global Network on Business Incubation, designed both to promote mutual support and knowledge sharing among *info*Dev's supported incubators world-wide and to strengthen the linkages between these incubators and related initiatives and networks.

GRANT PORTFOLIO

Three TYPES of grants have been approved so far. These include:

Operational grants (under RFP announced in February 2003) – for support to existing incubators in developing countries:
> Aimed at consolidating the operational and self-sustaining capacity, efficiency, performance and outreach of business incubators through the building and more effective use of ICT skills and ICT-enabled business incubation services.

Capacity building grants (under RFP announced in February 2004) – for support to new and start-up incubators in developing countries:
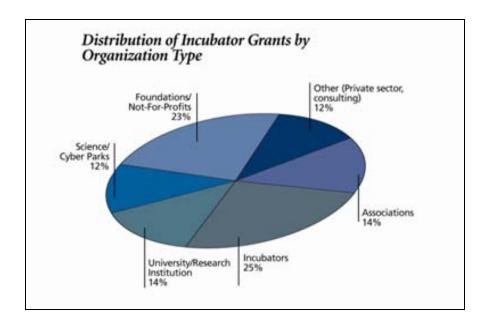> Aimed at providing financial and technical assistance to new or start-up business incubators and related programs for developing and piloting viable incubation models and processes.

Planning grants (under RFP announced in February 2004) – for support towards the planning of business incubators in developing countries:
> Aimed at providing financial support for the planning of self-sustaining new business incubators in developing countries.

An important feature to note is the diversity within the types of organizations receiving grant funding. With an effort to broaden the lessons learned, and to include a wide variety of organizations which are working on different aspects and dimensions of business incubation, the *info*Dev grant portfolio covers organizations which can be classified into:

- Business incubators
- Science and Cyber parks
- National Associations
- Foundations and not-for-profit organizations
- Universities and research institutions
- Other (private sector, consulting) organizations

Distribution of Incubator Grants by Organization Type

Grants for Country Incubators

Grants for Country Incubators

REGION	First round (2003)	Second round (2004)	Total Number of Grants	Total Amount of Grant Funding ($)
Africa	1	7	8	$ 1,370,000
Asia (East and South)	6	7	13	$ 3,020,000
Europe and Central Asia	3	6	9	$ 2,070,000
Latin America and Caribbean	6	4	10	$ 2,750,000
Middle East and North Africa	1	2	3	$ 900,000
Total	17	26	43	$ 10,110,000

Portfolio Of Incubator Projects

Portfolio Of Incubator Projects

COUNTRY	PROPONENT ORGANIZATION
AFRICA (8)	
Ghana	Busy Internet
Kenya	Jomo Kenyatta University of Agriculture and Technology (JKUAT)
Mauritius	National Computer Board (NCB)
Namibia	IT@AB Network - Namibia
Senegal	National Council of Negro Women/International Division (NCNW)
South Africa	Voxel Technology Innovation Support Center
Tanzania	World Ahead Consulting Network
Uganda	Uganda Industrial Research Institute (UIRI)

COUNTRY	PROPONENT ORGANIZATION
EASTERN EUROPE AND CENTRAL ASIA (9)	
Armenia	Viasphere Technopark
Azerbaijan	Information and Telecommunication Technologies Development Association (INFOTEK)
Georgia	Civil Society Support Centre
Kazakhstan	SODBI Business Incubator Shymkent
Krygyzstan	Union Of Business Incubators And Innovation Centers of Kyrgyz Republic
Romania	Business Incubator Centre, Baia Mare
Turkey	Ankara Cyberpark Inc.
Ukraine	Ukrainian Business Incubators & Innovation Centres Association (UBICA-ICT) & Kharkov Small Business Incubator, Kharkov Technologies
Uzbekistan	The Association of Business Incubators and Technoparks of Uzbekistan (ABIT)

COUNTRY	PROPONENT ORGANIZATION
LATIN AMERICA AND THE CARIBBEAN (10)	
Brazil	Technological Incubator of Popular Cooperatives of the Federal University of Rio de Janeiro – ITCP; & Instituto Gênesis da PUC-Rio; & Minas Gerais Incubators Network
Chile	Access Nova
Colombia	INNOVAR and Corporación Bucaramanga Emprendedora (CBE); & Incubadora Parque Tecnologico Del Software De Cali
	Corporación para el Desarrollo de Tunía (Corpotunía)
Costa Rica	Comisión Asesora en Alta Tecnología de Costa Rica (CAATEC)
Dominican Republic	Cyberpark of Santo Domingo
Panama	Panama Technology Business Accelerator (PTBA)
Paraguay	Fundación Enlace
Peru	Centro de Innovación y Desarrollo de la Pontificia Universidad Católica
Uruguay	Ingenio–Incubadora de empresas (LATU – ORT)

COUNTRY	PROPONENT ORGANIZATION
ASIA (13)	
China	Yangling Business Incubation Center & The Tianjin Women's Business Incubator (TWBI)
India	Indiaco.com Private Limited
	Tiruchirappalli Regional Engineering College-Science and Technology Entrepreneurs Park
Indonesia	Koperasi Starcall Wartelnet
	Broadband Network System (BNS)
Malaysia	Universiti Teknologi Malaysia (UTM)
Mongolia	InfoCon Co., Limited
Nepal	IT Professional Forum (ITF)
Philippines	UP-AFI Joint Experimental Facility - Ayala Foundation
Sri Lanka	Sri Lanka Technology Incubator Private Limited - ConceptNursery
	Intermediate Technology Development Group (ITDG) - South Asia
Thailand	Kenan Institute Asia (KIAsia)
Vietnam	Center of Research and Consulting on Management (CRC)

COUNTRY	PROPONENT ORGANIZATION
MIDDLE EAST AND NORTH AFRICA (3)	
Iran	Isfahan Science & Technology Town (ISTT)
Jordan	National Consortium for Technology and Business Incubation
Morocco	Moroccan Information Technopark Company

REGIONAL AND GLOBAL WORKSHOPS

As part of the Incubator Initiative, the *info*Dev Program has adopted a strategy of supporting Regional Workshops and Global Events that bring experts and practitioners together on a platform to discuss major issues relating to Innovation and Entrepreneurship, Business Incubation and the applicability in different environments and countries.

Global Forum on Business Incubation: *Creating the Conditions for Innovation*
In October 2004, *info*Dev held a highly successful Global Forum on "Business Incubation: Creating the Conditions for Innovation" in New Delhi, India. This Forum, organized in cooperation with the Department of Science and Technology of India and the Federation of the Indian Chambers of Commerce and Industry, brought together more than 300 entrepreneurs, business incubator managers, venture capitalists and policymakers to discuss the fundamental impediments to innovation and new business creation in developing countries.

Discussions during the Global Forum reinforced several key challenges that SMEs face in growing their businesses that *info*Dev had identified through its work with business incubators and their tenants, including:
- *Access to Growth Capital* – Scarce overall financial resources to help start-up businesses in developing countries, particularly ICT-enabled businesses, grow to the stage where they can attract institutional investors such as the International Finance Corporation (IFC);
- *Access to Regional and Global Innovation Networks* – Insufficient national, regional and international networking opportunities for ICT-enabled SMEs to exchange best practices and lessons from experience;
- *Access to ICT-Enabled SME Support Services* – Difficulties in raising local public and private sector awareness of the importance of supporting entrepreneurship and SME development as an engine of new economic opportunities through sustainable mechanisms such as business incubators.

The Forum concluded with the launch of 'The Global Network on Business Incubation for Development' to support knowledge sharing and other business incubation activities. Participants also signed a Declaration containing a description of goals for a continued and strengthened cooperation on all levels – national, regional as well as international. The declaration also calls for concrete action by governments, donors, the private sector (industry and finance), and *info*Dev to support development of an environment supportive to business incubation and entrepreneurship.

BUILDING ON THE INFODEV INCUBATOR INITIATIVE

The Global Network uniquely positions *info*Dev to play a lead role in addressing the constraints to ICT-enabled innovation and new business creation in developing countries, such as access to financing, with its donors and private sector partners. The network provides *info*Dev with a diverse pool of business incubators and emerging SMEs from across the developing world that can generate lessons learned on providing effective and sustainable business support services.

In the coming months, *info*Dev will continue to grow this Network and provide technical support and capacity building services to SMEs in developing countries through several activities:

- *New Round of Grants* – This new round of support is aims to (i) improve the operational performance of business incubators to encourage sustainability and growth of the incubator and its tenants; (ii) strengthen regional and global networks for incubation and innovation support; and (iii) address specific challenges facing SMEs including the broader business environment such as access to finance.
- *The Global Innovation Marketplace* – Building on its previous experience with the Global Forum on Business Incubation, *info*Dev will convene each year a Global Innovation Marketplace to bring together innovators and entrepreneurs from developing countries with private sector investors, public sector partners, and other key stakeholders both to exchange ideas and experience about promoting innovation and SME development, and to build relationships between developing country innovators and private investors. In the lead up to the Global Innovation Marketplace, *info*Dev is organizing regional networking events.
- *Impact Assessment and Lessons Learned* – In order to assess the impact of business incubation as an effective mechanism for supporting ICT-enabled SMEs in developing countries, *info*Dev is conducting detailed case studies and utilizing a customized monitoring and evaluation tool.

Addressing the Challenges Facing ICT-Enabled SMEs
*info*Dev is designing analytical work based on lessons learned from the business incubator initiative to assess overall constraints to innovation and new business creation in developing countries, including financial and human resource limitations as well as policy and regulatory challenges. As part of this theme, *info*Dev is also focusing on the effective utilization of ICT to improve the competitiveness of firms, as well as the challenges of developing sustainable businesses that address the specific information and communication needs of the poor. To address these issues, *info*Dev is supporting research, toolkits and other capacity-building activities for developing countries and donors and their partners. Several components of this program area are in progress, and others will be added in the coming months. Activities currently in progress include:

- *ICT, Innovation and Economic Growth in Transition Economies: A Multi-Country Study in the Europe and Central Asia Region* – An in-depth study of the impact of ICT on firm-level innovation in Poland, Russia and the Baltic States;
- *Scaling Up Innovation and Entrepreneurship in Developing Countries: the Role of Private Sector Finance* – An analysis of the impediments facing developing-country entrepreneurs as they seek financing to grow their businesses, particularly in the ICT sector;
- *Serving the Next Billion: Promoting Private Sector Investment and Innovation to Address the Information and Communication Needs of the Poor* – A joint study with Alcatel focused on identifying what is distinctive about demand patterns for information and communication services among the poor, and on building sustainable business models for addressing that demand.

Developing Economic Growth Strategies that Harness ICT and Enable Local Innovation
*info*Dev is applying the lessons from its firm-level analytical work and Incubator Initiative to understand how developing countries can design and implement ICT-enabled economic development strategies that stimulate private sector-led growth in an increasingly global economy. Many developing countries have looked to China, India and Singapore and have tried to replicate their success stories with costly investments in call centers and cyberparks that have not yielded expected benefits. To help

developing countries and their donors think more strategically about how ICT can be harnessed to improve competitiveness and spur economic growth, *info*Dev is conducting several country and regional studies and a broader "framework paper" that help developing countries and donors think strategically about ICT as tools of growth without succumbing to the "ICT-push" tendencies of many recent "ICT strategy" exercises. Studies in progress or recently completed include:

- *Identifying Challenges to ICT-Based Innovation and Economic Diversification in the Caribbean:* (recently completed, in cooperation with the European Commission and the World Bank, leading to several follow-on operational activities in the region including partnering with the European Commission in the design and implementation of business incubators in the Eastern Caribbean).

- Similar studies in several African countries are either under way (Tanzania and Ghana) or will begin (Uganda) in the next few months.

- A "framework paper", *ICT, Poverty and the Global Economy: Challenges and Opportunities for Developing Countries*, is currently under way. This paper will provide a unifying analytical framework for *info*Dev's ongoing work in this area.

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*info*Dev's Global Network of Business Incubators

Description of projects and institutions receiving grants

AFRICA

Ghana
Grantee: BusyInternet Ghana Limited

Grant: Capacity Building Grant. US $300,000
Contact: Ms. Estelle Akofio-Sowah, Managing Director
Email: Estelle@busyinternet.com
Project Website: www.busyinternet.com; Project website: www.busyinternet.com/incubator

BusyInternet Ghana, a private Ghanian company, was established in 2001 and is a joint venture between Ghanian investors and BusyInternet International. Its mandate is to promote social and economic development in Africa through information and communication technology applications. The overall approach is that of facilitation through a combination of physical infrastructure including electricity and bandwidth and the social environment of experts and entrepreneurs. BusyInternet Ghana focuses on providing the appropriate resources for businesses and organizations to execute their core competencies and enhance their skills. Over the last 26 months, BusyInternet has facilitated the setup and growth of 11 information and communication technology companies. It is the leading technology incubator in Ghana and has established a clear market differentiation providing its mix of tenants with a unique environment of networking opportunities and a competitive edge over similar businesses in Accra. To date, five companies have been successfully incubated. At present, it has six tenant companies in its portfolio.

Partnerships
Fidelity Investment Fund I (investor) is a local Ghanaian investment fund that is aggressively moving to invest in new ventures with a special focus on information and communication technologies (ICT). **Databank Financial Services** (investor) is the leading financial service company in Ghana. **Soft Tribe** (partner) is led by Joe Jackson and Herman Chinnery-Hesse and is the leading software development company in West Africa with a range of retail products including point of sale, accounting, stock and more. It developed the Limpopo software that runs BusyInternet's accounting functions.

Project Objectives
The *info*Dev-funded work program is to enable BusyInternet to become a leading business incubator in Africa reducing the failure rate of early-stage companies and speeding up the growth of companies that have the potential to become substantial generators of employment and wealth. Specifically the objectives are the following:

- to provide quality services, expertise and information to start-up companies that will help them organize and manage their businesses professionally;
- to build the institutional capacity of BusyInternet as well as that of the incubating companies;
- to provide networking opportunities for access to technological innovations, markets and business incubation associations;
- to expose start-ups to investors and other sources of funding;
- to create a resource database for tenants' companies to access data on industry best practices;
- to educate both private and public sector leaders about the value of supporting the small business incubation concept and process in order to promote integration of ICT in business for economic development.

Activities Completed and Milestones
- BusyInternet has launched its first 18-month intensive program with clear objectives, rules and obligations and has selected 4 young innovative companies from a pool of 17 applications.
- The four companies are Runway 14 New Media; Childnet Electronic Publishing Limited; Top-Up TeleCenter Limited; and IT-Westgroup.

- Each participant in the 18-month program is to receive a minimum of US$45,000 in technical assistance in the areas noted below and is also required to contribute 10% from its own resources toward total program costs:
  (a) *customized training and professional assistance* that is to include hands-on help with the use of ICT in business development; assistance with product design, marketing and branding; managerial skills and technology requirements;
  (b) *low-cost infrastructure* including office facilities; high-speed bandwidth; business services (copy center, prominent address and central business location, advertisements using online banners etc.) and a conducive entrepreneurial environment;
  (c) *support for obtaining financing and networking opportunities* to foster business growth and profits, awareness raising and knowledge sharing on challenges of supporting ICT-related innovations in Ghana;
  (d) *training and capacity building* including mentoring and guidance on ICT policy issues and access to legal and corporate advice by experienced, successful business persons.

An awareness and capacity-building event

- In addition to the focused 18-month program, BusyInternet has also planned activities to increase publicity on the concept of incubating small businesses using ICT in entrepreneurship. This includes learning and knowledge sharing on lessons and challenges of creating and supporting small, innovative ICT businesses within Ghana's particular developmental environment through the following:
  (a) educating key media players on supporting related innovations in business through properly focused emphasis in SMEs on business incubation reporting;
  (b) sponsoring a series of luncheons for top policy makers and government officials to sensitize them to issues of business incubation and ICT-related business innovations;
  (c) holding public workshops and conferences to promote the business incubation concept and use of ICT in business development in Ghana;
  (d) publicizing *info*Dev's business incubation program in collaboration with GINKS (an ICT advocacy initiative) through BusyInternet's cyberseries year-long program;
  (e) exposing incubated businesses to international forums such as the soon-to-be-held World Summit on the Information Society in Africa preparatory conference in Accra in early February 2005.
- BusyInternet has been in consultations with the Ministry of Communications on the establishment of the government's technology incubator at the Ghana Multimedia Centre.
- BusyInternet will be performing as a member of the recently formed Incubator Governing Council set up by government to oversee business incubation in Ghana and will attend quarterly briefing sessions.

Indicative Portfolio of BusyIncubator Ghana

Name of Client/tenant Company	Description of Business
Childnet Electronic Publishing Co. Ltd.	Pioneers interactive educational software development on CD-ROMs in Ghana with a vision to be the leader in content and interactivity and the best priced educational software in West Africa.
Event PmG	Sells unique invitation cards for all occasions.
Top Up Business Services	Leading ICT integrated service provider offering the most comprehensive range of business services under one roof at all its outlets (100 to be established throughout Ghana in the next 48 months).
Runway 14	Animators, copywriters, designers, musicians, new media artists, programmers, television producers, video jockeys and conceptual urban philosophers located in Accra, Amsterdam, Devon, Helsinki Johannesburg, London and Los Angeles.
BusyLab	Researches and develops web-based applications for emerging markets. They are currently working on a number of private and public sector initiatives to build appropriate software solutions for the Ghanaian market.
Cyterra Solutions	Provides advanced web development, e-learning and database applications for SMEs.
Ecoband Networks	Provides connectivity services and solutions for Internet service providers and broadband Internet protocol networks within the Economic Community of West African States. Ecoband Networks is the local agent/distributor for Card USA, Ceragon Networks, Denwa Communications, eKa Ltd., IP Planet Network, Q-Kon, and RAD Data Communications.
African Learners Online	Offers solutions that support learning and training for individuals and organizations. The company cooperates with European and African publishers and content providers of textbooks to provide electronic books in all disciplines for degree and non-degree students.
Teledata	A telephone distribution company that sells all kinds of mobile phones and phone cards.

Kenya
Grantee: Jomo Kenyatta University of Agriculture and Technology

Grant: Planning Grant. US $100,000
Contact: Dr. Atieno Ndede-Amadi; Associate Professor of Information Technology
Email: ceo@jkuat-cbi.co.ke
Website: www.jkuat.ac.ke; Project website: http://www.jkuat-cbi.co.ke/index.php

Jomo Kenyatta University of Agriculture and Technology (JKUAT) started operations in 1981 as a diploma awarding institution in the fields of agriculture and engineering. In 1989, it was elevated to the status of a university college, and in 1994 it was established as a full-fledged university. Its facilities have been funded through grant aid and technical cooperation programs with the Japanese government. The mandate of the *info*Dev Incubator Initiative work program in Kenya is the creation of the **Jomo Kenyatta University of Agriculture and Technology Center for Business Innovation (JKUAT-CBI)**. CBI is to be a public, not-for-profit center co-sponsored by government departments, non-profit organizations and private investors for the primary purpose of sustained economic development and job creation. It will involve successful entrepreneurs, lawyers, accountants, bankers, scientists and other professionals in providing expertise to its members. The planned center is to be a hybrid incubator in that it will provide its membership with access to government as well as private sector funding and other resources. The emphasis of the work program is to be on innovative technology applications and transfers providing opportunities for university researchers and associated groups. It is planned to provide start-up business opportunities for alumni of JKUAT and other Kenyan universities, among others. The incubator is to be strategically focused on the cutting edge of thinking about how to support small business development and about the use of information and communication technologies (ICT) in community development with an emphasis on innovation.

Partnerships
CBI is to be created with assistance from the **African Institute for Capacity Development**, the **Kenya Private Sector Alliance** (KEPSA), **Kenya Industrial Estates** (KIE), the **Ministry of Finance of the Government of Kenya**, and the **United States Agency for International Development** (USAID).

Project Objectives
The broad aims of the JKUAT-CBI incubator are to help address the sustainable economic development issues raised by the Kenyan government in its poverty reduction strategy process and to help achieve the objectives outlined in it. For example, lack of financial services and access to commercial lending for small businesses, women, youth and the disabled has been identified as one of the major constraints to growth and productivity in Kenya. Specifically, the objectives for CBI include the following:
- to stimulate economic activity in Kenya, generate employment and leverage ICT to facilitate the integration of local businesses into the global knowledge-based economy;
- to develop human and institutional capacity for promoting and enabling the appropriation of ICT for small enterprise and e-business development;
- to foster entrepreneurship, business innovation, investments and private sector development particularly in small and medium-sized enterprises (SMEs);
- to provide a strong demonstration effect leading to improved ICT policies that encourage investment in and the growth of the local small business community;
- to promote equality and diversity in business development by actively engaging disadvantaged groups in the incubation process including youth, women, and people with disabilities;
- to address the business support needs of small enterprises and emerging entrepreneurs among groups that are underrepresented in the business community;

- to facilitate multi-stakeholder consensus, collaboration, decision making and action in order to mobilize resources and increase access to ICT infrastructure and better service delivery to small businesses;
- to promote networking and knowledge dissemination regarding the effective application of ICT skills and related services for achieving business competitiveness in particular and for socioeconomic development in general.

The targeted disadvantaged groups include the following:
- *Women*: Women constitute 51% of Kenya's population hence their economic empowerment is critical. Only 29% of formal employment positions are occupied by women (most women work in the informal sector where there is an acute lack of social security and access to credit facilities).
- *Youth*: In the 1998 census, youth aged 15–25 years represented 22% of Kenya's population. The youth are not adequately absorbed into public service, and the private sector has been unable to create employment due to poor national economic performance.
- *Disabled*: People with disabilities constitute approximately 10% of the national population. Because national statistics have neglected to identify this group, it has not been incorporated into planning resulting in inadequate budgetary allocations and gross unemployment.

Activities Completed and Milestones
- The Kenya Country Business Incubator initiative was conceptualized in the *info*Dev proposal of January 2004 that was subsequently funded for up to 18 months.
- Following the funding, stakeholder institutions were identified and the organizational structure of the incubator was institutionalized. A board of trustees, an executive management committee and several technical committees were appointed.
- Since receiving *info*Dev funds, JKUAT has engaged in an intensive campaign to bring in partners like the Investment Promotion Center (IPC), the African Institute for Capacity Development (AICAD), the Kenya ICT Trust Fund, NEPAD Kenya, Delloite and Touche and a number of government and educational institutions.
- On November 2, 2004 the Kenya Country Business Incubator (KeKoBI) secretariat held a stakeholders' forum to brainstorm the way forward for this incubation initiative. The forum attracted 40 participants drawn from diverse backgrounds and sectors of the economy including research and academia, the private sector, NGOs etc.
- On December 9 and 10, 2004, the secretariat organized a second workshop with the objective of educating stakeholders in business incubation. This two-day workshop took place in Nyeri. An incubator expert from South Africa, Mr. Ben Zaaiman (the CEO of Softstart Trust) shared the incubation experiences of South Africa, the leading country in Africa in the number of business incubators (at 22 and growing). It is at this forum that participants adopted the proposed organizational structure of our incubator to include a board of trustees, an executive management committee, a chief executive officer, a technical committee coordinator and the technical committees as its framework institutions.
- The organizational structure of KeKoBI as conceptualized and adopted at the Nyeri workshop has been reviewed and subsequently revised at the suggestion of *info*Dev to a less top-heavy model. *info*Dev suggested at the planning stage that what was needed was a capacity-building structure rather than a heavily bureaucratic one. Based on those recommendations, the secretariat revised the organizational structure.
- Technical committees formed at the Nyeri workshop met at scheduled monthly meetings and at a number of unscheduled ones. At present, the identified convergence project is an e-water systems project that was initially proposed by the chairman of the central water board and for which a project proposal document has been developed.
- To implementing this project, a memorandum of understanding was signed for a working relationship with e-water systems to help with training and the development of their management systems.

- In the e-water project, opportunities have been identified to conduct training programs on water systems and management for several stakeholders including community-based organizations (CBOs) as water service providers, non-governmental organizations in their dealings with CBOs and government officials such as provincial and divisional water officers who provide possible avenues for generating revenue streams for KeKoBI.
- KeKoBI participated in the formation of the Africa Region Business Incubator Association in Pretoria, South Africa in April 2005.
- The main question that the incubator faces today relates to financial sustainability and the challenge of identifying viable revenue streams.

Mauritius
Grantee: National Computer Board

Grant: Capacity Building Grant. US $100,000
Contact: Mr. Kemraz Mohee, Executive Director, National Computer Board
Email: ncb01@ncb.intnet.mu
Website: http://ncb.intnet.mu/, Project website: http://ncb.intnet.mu/

The **National Computer Board** (NCB), the implementing institution for *info*Dev Incubator Initiative work program in Mauritius, was established under the National Computer Board Act of 1988. It is a parastatal organization under the Ministry of Information Technology and Telecommunications and is administered by a board of directors. The role of NCB is to e-power people, businesses and the public sector by developing and promoting information and communication technologies (ICT) and ICT-related services in line with national goals and policies. NCB is a key enabler in transforming Mauritius into a cyber island and, among others, advises the government on the elaboration of national policies for the development of the ICT sector.

Partnerships
Multilateral Organizations
- The **United Nations Development Programme** (UNDP) provided upstream policy support and developed a strategic plan.

Project Objectives
- Assess existing facilities and services offered to technology start-ups at the NCB Incubator Center and examine ways to enhance them.
- Evaluate the capacity-building needs of start-ups and incubator management teams, devise training plans in line with business and marketing perspectives for the long-term sustainability of the ICT sector across the country and develop partnership strategies.
- Strengthen existing networking facilities between institutions (local and international) and receive advice on long-term development addressing issues such as clustering and capacity building with international institutions.

Planned Activities and Milestones
- *Attracting start-ups in the ICT sector:* The center plans to accommodate eight technology start-ups. To date, it has accommodated 13 enterprises. The incubator management team manages the center and reports to the incubator management committee for project approval and policy decisions.
- *Promoting and encouraging young and potential entrepreneurs to set up new business in the ICT sector:* The center will create a pool of national entrepreneurs for employment, income and wealth creation through a two-phased approach. The first phase is to include an appraisal of existing facilities and services offered at the center to start-ups; creating strategic plans for the center including marketing, networking and partnership and formulating training and expansion plans for tenants and the management team.

The direct beneficiaries of this project are the tenants and the center's management team. NCB also plans to include new and potential technology start-ups at the cybercity of Ebene to enhance their knowledge and expertise in the long term and to promote knowledge transfer. The main activities targeted by the cybercity include ICT-enabled services including software development, call center operations and business process outsourcing.

<u>Featured In the News</u>:

Africa Looks to Incubators to spark ICT
John Yarney, March 17 2005

*info*Dev is chartered to help developing countries maximize the impact of ICTs in combating poverty and promoting broad-based sustainable development. That concept is fundamental to Africa's budding incubation-center projects.

