



Information for Development Program

**Promoting Innovation and Entrepreneurship in Latin America  
and the Caribbean:  
Strategies and Partnerships**

**May 15 - 18, 2006**

**Technological Laboratory of Uruguay (LATU)**

**Montevideo, Uruguay**

**Workshop Report**

**July 10, 2006**

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## List of Organizations and Programs, Acronyms, and Websites

Access Nova, Chile		<a href="http://www.accessnova.cl/">http://www.accessnova.cl/</a>
ANPROTEC	National Association of Promoters of Innovative Ventures, Brazil ( <i>Associação Nacional de Entidades Promotoras de Empreendimentos Inovadores</i> )	<a href="http://www.anprotec.org.br/">http://www.anprotec.org.br/</a>
Banco Río – Universities Program, Argentina		<a href="http://www.bancorio.com.ar/individuos/universia_emprendimientos.jsp">http://www.bancorio.com.ar/individuos/universia_emprendimientos.jsp</a>
CAEMP	Building of Entrepreneurial Environments, Brazil ( <i>Construção de Ambiência Empreendedora</i> )	<a href="http://www.genesis.puc-rio.br/genesis/main.asp?Team=%7B1AE4C65D-54DB-4F4E-81BA-AC501402030A%7D">http://www.genesis.puc-rio.br/genesis/main.asp?Team=%7B1AE4C65D-54DB-4F4E-81BA-AC501402030A%7D</a>
ChileGlobal		<a href="http://www.chileglobal.org">http://www.chileglobal.org</a>
CIDE	Innovation and Development Center, Peru ( <i>Centro de Innovación y Desarrollo</i> )	<a href="http://www.pucp.edu.pe/invest/cide/">http://www.pucp.edu.pe/invest/cide/</a>
CONICYT	National Commission for Scientific and Technological Research, Chile ( <i>Comisión Nacional de Investigación Científica y Tecnológica</i> ) - Collaborative Research Consortia	<a href="http://www.conicyt.cl/bancomundial/">http://www.conicyt.cl/bancomundial/</a>
CORFO	Corporation for the Promotion of the Private Sector, Chile ( <i>Corporación de Fomento de la Producción</i> )	<a href="http://www.corfo.cl/">http://www.corfo.cl/</a>
Desafío SEBRAE, Brazil		<a href="http://www.desafio.sebrae.com.br">http://www.desafio.sebrae.com.br</a>
Emprender, Ecuador		<a href="http://www.emprender.com.ec/">http://www.emprender.com.ec/</a>
Endeavor		<a href="http://www.endeavor.org">http://www.endeavor.org</a>
EviMed, Uruguay		<a href="http://www.evimed.net">http://www.evimed.net</a>
FIA	Foundation for Agricultural Innovation, Chile ( <i>Fundación para la Innovación Agraria</i> )	<a href="http://www.fia.cl/">http://www.fia.cl/</a>
<i>Fundación Chile</i>		<a href="http://www.fundacionchile.cl">http://www.fundacionchile.cl</a>
GDLN	Global Distance Learning Network	<a href="http://www.gdln.org">http://www.gdln.org</a>
Genesis' community incubation, Brazil		<a href="http://www.genesis.puc-rio.br/genesis/">http://www.genesis.puc-rio.br/genesis/</a>
Government of the Province of Pichincha, Ecuador		<a href="http://www.pichincha.gov.ec/">http://www.pichincha.gov.ec/</a>
IASP	International Association of Science Parks	<a href="http://www.iasp.ws/">http://www.iasp.ws/</a>
ICA	Institute for Connectivity in the Americas, Canada	<a href="http://www.icamericas.net/">http://www.icamericas.net/</a>
INEM	Monterrey Business Incubator, Mexico ( <i>Incubadora de Empresas Monterrey</i> )	<a href="http://www.monterrey.gob.mx/inem/">http://www.monterrey.gob.mx/inem/</a>
Ingenio, Uruguay		<a href="http://www.ingenio.org.uy/">http://www.ingenio.org.uy/</a>
INVAP, Argentina		<a href="http://www.invap.com.ar/">http://www.invap.com.ar/</a>
ITCP	Technological Incubator of Popular Cooperatives, Brazil ( <i>Incubadora Tecnológica de Cooperativas Populares</i> )	<a href="http://www.itcp.coppe.ufrj.br/">http://www.itcp.coppe.ufrj.br/</a>
Jump, creative management, Colombia		<a href="http://www.jumpprojects.com/">http://www.jumpprojects.com/</a>
KEA Network, New Zealand		<a href="http://www.keanewzealand.com/index.html">http://www.keanewzealand.com/index.html</a>
LATU	Technological Laboratory of Uruguay ( <i>Laboratorio Tecnológico de Uruguay</i> )	<a href="http://www.latu.org.uy/">http://www.latu.org.uy/</a>
MIF	Multilateral Investment Fund	<a href="http://www.iadb.org/mif/">http://www.iadb.org/mif/</a>
MIT 50K Business Plan Competition, Argentina		<a href="http://www.mitclub.org.ar/home/home.html">http://www.mitclub.org.ar/home/home.html</a>
New Zealand Trade and Enterprise		<a href="http://www.nzte.govt.nz/">http://www.nzte.govt.nz/</a>
Octantis, Chile		<a href="http://www.octantis.cl">http://www.octantis.cl</a>
ParqueSoft, Colombia		<a href="http://www.parquesoft.com/">http://www.parquesoft.com/</a>
PDT	Technology Development Program, Uruguay ( <i>Programa de Desarrollo Tecnológico</i> )	<a href="http://www.pdt.gub.uy/pdt.html">http://www.pdt.gub.uy/pdt.html</a>
Peruincuba		<a href="http://www.peruincuba.net/">http://www.peruincuba.net/</a>
PRODUCE	Ministry of Production, Peru	<a href="http://www.produce.gob.pe">http://www.produce.gob.pe</a>
Prosperitas Venture Capital, Uruguay		<a href="http://www.prosperitascv.com/">http://www.prosperitascv.com/</a>
RELAPI	Latin American Network of Technology Park and Enterprise Incubator Associations	<a href="http://www.relapi.org/">http://www.relapi.org/</a>
SECYT	National Secretariat of Science and Technology, Argentina ( <i>Secretaría de Ciencia y Tecnología</i> ) - Venture Capital Fora	<a href="http://www.forocrearcit.secyt.gov.ar/">http://www.forocrearcit.secyt.gov.ar/</a