Mauritius, for example, identified ICT as having the potential to sustain <u>economic development</u> and is promoting the ICT sector as a new economic pillar, according to Roshan Seebaluck, the assistant manager of Mauritius' National Computer Board and ICT Incubation Center.

Developments in the Mauritian ICT sector, including the incubation center, business process outsourcing activities and the growing interest of foreign investors in the local market, are expected to increase employment, Seebaluck said. Seebaluck expects the ICT sector to require 7,000 workers to 13,000 workers by 2006.

"Assuming a ratio of one IT professional to two supporting staff, total employment that would be required in the economy would range from 22,000 to 39,000 by year 2006 within the ICT sector," said Seebaluck. <u>Read More</u>

Namibia
Grantee: Information Technology in African Business (IT@AB) Network Namibia

Grant: Planning Grant. US $100,000
Contact: Tom Mukaiwa, ITAB Interim Chairman
Email: tom.mukaiwa@bits.com.na
Website: http://www.it-ab.net/ Project Website: http://www.bits.com.na/infoDev/Default.aspx

IT@AB stands for **Information Technology in African Business** and is made up of 33 organizations in the Southern African Development Community (SADC) region drawn from the private business sector, trade promotion, universities, Internet service providers (ISPs) and training Institutions. IT@AB is an initiative of inWent Capacity Building International which is supported by the German Ministry of Economic Co-Operation. The primary focus of the network is to reduce the digital divide between Africa and the developed world. IT@AB seeks to enable small and medium-sized enterprises (SMEs) and small enterprises (SEs) to participate in the global digital economy. Since the beginning of 2004, IT@AB has been preparing to set up business incubators in each member country. The purpose is to take a number of high potential SMEs and SEs and through intensive training and skill transfers turn them into very effective and sustainable enterprises. Each incubator is to be e-business enabled and turned into a global player. The *info*Dev-funded work program is to create a Namibian incubator with a view to incubating selected SMEs by delivering effective training in business skills and by enabling them to leverage the benefits of ICT. The work program is intended to result in incremental, replicable, sustainable development across the country.

Partnerships
The Namibian IT@AB Network is made up of four organizations:
- Business Information Technology Solutions Private Limited (BITS);
- University of Namibia (UNAM);
- Telecom Namibia;
- NetAcademy.

Project Objectives
The overall aim is to establish a business incubator service to promote business innovation and private sector development in Namibia by integrating and effectively using ICTs in business and small enterprises. The aim is to address the business support needs of small enterprises and emerging entrepreneurs, especially among groups that are under-represented in the business community. The specific objectives of this program include the following:
- prepare a detailed implementation plan for a Namibian *info*Dev incubator including procuring a physical location and enlisting up to 10 Namibian tenants or business enterprises;
- develop one or two optimal, sustainable business models for Namibian SEs and SMEs;
- create effective, documented and replicable multiplier mechanisms that foster a mushrooming effect of ICT-enabled, sustainable SMEs that will create jobs;
- produce courseware for the effective transfer of business and sustainability skills;
- create a repository of business intelligence relevant to the Namibian business climate and share the repository with the *info*Dev and IT@AB networks.

Senegal

Grantee: International Development Center of the National Council of Negro Women/International Division Senegal Office

Grant: Planning Grant. US $70,000
Contact: Cynthia Ferguson Colas, International Development Center Director; Mamadou Sarr, Program Manager
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Website: http://www.ncnw.org, Project website: http://www1.telecomplus.sn/ncnw/waro.htm

The **International Development Center** (IDC) of the **National Council of Negro Women** (NCNW) through NCNW-Senegal is implementing a year-long planning project titled Creating an Enabling Space for Young Entrepreneurs (EYE). Its purpose is to plan the development of a business incubator that provides services to new and existing enterprises, especially female-owned/operated businesses, to enable them to access and use information and communication technologies (ICT) to develop their businesses and penetrate global markets. This project is directly linked to the NCNW-Senegal strategic program and is designed to produce a fully elaborated strategic and operating plan for the development of a business incubator in the St. Louis region of Senegal.

Partnership
NCNW, founded in 1935, is a voluntary, non-profit organization with a mission to advance the opportunities and the quality of life of African American women, their families and communities. NCNW fulfills this mission through research, advocacy, national and community-based services and programs in the United States and Africa. With its 38 national affiliate organizations and its more than 200 community-based sections, NCNW has outreach to nearly four million women, all contributing to peaceful solutions for the problems of human welfare and rights.

Project objectives
The overall objective of the *info*Dev-funded work program is to build on the progress made by the EYE program and to further plan the development and start-up of a business incubator. The services and programs offered to tenants and other clients of the incubator will be geared to expanding the use of ICT to enhance the viability and development of SMEs with an emphasis on women's entrepreneurial development. Planning is to be broadly participatory involving relevant Senegalese national and local government representatives; public and private sector partners; institutions in the region and potential incubator tenants and clients.

Planned Activities and Milestones
The overall success of this project as well as the eventual development of the business incubator will depend upon the development of a web of partnerships within a community of stakeholders operating at the local, national and international levels. Participatory methods embedded in the design of the EYE project will lay the foundation for the creation of that community of stakeholders. The project will consist of four main sets of activities:

1. *Building a community of stakeholders:* Information and sensitization campaigns are to target women in business, young artisans and their families, public sector representatives, business and artisan associations and networks, educational and vocational training institutions, potential investors and donors.
2. *Market analyses:* Assessments of existing and latent needs for ICT-based incubation services and of the pool of potential tenant/client services are to be provided through the incubator. Market research is to help identify economic sectors and to target niche areas and services the incubator will deliver. Market surveys using participatory approaches are to be used to ensure that the stakeholders play a substantive role in defining and shaping the packages of services the business incubator provides.

3. *Strategic planning:* This will involve the adoption of immediate and long-term business and capital development strategies including marketing, operation and management of incubator services, business planning and facility development plans.
4. *Incubator facility design:* Working with government services and the stakeholder community, site selection criteria are to be determined and detailed specifications for facility design are to be developed.

The end result of this planning project is to be a fully elaborated development plan for a business incubator specially designed to address the needs of female entrepreneurs. A related objective is to implement the project in a participatory manner so that the process itself enhances support for the business incubation concept and its development. In addition, the project is to advance community and entrepreneurial knowledge of the economic environment, conditions for effective participation in global markets, and ICT-based services and business enhancements. Stronger partnerships between public and private sector players are another expected outcome of the program.

South Africa
Grantee: KwaZulu-Natal Innovation Support Centre (KZNISC) trading as Voxel Technologies

Grant: Operational Grant. US $400,000
Contact: Steve Giddings; Project Coordinator
Email: steve@innovation.org.za.
Website: www.innovation.org.za

In South Africa, the **Southern African Technology Incubator Network (SATIN)**, which consist of three ICT Incubators – Bodibeng Technology Incubator (formerly BrainWorks) (BTI), KwaZulu-Natal Innovation Support Centre (KZNISC) trading as Voxel Technologies, and SoftStart IT Incubator, have been funded under the *info*Dev Incubator Initiative. This project proposes to use ICT to enhance the current capacities of the existing high technology incubators in South Africa, and to use ICT to transfer this knowledge and learning to other incubators. This will have a measurable impact on the success rate of these incubators in their attempt to eradicate poverty and to uplift people from previously disadvantaged groups. The Godisa program (the SA government incubation agency, which also represents a number low tech incubator) supports this project and assist in the eventual transfer of the results of this project to these incubators. BrainWorks Technology Incubator, Voxel Technologies Innovation Support Center is providing the resources for development portion of the project, while SoftStart is to participate as a lead user during the implementation phase. The proponents (and their supporting organizations) have been successfully involved in incubation activities in South Africa over the past three to four years.

The original proposal was a joint project between BTI and the KZNISC, with the backing of local, provincial and national government. Despite the management changes that happened at BTI that happened at the same time of the project launch, all parties continued to be committed to the project. The Departments of Economic Development and Tourism of both eThekwini Municipality as well as the KwaZulu-Natal provincial government had committed monies to the project and eThekwini's promised money was also received. Fresh contracts were drawn in the month of June 2004 and the project was re-launched on July 2004.

Partnerships
- The proponents of the South Africa Technology Incubator Network consist of three ICT Incubators (KwaZulu-Natal Innovation Support Centre, Bodibeng Technology Incubator, and SoftStart IT Incubator). It is supported by the government's incubation agency, Godisa. The first two of these incubators will be providing resources for development portion of the project, and SoftStart will participate as a lead user during the implementation phase.

Project Objectives
This project plans to use ICT to enhance the current capacities of the existing high technology incubators in South Africa, and to use ICT to transfer this knowledge and learning to other incubators that operate with survivalist entrepreneurs. This will have a measurable impact on the success rate of these incubators in their attempt to alleviate poverty and to uplift people from previously disadvantaged groups. Specifically the objectives include:
- Develop and implement a domain management system which will empower the incubator, as leader in the local business community, to manage the interactions actively between community members and promote information flow between them
- Establish and develop the basic infrastructure (both IT and management processes) for a satellite Incubator associated with Voxel technologies. The satellite Incubator will rely on the Domain Management System in order to deliver services and products in the cost effective way to clients which are remote from the head office Incubator. This will be the platform to provide value and reach underdeveloped, remote and PDI community entrepreneurs in a cost effective way

- Disseminate their learning and technologies developed to a low-technology incubator in order to show how ICT technologies can be used in a practical matter to alleviate poverty by helping survivalist entrepreneurs to become viable businesses
- Use the information sharing platform as a pilot for a future portal to be used by provincial and local government for them to manage their community or the residents in a particular area to enhance learning between the various incubators in South Africa through working collaboratively on this project.

Planned Activities and some milestones
The main activities planned within the project relate to the following four categories:

- Develop and implement a web portal based domain management system (DMS). This will be piloted at the proponent ICT incubators (BTI, VT and Softstart) as well as another Incubator operating in the low-tech, survivalist entrepreneur area that is to be identified. The DMS aims to improve relationship and information networking, and knowledge gathering and dissemination.

- Create comprehensive training courses for the use of ICT to build on the current institutional and managerial and technical capacity as well as for clients. This is to be done using the assistance of local and international experts. Assistance is also to be sought from a team consisting of local and international experts. Whenever applicable the course content is to be disseminated and delivered through the above domain management system.

- Utilize the local and international experts to develop an appropriate model to further expand KZNISC's existing ICT facilities and to examine its role for medium to long term sustainability. In particular, plans are being charted to seek global partners to support ICT and engineering software development through the retention and attraction of new ICT and engineering software skills through global outsourcing of ICT contracts and the establishment of Joint Ventures with global partners. Once suitable partners are identified, networking with these partners is planned to be facilitated through the above domain management system.

- To expand the reach of KZNISC, it is to develop an ICT platform and incubation tools for a satellite innovation support center in the Pietermaritzburg area at a distance of about 50 miles. This is to be used as part of the pilot site for the implementation of the domain management system, and will also serve as a model for a proposed satellite Incubator to be established by the BTI. The initiative will explore the role that ICT can potentially play in reducing incubation costs and improving efficiencies by following a satellite incubation strategy.

Tanzania
Grantee: World Ahead Consulting Network

Grant: Planning Grant. US $70,000
Contact: Mr Simbo Ntiro; Management Consultant
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Website: http://www.world-ahead.com, http://www.ethinktanktz.org

In Tanzania, **World Ahead Consulting Network (WCN)** is the lead implementing organization for the planning grant from *info*Dev that is to be used for (1) gathering data and information on the overall business incubation environment; (2) conducting a feasibility study for sustainable ICT-enabled business incubation and (3) developing an implementation and business plan. Other activities include knowledge dissemination, stakeholder and thematic workshops and overall monitoring and evaluation.

Partnerships
- Partner organizations include the **University Computing Centre** (UCC) and the **University of Dar es Salaam's Entrepreneurship Centre** (UDEC). The activities of the project are to be coordinated by a project steering committee composed of representatives from these institutions and the Ministry of Industry and Trade of the Government of Tanzania.
- The role of WCN as the main implementing institution is to cover overall project management functions including overseeing research and analysis, facilitating meetings and workshops, establishing and moderating networking among key stakeholders and other interested parties, overseeing logistics and other arrangements, providing technical input to the business plan and reporting to *info*Dev regularly on progress.

Project Objectives
The overall objective is to include all key players in the business incubation and information and communication technology (ICT) arena in the development of a plan that will stimulate sustainable business incubation in Tanzania. The project will consist of the following activities:
- planning for the provision of business incubation services to promote business innovation and private sector development through the integration and more effective use of ICT in business and small enterprise development;
- building local capacity in target business communities;
- raising awareness and promoting the appropriation and utilization of ICT by local entrepreneurs and small businesses as tools to address their short- and long-term development goals;
- facilitating the creation of a global incubator network for exchanging ideas and formulating best practices and lessons learned for designing and implementing business incubators in developing countries.

The aim is to mobilize resources and build capacity within organizations in developing countries based on the available experience and best practices from across the world, to catalyze further investment and support from domestic and international organizations, and to document experiences in utilizing ICT to help *info*Dev and the WNC better understand the impact of ICT on establishing business incubators in developing countries.

Activities Completed and Milestones
Preparing a business plan for sustainable ICT-enabled business incubation in Tanzania in the wider context of improved business development services. The intention is to implement the business plan by establishing one or more business incubation units and by creating a network of key stakeholders that will enhance the delivery of business services to support ICT-enabled sustainable business incubation. This main objective is in line with Vision 2025, the Small and Medium-sized Enterprise Development

Policy of Tanzania and the national ICT policy. Given this main objective, the list of main activities planned and anticipated outputs includes the following:

- *Appointment of a steering committee* with representation from the three project proponents, namely WNC, UC and UDEC. The committee has approved the project plan and all subsequent project deliverables. It is to monitor the progress against the evaluation criteria developed as part of the project inception report.
- *Develop and launch the communication strategy* including a website linked to the Tanzania Development Gateway and a discussion group that will involve all key stakeholders. The objectives here include knowledge generation and dissemination of strategic analysis, successful practices in other countries in the region, lessons learned, business models, etc.
- *Research the business incubation and entrepreneurship environment* in Tanzania through a needs assessment identifying constraints and issues in a strength-weakness-opportunities-threats (SWOT) analysis and a risk analysis.
- *Conducting thematic technical workshops* focused on business incubation models and their appropriateness to Tanzania and on deploying ICT in business incubation geared toward preparing a business plan for sustainable business incubation.
- *Preparing the business plan* for sustainable business incubation in the country.

Uganda
Grantee: Uganda Industrial Research Institute (UIRI)

Grant: Capacity Building Grant. US $200,000
Contact: Mr. Charles G. Kwesiga, Executive Manager (UIRI)
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Website: http://www.uiri.org/

One of the instruments that the government is using to eradicate poverty is promoting rural industrialization and turning primary or raw products to semi-finished or processed commodities through rural small and medium-sized enterprises (SMEs). The **Uganda Industrial Research Institute** (UIRI), the implementing organization of the project, is to provide assistance to SMEs through partner centers in the country. UIRI offers training and advisory services to rural SMEs to improve their technical and managerial competence. The major focus of this project is small-scale meat processing enterprises. The *info*Dev-funded work program includes introducing the use of information and communication technologies (ICT) in all aspects of business operations to improve their efficiency and competitiveness. The enterprises are in six major upcountry towns: Fort Portal, Soroti, Busia, Arua, Hoima and Kabale. In the short term, UIRI is focused on supporting the enterprises to add value to their products in order to achieve a quality that will meet the demands of regional markets. The overall experience and lessons learned are to be used in later phases as models for other sectors, notably fruit processing and dairy products.

Partnerships
- In the initial phase of the project, UIRI collaborated with the **Food and Agriculture Organization** (FAO), the **Common Fund for Commodities** (CFC) and **GTZ/CIM** (German Technical Cooperation). These organizations contributed funds and/or technical assistance.
- The culmination of this collaboration was the establishment of the regional **Uganda Meat Technology Center** (UMTC) and the facilitation of six small enterprises (partner centers) to engage in meat processing. More than 50 entrepreneurs and members of regional organizations have been trained at UMTC.
- The work program funded by *info*Dev has also attracted technical assistance from **Makerere University Business School** (MUBS), **International Institute for Communication and Development** (IICD), the **German Council for Sustainable Development** (GTZ) and the **German Development Service** (DED).

Project Objectives
The overall aim of the *info*Dev-funded work program is to improve communication, trade, performance and efficiency and to allow for business expansion of the six small partner centers that were originally established under UIRI. The objectives that relate to the use of ICT tools, training for their optimal utilization and monitoring their impact on business processes include:
- identifying knowledge and technology gaps in e-business at the incubator and at partner centers;
- providing and improving UIRI's incubator capacity to impart effective entrepreneurial and business skills through training, self-learning and demonstration;
- strengthening the incubator's capacity to provide technical, business advisory and information services to its clientele;
- enhancing the incubator's capacity in networking with partner centers, graduated companies and other relevant stakeholders such as regional, national and ultimately international incubators or incubator associations;
- bridging the gap between the current business operations of the selected partners and their development potential through innovations and the expansion of market opportunities and expanding the list of participating enterprises;

- enabling the marketing of products and services to existing and potential clients both within and outside the country;
- promoting enterprises that can absorb the excess from agriculture and redundant human resources thus creating employment opportunities through investments.

Activities Completed and Milestones

- *Institutional capacity building:* Training for the project implementation team through a GTZ facilitated and co-funded training program produced e-learning training modules. Members are currently taking part in training to produce modules in food processing and business and entrepreneurial skills that will benefit client enterprises once they have been equipped with ICT facilities. The modules under development blend e-learning with CDs and videos to supplement face-to-face workshops.
- *Development of managerial and technical capacity:* A strategy has been adopted categorizing client enterprises into two groups. The first three functional clients in Fort Portal, Soroti and Busia were to be given priority and assisted with technical and managerial training, ICT equipment and technical assistance. The other three clients in Arua, Hoima and Kabale have experienced management changes and are expected to be ready for ICT intervention after the first year of project operations.
- *Promotion of cost-effective and efficient integration of adequate ICT:* Visits to client businesses were undertaken to establish, among other things, the status of the ICT situation and readiness on the ground. Through this exercise, four members of the project implementation team conducted an assessment/fact-finding mission of the three priority client enterprises.
- *Strengthening small businesses in ICT and non-ICT sectors:* The project team realized early on that ICT development would have to go hand-in-hand with non-ICT sectors if the project was to be successful. Emphasis has been put on developing managerial competence and technical support for the units. The technical staff at UMTC has given guidance on locating business premises, packaging of products and equipment handling, among others. There was also a campaign to develop the marketing strategies of the units to move away from the traditional way of selling their products to the level at which ICT will be critical to their businesses. The strategy to integrate ICT as a tool in these small-scale businesses had to be reviewed in view of the findings about their readiness. Emphasis has therefore been placed on enterprise development focusing mainly on training in best practices in record keeping, financial aspects and other managerial competencies in order to achieve an easy transition to ICT-based management.
- *Partnering:* (1) MUBS: The project team has been working with the Enterprise Development Centre to develop a framework for support that would be suitable to address the managerial needs of the enterprises. (2) GTZ: Members of the *info*Dev project implementation team are undertaking e-learning training to develop modules in business and entrepreneurial skills and food processing that will be the basis for training clients once they have integrated the use of ICT into their businesses. (3) IICD: The institute has continued to offer support and has contributed considerably to capacity building in ICT-related training for the project staff. (4) DED: Their technical advisor attached to the meat department has been instrumental in providing technical assistance through a pilot study to determine the impact on the business operations of better processing equipment coupled with integration of appropriate ICTs.
- *Business incubation development:* In line with the project's need to keep abreast of the global incubation network and with the development of strategies to improve sustainability, representatives of UIRI attended the Global Forum on Business Incubation 2004 in India, traveled to Thailand as part of an ICT for development (ICT4D) delegation, to the United Kingdom and to South Africa to exchange ideas on incubation activities and to seek collaboration.

Highlights
- UIRI has been nominated for the "Best Ugandan E-Business Product" awarded for the World Summit Global Contest.
- UIRI has also initiated policies on industrialization that the government has worked on resulting in a restructuring program for the institute that will transform it into a center for industrial development in the country.

Awareness workshop

Directors meeting / Management workshop

ASIA
(East and South)

China
Joint Grantees: Tianjin Women Business Incubator (TWBI); Yangling Business Incubator Centre (YBIC)

Grant: Operational Grant. US $500,000
Contact: Ms.Wang Yan, Manager, Enterprise Development Department, (TWBI) and
         Zhang Qidong, Director of YBIC
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Proponent Website: http://www.twedc.com/ and http://www.ylibi.com

Through a grant to the Ministry of Finance of the Government of China, *info*Dev is supporting two incubators.

The **Tianjin Women's Business Incubator** (TWBI) is based in Tianjin, China's third largest city, and has the status of a non-profit mixed incubator specializing in assisting female entrepreneurs and fostering growth in the employment of women made redundant by economic reform and restructuring. Established in 2000, it is China's only women's mixed business incubator. It was established with the financial assistance of the Tianjin Municipal Government, which provided the building and some cash investment, the Tianjin Women's Federation and three other local government authorities. The incubator had received earlier technical assistance in the form of business planning consultancies and training from the United Nations Development Programme (UNDP) and has been guided in its establishment and development by consultants from Australia and the United States (US). Incubator managers have traveled extensively abroad to learn from other incubators and have drawn extensively on the National Business Incubator Association website for information. TWBI currently has a building area of 5,000 square meters with 48 on-site tenants and 10 off-site tenants and to date has graduated 4 companies. Directly and indirectly it has been responsible for providing employment opportunities for an estimated 2,000 people, a ratio far higher than developed-country incubators. It offers clients start-up assistance, business training, business mastermind assistance and assistance to graduates, and it facilitates an on-site micro credit program which received seed funding from UNDP and the Tianjin authorities. Operating at full capacity, it has managed to develop near financial self-sufficiency through charges for office rent, business services and external training courses. It has become famous in China as a model and acts as a center for study tours from other incubators and potential incubators in the country.

Yangling Business Incubator Centre (YBIC) is based in Shaanxi Province, Northwest China, and is managed by the Yangling Agricultural High Tech Industries Demonstration Zone and the Torch Centre of China's Ministry of Science and Technology (MOST). Established in 1998, it specializes in agriculture, animal husbandry and bio technology commercialization at the small and medium-sized enterprise (SME) level and has received most of its investment from China's MOST Torch Program and the local Shaanxi Province Science and Technology Bureau, both of which fund high-tech research and development and technology commercialization projects. It currently has four centers with a total building area of 30,000 square meters (one central incubation building of 11,000 square meters), all with broadband access, that serve 56 on-site tenants and 40 off-site tenants. To date, it has graduated 15 companies, 6 in 2004. YBIC developed with guidance from the government (MOST) as well as through knowledge gained from study tours to existing incubators including those abroad (US and Europe), training by existing incubators and networking within China.

*info*Dev funding has been used to train incubator staff and tenant entrepreneurs, to help develop model enterprises for broader enterprise promotion, to install an information and communication technology network throughout the center, and to help tenants develop products and absorb technology, know-how and new skills.

Activities Completed and Milestones

TWBI has used the grant from *info*Dev to weave a broad network of alliances.
- Tianjin Telecommunications Co., the local subsidiary of China NetCom, donated network equipment and services for the free installation of a 10 megabit per second fiber optic connection and a wired/wireless local area network at TWBI.
- eNorth, a media company affiliated with the Tianjin municipal government, donated use of facilities and staff for the training of TWBI staff, clients and outside entrepreneurs in information and communication technologies (ICT).
- The ICT Dissemination Office of the Tianjin municipal government provided a grant equivalent to US $50,000 for establishing an ICT training center within TWBI. In addition, the ICT Dissemination Office offered support and good advice during the implementation of the *info*Dev-funded work program.
- The Finance Department of the Tianjin municipal government donated the equivalent of US $100,000 for setting up a revolving fund to be used to make low-interest loans to the winners of the annual business plan competition sponsored by TWBI. This competition was initially conceived as part of TWBI's *info*Dev project. It has already been held twice and has been instrumental in creating a great deal of favorable publicity and attracting several outstanding businesses to TWBI.
- TWBI has been actively disseminating its experience and establishing partnerships beyond the scope of its *info*Dev project. The Tianjin municipal government, the Tianjin Women's Federation and TWBI have been working closely with the Gansu Provincial Government and the Gansu Women's Federation to establish a women's incubator in Gansu. TWBI has also been working with the Gansu Women's Federation to train rural women in Gansu for employment in the service sector in Tianjin. Assistance is also being provided to the Jinan and Dongli District Women's Federations to start incubators for women there.
- TWBI has established advanced ICT infrastructure and has provided training to staff, clients and female entrepreneurs in the basic use of ICT and applications of ICT to small business management.
- It successfully conducted two major business plan competitions and set up a venture fund to award winners of the competition with low-interest loans on accessible terms.
- It implemented a "pre-incubation" facility for very early stage businesses and established a new website with an interactive incubation forum and virtual incubation capabilities.

YBIC has seven activities planned for the project.

A. Training Programs
- Abroad: Send YBIC staff and client enterprises to US/European countries for training in (a) government support to agriculture; (b) agricultural processing stages; (c) access to credit and financial assistance and approaches for agro-businesses; (d) high-tech enterprise growth and (e) cooperation with US/European agro-businesses.
- Domestic: Send YBIC staff to coastal areas and developed regions in two groups to learn on-site venture creation and provide lectures and consulting for YBIC staff and client enterprises and short-term training for YBIC staff.
- Conduct and attend seminars and workshops for YBIC staff and client enterprises.
- Provide training for entrepreneurs via Internet by setting up a satellite system.

March 2005. TWBI holds a free-of-charge training course in ICT to create and develop women's businesses and enterprises.

B. Capacity Building and Enterprise Development

- a shared biology laboratory with instruments and equipment;
- a multifunctional hall for training;
- an entertainment center for cultural and sporting activities.

C. Support for Clients' Enterprises

- Subsidize research and development in high-tech enterprises.
- Subsidize international talent exchanges.

TWBI has become a training center certified by the International Labor Organization and the Ministry of Labor and Social Security. It has trained 400 entrepreneurs.

D. Dissemination of New Technologies

- Organize clients to attend exhibitions and fares.
- Publicize clients' technologies and products in the media.
- Establish a showroom for clients' technologies and products.
- Subsidize dissemination and application of clients' products in agricultural manufacturing.

E. Develop a Portal

- hardware;
- publicity and information exchanges;
- software.

F. Support for Innovative Client Projects

- Appraise technological achievements.
- Apply for patents and register trademarks.
- Sponsor national/international talent exchanges.

G. Project Evaluation

- Evaluate project implementation and its social impacts.

Indicative Portfolio of TWBI

Name of Client Company	Description of Business
Zhongkejianye Network Co.	IT systems integrator in the business of providing systems design, installation, analysis and maintenance.
Tianjin Sai'ou Business Co.	Sales agent for brand-name electrical household appliances.
Tianjin Branch, Jinming Farm Products Co.	Green farming products, sales and trade.
Eastern Iris Medical Technology Research Center	Provides health consultation and diagnosis by Iris-based health testing technology.
Huanhao Science Co.	Development and manufacturing of water purification equipment.
Yinghe Food Trade Co.	Food distributor selling most of its products through supermarkets.
Bandao Foods Co.	Makes flash-frozen sticky corn.

India
Grantee: IndiaCo.Com Private Limited

Grant Amount: Operational Grant. US $400,000
Contact: Name: Rahul Patwardhan, President and CEO
Email: rahul@indiaco.com
Proponent Website: www.indiaco.com

IndiaCo is a business and technology incubator and start-up resource center with operations in the geographic proximity to the innovation clusters in the Pune-Mumbai corridor. It assists early stage companies by providing business infrastructure and office space, mentorship and coaching, and assistance in raising private equity capital. The goal is to increase the success rate of start-ups by operating a network that facilitates and motivates the use of local resources to commercialize available technologies that create value in the marketplace. Member companies remain in the incubator for up to two years and are expected to show progress with an approved business plan.

Project Objective
As a business incubator, IndiaCo iClusters, manages incubation centers for high technology startups under the IndiaCo umbrella. Its unique process of nurturing startups has received support from *info*Dev under its Incubator Initiative. Currently IndiaCo iClusters works with over 100 technology companies worldwide and provides their incubate companies an environment conducive for the development of ventures that are at the conceptual or at the start-up stage. IndiaCo's incubation work has produced an impressive track record to date that includes 19 successful exits; 2000+ Jobs created; $300 million+ market capitalization, including an investment from Duke Equity; and 7 listed enterprises.

IndiaCo functions as a venture creation engine in addition to being a resource center and incubator for high-tech startups and early stage companies. It focus area is wide.

- **Enterprise Software / Service -** Companies developing software products / platforms for use by enterprises, and such software would reside on enterprise class servers or desktops.
- **Infrastructure -** Companies that are inventing technologies / products that provide a basis for the development of applications and products and are not focused on a specific market vertical.
- **Wireless -** Companies that are developing applications for the wireless internet or building infrastructure to support the proliferation of wireless infrastructure.
- **Internet Applications -** Companies that are building applications that leverage the internet: Application Service Providers, e-Business Exchanges and Engines.
- **Other Hardware / Bio-Med / Health Sciences -** Companies that are developing hardware devices / transducers for instrumentation / testing / measurement and analysis/Health sciences.

Partnerships
IndiaCo specializes in mobilizing the resources that are required to enable innovation through the lifecycle of an enterprise. **Duke Equity Partners** is a private equity group that focuses on providing value and development to public and privately held enterprises at all stages of growth and evolution.

Activities completed and some milestones

Information Infrastructure: Improving facilities for better performance of incubator and tenant companies:
New Infrastructure
- broadband connectivity and leased lines from PSTN for handling increased data and voice communication needs

Extend And Upgrade Existing Facilities

- computing facilities (servers, nodes, software) for enabling multi-tasking operational needs
- fiber-optic communication network and utilities (power conditioning, back up power sources)
- subsidize infrastructure, connectivity costs to tenant companies.

Enterprise Resource Planning: Develop and implement new systems services, organizational transformation and training for enabling e-business
- international experts services proposed in understanding site specific applications, developing an appropriate business model for IndiaCo operation and advice during implementation
- inducting a system specialist in the staff responsible for management, operation, maintenance of the system and providing technical assistance to various users

In-house Business Processes: Improving business management and operational skills of incubator and its tenant companies to integrate applications of ICTs in their business cycles through
- training programs for modern business management techniques and practices; operational skills development; strategic business planning and networking for strategic alliances
- overseas training programs and study tours; special programs on ICTs application for in house business process improvements and IT for incubator management
- enhancing website for ICT dissemination

Partnerships and Outreach Functions: Improving support to tenant companies in areas of networking, developing partnerships, marketing, intellectual property and overall operational support:
- networking with R&D organizations, academic institutions, other incubators
- creating intellectual property assistance cell to provide assistance on IPR issues
- developing partnerships and building-up strategic alliances for business growth
- market development assistance (research, marketing strategies, promotional activities)

Content And Applications Creation Through A Website: Enhancing content and creating an interactive website with public and password protected restricted domain
- development of a technology showcase that is to be a searchable database of intellectual property and their technology plans; confidential due diligence reports written by IndiaCo associates on each technology; presentations by scientists at milestone events
- creating a Startup Road Map as a guide for startups during early stages of growth with an online reference library of related business development materials supplementing other on-line resources

Impact Evaluation: Assessing the overall impact of the ICT-enabling program on performance of tenant companies and the incubator through an evaluation study

Portfolio Description and Economic Model
Number of full-time incubation employees: 6 full time employees
Number of technology enterprises in the portfolio: More than 100 tech enterprises worldwide
Services Offered: Mentoring, Structured milestone approach, Operational support, Office space
Other Performance Indicators: 19 successful exists, 2000+ jobs created, 7 listed enterprises
External and internal selection rate: Varies between 10% to 15 %

India
Grantee: Tiruchirappalli Regional Engineering College, Science & Technology Entrepreneurs   Park
(TREC-STEP)

Grant Amount: Operational Grant. US $300,000
Contact: Mr. R. M. P. Jawahar, Executive Director
Email: jawa_ts@yahoo.com
Proponent Website   http://www.trecstep.com/

Tiruchirappalli Regional Engineering College - Science and Technology Entrepreneurs Park (TREC-STEP), is the first Science Park promoted in India since the year 1986, to foster knowledge based ventures of young science and technology entrepreneurs. The promoters of TREC-STEP include the Department of Science and Technology; Government of India, Government of Tamil Nadu, Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Finance Corporation of India (IFCI), state financial and development organizations such as Tamil Nadu Small Industries Development Corporation etc. along with the premier educational institution - Regional Engineering College Tiruchirappalli, now renamed as National Institute of Technology. TREC-STEP is situated in 200,000 square meters of land, between the Regional Engineering College, Tiruchirappalli and Bharat Heavy Electricals Limited, and is right on the industrial area that houses a nationally reputed SME Cluster of over 300 fabrication industries. These locational advantages provide a unique industrial and academic ambience for TREC-STEP to promote knowledge-based ventures.

Project Objective
The *info*Dev funded work program has been planned as a flagship incubation initiative in the country, for other incubators to emulate. With its good track record of Best Performing STEP in India, TREC-STEP, is to implement a series of ICT enhanced incubation initiatives for developing synergies. The *info*Dev World Bank project 'Developing ICT Synergies for Incubating Start-ups' commenced on 1st December, 2004 with the aim to develop regional competencies to assess, network and utilize global performance standards, markets and opportunities through start-up ventures for generating jobs and wealth in the region. All activities undertaken as part of the work program funded by *info*Dev is to create a synergistic effect in venture creation. These include:
- Developing a web portal for business incubation
- Capacity-building through training
- Developing networking and linkages, incubation facilities, incubation programs and
- Documentation & dissemination platforms

Partnerships
TREC-STEP has a vast resource network-base consisting of various organizations. This includes the Department of Science and Technology (Government of India), Confederation of Indian Industries (Technology Development Board and Technology Transfer Network), Small Industries Development Bank of India (SIDBI), Small Scale Industries Association, Indian Railways, Bharat Heavy Electricals Limited, UNIDO, United Nations Asia Pacific Center for Technology Transfer, and the British Council.

Activities completed and some milestones
The overall objectives of the *info*Dev funded work program include developing regional competencies to assess, network and utilize global performance standards, markets and opportunities through start-up ventures for generating jobs and wealth in the region. To help the process, the implementation plan for the project has been prioritized as below:
- *Documentation for TREC-STEP and for the Project*: The documentation Work is planned in five distinctive packages (i) Documentation for TREC-STEP Incubation Concept, Incubation Facilities

and Programs; (ii) Documentation at the initial stages of the project highlighting inputs and plans; (iii) Documentation at the final stages of the project highlighting outputs and achievements; (iv) Project Brochure at the initial stage and (v) Project Brochure at the final stage – hand copy for broader target group circulation. Although the documentation process is underway and the initial work is progressing, majority of the planned activities here are to start during incubation programs and be completed along with the project or even continue after the project to document the effects.

- *Capacity building through Training in Business Incubation & Management, IT and Quality Business Excellence Model*: ICT Training schedules have been finalized by the IT team of TREC-STEP. It has been proposed that two training programs for other Indian business incubator managers be organized at (i) JSS-STEP, JSS Academy of Technical Education, Noida and (ii) International Crops Research Institute for the Semi-Arid Tropic's technology business incubator (ICRISAT-TBI), Hyderabad, before May 2005 and December 2005 respectively. A minimum of 80 business incubator managers are planned to be trained in these two programs out of the 100-targeted Business Incubation Managers. The remaining 20 business incubation and management training is planned to be taken through other organizations including the Confederation of Indian Industries (CII). For Quality Model training programs, it has been planned to undergo the training programs in People Capability Maturity Model (PCMM) for other future initiatives.

- *Start-up Support Centre*: Initial incubator requirements and models in terms of utilities for start-ups have been discussed with engineers and architects and suitable plan has been finalized to convert the physical incubation space available at TREC-STEP nursery shed into fully furnished 10 to 15 incubation modules. TREC-STEP in collaboration with the Software Technology Parks of India has established a satellite earth station in its campus to provide the global connectivity for ICT ventures. The process of augmenting TREC-STEP computing power with new computer systems and software has commenced. Necessary hardware specifications have been laid down, enquiries called for and comparative statements prepared. It is also planned to establish a wire-free intranet local area network facility to create paperless office environment.

- *Design of Incubation Program*: The Incubation programs are planned to provide entrepreneurs with comprehensive outlook and inputs for start-up venture creation and management. It is also planned to provide them with an invaluable opportunity to develop networking with experts and others. Four incubation programs are designed to train 100 potential entrepreneurs of 25 in each program. It is planned to have 10 days classroom training with a three months focused ICT enabled incubation support program. The manual for Business Incubation Program is to be prepared both in soft and hard versions to facilitate further dissemination to other incubators and development organizations.

- *Incubation Web Portal*: The planned web portal is to be designed to allow running scenarios and breaking even simulations, cash flow simulations, and investment appraisals simulations. Having identified the applications, TREC-STEP is in the process of procuring applications. These applications are to be studied and discussed by the team of experts constituted to design the proposed ICT enabled Business Incubation model.

Indonesia
Grantee: Koperasi Starcall Wartelnet

Grant: Operational Grant. US $250,000
Contact: Mr. Eddie Cendana, Project Manager
Email: eddie@starcallwartelnet.com

Koperasi Starcall Wartelnet is a non-profit private cooperative communication organization established in 2002 and based in Jakarta to provide information and communication technology (ICT) support and related advisory services to outsourced small and medium-sized enterprise (SME) clients through their multimedia-based telephone and business service franchised kiosks (under the name Starcall). It is not a standard incubator, but it has identified a way to bring ICT to a large number of rural and suburban areas in Western Java. Through its network of kiosks, it has successfully served micro-enterprises and SMEs that had no access to modern communication facilities and business services and in doing so has expanded SME employment. It has also been successful in educating micro and SME entrepreneurs in the benefits of using ICT to deliver better and more cost-effective services. The Starcall central building has an area of only 200 square meters with no incubator tenants, but this operation services 105 off-site clients (ICT/ business service kiosks) and significantly enlarges ICT networking to outer suburban and rural communities. To date, 10 graduates have gone on to establish larger premises elsewhere but still network with the Jakarta center.

Project Objectives
The objectives of the *info*Dev-funded work program are to:
- build up the institutional, managerial and technical capacity of Koperasi Starcall Wartelnet to foster an additional 60 pre-qualified SMEs to manage and operate multimedia-based telephone kiosks (Wartels) in three implementation sites (Bali, Central Java and West Java);
- generate and disseminate field experience and best practices in business incubation of SMEs involved in providing ICT services in suburban and rural communities;
- develop greater connectivity and networking abilities to catalyze further investment and support from the private sector and other domestic and international organizations;
- assist in creating community wealth by promoting the emergence and development of ICT enterprises and ICT-enabled firms.

Partnerships
Koperasi Starcallwartelnet was established by **PT StarCall Siskom**, **PT Texascom Hitek System** and associated networking partners to institutionalize incubation to foster SMEs. PT StarCall Siskom and PT Texascom Hitek System are part of a group of companies consisting of a 14-year-old network system integrator/turnkey solution provider with over 150 professionals, a broadband Internet service provider, a network access point provider, an ICT product distributor, an Internet protocol phone provider and a VSAT service provider in Singapore.

Planned Activities and Milestones
The completed work program consists of (a) an institutional development program, (b) a capacity building program and (c) an expansion program.

The institutional development program consists of the following activities:
- enhancing organizational infrastructure;
- establishing a portfolio of business incubation services;
- establishing a portfolio of suitable tenant companies;
- developing a detailed work plan for project activities;
- creating a website on incubation practices.

The capacity building program consists of the following activities:
- developing and customizing toolkits;
- developing workshop modules;
- developing a website;
- conducting on-the-job training for the incubator's management;
- conducting workshops for tenants and candidates;
- networking;
- conducting evaluations for improvement.

The expansion program consists of the following activities:
- developing seminar modules;
- organizing the seminar;
- developing campaign material;
- performing the campaign;
- developing web-based courses
- conducting evaluations and recommendations for replication.

Indonesia
Grantee: Broadband Network Service

Grant: Capacity Building Grant. US $200,000
Contact: Kurnia Tugiono, Chairman
Email: kurniat@bns.co.id
Website: www.bns.co.id

Broadband Network System (BNS) is a registered private enterprise founded in 2001 in Jakarta. In addition to office space, facilities include a state-of-the-art broadband network servicing major cities on Sumatra, Java, Bali and Lombok islands. **PT Broadband Network System** is a holding company consisting of several information and communication technology (ICT) companies with 13 cumulative years of experience as network system integrators, turn-key solution providers, broadband Internet service providers, Internet protocol (IP)-based multimedia operators, fiber and VSAT link providers and operators (with a licensed microwave Batam-Singapore link) as well as IP phone operators. Using the financial and technical resources from *info*Dev and the Indonesian government, BNS is to consolidate its operations to provide quality, self-sustaining ICT services by enhancing its organizational infrastructure. This will include improving the efficiency, performance and outreach of its business incubation services by building and more effectively using broadband-enabled ICT and e-service solutions.

Project Objectives
The objectives of the *info*Dev-funded work program are to:
• leverage broadband-enabled ICT and e-service solutions as cost-effective engines to improve BNS operations, performance and prospects for long-term sustainability in delivering quality business incubation services;
• enhance organizational infrastructure and implement ISO-9003;
• enhance the quality, coverage and impact of value-added business incubation services to broadband enabled e-service providers to manage limited resources and control risks to improve performance and competitiveness;
• cooperate with local universities in planning and providing business incubation services and technology transfer to domestic entrepreneurs and small businesses;
• assist startup, e-service innovative, small businesses to grow from subsistence to independence and generate employment and local economic development through accelerated e-service development and ICT-enabled production processes;
• foster alliances and partnerships to build capacity for ICT-enabled business incubators and small businesses at the national and regional levels to face the challenges and grasp the opportunities of the emerging global information economy;
• generate and disseminate lessons learned and successful practices in the use of ICT for business incubation, enterprise innovation and business competitiveness.

Planned Activities and Milestones
The main activities to be undertaken under the *info*Dev-funded work program are related to (a) core business development, (b) training, (c) networking and (d) marketing.
• Transfer knowledge and training for improving business management and enabling e-business capabilities.
• Procure the consulting and staff services required to establish, enhance or expand the business incubation capabilities of clients.
• Consolidate the business plan.
• Do a needs assessment of tenant companies, particularly for ICT-based services.

- Improve and innovate incubation services and better definite business lines.
- Improve the managerial and operational skills of the incubator and of tenant companies, especially for integrating ICT and e-services throughout.
- Develop and/or enhance the online presence of the incubator and its clients and enable e-learning services for clients and outside users.
- Strengthen the networking, marketing, e-business development, export and overall operational capabilities of tenant companies.
- Focus technical assistance on tenant companies when they are ready for graduation.
- Monitor and evaluate the impact of project activities and assess the progress of the incubator and its clients.
- Generate and disseminate knowledge particularly in the form of strategic analyses, case studies, lessons learned, business models and successful practices, especially those ICT-related.

Malaysia
Grantee: Universiti Teknologi Malaysia

Grant: Operational Grant. US $250,000
Contact: Mr Shukri Hashim
Email: shukri@webmail.bip.utm.my
Proponent Website:
http://web.utm.my/bip/index.php?option=content&task=view&id=29&Itemid=55&limit=1&limitstart=1

The Universiti Teknologi Malaysia (UTM) in Johore established and funded three non-profit technology incubators in its Technovation Park in the period 1997–2000. They are the Industry Centre (1997); MARA Technology Entrepreneurial Complex (2000) and the UTM-MTDC (Malaysia Technology Development Corporation) Innovation Centre (2000). The UTM incubators are of various types. The Industry Centre has mixed-use/technology, the MARA Complex is for postgraduate ICT commercialization and the UTM-MTDC incubator specializes in commercializing research and development. UTM's objectives are to enhance high-tech entrepreneurship in southern Malaysia and in doing so make UTM a world-class university. The total incubator building area in the three centers is 2,370 square meters (Industrial Centre 1,592; MARA 290 and UTM-MTDC 488). There are 35 on-site tenants (Industrial Centre 15; MARA 15; UTM-MDC 5), and the number of graduates to date is 24 (Industrial Centre 3; MARA 18; UTM-MDC 3). The incubator complex provides assistance to tenant clients through seminars/training, forums, interviews, and grants through a commercialization fund from UTM.

Project Objectives
The main goal is to help in promoting business innovation and private sector development by improving the performance of business incubation activities.

Partnerships
UTM has contributed $5,216,500 for the provision and maintenance of the incubation facilities and ICT infrastructure. UTM's partners, **MARA** and **MTDC**, have also contributed $3,375,000 toward the incubation and entrepreneurial training facilities and its programs.

Planned Activities and Milestones
- In July 2003, the project committee organized a workshop to elaborate the implementation of the program. The workshop recommended three programs: (1) training, (2) development of a business center and (3) server farm programs.
- *Training***:** The training programs will help clients in many ways such as educating entrepreneurs, developing business competency, identifying entrepreneurs with business experience and creating a business and entrepreneurial mind set. Among the main activities are the mentoring programs, certificate programs, marketing and business plan strategy workshops, study tours and financial planning courses.
- *Business Center:* The functions of the business center are to provide facilities like Internet lines, fax machines, computers, software, printers, copiers etc. and to encourage business contacts and networking through seminars, conferences and courses to create a support system for clients.
- *Server farm:* The server farm is to provide a portal system that helps clients to promote their products, develop marketing strategies and business activities, and enhance commercialization. Independent network infrastructure will help clients with reliable Internet connections.

Mongolia
Grantee: InfoCon Company, Ltd

Grant: Planning Grant. US $100,000
Contact: Ms. Tsetseg-Ulzii Yadamsuren, Project Coordinator
Email: batpurev@infocon.mn
Proponent Website: http://www.infocon.mn/eng/index.php

The activities during the planning phase will build a solid foundation for establishing a business incubator. The proposed **New Path Incubation Center** will be a joint initiative of the ongoing, highly productive relationship between InfoCon, the Mongolia Development Gateway and the Mongolian Academy of Science. The Mongolian Chamber of Commerce will also be involved, and the Ministry of Infrastructure will offer official recognition and support. In the medium term, the incubator will engage a number of partners from the private sector to strengthen the capacity and viability of the project.

Project Objectives
The primary goal is to create a business incubator that will facilitate dynamic exchange, foster research and development and promote the knowledge and use of information and communication technologies (ICT) among Mongolian businesses. The main activities during the planning phase are to include an extensive needs assessment, strategic and business planning, creating partnerships, establishing the incubator's infrastructure and designing a formal monitoring and evaluation mechanism.

Partnerships
Implementing organizations are **InfoCon Company, Ltd**, the **Mongolia Development Gateway**, the **Mongolian Academy of Science**, and the **Mongolian National Chamber of Commerce and Industry**. The role of InfoCon is to oversee the implementation of the project and to foster and maintain strategic partnerships. The Mongolia Development Gateway is to contribute its expertise and experience in ICT development and training and its ability to facilitate the integration of ICT and sound business practices into participating organizations. The role of the Mongolian Academy of Science in the New Path project is to serve as the link between Mongolian businesses and research and development information and outcomes.

Planned Activities and Milestones
- *Extensive needs assessment:* This process will investigate the current status of technology transfer in Mongolia and will assess the outcomes of these activities. It will look at the potential for new opportunities and how they can best be exploited. The assessment may also feature a financial viability study and risk assessment. A collaborative approach will be taken involving members from industry and the government exploring their perspectives on the strengths, weaknesses, opportunities and threats (SWOT analysis) relating to new technology businesses in Mongolia.
- *Strategic and business planning:* A strategic business plan will be developed in accordance with the outcomes of the needs assessment and in consultation with the two main proponents of the project. The business plan will feature a full implementation strategy, updated goals and objectives, a risk minimization strategy, forward planning, a comprehensive internal and external ICT strategy, monitoring and evaluation processes and a well-defined exit strategy.
- *Support and partnership building:* Both the Mongolia Development Gateway and the Mongolian Academy of Science already form part of a wide ranging network of Mongolian organizations dedicated to the development of both ICT and non-ICT industries in the country. During the planning phase, these relationships will be examined, and the potential benefits to the projects will be assessed. This process will expose any shortcomings or opportunities to create new links. Additional financial and in-kind support will be sought from both new and existing partners.

- *Establishing incubator facilities:* Arrangements for physical space and appropriate infrastructure will be finalized. Based on the identified needs, the center will be set up and the recruitment of internal staff and clients will commence.
- *Monitoring and evaluation:* There will be internal and external monitoring and evaluation. Internal monitoring will be carried out by the project coordinator to ensure the timely delivery of activities and the achievement of goals and objectives. External monitoring will be conducted by an experienced independent institution. The lessons learned will be applied. At the initial stages, some key performance indicators and the main goals and objectives will be developed. The progress of the project will be measured against these and will be reported both in the quarterly and final reports.
- *Development of an online portal:* An incubator website is to be developed to communicate the goals, objectives, services and products offered to beneficiaries; to introduce partner organizations, participants and achievements of the project and to regularly update activities implemented and progress achieved. The site is to be designed in a portal format with the potential for each participant to develop his or her own sub-portal. The site is to also feature some e-procurement and e-commerce functionalities. This will allow potential investors to post funding proposals and incubator participants to advertise their research and production results. Moreover, it will have a component on toolkits and guidelines for small and medium-sized enterprises to enhance their businesses.

Nepal
Grantee: Information Technology Professional Forum (ITPF), Nepal

Grant Amount: Planning Grant. US $100,000
Contact : Mr. Suresh Kumar Regmi, President
Email: skregmi@yahoo.com
Proponent Website: www.itpfnepal.org Project Website: http://www.incubation.org.np/

The **Information Technology Professional Forum (ITPF)** has been awarded a grant for the planning phase of Business Incubation System in Nepal. ITPF, with the cooperation and support of stakeholders like the High Level Commission for Information Technology, His Majesty's Government of Nepal, the Nepal Chamber of Commerce, Kathmandu Engineering College, Kathmandu University and others, will conduct a needs assessment, in-depth research and analysis and planning for the provision of business incubation services to promote business innovation and private sector development. The business incubation services will focus on the integration and use of information and communication technologies (ICT) into the development of small and medium-sized enterprises (SMEs) and micro enterprises (MEs).

Project Objective
The ultimate goal is to build local capacity in the targeted business communities, to raise awareness, to promote the appropriation and utilization of ICT by local entrepreneurs and small businesses as tools to address their short- and long-term development goals and to facilitate the creation of a global incubator network for exchanging ideas and formulating best practices and lessons learned for designing and implementing business incubators in developing countries. The aim is to mobilize resources and build capacity in organizations in developing countries based on available global experience and best practices, to catalyze further investment and support from domestic and international organizations and to document experiences in utilizing ICT to help *info*Dev and the recipient better understand the impact of ICT on establishing business incubators in developing countries.

Partnerships
ITPF is expected to partner with other private or public institutions; with SME development and innovation programs with venture capital investors, financial institutions, universities, enterprise clustersand business associations and with NGOs. Two meetings were organized with initial partners namely ITPF, the High Level Commission for Information Technology, the Nepal Chamber of Commerce, Kathmandu Engineering College and Kathmandu University.

Planned Activities and Milestones
This planning project is designed to be completed in nine months. The first five months are to be allocated to research and consultation. Programming and consensus building (Business Incubation System design) are scheduled to begin in the fourth month and will take five months to complete. Awareness and promotion campaigns to benefit prospective stakeholders are also to be initiated with the planning process and will continue beyond the project period.

- Meetings were held with government, private and civil society organizations and with professionals who have been involved in SME/ME development, enterprise promotion, entrepreneurial development and business incubation.
- A meeting of stakeholders was organized on August 24, 2004 to disseminate the concept of business incubation to the larger community, to identify the immediate beneficiaries of this initiative and to recognize the partner(s).
- A steering committee was officially formed with representation from government institutions including the High Level Commission for Information Technology, the Department of Cottage and

Small Industries, the National Planning Commission and the National Information Technology Centre. Other participants included the business association of the Nepal Chamber of Commerce, Tribhuvan University, Kathmandu University, ITPF and the Incubator Initiative Nepal project team. The steering committee is chaired by a representative from the High Level Commission for Information Technology.

- After several rounds of discussion and deliberations among initial partners and in the ITPF executing committee, the Incubator Initiative Nepal project submitted an inception report to *info*Dev on September 7, 2004. Planned activities are the following.

  1. Participate in activities promoted by iDISC and *info*Dev and contribute to knowledge-sharing activities at the local and international levels, particularly with other incubators and emerging enterprises.
  2. Establish strategic partnerships with other key institutions locally and in other countries to provide complementary and cost-effective products and services, knowledge, networking, market integration, innovation, community outreach and financial support.
  3. Establish a long-term, dynamic, easily accessed source of knowledge on best practices in ICT-enabled business incubation that supports entrepreneurship development and innovation with a special emphasis on poverty alleviation and social and educational advancement.
  4. Create a repository of business practices and needs, drawing from experiences in the country and elsewhere.
  5. Network and establish partnerships to support the analysis, planning and testing of new incubator approaches in challenging private sector environments.
  6. Document experiences and best practices in planning and establishing an ICT-enabled business incubator, creating strategic partnerships and attracting additional financial resources from both private and public resources.

Philippines
Grantee: Ayala Foundation

Grant: Operational Grant. US $400,000
Contact: Victoria P. Garchitorena
Email: garchitorena.vp@ayala.com.ph
Proponent Website: http://www.ayalafoundation.org/
Project website: http://www.upayalatechnopark.org.ph/

The **Ayala Technology Business Incubator** (TBI) is part of the University of the Philippines (UP) Ayala Technology Park project to develop technology through information and communication technology-based entrepreneurship. The incubator, established in 2001 at the UP Diliman Campus Science and Technology Park, Quezon City (part of Metro Manila), is a non-profit information and communication technology- incubator encouraging new enterprise start-ups and business growth in (1) Internet technology; (2) network technology; (3) wire and wireless communication; (4) data communication; (5) digital signal processing; (6) algorithm development; (7) software design and development; (8) hardware design and development and (9) microelectronic design. Its overall objective is to promote government-academic-industry/ private sector collaboration and forge more support for small and micro enterprise development in the Philippines.

Project Objectives
The work program funded by *info*Dev is to include the following activities:
- developing human and institutional capacity at the community level by promoting the wider and more efficient uses of information and communication technologies (ICT) for local business innovation and their application for economic growth;
- stimulating economic activity, generating employment and leveraging ICT to facilitate the integration of national and local business communities into the global economy;
- providing a strong demonstration effect leading to improved ICT policies that encourage investments in local small business communities;
- promoting equality and diversity in business development by actively engaging disadvantaged groups in incubation including women, people with disabilities and minorities. Special attention is to be given to the needs of small entrepreneurs who face challenges.

Partnerships
There have been numerous relationships forged across the public and private sectors:
- partnership with the **Philippine Emerging Startups Open, Inc.** (www.mit.edu/peso/) in July 2005 to help build an entrepreneurial environment through business plan competitions, business plan writing workshops, mentoring and enterprise management seminars;
- collaborative effort with the **Department of Trade and Industry** (DTI) specifically the **Bureau of Small and Medium Enterprise Development** for incubator services for target consolidators or accelerators of micro and small enterprises nationwide (Mindanao Products Showroom, Association of Negros Producers, Paete and Pakil Artisan Wood Carvers and the Bantog Farmers Cooperative);
- collaborative effort with the **Philippine Economic Zone Authority** to register the facility as an information and technology zone to enjoy the incentives provided;
- partnership with the **Commission on Information and Communication Technology** to (1) adopt a project initiative on helping small and medium-sized enterprises (SMEs) in ICT and (2) adopt a project initiative on eLegis (reference system) for local government units (LGUs)
- regular exchange activities with DTI to identify how best to present SME capabilities in the ICT and electronics sectors ;
- partnership with the **League of Vice-Mayors of the Philippines** and **Vice-Governors League of the Philippines** to implement eLegis as a reference system for business development and investment regulations in LGUs nationwide.

Activities Completed and Milestones

Activities to be undertaken are in connectivity and networking, business resource inventory, service clinics, training; idea exchanges, "biz dev" plan competitions, entrepreneurial learning labs, Philippine network of business incubators and accelerators, sharing best practices, needs analysis, awareness raising and policy advocacy. Target markets include technology start-ups, research and development service providers, and knowledge-based activities. TBI now consists of a 520 square meter building with 8 tenants, but there is a plan for an expanded facility to offer more space. It is managed through a steering committee and a project management team.

Indicative Portfolio of Ayala Technology Business Incubator

Name of Client Company	Description of Business
Fluxion, Inc	One of the leading platform developers and solution providers for mobile technology in the Philippines. It is the first beneficiary of the incubation program of iAyala's Ideafarm, a former locator at TBI.
OptiServe Technologies, Inc	A company involved in the design, development and integration of custom-built application software for education, LGUs and business.
I-Gate Solutions and Technologies Corp	The company produces environmental control units for telecom companies. It is involved in the development and manufacture of automation products for cell site applications.
Integrative Learning	This is a "knowledge-systems integration company" and a content innovator that provides a pioneering e-learning venue offering the first master's degree program for teachers in the Philippines and other developing countries. It uses the multi-intelligent distance learning protocol as a standard for distance education design and delivery.
Astra (Philippines), Inc	It develops software and hardware solutions for export, mainly to Japan. It also engages in research and development in areas such as optical character recognition, mobile and wireless computing and entertainment software.
Systema Computer Solutions Corporation	A software company that delivers business solutions using innovative and cost-effective information technologies. Systema is in partnership with 10art-ni Corporation, a Japanese web system consulting and development company, Systema plans to conduct research and development pertaining to 10art-ni's Web Work Bench Software, an application framework product for Java development.
Java Research and Development Center	A 4-way collaboration among Mirant Foundation, Ayala Foundation, Sun Microsystems and UP, it is an incubating facility for small enterprises.
Center for Economic Policy Research Center	The center has been designated as the Asian focal point for Scientist for Health Research and Research for Development (SHARED), a web-based knowledge management approach designed to foster networking among health scientists in developing and developed regions. The center is in partnership with UP Manila Information System, Philippine General Hospital, the National Institute of Health and the Philippine Center for Health Research and Development.

Sri Lanka
Grantee: Sri Lanka Technology Incubator (Pvt.) Limited

Grant Amount: Operational Grant. US $300,000
Contact : Ms. Thusitha D.Pilapitiya, Chief Executive Officer
Email: info@ConceptNursery.com
Proponent Website: http://www.conceptnursery.com/

The Sri Lanka Technology Incubator (SLTI) is an ICT technology incubator, established in July 2000 in Colombo as a small non-profit company operating under the title of the **Concept Nursery Expansion Program.** Its business development aim is to strengthen and encourage entrepreneurship and stimulate the adoption and consumption of information and communications technology (ICT) in Sri Lanka by growing and franchising ConceptNursery to provide opportunities for entrepreneurs throughout the country to establish and grow viable ICT related ventures; develop programs to assist SME enterprises to adopt and utilize ICT; develop and promote technology entrepreneur programs for women; and disseminate best practices in business incubation including the exchange of entrepreneur experiences and incubator management. The total building area of the ICT incubator is 325 sq. meters, housing 10 ICT-enabled software tenants employing 50 staff. There are also two off-site tenants, and three more are about to be launched. The incubator has graduated 20 clients over the past 3 years, mainly due to rapid expansion of their business and staff numbers. The incubator provides assistance to clients with financial assistance by arranging regular forums and meetings involving venture capital investors and tenants (through one of the incubator's partners (NextVentures), a venture capital company. This company is used to help develop tenants' business plans, finance applications, other documentation, and undertake due diligence.

Project Objective
The ConceptNursery Expansion Program is intended to strengthen the incubator and broaden its scope of activities to encourage entrepreneurialism and stimulate the adoption and consumption of information and communications technology (ICT) in Sri Lanka. The objectives include:
- Grow and franchise ConceptNursery to provide opportunities for entrepreneurs in Sri Lanka to establish and grow viable ICT related ventures
- Develop programs to assist small and medium sized enterprises in Sri Lanka to develop and/or adopt and consume ICT
- Develop and promote technology entrepreneur programs for women
- Disseminate best practices in business incubation including the exchange of entrepreneur experiences and incubator management
- Ensure sustainability of incubator activities by increasing the level of operational efficiency and the development of new revenue streams to help fund expansion activities

The ConceptNursery intends to help establish a scalable environment that would be conducive to entrepreneurialism, research and development of new technology and solutions, and the maturing of the ICT sector. Using the experience gained over the past three years, and the combined expertise of its Board of Directors, ConceptNursery will adapt a pragmatic and realistic approach to achieving the above goal and objectives.

Partnerships
The ConceptNursery is a unique public private partnership between the following institutions:
- Sri Lanka Institute of Information Technology: Quasi Government : ICT training/eGovernment
- Nextventures Limited: Private : Venture Capital Fund Management
- MediaSolv: Private: Software development
- Prudential Holding Limited: Private Diversified

The ConceptNursery Expansion Program will be conducted with the direct support of two of the incubator's founding shareholders; Media Solutions and NextVentures. Media Solutions will assist with the ICT Enhancements, while NextVentures will provide Management Consultancy.

Activities completed and some milestones
Conceptnursery had more than three years of hands-on experience incubating mainly software related startups. The main objective of the infoDev project was to expand the reach and be able to serve more entrepreneurs. In order to execute the project effectively, two components required developing – (a) Comprehensive itemized master plan for the entire project with evaluation criteria and (b) a process based approach with flexibility to adapt unique incubatee situations

Eight areas were identified as most important for the expansion project that includes Women entrepreneurship; Technology related education; Non-technology related education; Open source evangelism; Forum to exchange innovations; Events to encourage innovation; Virtual incubation; and Franchising Conceptnursery

In order to make a positive impact on these areas, number of activities was planned strategically. These activities were designed carefully to make sure the right content is delivered to the right recipient. Following areas will highlight the activities that are taking place at the moment.
- Conference: The 'Entrepreneurship Conference' was targeted at decision makers and gate keepers from the corporate world. In this regard Sri Lanka's first conference on entrepreneurship was conducted successfully on March 19th 2004. The title of the conference was 'Business Incubation for Innovation and Economic Development'. Top officials from both government and private sector participated.
- Big-Idea Workshop: With regard to taking the entrepreneurship mantra country wide, a special interactive workshop named 'BigIdea' was created. The workshop includes many lectures with the objective being to introduce creative thinking process and distil it further with a business plan. This workshop was very successfully conducted at various institutions, including universities and other associations.
- Training and Capacity Building: For both technology and non-technology related education, a set of topics that are high demand were identified and were formulated after doing a research with the incubatees and industry. The topics were categorized into various disciplines like Marketing, Management, Technology, Legal, Finance, Human Resource Development. Most of the topics were conducted free of charge to the participants.
- ICT components: The Conceptnursery Expansion program envisages the use of ICT to increase operational efficiency and deliver scalable functionality as the incubator embarks on a mission to broaden its scope of activities beyond the confines of current resident program. The suite of tools includes:

The Entrepreneur Portal: Entrepreneur Portal will allow ConceptNursery (CN) to aggregate and disseminate news that relates to entrepreneurship and emerging technology. One of the biggest problems for budding entrepreneurs in Sri Lanka is that they lack exposure and access to information. The Entrepreneur Portal will cut the clutter on the Internet and allow visitors to the site to access news and information related to the incubator's areas of interest. The Entrepreneur Portal will be an outreach activity of CN, primarily intended to attract potential Tenants and partners. This portal is currently at the prototype stage and is going through final deployment stage.

Groupware and messaging platform: Even as CN's activities and focus extends beyond the walls of the current building the need to engage and work closely with resident and virtual Tenants, partners and various other stakeholders becomes even more pronounced. A comprehensive CN Messaging and Groupware solution will allow the various stakeholders to communicate and share information more efficiently. In addition to email, calendar and contact management, the online document share, message board and chat conferencing facilities will also allow the CN to facilitate an ongoing dialogue

and also conduct online mentoring sessions and seminars. The CN Messaging and Groupware solution is primarily intended to increase internal productivity as the incubator broadens its scope and focus. CN proposes to deploy an online Project Management and Collaboration solution that will dovetail into the CN Messaging and Groupware platform. The Project Management and Collaboration solution will be used for CN's own activities as well as for CN Tenants, resident and virtual, who will manage their technology development process using this tool. The tenants will be able to use this facility to allow their customers, investors and other partners to track progress and monitor developments. The CN Project Management and Collaboration solution is primarily intended to infuse discipline and transparency from the very beginning of the CN Tenant's technology development process. Both these products are currently installed at the premises and going through the acceptance stage

Technology and Investment Exchange Portal: To further compliment CN's Entrepreneur Portal, CN proposes to develop and deploy an online Technology and Investment Exchange for Tenants and Graduates. This facility will allow current and graduated Tenants, both resident and virtual, to market and deliver themselves, their products and solutions to customers and potential investors who may be anywhere in the world. The CN Technology and Investment Exchange will integrate functionality similar to that found on popular commercial sites like eLance, CDW, Amazon & eVentures. This facility will be used to generate revenue and build credibility that could subsequently be leveraged by the Tenants as they establish themselves in the market. This facility will also be integrated with the three other software modules so as to provide a seamless user experience. This portal is currently at the prototype stage.

Tenant portal: The CN's growth beyond the confines of the current premises is crucial to its long-term success. It is clear, however, that growth cannot come from investment in brick and mortar incubators. To this end, the incubator has conceived a franchise program and a Virtual Tenant (VT) program. The franchise program will be implemented through alliances with Universities and other institutions at the national levels. The VT program however, will aim to provide the relevant services to prospective tenants who will incubate remotely. This portal is currently at the prototype stage.

Sri Lanka

Grantee: Intermediate Technology Development Group – South Asia

Grant Amount: Planning Grant. US $70,000
Contact : Mr. Jayantha Gunasekara, Technology Programme Leader
Email: Jayantha@itdg.slt.lk
Proponent Website: http://www.itdg.org/; Project Website: http://www.rensrilanka.org/

Intermediate Technology Development Group – South Asia (ITDG) helps eradicate poverty in developing countries by developing and using technology and by demonstrating results, sharing knowledge and influencing others. ITDG was established in England in 1966 by Dr. Fritz Schumacher, author of 'Small is Beautiful'. The organization has regional and country offices in Peru, Kenya, Zimbabwe, Sri Lanka, Sudan, Bangladesh and Nepal. ITDG helps eradicate poverty in developing countries by developing and using technology and by demonstrating results, sharing knowledge and influencing others.

Project Objective:
Under the *info*Dev Incubator Initiative, ITDG will work with small scale agro processors to strengthen their market linkages through networking and introducing simple and effective applications of ICTs and link them with the e-business world. The services that are planned to be identified include market intelligence, marketing services, expert inputs, management inputs and timely information that are beyond the conventional business development services delivery. This commercial provision of marketing and other consultancy services for the rural and small scale agro processing sector is to be undertaken through a community network model 'Rural Enterprise Network' (REN) that was established among the group enterprises assisted by ITDG, which has now emerged to be the business incubating arm of ITDG South Asia.

Partnerships:
The REN or Rural Enterprise Network, which brings together rural micro scale agro processors, was conceived by ITDG to address certain pertinent issues that plague rural producers in Sri Lanka. It is a venture that seeks to bridge the gap between rural entrepreneurs and distant markets and professional services. Today, REN is incubating fifteen group enterprises in the districts of Badulla, Kurunegala, Kandy, Matara, Anuradhapura and Puttalam in the field of agro processing (dehydrated vegetables, fruits, and medicinal herbs.)

Planned Activities and some milestones:
ITDG-South Asia has establishment of a 'rural enterprise network' (REN) as an extended business development service provider for small scale rural enterprises. The main functions of the REN are to,
- Do market research, set up business partnerships and sales agreements and facilitate physical access for REN members to markets.
- Establish a new brand name
- Set up and operate a business extension service offering limited services and facilitating wider services to REN members
- Develop service agreements and useful contacts with a range of organizations (credit institutions, BDS, legal experts etc.) and use the extension service to help facilitate access of REN members to these organizations.
- Organized ICT platform to communicate and coordinate on all business functions of scattered members of Rural Enterprise Network.

The operational costs of the business incubation model will be financed from donor funding initially and will recovered by embedded cost recovery mechanisms of providing marketing assistance and

linkage development. The main revenue stream of the business incubator would be the commission businesses those currently involved with.

The main investors will be financial institutions. REN will assist the group enterprises coming under the purview of its business incubation to develop sound business and investment plans which will provide the financial indicators such as pay-back periods, return on investment, for the creditor to draw up their own exit plans. Part of the financial investment will be made from the revenue of the business incubators. The project is to develop partnerships with organizations and development programs promoting micro-enterprises. In this way the incubator will gain the opportunity of identifying potential enterprises for their services.

Thailand
Grantee: Kenan Institute Asia (KIAsia)

Grant: Planning Grant. US $100,000
Contact: Paul Wedel, Executive Director
Email: kiasia@kiasia.org
Proponent Website: www.kiasia.org

Kenan Institute Asia (KIAsia) and the Office of Vocational Education Commission developed the **KIAsia Business Incubator** (KIAsia BI) in 2003 to assist aspiring entrepreneurs in Thailand, especially rural residents who typically lack funds and necessary basic business know-how. KIAsia BI is currently focusing on assisting entrepreneurs to realize their business ideas while expanding to include information and communication technology (ICT) utilization and international business practices. (KIAsia was established in 1996 with an endowment provided by United States Agency for International Development, the Royal Thai Government, the Frank Hawkins Kenan Institute of Private Enterprise and the William R. Kenan Charitable Trust).

Project Objectives
KIAsia used the planning grant from *info*Dev to do significant research and planning to conceive, formulate and refine a business plan to establish business incubators at five vocational schools throughout Thailand. The Office of Vocational Education Commission of Thailand is a strategic partner and will provide facilities, staff and tenants once the planning phase is concluded and the operational phase begins. This work program is to focus on four key areas: basic business education, competency development, funding assistance and ICT utilization/skills. Each area will include a number of activities as pre-requisites for the successful implementation of effective, efficient incubators. These activities are to have a positive impact on the ICT community within Thailand as the rural community begins to utilize their benefits.

Partnerships
The Office of Vocational Education Commission (OVEC) is responsible for vocational education and short training programs to meet the needs of the labor market and national economic growth according to the human resource production policy and the National Economic and Social Development Plan. KIAsia was involved in strategic direction, linking KIAsia BI with partner organizations, coordinating with *info*Dev, researching best incubator practices/ICT uses and customizing them for Thailand. OVEC coordinated with KIAsia to identify the five ideal incubator location sites, to evaluate the KIAsia BI plan with regard to facilities and staff resources to be allocated for the business incubator and to assist with future tenant recruitment. Both organizations worked closely together to bring on-site or off-site incubation services to as many locations in Thailand as possible.

Activities Completed and Milestones
- *Close cooperation with OVEC:* KIAsia and OVEC have worked closely together over the past year to prepare a business plan for the incubator. This close cooperation has resulted in a strong relationship that will enable the two organizations to work together to implement the plan. By building on the strengths of their respective organizations, this partnership is better positioned to address the needs of the small and medium-sized enterprises (SMEs) targeted by the planned incubators. This close cooperation will undoubtedly lead to other projects between the two organizations and is also planned to be used as a road map for future successful partnerships.
- *Increased internal capacity of KIAsia:* KIAsia staff have been able to attend numerous training courses that have significantly built up internal capacity. Most noteworthy is the "train the trainer" course for new incubator managers that was facilitated by Amber Nystrom from Social Fusion. KIAsia approached the National Business Incubators Association (NBIA) and requested a course to

train new incubator managers in Southeast Asia. KIAsia is the only organization to have received this type of course. It is expected that KIAsia will offer this training to many organizations in Southeast Asia thereby increasing the capacity of the region. Training in best business incubator practices, general business incubator issues and financing for tenants has rounded out the training received. KIAsia has already utilized this new capacity by organizing seminars to increase awareness of business incubators. KIAsia is working to be a leading information and consulting resource for business incubation in Southeast Asia.

- *Networking with organizations in Thailand and internationally:* KIAsia's network will greatly assist future SME clients as KIAsia acts as the focal point for domestic and international communication and partnerships. ICT use will allow incubator tenants access to our domestic and international partners.
- *Business plan that is ready to seek funding for implementation:* This business plan has analyzed current situations, best practices, and cultural/geographical/environmental issues specific to the planned incubator sites. The plan has been refined and is ultimately expected to be complemented by site specific business plans.
- *Incorporated ICT use into the business model which targets rural communities:* Connecting rural SMEs to ICT was a primary concern for KIAsia in planning these incubators. Significant time and resources were expended to understand how ICT could successfully be utilized by target clients. The plan includes not only ICT as a means of accessing information but can also be used as a central part of a tenant's business model. The key was not just providing Internet access to companies but understanding that incorporating ICT will facilitate their business processes.

Vietnam
Grantee: Center for Research and Consulting on Management

Grant: Planning Grant. US $50,000
Contact: Mr. Pham Minh Tuan
Email: crc@hut-fem.edu.vn
Proponent Website: http://www.hut.edu.vn/en/index.php?c7_9

The **Center for Research and Consulting on Management** (CRC), an autonomous unit of Hanoi University of Technology (HUT), is the lead implementing institution for the work program in Vietnam. The center was established in 2003 in the faculty of economics and management with support from the Swiss Agency For Development and Cooperation, the Asia Institute of Technology, and the Vietnam management development program. The overall mandate of CRC includes consulting and applied research on management and economics; facilitating technology transfer; organizing seminars and short-term training courses; conducting market research and marketing services; organizing business tours; mediating cross-market partnerships; and cooperating with international partners to enhance training quality.

Project Objectives
The objective of the work program is to fill the current gap in Vietnam for support for entrepreneurs in pre-seed and seed stages through training, research-application links, developing business plans, providing infrastructure building networks and offering business development services. The primary target tenants include students and researchers in universities and research institutions; authors of information and communication technology (ICT)- related innovations; individuals or teams with research under way or a completed innovation and young companies with fewer than two years of operation.

Partnership
Hanoi University of Technology was established in 1956. Over the last 40 years, the university has become a national institution for training engineers and a center for scientific research for almost all industries in the country and has further made considerable contributions to national education.

Planned Activities and Milestones
The planned work program includes (1) seminars and workshops on entrepreneurship; (2) the annual business plan competitions within HUT; (3) regular networking events with venture capitalists, later-stage incubators, corporate ventures and angel investors; (4) maintaining relationships with national competitions and (5) leveraging the novelty of the university incubator concept to create media coverage. The overall ICT strategy is planned to include three elements:
- an e-learning platform for business plan seminars and management training;
- an Internet-based information platform on business start-ups;
- services for creating website creation and for e-commerce.

The objectives for both the current planning and the implementation phases are as follow:
- *Sustainable financial model:* To construct a financial model with projected costs for carrying out the objectives in the operational phase and to identify feasible sources and amounts of funding (from private, government and non-government organizations) that sustainably cover those costs.
- *Awareness raising*: To raise awareness about the incubation concept and the CRC incubator in particular among potential donors, investors, clients and the community at large.
- *Potential clients:* To identify one or two clients who are currently in need of incubation services and who show high potential for either becoming a self-sustaining company or providing technology that will be applied widely.

All the above activities aim to:
- provide innovators with early practical advice to help direct their research so that their work will bring applicable, marketable results;
- coach and support them in creating convincing business plans that will win interest from later-stage incubators and venture capital funds;
- provide office infrastructure and lab resources to facilitate their research and business development;
- establish relevant networks of contacts, help entrepreneurs meet potential investors, clients, suppliers, partners, management and staff;
- help perform the necessary legal and financial work for setting up a new company.

EASTERN EUROPE AND CENTRAL ASIA

Armenia
Grantee: Viasphere Technopark

Grant: Capacity Building Grant. US $150,000
Contact: Aram Vardanyan, General Director, Viasphere Technopark
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Website: http://www.viasphere.com

Viasphere Technopark (VT) is a private company incorporated in the Republic of Armenia in 2001 and is a wholly owned subsidiary of Viasphere International (VI). VT started operations in July 2001 by housing five start-up companies. Since then, Viasphere Technopark has become a model commercial incubator in Armenia currently housing 11 tenants and has created more than 400 jobs in information and communication technologies (ICT) in addition to adding long-term value to local resident companies and subsidiaries in the United States (US).

VT is centrally located in Yerevan, the capital of Armenia, in the southeastern industrial part of the city in close proximity to Zvartnots International Airport and downtown Yerevan. The technopark campus consists of 10 buildings. The site was formerly a headquarters of Transistor Company, one of the most advanced semiconductor research and development centers in the former Soviet Union recognized throughout for power semiconductor development. The buildings consist primarily of office space and electronics laboratories.

Partnerships
Viasphere International has a network of venture capital and angel funds with a track record of successfully funding start-ups and projects. It has funded projects with several firms, funds and individuals in Silicon Valley in the US with proven industry track records. Viasphere International has a close working relationship with **D-Age Ventures**, **Band of Angels** and **Alpha Ventures**. Over the years, VI has established working relationships with other incubators around the world through formal and personal connections with the principals. It looks at these relationships as a way to exchange experiences and to access expertise and local markets on a mutually beneficial basis. These relationships include the following incubators and technology parks: **Werhner von Braun Institute**, São Paulo, Brazil; **Saras Labs**, Sardinia, Italy and **XL TechGroup**, Florida, US. In addition to infrastructure and management experience, VI possesses a network of worldwide investors and incubators to help companies with capital needs, development resources and access to markets.

Project Objectives
The main objective of the *info*Dev-funded work program is to improve the managerial and operational capabilities of the Viasphere Technopark and its tenants and to strengthen the growing ICT sector in Armenia. The anticipated project outcomes will:
(i) facilitate the flow of information and expertise to transfer know-how in creating and running successful start-ups;
(ii) tap into a global network and exchange of experiences among ICT incubators in the US, Europe, and the Far East;
(iii) facilitate an exchange of experiences among incubators in the US, Europe, Latin America and Armenia, and
(iv) support local start-ups to serve as catalysts providing cost-effective and ICT-enabled solutions for various branches of industry that are key to the socio-economic development of Armenia. These objectives will be achieved through targeted consulting, training, residency and commercialization services to be offered by VT in Armenia and VI in the US.

Activities

- *Providing knowledge and advice to VT staff on the business and operational specifics of running business incubators:* The activity will include incubator management consulting. An international consultant with extensive expertise in business incubation and development will assist VT management and staff in further developing and improving their strategy and operational mechanisms, will help to create solid business links between businesses and research and will advise on training needs and networking opportunities.

- *Reviewing and learning international expertise by establishing beneficial links with business incubators, private companies and non-profit organizations:* This activity proposes study tours for VT management and staff to successful business incubators to learn their key development factors and success stories, to discuss possible ways of cooperating with the Armenian incubators and the IT/hi-tech community and to consider perspectives and the feasibility of implementing joint projects of mutual interest and benefit.

- *Organizing the participation of tenant companies in the CeBIT 2005/Electronica exhibition to gain a better understanding of worldwide trends in IT/hi-tech and to review their marketing capabilities as well as to create contacts and partnerships:* Three prospective tenant companies will participate in the tradeshow.

- *Supporting tenant and client companies to serve as catalysts providing cost-effective and ICT-enabled solutions for various branches of industry:* The activity includes implementation of 5 strategic joint pilot projects.

- *Providing local companies, start-ups, and individuals with an easily accessed source of knowledge on business incubation that supports entrepreneurship, development and innovation:* Workshops and seminars will be organized to talk to the community to disseminate information on ICT and the power of business incubation as well as to identify key problems existing in different industrial sectors where ICT-enabled solutions might help.

Milestones

Viasphere Technopark was one of nine companies nominated for the government's annual award on quality assurance and service provision in 2004. During the past two months, VT has worked intensively with three companies from the US, France and Armenia to establish start-up companies in the Technopark.

- November 2004. Synopsys, Inc. (NASDAQ: SNPS) the world leader in electronic design automation software for semiconductor design acquires Monterey Arset, CJSC, originally a Viasphere start-up company (2001), which became a wholly owned subsidiary of Monterey Design Systems, Inc. based in Silicon Valley, California in May 2003.
- Negotiations are ongoing to house Synopsys' two local subsidiary companies on VT premises.
- January 2005. VT awarded Government of Armenia's annual and prestigious award for quality assurance and service provision.
- March 2005. First VT graduation. The original Viasphere start-up company (2001) became E-Z-CAD subsidiary (2003) by increasing the number of staff from 5 to 60.
- March 2005. Participation in CeBIT 2005 exhibition in Hanover, Germany and demonstration of the first prototype of Densitec (high precision green density measuring equipment) developed and designed in Viasphere with the joint efforts of our tenant and client companies.

Indicative Portfolio of Viasphere Technopark

Name of Tenant Company	Description of Business
Synopsys Armenia CJSC	Electronic design automation
Epygi Labs Armenia, LLC	Networking software and hardware
Transistor Delta, CJSC	Microwave and high-frequency semiconductor research and manufacturing
M-Possible CJSC	Gaming software for personal digital assistants
Transistor Plus, LLC	Semiconductor and testing device design
DVA Group Armenia, CJSC	Broadband and digital video design systems
EAA Center	Telecommunication services
Diamotech, CJSC	Yerevan Branch Office; diamond polishing
Sonics Armenia Holding, Inc.	Embedded electronic design
Cafeteria Technofood, CJSC	Catering services
Damaris Am, LLC	Banking software design and e-service
Rubin L. Tech, CJSC	Laser device design and service
Smart-Tech, LLC	Banking software design and services
IntEj, LLC	Voice over Internet protocol services
Piton publishing, LLC	Publishing
SCDM, CJSC	Banking software
Averso, CJSC	Gaming software design

Azerbaijan
Grantee: Information and Telecommunication Technologies Development Association

Grant: Planning Grant. US $100,000
Contact: Mr Araz Mamadov,
Email: araz@azerinet.com,
Website: http://www.gateway.az/cl2_gw/pages/az/

Information and Telecommunications Technologies Development Association (INFOTEK) is a locally registered non-profit organization with a mandate for the development of information and communication technologies (ICT) in Azerbaijan. It is the organization that is responsible for the "az" domain name. The objective of the work program funded under the *info*Dev Incubator Initiative is to foster the social and economic development of Sumgayit by launching a business incubator there. Sumgayit is located in the northern part of the Absheron peninsula, north of Baku, and is the second largest industrial city in the country.

Partnerships
The partner organizations for this project in addition to INFOTEK, include **Flexible Solutions**; the **Executive Office of Sumgayit City**; **Citizens Development Corps** (CDC), a US non-profit organization and international organizations including the **United Nations Development Programme** (UNDP) through its Joint Azerbaijan Government and National Information Communication Technology Strategy (NICTS) project. The other partners include **Khazar University**; a local television broadcasting station **SPACE**; **Development Gateway Foundation**; **IIZ**, a German funding organization and **Hewlett Packard Invent**. There are also working relations with the Sumgayit branch of the Ministry of Economic Development of Azerbaijan which is responsible for business support and development in Sumgayit and in the Aphseron region.

Project Objectives
The mission of the project is to foster the social and economic development of Sumgayit by introducing a business incubator that will promote entrepreneurship and private sector development, develop higher penetration of national businesses in domestic and international markets and provide more dynamic knowledge flows and collaboration among stakeholders of the local business community. This is to be primarily achieved by developing the organizational capacities and client orientation of the incubator through increased services and products for tenant companies, by creating a suite of online tools and forums for partnerships and by formulating a business plan for its long-term sustainability.

Planned Activities and Milestones
The project will be implemented in two stages.
Planning September 2004 – October 2005: The main goal of this stage is to identify the incubation environment and assess the needs of local businesses. This will include the following actions:
- conducting an assessment of the current situation of regulatory, policy, institutional, infrastructure, business climate and human resources and the use of ICT for small enterprise development;
- providing an assessment of needs of small and medium-sized enterprises in terms of support services;
- identifying the primary hurdles to face in establishing a business incubator and making it sustainable (identify potential revenue streams);
- identifying local business capacity and the goods produced and prepare local company profiles;
- preparing all documentation and business plans for establishing a business incubator and mobilizing local and international partners for support for establishing and running it;

- identifying market demands for Sumgayit goods and services and the best methods to utilize ICT tools for local business development;
- identifying the donor organizations that will provide the funding for tenant companies to get ISO certification and getting financial assistance from local and international financial institutions for them;
- discussing the introduction of the curriculum on business incubators with the Ministry of Education and leading universities;
- recruiting 10 future business incubation and development managers and providing them with training on business organization, marketing, finance and financial management, English language, how to write proposals and submit tenders, business incubation principles, project management and introduction of ICT tools into production and business processes;
- developing and introducing online and printed business models to sustain the incubator and produce the necessary business concept papers and business plans.

Implementation January 2006 – February 2007: The main outcome of this stage is to establish the business incubator and provide its services for tenant companies. The related milestones here include the following:
- organizing and conducting an exhibition of local business companies;
- creating a web platform for the business incubator and for tenant companies;
- providing assistance for tenant companies to prepare and pass ISO certification;
- developing organizational capacity and strengthening client orientation by establishing the business incubator as a registered legal entity; producing the technical support strategy, mechanisms and documentation; setting up knowledge sharing and research functions; seting up quality assurance mechanisms (monitoring and evaluation systems); carrying out comprehensive evaluations of the incubator's performance and deliverables and setting up online support for the incubator team;
- developing and introducing services and products for tenant companies including expert services for the development of, for example, company strategies or marketing and financing;
- setting up premises including office and laboratory space; conference facilities; office services such as switchboard, photocopying and secretarial services; cooperating and networking with other companies, investors and public services; training in introducing sales and marketing departments in companies;
- introducing modernized (if applicable) or new (if not) departments within tenant companies that will be responsible for sales, marketing, promotion and foreign trade relations and organizing a local exhibition of tenant companies;
- stimulating and enhancing partnership opportunities on the global or regional levels with other incubators established with *info*Dev funding and with the private sector.

Georgia
Grantee: Civil Society Support Centre (CSSC)

Grant: Planning Grant. US $70,000
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Website: www.cssc.ge

The **Civil Society Support Centre** (CSSC) was founded in 1999 in Gori in the center of Shida Kartli, one of the largest regions in Georgia. Since then, CSSC has covered the whole Gori region and in 2003 had a branch office inaugurated in Tbilisi. The centre has several departments that implement programs in various spheres of civil society development including community development, self-governance, small business assistance, and information and communication technologies (ICT). The planning grant aims to create a strategic framework for launching and developing a Georgian business incubator and educating stakeholders in Georgia to create a solid basis on which the incubator can be established. The incubator feasibility study is to serve also as a market development tool to foster introduction of business incubation systems across the region.

Partnerships
CSSC is the proponent organization and provides in-kind contributions, project management and coordination of participants. **Intellcom Ltd**. (an information technologies and communications company) provides office space for the project, communication and broadband access and is the prospective anchor tenant for the future incubator.**Universe Ltd**. (an information technology and software company) provides computer hardware and Internet services. **Eurasia Foundation** is a co-financer.

Project Objectives
With the vision of identifying opportunities for business incubator development and developing a detailed operational framework for a Georgian business incubator including a development plan, the main objectives of the *info*Dev-funded work program are:
- conducting a feasibility study for the Georgian business incubator;
- testing community reaction and promoting the business incubation concept among stakeholders by launching a public relations campaign to educate government officials, key players in the community, business community leaders and acting and potential entrepreneurs;
- creating a business plan and operational framework for the incubator.

Activities Completed and Milestones
Supported by the *info*Dev Incubator Initiative and the Eurasia foundation, CSSC conducted a comprehensive feasibility study of the business environment and the needs of small and medium-sized enterprise (SMEs). The current political, economic, social, technological, labor and market trends present a variety of implications for the impact and sustainability of a business incubator in Tbilisi. The proposed incubator has the potential to become a self-sustaining economic development instrument. It requires participants from government, international and national non-government organizations (NGOs) and donor organizations, industry and educational organizations in order to achieve success.

A business incubator not only implies the opportunity to become self-sustaining and independent of long-term subsidies but also has the potential to become a local and regional hub for various business development service instruments and for knowledge generation and dissemination. The major strength of the proposed business incubator model is its focus on knowledge-oriented entrepreneurs and enterprises and its international networking that assures knowledge transfer to the region. The feasibility study indicates the demand in Tbilisi for a mixed incubator focused on knowledge-oriented

enterprises with social impacts that might in the long term transform into a specialized business incubator focused on a local industry cluster or technology sphere and/or the international market. The proposed business incubator has the potential to become a model for replication in other regions of Georgia.

To strengthen the survival and growth opportunities for its clients, the business incubator will provide infrastructure (work space and equipment) and knowledge services (training and consulting and information) to start-up enterprises in Tbilisi. The marketing and networking strategy will generate corporate images and relevant contacts for its clients in order to add further value to SMEs. The business incubator concept is based on effective networking and stakeholder management on both the local/national and international levels. Main stakeholders will be Tbilisi, the Georgian government, Tbilisi universities, and international donor organizations.

The main objective of the incubator is to be financially self-sustaining in the third year of operations. Sustainability is based on revenues from rentals and consultancies for knowledge services (training and counseling, SME online information hub) in the development stages. For the online information hub, self-sustainability is not projected. Its venture capital will be generated by the facility and the training center. Several factors are critical to the success of the incubator. They are impact focus, sustainability of the mission, sustainability of motivation, and financial sustainability. In the development strategy and implementation sections of this business plan, overall objectives are identified for each of the critical factors.

1. Establish a focal area in expertise in business incubation of knowledge-oriented SMEs.
2. Promote strong collaboration and cooperation among stakeholders and create strong and effective incubator governance.
3. Establish collaboration with universities and scientific organizations to contribute to the technology and knowledge transfer culture in the long term.
4. Establish collaborations with financial institutes and individuals to contribute to the investment culture in the knowledge-oriented SME sector.
5. Establish international networks to increase knowledge transfer to the region.
6. Create a financially self-sustaining business incubator.

The proposed incubator will be implemented in three phases. The **first** can be described as the initiating and planning phase which was started by CSSC in 2003 and will be completed by successfully identifying the source of funding and the implementation of the business plan (target: September 2005).

The **second phase** is incubator start-up which will be launched (target: September 2005) when phase one is completed. The mission will be accomplished by achieving overall financial and motivational sustainability. It will also include recognition of expertise among key target and stakeholder groups. The target for completion is September 2008.

The **third phase** is incubator maturity which will commence at the break-even point (financial self-sustainability) and which will be accomplished when the incubator functions as a regional hub of expertise. The target for completion is September 2010.

Kazakhstan
Grantee: SODBI Business Incubator

Grant: Operational Grant. US $250,000
Contact: Kairat Sugurbekov, Director
Email: k_sugurbekov@sodbi.kz
Website: http://www.sodbi.kz/; Project website: http://infodev.sodbi.kz/en/index.php

SODBI Business Incubator is both non-profit (legal entity) and information and communication technology (ICT)-enabled and is based in Shymkent, southern Kazakhstan. It was established with the support of the Shymkent City administration and is closely associated with the City Innovation Committee and its programs. The incubator is well known for its capable leadership and staff, its good facilities and good early preparation in terms of completing a feasibility/business plan and creating a good image to attractive more innovative tenants. The work program addresses issues of donor support in mentoring/consulting, facilitation of business partnership arrangements between incubators and clients, advocacy for small and medium-sized enterprise (SME) policy reform, fund raising, access to supportive networks and access to Russian language translations of global and *info*Dev literature on incubation. It has over 20 tenants and 10 graduates to date. To support ICT-related business tenants, SODBI established its own loan fund for SMEs and has an agreement with banks to provide loans to its tenants and clients. It is financially self-sufficient generating revenue from tenant rentals, business services to internal and external clients and training services.

Partnerships:
Financial Contributions and Networking
• Soros Foundation, Kazakhstan
• Eurasia Foundation
Technical Assistance, Training, and National/International Networking
• Kazakhstan Association of Business Incubators and Innovation Centers (KABIC)
• Science Park and Innovation Center Expert Group (SPICE)
• Poland Business and Innovation Centre (PBICA)
Educational Institutions
• South Kazakhstan State University
• University of Applied Science Mittweida, Germany
Government
• City Government of Shymkent
Private Sector
• GeKarTel AG, Germany

Project Objectives
• Enhance the ICT capabilities of SODBI and its tenants by improving the business, project and knowledge management levels of the tenants to increase innovation and SME promotion.
• Develop a local network for innovation uniting partners from the business incubator with universities, the local government, financial institutions and investors, and entrepreneurs to support and stimulate innovative activities.
• Stimulate e-business and SME ICT capabilities by developing an SME information portal that includes the most necessary and up-to-date information for all types of entrepreneurs considering their local contexts and user-friendly databases like the "Made in South Kazakhstan" database containing information about the products and services produced by local enterprises.
• Market Shymkent and South Kazakhstan to help raise awareness of the region among international groups and to create a positive image to attract foreign investors, potential partners and tourists.

Activities Completed and Milestones

- *Creating an active, local network for innovation:* The network established included 5 local enterprises co-funding project activities; 5 banks, financial institutions, and venture capital firms; 15 local and regional administrative departments; 3 university faculties; 5 local and regional NGOs and international organizations.
- *Enhancing the incubator's ICT capabilities:* Work programs were undertaken to increase the efficiency levels of the business, project and knowledge management levels of both the incubator and its tenants. Examples of systems developed include improving Intranet communication and managing information and customer relations.
- *Stimulating SME ICT capabilities:* Training sessions covering approximately 100 incubators were organized at the *e*Business Training Center through country-specific course modules in the Kazakh language. Best website contests (20 participants); best business plan contests (20 participants); distance learning modules (300 downloads); online business portal for SMEs, www.shymkent.com (5000 page requests) and listings at the "Made in Kazakhstan" catalogue database (1000 queries) were among some of the strategies employed.
- *Strengthening city and regional marketing capabilities through ICT use:* A multilingual (English, Russian, partly German), online business and tourism portal www.southkazakhstan.com was created for developing and maintaining an information portal targeting potential foreign investors and business partners to stimulate the first stage of city and regional marketing strategy development.

The *info*Dev project in Shymkent is integrated into the city's overall incubator development strategy and objectives. The main pillar of the project is a regional SME information portal and e-incubator (www.shymkent.com) in Kazakh and Russian. SODBI has developed internal technical, managerial, and consulting capabilities to operate the portal and to provide consulting and training services on ICT integration and e-business for SMEs and entrepreneurs in the region. Also, the incubator will coordinate the launch of a multilingual information portal targeting international groups both in business and tourism at www.southkazakhstan.com. The SME information portal is planned as an integrated element of the south Kazakhstan SME information and education network developed and maintained in cooperation with local authorities and non-government organizations in the region.

Kyrgyz Republic
Grantee: Union of Business Incubators and Innovation Centers of the Kyrgyz Republic

Country: Grant: Capacity Building Grant. US $150,000
Contact: Zamira Akbagysheva,
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Website: http://wcongresskr.freenet.kg

The **Union of Business Incubators and Innovation Centers of the Kyrgyz Republic**, the implementing organization of the *info*Dev Incubators Initiative work program in Kyrgyzstan, was launched in August 2003. Its mandate includes promoting small and medium-sized enterprise (SME) development through implementing and maintaining business incubators, innovation centers, and technology parks. In addition to functions related to asset maintenance, the union is also responsible for promoting economic growth, raising employment, helping start-up businesses and integrating Kyrgyzstan into the global knowledge-based economic system through the development of business incubators and the introduction of information and communication technologies (ICT).

Partnerships
The partners for this work program include the **Eurasia Foundation**, the **Organization for Cooperation and Security in Europe** (OCSE) Center in Bishkek, the **International Finance Corporation-State Secretariat for Economic Affairs** (IFC –SECO) program for **Leasing Development in Central Asia**, the **United Nations Development Fund for Women** (UNIFEM), and the **United Nations Development Program** (UNDP).

Project Objectives:
The *info*Dev-funded work program is to add three main activities to those of the Union of Business Incubators:
- introducing tenant companies of an existing business incubator to ICT in order to increase the efficiency of their operations;
- launching a branch to incubate ICT projects;
- rendering help in ICT development to regional business incubators.

Planned Activities and Milestones:
The main goal of the *info*Dev project is to increase the competitiveness of SMEs by enhancing their ICT and e-business capabilities. Activities include:
- enhancing the awareness and knowledge of opportunities provided ICT and Internet for SMEs;
- enhancing the ICT and Internet/e-business capabilities of the union and of business incubator managers;
- improving the technical e-readiness/ICT infrastructure of the union;
- enhancing the awareness and knowledge of opportunities for SMEs with ICT and Internet among local authorities, government and other relevant stakeholders;
- creating a network for innovation for SME support in ICT.

The following are some of the planned project implementation milestones for the union:
- enhancing strategic and operational management capabilities;
- conducting an empirical study on ICT use and e-readiness among SMEs;
- improving knowledge management capabilities;
- increasing technical e-readiness/ICT infrastructure;
- setting up an ICT training and information center;
- creating a distance learning program and an SME online information portal;

- designing and conducting a training program on business incubator development for business incubator planners and managers;
- organizing a national conference on SMEs and the Internet;
- creating a corporate and an *info*Dev project website;
- actively participating in and contributing to CABIN (Central Asian Business Incubators and Technology Parks Network) and to the regional Eastern European and Central Asian Business Incubators Network;
- Generating and disseminating knowledge on ICT for SMEs.

Milestones Achieved

To date, the Union of Business Incubators has completed the following activities:

- 6 seminars on how to get credit and use ICTs in SMEs for 200 participants
- 22 seminars on how to use Internet for business development for 534 participants;
- 29 training sessions on the basics of ICTs for 327 participants;
- 2 seminars on how to create business incubators and use ICT in SMEs for 66 participants;
- an exchange with National Association of Business Incubators in Russia, September 2004;
- participation in the Global Forum On Business Incubation in New Delhi October 2004 which raised experience in advancing business conception, in mobilizing resources and business plans and in developing strategies, activities, finances, marketing, etc.;
- participation in the seminar "Start Your Business in Internet," in the conference "Internet for Development of Your Business" and in Business Incubator SodBi, Shymkent (May 2005).

Romania
Grantee: The Development Centre for Small and Medium-sized Enterprises Maramures (CDIMM Maramures Foundation)

Grant: Operational Grant. US $350,000
Contact: Mr. Radu Big; Executive Manager
Email: radu@cdimm.org
Website: www.cdimm.org, Project website: http://ict.cdimm.org/

The **Business Incubator Centre at Baia Mare** is a mixed incubator managed on a non-profit basis with the funding support of a foundation. It was established to support entrepreneurship among university graduates, youths and other business newcomers by fostering information and communication technologies (ICT) start-ups using ICT research developed in Romanian universities and research institutions. The incubator also aims to improve the capability of associated/networked incubators to develop ICT ventures and to assist small and medium-sized enterprises (SMEs) to adopt ICT for improved effectiveness and competitiveness. The incubator houses 32 on-site tenants and has already graduated 26 companies. It assists on-site and off-site tenants and clients through training and mentoring services and has developed advocacy with other SME promotional organizations.

Partnerships
- **Business Innovation and Incubation Association Harghita**, a business incubator and partner;
- **Center for Business Excellence Bucharest** (CBE) based in Bucharest, Romania;
- **Executive Agency for Higher Education and Research Funding** (UEFISCSU), a public institution under the ultimate authority of the Ministry of Education and Research responsible for managing and administrating higher education and research funding.

Project Objectives
- Develop programs and mechanisms that foster and encourage the establishment and incubation of start-ups based on ICT developed in Romanian universities and research institutions.
- Improve the capabilities of participating incubators to facilitate the development and expansion of ICT-based ventures.
- Assist SMEs to develop and integrate ICT solutions into their operations so they can become more effective and competitive.

Activities Completed and Milestones
- *Empirical country assessment:* This was conducted to evaluate ICT services and included interviews and meetings with key ICT organizations (universities, companies, development organizations, business incubators) and local government (mayors, counselors).
- *Assessment study:* This was done on ICT issues in Romania. (technology, talent, know-how, capital, culture and context), technology issues, and commercialization issues (barriers, start-up)
- *Technical upgrades:* These included upgrades to the LAN between BIC Baia Mare, BIIC Harghita and CBE Bucharest.
- *Creating content and applications for training programs*:
  - modules on technology commercialization by Technology Innovation Group Inc.and UEFISCSU;
  - informatics for SME management;
  - e-commerce and e-business solutions for SMEs;
  - data base tools for building, administration, on-line and long-distance access with German assistance;
  - networks for SMEs: LAN solutions;
  - networks for SMEs: WAN solutions.
- *Training manual:* This is in Romanian and English, and the curriculum is based on the above programs. Modules include Management of SMEs, ICT and SMEs and Elements of Intellectual

Property with an annex on the legal aspects of business startups (ISBN 973-85921-6-X). Electronic versions of the manual on CD-ROM have also been produced.

- *Training and capacity building:* Forty-three trainees from other organizations were selected in Baia Mare by CDIMM Maramures and 17 trainees were selected by BIIC Harghita in Miercurea Ciuc. The tenant companies from the business incubators had priority. Twenty-nine people completed the training program in Baia Mare and graduated with diplomas certified by the Ministry of Labor and the Ministry of Education; 15 completed training in Miercurea Ciuc.
- *Outreach and networking:* CDIMM Maramures organized an international conference on intellectual property rights in Baia Mare in collaboration with the patent offices of Romania and Hungary. The two-day workshop, Technology Commercialization: An Integrated, International Perspective, was organized in Bucharest in June 2004 and in Baia Mare in November 2004 for participants from incubators, universities, government agencies, and the private sector.

Training on the Commercialization process

Training for SMEs Representatives

Turkey
Grantee: Ankara CyberPark Technology Incubator

Grant: Capacity Building Grant. US $250,000
Contact: Ms. Hanzade Avci Saricicek, Institutional Development Manager
Email address: havci@cyberpark.com.tr,
Web site: http://www.cyberpark.com.tr

The incubator was established as part of the Ankara Cyberpark which is a university-related science
and technology park. The guiding mission is to serve research and development project groups,
technology-based start-up firms and small and medium-sized enterprises (SMEs). The
internationalization of firms operating within the incubator is encouraged through the European and
international knowledge networks with which Cyberpark is associates.

Partnerships
- **Bilkent University** (the main shareholder of the Cyberpark)
- **Bilkent Holding** (shareholder of Cyberpark)
- **Turkish Technology Development Foundation** (TTGV): TTGV is an independent, non-profit
  organization established jointly by the private and public sectors in order to raise industrial
  awareness of research and development and to support industrial technology development projects.
  TTGV will be supporting the project by providing office equipment, technical infrastructure,
  computing equipment and the software required for the incubator. TTGV will also take part in the
  tenant selection and evaluation committee and will provide technical assistance for incubator tenants
  by transferring its experience in technology development.
- **KOSGEB** (an SME industry development organization): KOSGEB is a non-profit, semi-
  autonomous organization responsible for the growth and development of SMEs in Turkey.
  KOSGEB will be providing research and development support including seed capital for the
  technology projects of tenants and capital support for their training and consultancy costs.

Activities Completed and Milestones
- Tenant selection and evaluation procedures have been determined and a committee has been formed.
- The strategy to monitor and assess the progress of tenants' projects as well as graduation and pricing
  has been formulated.
- The incubator's website, an Intranet system and a communication and synergy platform have been
  developed.

Services for tenants: The incubator's services are especially targeted to raise awareness and promote
the utilization of ICT by small businesses and entrepreneurs as tools to address their short- and long-
term development goals.
- Basic services consist of network and communication infrastructure, Internet connection, physical
  facilities (office area, shared lounge, reception area and utilities), shared secretarial services, catering
  and security.
- Support services consist of training and consultancy in access to financial resources and grants,
  intellectual property rights issues, procedures for establishing a company and training in emerging
  ICT topics.

Virtual Technology Development Center protocol signed: The Virtual Technology Development
Center (DTI) protocol between Ankara Cyberpark, Bilkent University, TTGV and KOSGEB has been
signed. With this protocol, Cyberpark has received the status of DTI, and tenants located at the
Cyberpark Technology Incubator will now be able to benefit from the support mechanisms and

financial aids of KOSGEB which had earlier only supported tenants of its own public technology facilities (TEKMERs).

New research and development fund from the government: A recent decision by the government to set up a new research and development fund with a budget of approximately US $334,200,000 for 2005 (with similar allocations expected for the next few years) is significant and is expected to provide a huge boost to projects and to increase the number of new technology-based companies and the size and capacity of the existing ones. Tenants at the Cyberpark Technology Incubator are also expected to benefit from this fund.

View of Incubator Tenant Office

Training to Incubator Tenants

Ukraine
Joint Grantees: Ukrainian Business Incubators and Innovation Centre Association (UBICA) and
Center of Small Business Development, Kharkov Small Business Incubator

Grant: Operational Grant. US$500,000
Contact: Nikolay Paal - Director, Project Manager
Email Address: ubica@ubica.kiev.ua
Website: www.ubica.kiev.ua

The **Ukrainian Business Incubators and Innovation Centre Association** (UBICA) was established in 1998 as a network of business incubators in Ukraine. Currently, UBICA consists of 10 incubators, 24 Economic Support Centers and 3 technology parks. Counting all regional offices (information centers), UBICA currently has 71 legal entities and 112 individuals. The mission of UBICA is to provide assistance for entrepreneurial development programs by establishing and supporting business incubators, technology parks, centers for entrepreneurial support and other innovative structures. It achieves its mission by:
• protecting the rights of entrepreneurs and establishing support structures;
• realizing and developing support programs for innovative businesses;
• building a partnership network in Ukraine and the region;
• using new approaches to support and develop small and medium-sized enterprises (SMEs);
• collaborating with government to develop support programs for entrepreneurs.

Project Objectives
• assist the social and economic development of the population by supporting information and communication technologies (ICT) in SMEs;
• widely implement ICT in SME activities in Ukraine to increase their effectiveness;
• develop infrastructure to support entrepreneurship in Ukraine and unite all these structures in a network for effective cooperation;
• focus on professionalism in entrepreneurial support organizations;
• promote business incubation technology in Ukraine;
• introduce new technologies and innovations in national entrepreneurial support programs;
• increase the efficiency of institutions and improve the quality of services provided by them.

Activities Completed and Milestones
•   Since 1998, the association has implemented three projects to establish and develop business incubators: in Bila Tserkva, Kyiv region (1998); in Simferopol, Crimea (1998) and in Chernihiv (2000).
•   Since 1999, the association has rendered technical assistance to a range of other business incubators which has enhanced the overall performance of the network. Activities include the following:
     ▪ the establishment and development of over 300 enterprises including 142 enterprises inside the business incubator;
     ▪ over 4500 jobs created by the enterprises supported by the business incubator;
     ▪ over 1500 persons received social, psychological and medical rehabilitation through the program.
•   So far, UBICA has provided assistance to 34 projects in 20 regions of Ukraine. Such assistance includes training personnel and developing services, resource support, etc. at the local level.
•   Training has been provided to increase the professionalism of entrepreneurial support structures and entrepreneurs themselves and to introduce up-to-date information and communication technologies to SMEs. To achieve this goal, UBICA has so far done the following:
     ▪ used the services of 60 highly skilled trainers, 23 with international accreditation;

- developed and established 35 training programs for the SME and non-government organization sectors;
- trained 260 representatives and staff of ES structures.

- Training offers include three distance learning courses that were or are currently being worked out by a team of specialists within the UBICA ICT project on the following topics:
  - business planning;
  - inventions for business;
  - task management;
  - website planning, informational architecture and usability.
- In addition, actual information on entrepreneurship, innovation and business incubation is provided through several websites (including publications, speeches, reports, other electronic resources, etc.)
- UBICA's client strategy is to provide value added through building a network of incubators all over Ukraine that shares resources and creates synergies. As a national network, UBICA is able to do the following:
  - influence state and local authorities;
  - establish information interchange;
  - lobby the interests of business incubators and their clients at the legislative level;
  - deliver specialized ICT and other services to clients;
  - promote business incubator ideology at the regional and national levels;
  - exchange information within the incubator network;
  - increase business effectiveness through the ICT network.

Europe and Central Asia (ECA) Regional Workshop, Kiev

Kharkov Business Incubator (joint grantee, Ukraine)
Contact: Inna Gagauz - Director, Project Manager
Email Address:kt@isc.kharkov.com
Website: www.isc.kharkov.com/kt

Kharkov Business Incubator was funded as part of a shared grant with the UBICA information and communication technologies (ICT) business Incubator in Kiev. The Kharkov business incubator is part of the **Kharkov Technologies Centre** that was established in 1998 within the framework of the intergovernmental program Business Incubator Development (BID) in partnership with Loyola College, USA, and the Institute for Single Crystals of the National Academy of Sciences (NAS) of Ukraine in Kharkov with financial support from the United States Agency for International Development (USAID). The main goal of the project is to promote the local application and improve the use of ICT by Kharkov's tenants and affiliates and thus enable these small and medium-sized enterprises (SMEs) to improve their profitability in a competitive environment. The mission of Kharkov Business Incubator is to provide assistance to technology-oriented SMEs and to promote the commercialization of domestic science-intensive technologies and innovative activities in Ukraine

Partnerships
• Loyola College, Baltimore, Maryland, USA,
• Institute for Single Crystals of the NAS of Ukraine
• Regional mission of USAID
• Technopark Institute for Single Crystals
• Centre for Innovation Development
• Technopark Y.O.Paton Electric Welding Institute
• The Netherlands Management Cooperation Program (NMCP)
• Association of Ukrainian Business Incubators and Innovation Centres (UBIICA),
• Ukrainian Distance Learning Programme
• Special American Business Internship Training Programme (SABIT
• OJSC Real Bank
• Information Association of Small Business of Ukraine
• IndiaCo is a private equity investment firm
• Women's Public Organization Centre, Perspectiva
• Ukrainian Association of Women in Science and Education
• Dato, German Agency for Technology Transfer

Activities Planned and Completed
Kharkov Business Incubator set up a virtual business incubator to extend services to the whole Kharkov region. Under this umbrella, the incubator engaged in a number of diverse activities including the following:
• training for staff as ICT consultants;
• designing a web project designed;
• developing software package Virtual Business Incubator;
• researching the needs and demands of Kharkov entrepreneurs to effectively introduce ICT in business;
• providing consultancy services and support for the 38 tenants of the incubator on the topic Internet use in business;
• providing Internet access, Websites and content management panels for 14 clients (partly finished)

Client strategy: The incubator's strategy is to offer services mainly through courses of advanced training on a number of topics (see below), financial support and consulting services on topics like developing business plans and marketing research. In addition, the Kharkov incubator hosts a website,

provides virtual business incubation software and has developed a number of printed publications to reach out to a wider geographical area.

Services to tenants: Training for new entrepreneurs includes all aspects of activity, but the core is an original program, "Commercialisation of Scientific Developments for Scientists, Engineers and Entrepreneurs Engaged in High-tech Fields and Innovative Businesses." Centre specialists could also develop a corporate training program directed at solving specific problems that an enterprise faces. To date, more than 2000 people have been trained in the specific features of the economic situation in Ukraine and in prospects for business development, the infrastructure of entrepreneurship, legal regulations and small businesses, taxation and legislation in the sphere of small business, accounting, developing business plans, searching for sources of financing, leasing in small business, company management etc. Training is provided through on-site courses, through the virtual business incubator and through online distance learning courses that have been partly developed by the incubator. In addition, the incubator provides tenants with ITC infrastructure and support services.

Uzbekistan
Grantee: Association of Business Incubators and Technoparks of the Republic of Uzbekistan (ABIT)

Grant: Capacity Building Grant. US$250,000
Contact: Mr. Zafar Mukhitdinov, ABIT Vice-Chairman
Email Address: zafarm@rambler.ru ; zafarpm@hotmail.com
Web Site: www.binc.uzsci.net

The **Association Of Business Incubators and Technoparks of the Republic of Uzbekistan** (ABIT) was founded in 2000 and is registered as a non-government organization. Its main tasks include coordination of the activities of the country's business incubators and technoparks; support for members of the association and their business partners for socio-economic, scientific and technical cooperation and external economic and investment activity and the creation of small enterprises focused on use of new technologies, manufacturing, import-substitution and export-oriented products. The initiators and founders of ABIT consisted of 23 business incubators and 1 technopark.

Project Objectives
The objectives of the *info*Dev-funded work program are to help promote business innovation and private sector development by improving the business incubation activities of ABIT through the integration and more effective use of information and communication technologies (ICT) in business incubation and small enterprise development.

Targeted activities include building institutional, managerial and technical capacity; promoting cost-effective and efficient integration of adequate ICT throughout the incubation and business development cycles; leveraging the global incubator network to exchange experiences and ideas; and strengthening businesses in ICT and non-ICT sectors. The goal of the *info*Dev Incubator Initiative-funded work program is to foster socio-economic development in all provinces of the country by establishing ICT units in 13 existing business incubators to facilitate access to information and knowledge-sharing for all with a focus on small and micro-entrepreneurs and tenants of business incubators.

Partnerships
The business incubators network in Uzbekistan was created by the joint **United Nations Development Programme** (UNDP)/ **State Committee for State Property Management and Entrepreneurship Support** project, Creation and Development of Business-Incubators Network 1996—2003. The country's network consists of 36 business incubators located in all provinces. All business incubators are independent, self-supporting legal entities.

Activities Undertaken
Project activities are aimed at building local capacity in the target business communities, raising awareness of and promoting ICT use by local entrepreneurs and small businesses as tools to address their short- and long-term development goals and facilitating the creation of a global incubator network for exchanging ideas and formulating best practices and lessons learned.

The work program is to create (1) an Internet portal with a user-friendly interface; (2) ICT units by providing necessary equipment to 13 existing business incubators; (3) trained personnel in the use of ICT and (4) access and connectivity to the Internet portal for ICT units.

UNDP, *info*Dev and Business Incubation in Uzbekistan
The *info*Dev-funded work program is to be seen in the context of an ongoing UNDP-funded project, *Promotion of ICT Units in Rural Areas to Foster Small and Micro-Credit Enterprise Development*. During 2004, two ICT units were established in business incubators in Nukus and Karshi. The units were supplied with the necessary equipment and the managers were trained to deliver qualitative services and training programs in the use of ICT by entrepreneurs and common users. A total of 274 persons passed the training courses offered on Internet navigation and basic computing skills. One of the lessons learned from the project implementation phase was that merely establishing the ICT units would not satisfy the needs of local communities and entrepreneurs for comprehensive web-based information.

It was in this connection that the association of business incubation and technoparks of Uzbekistan applied for grant funds from to create a user friendly Internet portal that combined all useful sources of information into one system. On receiving *info*Dev financing, UNDP decided to extend the project to strengthen the capacity of business incubators in Karshi and Bukhara to provide high-quality training and services to local entrepreneurs including developing new products and access to information.

LATIN AMERICA AND THE CARIBBEAN

Brazil

Joint Grantees: (1) Minas Gerais Incubators' Network Information and Communication Technology Program, (Rede Mineira de Incubadoras); (2) Technological Incubator of Popular Cooperatives of the Federal University of Rio de Janeiro; (3) Genesis Institute for Innovation and Entrepreneurial Action

Grant: Capacity Building Grant. US $300,000
Contact: Christiano Gonçalves Becker, President, RMI
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Proponent Website: http://www.rmi.org.br/

Through a grant to **Rede Mineira de Incubadoras** (RMI), *info*Dev is supporting three incubator operations in Brazil: one in Belo Horizonte in Minas Gerais and two in Rio de Janeiro. The RMI Incubators Network Information and Communication Technology Program is a not-for-profit organization created in 1998 in the state of Minas Gerais. Its mission is to contribute to regional and national economic and social development by supporting organizations that promote technology-based companies in the state such as incubators, technology parks and technopoles. RMI comprises 15 technology incubators in Minas Gerais, all not-for-profit organizations connected to public or private managerial institutions including universities, foundations and mayoralties.

Technological Incubator of Popular Cooperatives of the Federal University of Rio de Janeiro (ITCP) supports popular cooperatives for creating livelihoods and income generating opportunities for poor and disadvantaged people, particularly women. The program is managed by Fundação COPPETEC (COPPETEC Foundation) and the Technology Transfer Office of COPPE/UFRJ. ITCP was founded in 1996 with an agreement between COPPE/UFRJ, FINEP (Brazilian Innovation Agency) and the Fundação Banco do Brasil (Bank of Brazil Foundation) in response to growing unemployment in Brazil. Since its creation, ITCP has contributed directly to creating more than 1,200 new livelihoods and jobs in Rio de Janeiro. ITCP has its own facilities with 400 square meters of building space located on the university campus. There are eight offices, an auditorium, a classroom, a telecenter and a conference room with optimal infrastructure.

Genesis Institute for Innovation and Entrepreneurial Action is a private, non-profit foundation of the Pontifícia Universidade Católica do Rio de Janeiro (Pontifical Catholic University of Rio de Janeiro [PUC-RIO]) with a mandate to transfer research results to society to promote innovation and entrepreneurship by training entrepreneurs. It was founded in June 1997. The *info*Dev-funded work program will lead to the creation of an audiovisual park in Rio de Janeiro municipality in the region comprising Rocinha slum, Gávea, Jardim Botânico and Humaitá to improve social and human conditions and to foster economic and technological development by supporting innovative information and communication technologies (ICT) for business incubation.

Planned Activities
The RMI program aims at improving economic results, commercializing, training and creating better instruments for monitoring and evaluating incubators, tenants and associated companies through a substantial improvement in the use and diffusion of ICT. The three projects that are planned under RMI supervision involve the participation of the three incubators, their tenants and associate companies. Activities include the following.
- *ICT and commercialization:* This project aims to improve the use of ICT and Internet as more effective tools for the commercialization of services and products of tenant companies. A poll conducted by RMI indicates that fewer than 20 % of tenants and associated companies of incubator members use the Internet for commercialization and business purposes. Leveraging this use to at least 60 % by providing consultant services and training and developing web commerce tools is the main goal of this project.

- *ICT and performance indicators for incubators and tenant companies:* The same survey detected a real need for improving methodologies for analyzing the performance of tenants and of the incubators themselves. The goal is to adapt, develop and implement a system that collects, consolidates and analyses performance indicators (for example using the balance score card methodology) to improve tenant follow-up and to develop incubator benchmarks.
- *ICT and web-based education for incubators and tenant companies:* The aim is to centrally deliver web-based training to develop entrepreneurs and tenant staff. This has been a challenge for all incubator members as the need for training is irregular.

The work program devised by ITCP provides tangible, easily shared social and economic results of introducing and developing ICT tools in poor neighborhood cooperatives. The project is to develop and incorporate ICT in ITCP's tenant cooperatives as well as in their graduates to address their short- and long-term goals, namely to (i) introduce, develop and incorporate ICT in all applicable ITCP activities to improve performance, sustainability and growth; (ii) foster the creation of cooperatives using ICT-related services and (iii) disseminate and replicate to other neighborhood cooperative incubators the lessons learned during project preparation and implementation. The first course developed is on cooperative indicators as part of the integrated management system. This will manage the whole incubator, the process of incubation and the cooperatives and will also generate indicators from the interface of these models. This system is to be made available on the portal for use by other incubators, institutions and organizations.

The four main components of the Genesis Institute project are the following:
- *Survey:* Develop two surveys, one on local living conditions and another on the audiovisual supply chain to identify problems and potential.
- *Work plan:* Streamline efforts and determine the actions and projects that must be implemented to foster local development and enhance the audiovisual park. It also includes designing follow-up processes and managerial indicators.

Genesis Institute: Business Consortium and Corporate Networks

- *Business consortiums and corporate networks:* Design and implement interactive cooperative networks to strengthen local businesses, generate business opportunities and reinforce the audiovisual park. Such efforts are to follow the arrangement of periodical business meetings to foster communication, synergism and cooperation among the participants
- *Business incubation*: Direct and adapt PUC-RIO's business incubation programs to foster and support business planning, research and development programs; strategic partnerships and intellectual cooperation and transference for the purpose of reinforcing, enhancing, and expanding the audiovisual supply chain.

Genesis Institute Highlights
- *Pioneer in diversification of incubation areas*: These include technology, culture, social and community and local development.
- *Creating entrepreneurs:* Genesis Institute is active in all stages from establishing an entrepreneur to market follow-up.
- *Expanding the incubator concept:* Genesis Institute believes that individuals should be emphasized more than enterprises.

Indicative Portfolio of Genesis Institute

Name of Client/Tenant Company	Description of Business
Antenada	Fashion for women, products for teenagers.
Nós do Cinema	Training, qualification and practice in cinema, television and computer science for less-developed communities.
Grandeur Jogos	Consulting, creation and development of games for education and entertainment.
Dançar a Vida	Emotional development through dancing for children from 4 to 11 years old.
Editora Outras Letras	Projects to promote Brazilian culture through music, cinema and arts.
Cultural Biz	Consulting and participation in revitalization enterprises and interpretation of cultural, historical and natural patrimonies.
Geravida	Courses and cultural events for children and teenagers from less-developed communities.
Apraax	Development of a scholarly panel for improving the quality of middle schools.
Letre	Marketing, manufacturing and installing signs with exclusive schedules, logistics and designs.
Cabeça de Negro	Promotes appreciation of the culture of Brazilians of African descent using new technologies with low costs.
Consultoria Jurídica Ambiental	Promotes environment education to prevent damage and to solve environment conflicts.
Mover Imagem	Audiovisual producer with focus on social responsibility.
Ulisses Mello Restaurações	Innovative system for combating and controlling the decay of artistic, cultural and historical objects.
ArteVisivo Comunicação Visual	Solutions using graphic design to enhance the image of companies and their products and services.
Caus Bambu Design	Product design and development of innovative technology for application with bamboo.

Chile
Grantee: Fundación para la Transferencia Tecnológica

Grant: Operational Grant. US $400,000
Contact: Mr. Antonio Holgado, Tel 56-2-678-4816
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Proponent Website: www.incubadora.accessnova.cl

Access Nova Incubación is a Santiago-based, state-run, technology-based business incubator. It is funded and managed by the University of Chile's Technological Transfer Foundation which is part of the Faculty of Physical and Mathematical Sciences. It operates in strategic alliance with the OCTANTIS Incubator that is managed by a consortium comprising the privately run Adolfo Ibañez University (Valparaiso Business School), the Invertec IGT export business group and Organized Enterprising Environment (CEO), an innovative private network for enterprise promotion in Chile. It was established in 1996 and is reputed to be a model for other South American business incubators and to rank in the top ten of Chile's incubators in terms of management, methodologies and quality of consultancies and training services. In addition to the grant from *info*Dev's Incubator Initiative, Access Nova's sources of financing include the Innovation and Development Fund (FDI), a state entity under the Corporación de Fomento de la Producción (CORFO), and monthly fees from the incubating companies for services rendered (management, mentoring, operational support, quality control, access to finance, and public relations).

Project Objective
The *info*Dev-funded work program is to enable the incubator to extend the technological incubation concept by (i) reducing entrance barriers to creating ICT-related companies; (ii) minimizing risk through mentoring and training in business management; (iii) fostering successful businesspersons to lead and manage profitable businesses when leaving the incubator; and (iv) becoming an important economic and social instrument for universities and local communities. Important programs include the design and start-up of an angel investment network and strengthening networking with the National Business Incubators Association (ANIN).

Partnerships:
- **Access Nova Incubacion**
  - **Tecnológico de Monterrey** (TEC) for the study of best practices in business incubation;
  - **ISO Easy**, a consulting company assisting in developing ISO 9001 compliant processes;
  - **e-Deas**, a public relations firm conducting a campaign promoting entrepreneurship in Chile;
  - **3M** to promote innovation and entrepreneurship in researching how to transform university-sponsored projects into incubating companies;
  - **Codelco**, the country's largest copper mining company incorporating ICTs into its processes;
  - **NTT DoCoMo**, a technology partner with whom AccessNova conducts research and incubates companies (NTT partners in developing remote mining technologies for Codelco).
- **OCTANTIS Incubator**
- Incubators within the newly created **ANIN**

Activities Completed and Milestones
- *Strengthening the incubator network:* Access Nova collaborated with TEC given the latter's value and experience in the area of entrepreneurship and incubation. Another manifestation of this exchange program was a dialogue with the Nicaraguan Minister for Science and Technology. The Access Nova Incubator completed a comprehensive analysis and systematization of its procedures and management activities. It received its ISO 9001 certification in November 2004 which is expected to contribute to making its services more efficient and effective. An initial diagnostic of the incubator was undertaken between October and December of 2003 followed by the design and

implementation of an action plan to improve its project selection process and to run a marketing campaign aimed at increasing the number of applicants. A strategic plan was also prepared.

- *Creation of ANIN:* A strategic plan for the association was developed followed by a legal constitution. An independent board was then created. ANIN was launched on July 17, 2003 during the closing ceremony of the First Congress of Entrepreneurship in Chile. Plans are underway to organize, execute and evaluate a campaign to promote the association.

- *Diffusion of best practice to other incubators in the country*: The model to transfer the knowledge gained in the first phase of the project will be carried out by ANIN. The foundation of the transfer model is based on transferring and redirecting knowledge gained and customizing the processes and knowledge to the needs of each incubator.

- *Producing images of success:* Efforts were undertaken to develop outreach activities to record the histories and attitudes of successful entrepreneurs to stimulate business by increasing the quality and amount of experimentation.

- *Design and development of a network of angel investors:* Studies have shown that the principal factor limiting investment in emerging companies is not scarcity of capital: it is the lack of knowledge and trustworthy information angel investors have about emerging companies. Additionally, these studies indicate that these networks tend to invest in local and regional start-ups. To bridge the gap between the worlds of angel investors and emerging entrepreneurs, the following activities were implemented: a market study, the creation of a network of angel investors, a model of operation for the network launch and executing activities that involve entrepreneurs, angel investors and risk capital.

Colombia
Joint Grantees: Innovar and Incubadora Parquesoft

Grant: Operational Grant. US $500,000
Contact: Adolfo J. Naranjo, Executive Director, Corporacion Innovar
          Humberto Pradilla, Executive Director, Corporacion Bucaramanga Emprendedora
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The *info*Dev-funded work program in Colombia covers two incubator operations. The first is a joint work program of **Corporación Innovar** (Innovar) and **Corporación Bucaramanga Emprendedora** (CBE) in Bogota and Bucaramanga, and the second is a work program of **Parquesoft: Incubadora Parque Tecnologico del Software de Cali** (PSTC). Innovar is a non-profit technology incubator based in Bogota servicing information and communication technologies (ICT)-enabled tenant clients and offering regional and virtual ICT services. It currently has an incubator building with an area of 2,200 square meters and 25 on-site and 20 off-site tenants. Graduate companies to date number 43. CBE is a technology business incubator that creates new knowledge companies and employment and increases the competitiveness of the business community. CBE offers basic and complementary support services to the entrepreneurial community. It was established by academic institutions and organizations from the private and public sectors, especially the industrial university of Santander. PSTC was founded in December 1999 at an industrial estate located in the north of the city. It created its own methodology of incubation, the model of entrepreneurship, by developing a unique cluster of knowledge at the national level. This methodology is based on alliances with key actors in the economy. The products and solutions developed by the entrepreneurs include business solutions and applications in sectors including education, health, security, transportation, government, services, agro-industry, environment and industry. These products and solutions align and integrate enterprise strategies with the overall mandate of bridging the digital divide. The incubator provides entrepreneurs with infrastructure and complementary professional services for enabling the development of ICT products and solutions.

Project Objectives and Planned Activities
The *info*Dev-funded work program for Innovar and CBE is to develop two regional incubator centers and to build capacity in their management teams, disseminate their experiences and promote the utilization of ICT in business development. Both Innovar and CBE face many challenges in building managerial capacity and in disseminating experiences including fragile financial positions, poor access to low cost broadband, lack of an ICT culture in business, and poor knowledge of incubation in the country. Their main learning experience derives from the United States National Business Incubation Association's website and conference, but for further development purposes they are seeking broad institutional strengthening and technical assistance especially for mentoring/consultancies and support from regional and global incubator networks. The *info*Dev-funded work program is driven by three main strategies:

- developing and improving internal capacity for incubation by standardizing the processes; creating a technological platform for creating a virtual business community; formulating an e-commerce model for incubated companies; installing, operating and maintaining infrastructure for virtual business incubation and e-commerce platforms;
- promoting entrepreneurial activities through the design and development of a business intelligence center with structured databases and creating self-managed business communities;
- constructing two regional incubation centers in cooperation local governments and linked with university, regional and national government programs, one by Innovar in Cundinamarca state and the other by CBE in Santander state.

PSTC works with enterprising young people on national software especially those entrepreneurs who face four generic constraints: no real estate space; no direct sponsorship; no access to risk capital and those seeking synergies between the university and the industry. The benefits that tenants typically receive include business infrastructure and support in design and relevant technology for software development. Additionally, a client looks to PSTC for an initial pilot project to make the company a practitioner, provide income and potentially become a research laboratory. The *info*Dev-funded work program includes the following activities:

- enhancing the business strategy and operational performance of the incubator;
- consolidating the regional network of technology parks in the southwestern region of Colombia;
- developing the human capital base with a focus on professional business management skills and ICT-enabled learning in new companies;
- promoting quality standards and establishing quality assessment methodologies in emerging software companies;
- strengthening the marketing strategy and marketing processes of business incubators and their clients in the region with a special focus on penetrating national and international markets;
- expanding the use of ICT for achieving higher productivity and competitiveness in incubators and small companies;
- generating and disseminating successful practices.

Colombia
Grantee: Corporación para el Desarrollo de Tunía (Corpotunía)

Grant: Planning Grant. US $100,000
Contact: William Cifuentes Alvarez, Corregimiento de Tunía Municipio de Piendamó
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Proponent Website: www.corpotunia.org

Corporación para el Desarrollo de Tunía (Corpotunía) is a not-for-profit civil society organization serving rural communities in the central and northern parts of Colombia's Cauca state. It was established in 1986 by a group of community leaders with financial assistance and support mainly from the Fundación Carvajal in Cali. Corpotunía's headquarters is in Tunía in the municipality of Piendamó (about 500 km south of Bogotá) just off the Pan-American Highway. The buildings occupy about 400 square meters of floor space and provide a reasonable amount of office space and space for training activities. The organization is legally recognized by the government and by the Chamber of Commerce. Corpotunía conducts integrated development projects aimed at organizing and supporting local producers of tropical agricultural products. A central aim of these projects is to link producers with growth markets as a means of reducing poverty in this neglected, predominantly rural region of the country. Drawing on experience in Colombia and elsewhere, this project will consolidate an agro-enterprise incubator in the southwest.

Project Objectives
The *info*Dev-funded work program will develop and test both direct and virtual approaches to providing training and support aimed at creating and strengthening competitive rural agro-enterprises. It is designed to link those approaches with the use of more conventional communication technologies such as radio and printed materials. In this way, the project will make the incubator's services and support widely available to rural communities so that they reach highly vulnerable groups such as refugees and indigenous people. Specifically, the project objectives include:
- evaluating the environment for incubation and the need for information and communication technologies (ICT) for new businesses;
- creating a support network for the agro-industrial business incubator and training associates how to develop and manage the incubator;
- developing a strategic business plan for the incubator;
- generating, diffusing and sharing with *info*Dev the lessons learned and the successful practices in the use of ICTs for incubation, innovation and competitiveness.

Partnerships
The strategic partners that are to contribute to the *info*Dev-funded project are to include the region's agro-enterprise developers including the **Cauca Chamber of Commerce**, **Cauca Regional Center for Productivity and Innovation** (CREPIC), and the **International Center for Tropical Agriculture** (CIAT).

Project Activities
- *Create an improved model for agro-enterprise incubation***:** Inventory the supply and diagnose the demand for business support services in rural areas. Determine the state of the art in proceses for agro-enterprise incubation. Design an improved agro-enterprise incubation process.
- *Develop centers (nucleos) for direct and virtual incubation of agro-enterprises:* Identify the regions where the incubation nucleos will be established. Define the objectives and services they will provide for increasing the competitiveness of important value chains. Develop ICT applications for the operational model of the centers. Devise mechanisms for supporting community-based incubation intermediaries or multipliers. Devise strategies for linking community telecenters with the project.

- *Develop an agrobusiness unit:* Develop an online information system for high-priority value chains. Design mechanisms for capturing and updating key information on value chains. Develop an online information system on agro-enterprise development. Develop an e-commerce platform for linking value-added products with markets. Design and launch the agrobusiness unit.
- *Design and develop ICT applications to support agro-enterprise incubation:* Design a model for integrating the use of ICTs into the agroenterprise incubation process. Develop and implement ICT applications for agro-enterprise incubation. Set up classrooms for computer-mediated distance education (e-learning). Develop content on agro-enterprise competitiveness. Develop electronic aids for the different incubation phases. Develop portable ICT applications to support technical assistance for incubated agro-enterprises.
- *Test direct and virtual incubation models in operation:* Operate, test, and adjust the direct and virtual incubation model. Measure impact indicators with a sample of agro-enterprises supported with the new incubation models. Summarize the outcomes of consultations with the project's various interest groups.
- *Evaluate and document the experience*: Form a committee to monitor and evaluate the project. Evaluate and monitor the project and consolidate Corpotunía's business plan. Measure the impact generated by the project during its initial and final stages and describe the aspects that changed.
- *Disseminate the experience:* Publish good practices from the project on the web. Disseminate this information by other means available to project partners. Interact continuously with the Incubator Support Center (iDISC).
- *Audit the project:* Contract an external auditor for the project.

Costa Rica
Grantee: Comisión Asesora en Alta Tecnología de Costa Rica (CAATEC)

Grant: Capacity Building Grant. US $250,000
Contact: Dr. Ricardo Monge
Email: rmonge@caatec.org
Proponent Website: http://www.caatec.org/, Project website: e-Incubation Project

The leading proponents of the *info*Dev-funded work program in Costa Rica include the Comisión Asesora en Alta Tecnología de Costa Rica (CAATEC) and the Centro de Incubación de Empresas-Instituto Tecnológico de Costa Rica (CIE-TEC). **CAATEC** is a private, independent, non-profit foundation that supports social and economic development in Costa Rica by leveraging advances in information and communication technologies (ICT). CAATEC is made up of individuals from the academic sector (including the presidents of the four national universities), the private sector and representatives of the largest multinational high-tech corporations operating in the country. The mission of the CAATEC Foundation is to increase the competitiveness of Costa Rica by strengthening strategic infrastructure, by e-development of human resources, and by the appropriate use of science and technology by small and medium-sized enterprises (SMEs). **CIE-TEC** was created in 1994 with the objective of promoting innovative start-up firms with the potential to make substantial contributions to national productivity. CIE-TEC's facilities are located at an industrial park in the province of Cartago. The current facilities allow CIE-TEC to support the incubation of a maximum of eight companies and to support other incubating firms outside its premises. It currently offers logistic and strategic services to tenants.

Project Objective
The *info*Dev-funded work program is to facilitate the development of competitive ICT-enabled SMEs in Costa Rica through the creation of an effective e-business incubator model (eBIM) at CIE-TEC. This model is to improve the levels of efficiency and effectiveness of the incubator itself resulting in the creation of competitive Costa Rican SMEs which are estimated to be 95% of the country's formal businesses. This will enable CIE-TEC to consolidate its operational and self-sustaining capabilities, performance and business outreach through the creation and more effective use of ICT skills and ICT-enabled business incubation services.

Partnerships:
- Ministry of Economy, Industry and Commerce (MEIC)
- Instituto Tecnológico de Costa Rica (ITCR)
- National Bank of Costa Rica (BCNR)
- Intel Corporation
- Investment Promotion Agency of Costa Rica (PROCOMER)*
- CAATEC

Activities Completed and Milestones
- *Office space and basic office services*: These activities were undertaken on the basis of a needs assessment and included creating a new computer training center on the premises with at least 12 new work stations. An agreement has been reached with ITCR (where the total bandwidth has been raised to 14 megabits per second) to reserve a portion for CIE-TEC. There are also plans to construct a new computer laboratory given CIE-TEC's participation in BCNR's mobile unit program.
- *Human resource development*: CIE-TEC needs to define and implement ways to determine the basic training needs of its tenants. The first component includes capacity building to find information they need on market conditions and competition, etc. and adding value to the skills they already possess (Internet search engine techniques and tools). The second component provides information to tenants

about outside consultants/training services and helps them negotiate costs for these services that will be paid by the tenants themselves.

- *Access to financial resources*: At the beginning of the project, CIE-TEC did not have optimal methods to analyze operating costs, to determine pricing for the services provided to its tenants, and to control expenditures, but this has been mitigated through a spreadsheet-based cost control system. A recycling project for tenants in the industrial park was started to raise income to cover budgetary shortfalls that the incubator has suffered in the recent past. There are also plans underway to investigate strategies for acquiring financial interests in tenants and to reduce the overall debt levels of the industrial park in Cartago where it is housed.

- *Formation of non-financial support networks*: Regular meetings between current tenants are to be arranged, and efforts have been made to strengthen relationships with outside organizations. Online communication and interaction with other members of the incubator community are currently progressing at a satisfactory level.

- *Incubator administration*: Clarifying and formalizing the relationship between ITCR and CIE-TEC regarding the work plan is a high priority that has recently been spelled out in detail. It is necessary in order to better anticipate the types of assistance that the incubator can receive from ITCR. An administrative information system has been deployed to better manage data about the activities and experiences of the administration and its tenants.

- *Admission and graduation criteria*: New selection criteria are planned based on economic development and the return on investment evaluation suggested by studies by BCNR and MEIC. A pre-incubation entrepreneurial training program is also planned for all the prospective tenants.

- *Outside incubator services*: The incubator will participate in the mobile unit program of BCNR which will provide $45,000 over two years for maintaining a computer laboratory in the incubator and for the participation of incubator staff in the mobile program. A vehicle equipped with computers and a satellite Internet connection will travel across the country visiting 50 communities to present BCNR's Internet banking services for entrepreneurs and in the process will gain an understanding of small businesses through interviews.

Project funding provided by *info*Dev has allowed CIE-TEC to substantially improve the quality of the services that it offers to local small businesses. Incubator tenants now have improved access to computers, high-speed dedicated Internet access, critical evaluation and revision of their business plans, training in business process improvement integrated with ICT use (including Internet investigation techniques), support for regular meetings between tenants to share experiences and suggestions, and e-mail newsletters with content relevant to their situations and problems.

These advances are noteworthy in and of themselves, but they have also fostered a new level of outside confidence in the professionalism and usefulness of incubator services. This has led to additional benefits for the incubator itself as well as for small businesses outside the incubator in Costa Rica and Central American. The value of courses with a primary emphasis on training in business process improvement with ICT as cross-cutting elements integrated into training in all business areas impressed the school of Business Administration of the Instituto Tecnológico de Costa Rica (ITCR) sufficiently to convince them to become responsible for the administration of the Incubator as well as to assume increased responsibility for incubator funding—a vital step toward assuring the incubator's sustainability and controlling service quality.

These same training resources have also attracted the interest of organizations such as MEIC, the National Network for Assistance to SMEs (DIGIPyME) and the Intel Corporation. They have joined the incubator, ITCR and CAATEC to promote a pilot program for training Costa Rican small businesses in the use of ICT to improve business processes. On a broader level, the incubator, ITCR and CAATEC have received funding from the Kellogg Foundation to develop a pilot program to provide similar training throughout Central America and southern Mexico. This will potentially benefit thousands of regional small businesses and will be one of the outcomes of the initial support *info*Dev provided to create incubator courses.

Membership in projects such as the Incubator-MEIC-CAATEC-Intel effort to promote ICT in Costa Rican SMEs and the Kellogg foundation-funded Central American effort (as well as the ITCR business school's increased levels of financial support) demonstrate the ability of the incubator to draw the attention and funding necessary to better serve the national and regional SME community.

Laboratorio de Biotecnología VitroPlant S.A.: in-vitro plant reproduction

Indicative Portfolio Comisión Asesora en Alta Tecnología de Costa Rica

Name of Client/Tenant Company	Description of Business
Laboratorio de Biotecnología VitroPlant S.A.	In-vitro plant reproduction, cloning of selected commercial plants, germination of orchid seeds
Corporación de Profesionales en Ingeniería (CPI) S.A.	Construction consultants (new and remodelled buildings: commercial, residential, industrial)
Sistemas de Colaboración Educativa H y F S.A. (SICOE)	Information systems for educational institutions
Innovaciones Biotecnológicas	Waste treatment for food processing and agricultural industries
Guaycará Breloa, S.A.	Production and sales of marzipan confections
Orel Biotecnologías ,S.A.	Phytosanitation

Dominican Republic
Grantee: Cyberpark of Santo Domingo

Grant: Operational Grant. US $150,000
Contact: Eddy Martinez
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Proponent Website: www.wati.com.do

Cyberpark of Santo Domingo's **Westport Applied Technology Incubator (WATI)** is the first applied technology enabler business incubator in the Dominican Republic. WATI's mission is to facilitate enhancement of international competitiveness of Small and Medium Enterprises by promoting a more efficient and vibrant use of applied new information and communication technologies and ease of access to these enterprises while preserving respect for intellectual property rights and foster potential intellectual property generator projects.

Project Objectives
- To continue promoting the local use of ICT applications within the small and medium technology enabled enterprises in the Dominican Republic to stimulate greater productivity and international competitiveness, creation of greater numbers of jobs and thus cascade the tools for poverty reduction.
- To use the WATI as a source of long term, easily accessed source of best practices for ICT enabled business in the Dominican Republic and the Caribbean. This shall be accomplished by engaging external consulting to improve the marketing, e-business, networking and operational capabilities of WATI's tenant companies.
- To expand the capabilities of WATI in the area of "open source" software and "open systems" architecture, enabling e-business activities using the open source platforms and thus helping stem the rate of intellectual property violations while allowing a creative tool to inspire the birth of indigenous intellectual property creation in the field of ICT.
- To promote and support refurbishing and device adaptation for use in the rural health provision and social security reform in the Dominican Republic.

Partnership:
- Universidad Dominicana O & M – the largest private university in the Dominican Republic with 28 thousand students and regional centers all around the country. The role of the Universidad O & M in the Westport Applied Technology Incubator (WATI)-*info*Dev project is to provide support in the following areas: project assessment; survey preparation; ICT architecture design; software development, and training and workshops.
- Conferederacion de Pequenas y Medianas Empresas (CODOPYME) – the federation of Small and Médium Enterprises's associations in the Dominican Republic, which serves as a representative of the concerns and interests of the SME sector before the governmental entities and general society as a whole. Within the strategic alliance with WATI to implement the *info*Dev supported project, Codopyme will continue its role of building capacity to accelerate the competitiveness of the Dominican Republic's SMEs to face the challenges and opportunities presented by growing globalization throughout the world. To achieve these goals, Codopyme will help leverage ICT within SMEs to facilitate integration into the global knowledge-based economy, developing SMEs human and institutional capacity at the national levels by promoting a wider use of ICT and specially within women owned businesses.

Panama
Grantee: City of Knowledge Foundation

Grant: Operational Grant. US $300,000
Contact: Jorge Arosemena, Director of City of Knowledge Foundation, Panama Technology Business Accelerator
Email: anavarro@ciudaddelsaber.org.pa
Proponent Website: http://www.cdspanama.org/

The **Panama Technology Business Accelerator** (PTBA) established in Panama City in 2000 operates on a non-profit, foundation-supported basis and focuses on information and communication technologies (ICT) and biotechnology. It is the only incubator in Panama. It provides a comprehensive range of services to tenants and graduate clients including pre- and post-support center incubation through mentoring; assistance with finance through local banks, private investors and angel investor networks; broad-quality technology incubation in the least amount of time possible and provision of business plan, management, and virtual entrepreneur development training courses.

The incubator has a total of 2,896 square meters of building area with 11 tenants; it has graduated 10 clients. It faces significant challenges in its plans to grow and become more effective, namely regulatory and business environment impediments, poor development of entrepreneurship and lack of finance for client and other enterprises. The incubator aims to become self-sufficient financially by 2008 by upgrading its revenue base through new rental, equity and royalty arrangements; new service fees and private donor funding based on tax credits. The approach to incubation has been to learn from the United States National Business Incubation Association and to attend incubation conferences and then adapt these to Panamanian conditions creating a so-called incubator "soup Panamanian style." The foundation is seeking further assistance in mentoring/consulting, financing, establishing supportive networks, and accessing other incubators through exchanges and study tours.

Project Objective
The *info*Dev-funded work program is to facilitate new activities that will help the incubator to reach out to more prospective clients all over the country and to deliver better solutions for them. Specifically, the new activities are to include the following:
- creating a seed capital fund for PTBA that will enable it to start new ventures;
- developing a national business plan competition to create awareness of the incubation system and what it can offer in the entrepreneurial sector to help create a stronger incubation base;
- formulating an incubator training course for the country in Spanish and a methodology that can be applied across all the other incubators in Latin America;
- serving as a virtual incubator to complement the work of PTBA as well as to expand the reach of the incubator to more entrepreneurs preparing business plans using the methodology already approved by the incubator;
- finalizing an online training course for entrepreneurial development that local universities can offer.

Partnership:
- Inter American Development Bank (IADB)

Activities Completed and Milestones
PTBA started its incubation program with 5 new ICT and biotech companies after 10 of the 15 original tenants of 2000 were spun off early in 2005. Those 10 companies have invested over $1.3 million dollars in the development of their products or services and have created (while in the incubator) 54 high-tech jobs and 25 administrative positions. PTBA has also begun to develop its post-incubation model with the help of international consultants and the portfolio of services to be delivered in this phase.

Paraguay
Grantee: Fundación Enlace

Grant: Planning Grant. US $100,000
Contact: Marcos Tatijewski, Project Executive Director
Email: proyectos@cedial.org.py
Proponent Site: www.enlace.org.py

Project Genesis: An Incubation and Regional Innovation System is part of the IPORA Project designed to create a catalyst for incubators, technological parks and entrepreneurial support organizations. It has as its objective the development and implementation of an inter-institutional program of business incubation that integrates the intensive use of technology as a fundamental tool for optimal production, management, marketing and knowledge network formation. The project design includes an initial phase of investigation, diagnosis and benchmarking followed by the implementation of networks, participant training and dissemination and promotion of an entrepreneurial culture. Additionally, a series of technological tools is planned to enable incubators to offer services of high value from the start of their activities, to improve the success indicators of new businesses and to stimulate exchange on best practices among incubators and their businesses.

Project Objective
Project Genesis aims to (i) produce a replicable methodology to design regional innovation systems (ii) promote incubation to improve the competitiveness of Paraguay's products and (iii) support emerging ventures. Finally, a strategy for businesses and entrepreneurs to benefit from the opportunities created by new information and communication technologies (ICT) is also to be developed.

Partnerships
In addition to the **Enlace Foundation**, the implementing institution, there are a number of collaborating institutions including the **Ministry of Industry and Commerce** (MIC), the **National Science and Technology Council** (CONACYT), the **National University of Asuncion** (UNA) and the **Business Cooperation and Industrial Development Center** (CEDIAL).

Activities Completed
Project performance has been structured in phases each with specific results (products) that will contribute to the deliverables and to the target activities according to the grant agreement. The phases are the following:
Phase 1: Technological Orientation of the Incubator
Phase 2: Articulation of Regional Actors
Phase 3: Business Plan
Phase 4: Follow-Up, Control and Diffusion

Phase 1: Technological Orientation of the Incubator
- *Analysis of the region's scientific and technological offerings based on their capacities and the capacity to interface with the production sector:* Define the information gathering instrument and the sample of institutions to interview. Train pollsters to acquire and gather accurate information. Analyze and interpret the information, collect feedback and make adjustments.
- *Study the industrial dynamics (demand for innovation) and analyze the regional market for scientific and technological services:* Define the information gathering instrument and the sample of institutions to interview. Train pollsters to acquire and gather accurate information. Analyze and interpret the information, collect feedback and make adjustments.
- *Economic analysis and analysis of future tendencies in the incubator's regional environment:* Compile documents and studies related to the economic environment. Conduct interviews with

government, academic and business entities. Define and/or identify strategic actors (stakeholders) and build their awareness. Conduct a workshop to identify future tendencies in the region then analyze them (application of techniques). Collect feedback and make adjustments.

- *Assessment of regional scientific and technological capacity:* Assess the legal, political and regulatory environment and infrastructure. Prepare a report on competition including business innovations, institutional technology offerings, interface activities and strategies. Collect feedback and make adjustments.

Phase 2: Articulation of Regional Actors

- *Planning workshops with actors:* Define objectives, schedule, participants and topics. Contact stakeholders in the incubation system. Conduct workshops to conceptualize and consult with stakeholders. Design guidance mechanisms for organizational policies. Design an agenda of commitments. Define an incubation policy guidance committee (COPI, in Spanish).

Phase 3: Business Plan
This is to include conceptualization; an analysis of local conditions; structure, projection and simulation; a feasibility assessment and a definition of strategic actions for the incubator.

Phase 4: Follow-up, Control and Diffusion
This includes follow-up and control activities and submitting deliverables; promoting a labor network and diffusing knowledge; establishing new alliances with partners and stakeholders to increase opportunities to create a regional incubator that includes ICT and supporting human development and the institutional capacity to incorporate ICT in small businesses and e-business.

An awareness and capacity-building event

Milestones
Alliance: The highest government authorities have been involved from the beginning, and an alliance was formed among five organizations to implement the project:

- MIC through its General Bureau for Business Development;
- CONACYT;
- UNA through the Entrepreneurs Program of the Poly-Technical Faculty;
- CEDIAL;
- Enlace Foundation..

Each organization designated one or two members to sit on a coordination council that meets periodically with the project team to follow up and advise on activities completed and to provide insights for improvement. In this manner, this project has received the permanent support of public institutions, NGO's and the university sector.

Diagnosis: The strengths and weaknesses of the various sectors involved in innovation and incubation are now available for any interested organization. This is the first study of its kind in the country made through the following comprehensive surveys performed on a group of 100 enterprises: institutional technological offerings, academic offerings, stakeholder focus groups, and focus groups on innovative activities.

 Know-how: The incubation environment and capacities in any region of the country can now be measured.

Strategic model: A model for operating incubators in Paraguay including the business plan of an incubator (portfolio of services, administrative, financial and intellectual property models, strategic agendas, technological orientation, etc.) is now available.

Capacity building: This will be developed for innovation, incubation and entrepreneurship. A one-week training workshop will be held in November 2005 with international experts from Colombia, Chile and Argentina.

Peru
Grantee: Centro de Innovación y Desarrollo de la Pontificia Universidad Católica del Perú

Grant: Operational Grant. US$ 350,000
Contact: Joaquín González Mavila, Manager, Centro de Servicios y Transferencia Tecnológica, Pontificia Universidad Católica del Perú
Email: jgonzal@pucp.edu.pe
Proponent Site: http://www.pucp.edu.pe/invest/cide/ Project website: http://www.peruincuba.net/

The **Centro de Innovación y Desarrollo de la Pontificia Universidad Católica (CIDE-PUCP)** is a nonprofit university technology incubator based in Lima established for the purpose of promoting an entrepreneurial culture and information and communication technology (ICT) projects; providing entrepreneurial training, business planning and incubation training and establishing networks of national and global significance to assist Peruvian small and medium-sized enterprises (SMEs). It currently provides training and consulting services, networks with investor angels and partners with micro-credit organizations for the further development of small ICT companies. The university incubator has 30 off-site tenants and 1 on-site tenant in an area of 30 square meters (center's office) and has graduated 15 clients.

Project Objective
The *info*Dev-funded work program is implemented by three institutions that include CIDE-PUCP, Instituto Nacional de Investigación y Capacitación en Telecomunicaciones (INICTEL) and Acción Comunitaria del Perú (ACP). The first two institutions lead in managing technology incubators in the country, and ACP is a private micro-lending organization. The specific objectives of the project are to do the following:
- strengthen the institutional capacities of the technology incubators of PUCP and INICTEL through the use of ICT;
- certify the staff of the existing incubators and incubation projects in Peru;
- promote the emergence of new ICT companies in Peru;
- disseminate knowledge of local and international experiences in business incubation.

Partnerships
- **CIDE-PUCP :** This is the leading proponent of the project and has had experience in incubation-related activities since 1995. It is supported by the experience and the infrastructure of PUCP, the first private university in Peru.
- **INICTEL' Incubator:** This incubator has been in business since 2000 and has the institutional support and the technological background of INICTEL with core competencies in telecommunications and related activities.
- **ACP:** This is a private, corporate group committed to the business development of emerging sectors in Peru. It was founded in 1969 by outstanding business leaders in Peru. The group's work is currently being carried out through its three strategic units (1) MIBANCO-Banco de la Microempresa S.A (2) Acción Comunitaria Corredores de Seguros S.A.C. and (3) IES Acción Comunitaria - Centro de Formación Empresarial. Acción Comunitaria del Perú is an important partner of the project; it will take charge of providing and administering a micro loan fund for incubated companies.

Activities Completed and Milestones
- *Strengthening of business incubators and capacity building of PUCP and INICTEL through the use of ICT:* The activities within this theme included developing a generic and customizable information system for the administration of incubators. This began with the compilation of best practices from online research of different models of incubators. To have a more complete vision of

the best system to develop, the research included Colombia, Brazil and Peru. The information systems of both incubators were improved as were their ICT facilities and physical infrastructures.

- *Training and extension services for the staff of existing incubators and other incubator initiatives in Peru:* With the help of international experts, incubator planning and management courses were developed. The design of the course of incubators was completed. The target audience includes the staff of different projects and incubators across Peru. The syllabus of the course is available. Initially, it was divided in two modules, pre-incubation and incubation, based on resources revised by PUCP and INCITEL. This design was validated in a workshop of the Peruvian network of incubators in which the participants indicated their training necessities. Contacts were then made with Brazilian experts of Rio de Janeiro and Curitiba. The course includes modules on entrepreneurship, innovation, technological business plans, and planning and managing incubators.

- *Training and extension services to tenant companies:* There were a number of national competitions held for prototypes and business plans related to ICT. A training program to develop ICT business plans using distance education modules was also undertaken. The task of designing the course began with two parallel activities. On one hand, a comparative study of similar online courses was made to know the actual course offerings and to identify the best practices to incorporate into the new course. On the other hand, a feasibility report focused on the variables critical for the success of the course. The design of the course was carried out with methodological support from the Unit of Education to Distance of the PUCP (PUCP Virtual). Micro-loan funds were also made available for incubated companies. Details of the qualifications for micro-credits are stipulated in the agreement signed by PUCP, INICTEL and ACP.

- *Knowledge dissemination:* This included activities undertaken to strengthen the national network of business incubation. Progress has been made in identifying and contacting the diverse players in the network, and project activities have contributed to strengthening relationships among incubators across the country. The search for best practices led to defining the online strategy for the project including the creation of a project website www.perincuba.net. Case studies and reports diffusing experiences have also been written.

Uruguay
Grantee: Ingenio–Incubadora de empresas LATU – ORT

Grant: Operational Grant. US $300,000
Contact: Ing. Miguel Brechner, President, Laboratorio Tecnologico del Uruguay (LATU)
Email: mbello@latu.org.uy
Proponent Site: http://www.latu.org.uy/ Project website: http://www.latu.org.uy/incubadora/

The **Ingenio-Incubadora de empresas LATU-ORT** based in Montevideo is the first non-profit
technology incubator to be established in Uruguay. It was developed with funding support from the
government, university and private sectors. It provides tenants a range of services such as marketing
support; international links; information and communication technology (ICT) and e-business
infrastructure and training; support for regional and international networking; exchanges with other
incubators in Latin America and online forums and business planning training workshops. The
incubator's total building area is 580 square meters and it services eight on-site tenants and 23 off-site
tenants. The work program includes the development of an incubation support network including
incubators in developing countries with similar conditions and online forums to improve international
links for clients.

Project Objective
The objectives of the *info*Dev-funded work program are to enhance the performance and scope of the
services of the incubator to demonstrate the feasibility of technology incubation in Uruguay.
Specifically the objectives include the following:
- increase the ICT capabilities of tenants through new services and support to offer post-incubation
  services to graduated companies;
- increase the possibilities of knowledge exchange and training with incubators and incubator
  associations throughout the world.

Partnerships
Ingenio is a business incubator in the ICT field created as a joint initiative by the **Laboratorio
Tecnológico del Uruguay** (LATU) and **Universidad ORT Uruguay** with financial support of
the **Inter American Development Bank** (IADB). This initiative builds on the joint effort of
the state, the universities and the private sector which, through their active participation in the
National Committee for the Information Society, foster the development of the ICT industry as
key to the economic growth of the country.

Activities Completed and Milestones
1) Capacity building of tenants in ICT:
- *E-business development and infrastructure:* Tenant companies will be provided with adequate
  infrastructure and know-how to implement their e-businesses. A number of services will contribute
  to business development, and special attention will be paid to product launching, e-advertising and
  online customer support activities. These services will include website design and maintenance for
  tenant companies and for the incubator itself. The websites will be built and launched as the
  companies prepare to approach the market.
- *Improvement of ICT marketing skills:* The staff of the tenant companies will be trained by ICT
  marketing and sales specialists who will focus on the design and implementation of the tenant
  companies' marketing plans, product designs, product launches and pricing policies. Training will
  be provided by consultants through a number of activities such as workshops (also accessed on the
  Internet), meetings with distinguished ICT entrepreneurs and individual advisory and consultation
  meetings.

- *Technical assistance for marketing campaigns:* Product launching is identified as a critical activity that requires special attention and support by the incubator. Technical assistance is to be provided to incubator tenants to finance advertising campaigns in the initial product launching.
- *Internet connectivity:* The incubator currently supplies all tenant companies with free, dedicated Internet connections. The incubator is also to have a free access library on topics related to tenants' activities.
- *Regional and international networking:* A number of entrepreneurs will receive financial assistance to cover their participation in commercial activities, fairs and events abroad. The purpose is to support their business development on a regional or international scale.
- *ICT managerial and technical courses:* Managerial and technical courses specifically for ICT companies will be given to incubator tenant companies along with a selected number of local ICT small and medium-sized enterprises (SMEs). The courses commenced on June 14, 2004.
- *Introduction to information technologies for SMEs*: A series of courses on information technologies targeted to non-ICT SMEs will be held on the following subjects.
  - *Case studies:* Local ICT companies succeeding abroad will be selected and analyzed as case studies in order to help start-up companies build an international strategy.
  - *Presentations of best practices in the application of ICT in SMEs:* Lectures on best practices will be given. SMEs located outside Montevideo will have access via videoconferencing. Courses will also be taped and published in the web.
  - *Workshop on business plans:* Ten ICT companies will participate in a workshop to assist them to design sound business plans. At the end of the workshop, each company should have a completed plan.
  - *Support to implement ICT solutions in SMEs:* Graduate student projects are useful tools to promote the utilization of ICT. Although SMEs located in small cities outside Montevideo are frequently less ICT-enabled and consequently the ones where help is most needed, they are seldom chosen as case studies because of high travel costs unaffordable for students. Between 15 and 30 graduate ICT student projects aimed at developing custom-made ICT solutions for SMEs will be selected and supported. The projects to be implemented in companies located outside Montevideo will be given higher priority.
  - *Contest for the best ICT innovative projects for SMEs:* The winning projects will receive support to finance their implementation. Winners will be selected by a committee that includes representatives from all universities issuing ICT-related degrees.

2) Support for client companies' development: In order to follow-up and assist companies in the first year after graduation, business counseling will be provided in relation to marketing, administration, and human resource management as a post-incubation service.

3) ICT incubator performance improvement: Incubation is a new activity in Uruguay, so there is a strong need to network with other more experienced incubators in other countries to share experiences, knowledge, training and consultants and to attend incubator associations seminars and events.

MIDDLE EAST AND NORTH AFRICA

Iran
Grantee: Isfahan Science and Technology Town (ISTT)

Grant: Operational Grant. US $300,000
Contact: Mehdi Keshmiri, Vice-President for Research and Technology
Email: mkeshmiri@istt.org
Website: http://en.istt.ir/ ; Project website: http://www.incubators.ir/

The goal of the project is to provide enhanced incubation services to the growing number of tenants and non-tenants and small and medium-sized enterprises (SMEs) across geographical and gender barriers to contribute to successful knowledge-based businesses and to create adequate employment. The project will improve upon the shortcomings stemming from university educational inadequacies, the centralized system in the capital Tehran, underdeveloped business incubation practices, poorly defined communication among stakeholders in the business domain, poor relations with international bodies active in the field and inadequate infrastructural information and communication technology capabilities. The implementation of the project will lead to the following:

▪ improved managerial and operational capabilities among knowledge-based SMEs and improved incubation and facilitation management capabilities among incubators;
▪ the infrastructure required for service delivery and resource and knowledge sharing among incubators and their tenants;
▪ augmented geographical and gender impacts of incubation programs across the nation;
▪ reduced incubation costs through facilitating e-services and knowledge sharing as extensions or outreach of incubation programs to non-tenants through an incubator portal system;
▪ economic development at the local and national levels through wider national and international business transactions (internationalization).

Partnerships
The *info*Dev-funded work program in Iran is a strategic, collaborative effort of **Isfahan Science And Technology Town** (ISTT) a government organization running three incubators, a pre-incubation program, a multi-tenant building and one newly established technology park; **Yazd Science And Technology Park** (YSTP) established in 2001 with a special focus on information and communication technologies (ICT), biotech, new energy, and textile technology and **Rooyesh ICT Incubator** affiliated with the not-for-profit National Job Creation Organization of Iran (JobIran) established in 2000. The funding for this unique public–private partnership includes internal funds, those solicited as grants from the Deputy Minister of Science, Research and Technology and those from the State Management and Planning Organization (MPO) in addition to funding from the *info*Dev Incubator Initiative.

Project Objectives
The planned work program is to result in the creation of training packages for trainers, enhanced incubator services, wider relations nationally and internationally, new incubation programs and an incubator portal system. The work program is to include five main modules related to (1) training in site-specific content by national and international experts; (2) creation of two complementary networking systems, one for tenants and the other for technology parks and business incubators; (3) enhancement and diversification of services and e-services; (4) creation of a bilingual portal system and (5) development of virtual incubation programs.

Projected Activities and Milestones
Training:
• The aim is to provide the skills required to establish a business and manage an incubator. There are prerequisites like English competency, basic understanding of business administration, etc. that

have been and are being provided through regular training at partner organizations. Training in this project will raise the level of skills to international standards.

- A group of international consultants has been approached to collaborate on the implementation of the project. Provisionally, three areas have been identified that require collaboration: (1) the incubation management system including the training of trainers and incubator managers; (2) training in IT and SME/business development including venture capital, international marketing, trade and foreign investment and (3) system development (including portal, e-service, etc.).
- Consultants will come from UN specialized agencies (negotiations are underway) and from foreign government schemes (the French Government has been already approached). The French embassy in Iran and the French Ministry of Foreign Affairs have approved ISTT"s preliminary request to organize a seminar for tenant companies, SMEs outside the partner organizations in the present project and Iranian public sector managers and decision makers on intellectual property rights and innovation with a specific focus on biotechnology, pharmaceuticals and agronomy/environment.
- A four-day workshop was organized from Dec. 20–23, 2004 with support from the United Nations Development Programme office in Tehran and MPO on project management and e-government.

Existing incubator improvement and e-service:

- A baseline has been created for the incubation support services provided to tenants in terms of quantity, quality and need. A process re-engineering approach will be adopted to improve upon current services. New ones will also be created upon completion of a needs analysis and feasibility study. International consultants will be hired to help.
- Later, a feasibility study will be conducted to find out what services, if any, can be offered electronically. One good candidate will be legal advice although face-to-face contacts with legal advisers will still be necessary in a minor number of cases.

Networking:

- The research and technology network already exists in Isfahan, but its regulatory system and transactions have to be refined. It will further have to be connected to the incubator portal system, and e-transactions must be designed and implemented to allow for easy access by SMEs to lab and technical services available in the network.
- A second network, the incubator network, will be designed that will electronically and otherwise connect all incubators across Iran to share their services, e-services, and facilities.

Portal:

- To create easy access to all types of information for business development, a portal system is envisioned that will be designed and implemented up to the pilot level.
- Databases will be created and engines will be devised to allow for easy, fee-based sharing of information, e-services and transactions. The portal will be scaled up by the ministries of commerce, finance, labor, industries, etc. once they realize its importance.

Semi-virtual incubator:

- A virtual system is to be designed with all possible aspects of an incubator to admit non-tenants. They will be connected through the Internet with occasional visits to a central facility or visits by incubator professionals for delivery of certain services and training. This is a semi-virtual incubator in the sense that there is a central headquarters or facility where the managerial staff and advisers can be reached. ICT are a powerful means of delivering support services to non-tenants.
- The semi-virtual incubation system will draw upon the other components of the project such as e-services, training and e-learning, the portal system and the networks. It is expected that at least eight non-tenant firms will be admitted to the program within the life cycle of this project in order to develop and test a model for scaling up and replication.

ISTT has also been appointed as the executive of two national programs:

- implementing the special national project to support ICT companies throughout the country (Takfa project, i.e. the program for increasing the application of ICT in the country) and providing the support of $1.5 millions to 60 ICT companies;

- implementing the financial support plan for pilot production and prototyping of technological projects that amounts to $1 million.

The French Ambassador in Iran and the Deputy Minister of Science, Research and Technology inaugurating the intellectual property workshop

Establishing several incubators in Iran and fostering the culture of incubation and actively participating in international meetings and seminars related to entrepreneurship, innovation, science parks and incubators have made ISTT a pioneer in the country and have also resulted in international recognition. The following are the main activities of ISTT:

- establishing the Qadir Incubator and admitting 82 tenant companies and inaugurating the pre-incubation stage in which 102 start-ups were admitted;
- establishing two university pre-incubators in the Isfahan region;
- establishing a high school student incubator with the cooperation of the State Education Department;
- expanding the physical space allocated to tenants by 20,000 square meters from 3500 square meters in just two years;
- equipping specialized and technical laboratories with a credit of $3.5 million and planning an increase to $6 million;
- designing a financial support system for companies in the incubation stage (seed funds) and providing financial support to more than 80 tenant companies that amounts to $ 2 million.

Some ISTT international successes include full membership in the International Association of Science Parks (IASP); active participation in the conferences and meetings of this association; establishing the West Asia division of IASP based on activities in Iran and electing Dr. Keshmiri, ISTT president, as the president of this division and nominating ISTT as the organizer and host to the IASP Asia Division Conference in 2006.

Above: Dr. Abdin Salih, UNESCO representative in Tehran Cluster Office and Dr. Luc-Bernard, the Representative of UNIDO in Tehran; both in ISTT

Indicative Portfolio of Isfahan Science & Technology Town (ISTT)

Name of client / tenant company	Description of business
Pardis Rayaneh Co	E-tourism
Pooyesh Royanama Co.	Computer graphics
Tarashe Pooyeshgar Co.	Video conferencing
Wireless solutions Support Co.	Web programming, Office automation
SarvNet Co.	Network Security
Shayan Mehr Co.	Web programming, Digital library

Jordan
Grantee: National Consortium for Technology and Business Incubation (NATCTIB)

Grant: Operational Grant. US $350,000
Contact: H.E. Dr Taher Kanaan, Secretary General, NACTIB
Email: omar@hcst.gov.jo
Website: http://www.hcst.gov.jo/En/Home.php

NATCTIB is based in Amman and is led by a successful but small non-profit, government-sponsored information and communication technologies (ICT) business incubator set up in 2003. The lead incubator in the consortium fosters new ICT enterprise start-ups and job creation. It has a building area of 800 square meters with 8 tenants and no graduations, as the incubator is only one year old (one tenant is about to graduate and expand operations). There are 3 other incubators in the consortium; one focuses on agriculture, one on general engineering and one has an emphasis on female entrepreneurs

Partnerships
The founding members of NATCTIB are the Higher Council for Science and Technology (HCST), Jordan University (JU), the Royal Scientific Society (RSS), and Princess Sumaya University for Technology (PSUT). The associate members are Jordan Technology Group (incubator/venture capital), Jordan Forum for Business and Professional Women (incubator), Bidaya Ventures (consultancy), United Group (consultancy) and Investor Protection Association. The partners of NATCTIB include Jordan Technology Group (incubator/venture capital), Jordan Venture Projects Co. (venture capital) and the Industrial Development Bank (venture capital).

Project Objectives
The work program addresses the key issues of entrepreneurial culture in the region, especially in regard to facilitating enterprise start-ups, small and medium-sized enterprise (SME) finance and government networking. Following a government grant of $US 200,000 to establish the incubator, it aims to achieve financial self-sufficiency through a model of tenant rentals and revenue sharing. The primary objectives of the *info*Dev-funded work program are to connect the numerous activities in Jordan that relate to job creation through entrepreneur and small business development and support, to achieve success through coordinating the different efforts so as to reduce duplication and to increase know-how and knowledge through the following activities:
- capturing lessons and know-how from member incubators and SME support programs of NATCTIB;
- revising and enriching these lessons using knowledge (training) gained through internships within successful international incubators;
- creating computer-based systems to monitor, evaluate, disseminate and facilitate best practices, lessons learned, successful procedures and knowledge among all members;
- improving awareness of NATCTIB's services and the entrepreneurial process as a whole.

The consortium aims to achieve the following.
- Increase the effective use of the existing RTD center's resources in helping Jordanian entrepreneurs and start-up companies to succeed in their businesses, enhance their contributions to the national economy and provide job opportunities for the different categories of Jordanian labor force.
- Link entrepreneurs and start-up companies to technical and administrative know-ho and financing.
- Encourage economically viable cooperative and contractual projects (RTD) with the private sector.
- Promote and support valuing and commercializing RTD output.

Activities Completed and Planned Milestones

The planned activities under the *info*Dev-funded work program are to include the following:

- *Procuring the services required to extend the capabilities and to enhance the performance of the incubator:* This involves cofunding national programs that enable an increase in deal-flow and outreach toward all potential sources of new projects for the purpose of awareness and education of the incubator services available. ($75,000)

- *Development and implementation of new services, organizational transformation and training required for enabling e-business:* (1) The consortium will create a management team focused on transforming the knowledge gained during its limited incubation experience from an implicit form to an explicit, reusable one. ($50,000) (2) It will then build a knowledge management system from the input of the transformation management team securing all intellectual property rights. To warehouse historical data and implementing knowledge management (KM) systems to facilitate real-time decision making based on the data, the system will include a computerized audit system, entry criteria, progress evaluations, pricing schemes, graduation criteria and incubator bench marking. The second objective for this system is to provide service to all members and associate members through a secure HTLM/XML-based system through traditional Internet connections. ($150,000)

- *Improve the business management and operational skills of incubator and tenant companies, especially to integrate ICT throughout the entire incubation and tenant business cycle:* Institutionalize the best processes and digitize them to make them available nationwide to all members ($15,000).

- *Core business development*: Develop digitized business development tools and templates such as business plan templates, company prospectus templates, website/virtual store front templates, and newswires ($35,000).

- *Training*: Develop instructional and training materials and programs on the use of digitized material and templates ($24,000). Provide training on the use of the audit and KM systems ($7,000); on the upkeep and further logistical development of the audit and KM systems ($15,000) and for 3 individuals in the management of incubators through participation in internship programs ($45,000).

Morocco
Grantee: Moroccan Information Technopark Company (MITC)

Grant: Capacity Building Grant. US $250,000
Contact: M. Abderrafie Hanouf, General Manager
Email: a.hanouf@casablanca-technopark.ma
Website: www.casablanca-technopark.ma

Casablanca Technopark is managed by a private company, the Moroccan Information Technology Company (MITC). With an area of 29, 000 square meters including conference rooms, meeting rooms, cafeterias and offices equipped with the latest technologies, the Casablanca Technopark provides its clients with a set of general services and technical inputs. It is currently hosting 130 companies most of which are start-ups and small and medium-sized enterprises (SMEs) in the information and communication technology sector. Multinational companies and training, research and development centers are also tenants. All these companies are provided with facilities and with services such as international networking, business plan follow-up and commercial assistance.

Casablanca Technopark is developing a business incubator in order to provide the necessary managerial assistance, technological support and training for successful entrepreneurial ventures. It will complete the existing infrastructure that currently provides services to operating technological start-ups as well as to small, medium-sized and large companies in the information and communication technology industry. The Casablanca Technopark business incubator aims to meet the needs of entrepreneurs in residence by operating as a hub through which internal and external resources and intellectual assistance will be channeled with the main goal of helping entrepreneurs turn their ideas into viable businesses in a two-year incubation period.

Partnerships
- Educational institutions include the **Al Akhawayn University**, the **National School of Computer Sciences and Analysis Systems** (ENSIAS), the **National Institute of Telecommunications** (INPT), **Mohammedia School of Engineering** (EMI), the **e-Business Management School of Lecce** (Italy) and **Indiana State University** (US).
- Research institutions include **R&D Maroc**, an association promoting innovation and entrepreneurship in which the Casablanca Technopark is also one of the main partners.
- Other professional affiliations include the **Association of Information Technology Professionals** (APEBI) and the **Young Leaders Centre of Morocco** (CJD).
- Discussions are underway on integrating with the **Moroccan Incubation Network** (RMIE), which currently comprises only university incubators, to exchange experiences and competencies.
- Partnerships with other technological poles in Tunis, Marseille and Beyrouth are being explored to develop a Mediterranean approach to incubation.

Project Objectives
The operational grant under the *info*Dev Incubator Initiative has been earmarked for capacity building especially for the integration of information and communication technologies (ICT), for monitoring tenant progress and sharing knowledge and for marketing and networking for tenants. With this work program, the first Moroccan incubator to function like a private fund will be established. The project not have any form of subsidy and will add significant value to the incubated companies and to Morocco.

Related Project Activities and Milestones
- The technopark was associated with the creation of the African ICT Innovation Task Force (AIITF) at the African Incubator meeting, Med IT 2004, in Tunis. The principal mission of this task force is the promotion of African technological innovations.

- The technopark's business incubator responded to a bid launched by the Algerian government for a feasibility study concerning the creation of a national incubator in Algiers.

Awareness Raising
- Two advertising campaigns calling for innovative ideas and projects were launched in major Moroccan newspapers in 2004, one in June and the other in December.
- Press conferences have been held to explain the essence and the purpose of incubation. These have resulted in articles published by economic newspapers and in coverage on the main Moroccan portal, Menara, as well as on national TV channels.
- The technopark is conducting a feasibility study for creating Morocco's first entrepreneurial caravan that would travel to main cities to inform entrepreneurs about the incubator and to select innovative projects.

Client Strategy
The strategy involves focusing on specific areas of high-tech expertise capable of leveraging economic development in the ICT sector. Although the incubator is targeting potential projects in the sector as a whole, the focus is on areas where true expertise is still lacking in Morocco. At present the incubator is encouraging the creation of start-ups in software development for business management solutions; e-business (e-commerce; m-commerce); mobile multi-media; Internet content development and value-added services for telecommunications.

Services to Tenants
The business incubator provides entrepreneurs with a supportive environment that helps them establish and develop their projects in the ICT field and turns their ideas into sustainable businesses. By providing services on a one-stop-shop basis and enabling overhead costs to be reduced by sharing facilities, the incubator aims to significantly improve the survival and growth prospects of start-ups and small firms in the early stages of development.

The incubator offers a wide range of complementary services and provides dedicated office space, value-added business support, technical assistance in developing effective business planning, hands-on training in special fields (sales and marketing strategies, public relations and communication, accounting and finance-related issues, etc.), business links, advice and networking.

Milestones
Since the launch of operations, the strategy has been to interact with the local stakeholders in the incubator. Hence, efforts have been concentrated on raising awareness of activities, finding new sources for projects, attracting quality projects and partnering with select financial and educational institutions.
- *Awareness and public relations:* Efforts are ongoing to ensure that the activities carried out at the incubation unit are communicated to a large audience and that achievements are regularly documented through direct communication in local newspapers and through press releases (usually on a quarter basis).
- *Entrepreneurial caravan:* Some of the targeted candidates are recent and future university and engineering school graduates, so the objective of the first entrepreneurial caravan was to promote the incubator and entrepreneurship throughout the country. In all, the caravan stopped at five Moroccan cities and visited nine universities reaching hundreds of potential candidates.
- *Seminars and forums:* One of the initial challenges faced was to establish the incubator as a reference in the ICT sector. This was accomplished by participating in technology shows and fairs and hosting live seminars at the center. Over time, the incubator has been able to exhibit in four forums: INNOVA 2004 (http://www.rdmaroc.org/tabronde.php); SITEB 2005 (Salon International de l'Informatique, des Telecommunications et de la Bureautique); CJD (http://www.cjd.net/Default.aspx?tabid=52); MED-IT (http://www.xcom.fr/medit/ma/).

- *Partnerships:* Over the past year of operations, the incubator has signed several partnerships with different institutions, some of which will prove beneficial for tenants. The partnerships that have been developed are classified as financial (they tend to help tenants and future candidates access sources of needed working capital like the Réseau Marocain d'Incubation et d'Essaimage Réseau Maroc Entreprendre), scientific and technological (with local and international universities and engineering schools to generate new quality projects) and organizational (in order to facilitate entrepreneurship by providing administrative procedures to tenants from, for example, the Fondation Banque Centrale Populaire pour la Création d'Entreprise).

Casablanca Technopark

Indicative Portfolio of Casablanca Technopark Incubator

Name of Tenant Company	Description of Business
ISN	Geographic information systems
Axentis	Payment systems (e- and m-commerce)
Planetarium	Production of 3D films and synthesized images
N2A	Management software

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Contact Details of *info*Dev Incubator Grantee Institutions

	Country	Proponent Organization	Contact Person	E-mail	Grant Approval	Type Of Grant
	AFRICA					
1	Ghana	Busy Internet	Estelle Akofio-Sowah	info@busyinternet.com	2004	Capacity Building
2	Kenya	Jomo Kenyatta University of Agriculture and Technology (JKUAT)	Atieno Ndede-Amadi	anamadi@jkuat.ac.ke	2004	Planning
3	Mauritius	National Computer Board (NCB)	Kemraz Mohee	ncb01@ncb.intnet.mu, incubator@ncb.intnet.mu	2004	Capacity Building
4	Namibia	IT@AB Network - Namibia	Tom Mukaiwa	becker@dcc.ufmg.br	2004	Planning
5	Senegal	National Council of Negro Women/International Division (NCNW)	Cynthia Ferguson Colas	ccolas@ncnw.org	2004	Planning
6	South Africa	Voxel Technology Innovation Support Centre	Steve Giddings	sgiddings@ananzi.co.za	2003	Operational
7	Tanzania	World Ahead Consulting Network	Simbo Ntiro	sntiro@world-ahead.com	2004	Planning
8	Uganda	Uganda Industrial Research Institute (UIRI)	Charles G. Kwesiga	kwesiga@msn.com	2004	Capacity Building
	ASIA					
1	China	Yangling Business Incubation Center; and	Madam Cheng Juying	chengjy@ylagri.gov.cn	2003	Operational
		The Tianjin Women's Business Incubator (TWBI)	Ms Wang Yan	tjwbi@public.tpt.tj.cn	2003	Operational
2	India	Indiaco.com (P) Limited	Rahul Patwardhan	rahul@indiaco.com	2004	Operational
3	India	Tiruchirappalli Regional Engineering College-Science & Tech. Entrepreneurs Park	R. M. P. Jawahar	trecstep@hotmail.com, jawa_ts@yahoo.com	2004	Operational
4	Indonesia	Koperasi Starcall Wartelnet	Buyung Anasril	buyunga@starcall.com, hendarto@starcall.com	2003	Operational
5	Indonesia	Broadband Network System (BNS)	Kurnia Tugiono	kurniat@bns.co.id	2004	Capacity Building

	Country	Proponent Organization	Contact Person	E-mail	Grant Date	Grant Details
6	Malaysia	Universiti Teknologi Malaysia (UTM)	Shukri Hashim	shukri@webmail.bip.utm.my	2003	Operational
7	Mongolia	InfoCon Co., Ltd	Tsetseg-Ulzii Yadamsuren	tsetseg@mongolia-gateway.mn	2004	Planning
8	Nepal	IT Professional Forum (ITF)	Suresh Kumar Regmi	pcs@mos.com.np, skregmi@yahoo.com, jyoti@rugalaxy.com	2004	Planning
9	Philippines	UP-AFI Joint Experimental Facility - AYALA Foundation	Victoria P. Garchitorena	garchitorena.vp@ayala.com.ph	2003	Operational
10	Sri Lanka	Sri Lanka Technology Incubator (Pvt) Ltd. - ConceptNursery	Ms. Thusitha D.Pilapitiya	info@ConceptNursery.com	2003	Operational
11	Sri Lanka	Intermediate Technology Development Group (ITDG) - South Asia	Jayantha Gunasekara	Jayantha@itdg.slt.lk, nadishap@itdg.slt.lk	2004	Planning
12	Thailand	Kenan Institute Asia (KIAsia)	Marc DaSilva	marcd@kiasia.org	2004	Planning
13	Vietnam	Center of Research and Consulting on Management (CRC)	Pham Minh Tuan	crc@hut-fem.edu.vn	2004	Planning
	EASTERN EUROPE AND CENTRAL ASIA					
1	Armenia	Viasphere Technopark	Aram Vardanyan	khachikyan@viasphere.com	2004	Capacity Building
2	Azerbaijan	Information and Telecommunication Technologies Development Association (INFOTEK)	Melahet Keiromova	araz@azerinet.com	2004	Planning
3	Georgia	Civil Society Support Centre	Vazha Goginashvili	csscge@yahoo.com	2004	Planning
4	Kazakhstan	SODBI Business Incubator Shymkent	Kairat Sugurbekov	sodbi@mail.ru	2003	Operational
5	Krygyzstan Republic	Union Of Business Incubators And Innovation Centers of Kyrgyz Republic	Zamira Akbagysheva	congresswomen@intranet.kg	2004	Capacity Building
6	Romania	Business Incubator Centre Baia Mare, Romania	Radu Big	radu@cdimm.org	2003	Operational
7	Turkey	Ankara Cyberpark Inc.	Mustafa Atilla	info@cyberpark.com.tr	2004	Capacity Building

	Country	Proponent Organization	Contact Person	E-mail	Grant Date	Grant Details
8	Ukraine	Ukrainian Business Incubators & Innovation Centres Association (UBICA-ICT), and	Nikolay Paal	ubica@ubica.kiev.ua	2003	Operational
		Kharkov Small Business Incubator (Kharkov Technologies)	Inna Gagauz	gagauz@isc.kharkov.com	2003	Operational
9	Uzbekistan	The Association of Business Incubators and Technoparks of Uzbekistan (ABIT)	Zafar Mukhitdinov	zafarpm@hotmail.com	2004	Capacity Building
LATIN AMERICA AND THE CARIBBEAN						
1	Brazil	Minas Gerais Incubators Network; and	Christiano Gonçalves Becker	becker@dcc.ufmg.br	2004	Capacity Building
		Technological Incubator of Popular Cooperatives of the Federal University of Rio de Janeiro – ITCP; and	Gonçalo Guimarães	itcp@itcp.coppe.ufrj.br	2004	Capacity Building
		Instituto Gênesis da PUC-Rio	Jesus Hortal Sanchéz S.J	aranha@genesis.puc-rio.br	2004	Capacity Building
2	Chile	Access Nova	Antonio Holgado	aholgado@dii.uchile.cl	2003	Operational
3	Colombia	INNOVAR and Corporación Bucaramanga Emprendedora (CBE); and	Adolfo J. Naranjo	innovar@innovar.org, pradilla@bucaincu.org, info@incubadora.org.co	2003	Operational
		Incubadora Parque Tecnologico Del Software De Cali (Parquesoft)	John Restrepo Zapata	jrestrepo@parquesoft.com, orincon@parquesoft.com	2003	Operational
4	Colombia	Corporación para el Desarrollo de Tunía (Corpotunía)	William Cifuentes	corpotunia@caucanet.net.co	2004	Planning
5	Costa Rica	Comisión Asesora en Alta Tecnología de Costa Rica (CAATEC)	Ricardo Monge	rmonge@caatec.org	2004	Capacity Building
6	Dominican Republic	Cyberpark of Santo Domingo	Eddy Martinez	emartinez@cei-rd.gov.do	2003	Operational
7	Panama	Panama Technology Business Accelerator – PTBA	Jorge Arosemena	anavarro@ciudaddelsaber.org.pa	2003	Operational
8	Paraguay	Fundación Enlace	Andrea Marcia Alvarez	proyectos@cedial.org.py	2004	Planning
9	Peru	Centro de Innovación y Desarrollo de la Pontificia Universidad Católica	Joaquín González Mavila	jgonzal@pucp.edu.pe	2003	Operational

	Country	Proponent Organization	Contact Person	E-mail	Grant Date	Grant Details
10	Uruguay	Ingenio–Incubadora de empresas LATU – ORT	Manuel Bello	mbello@latu.org.uy	2003	Operational
	MIDDLE EAST AND NORTH AFRICA					
1	Iran	Isfahan Science & Technology Town (ISTT)	Mehdi Keshmiri	mkeshmiri@istt.ir, rousta@cc.iut.ac.ir	2004	Operational
2	Jordan	National Consortium for Technology and Business Incubation	H.E Dr. Taher Kanaan	omar@hcst.gov.jo	2003	Operational
3	Morocco	Moroccan Information Technopark Company	Abderrafie Hanouf	a.hanouf@casablanca-technopark.ma	2004	Capacity Building

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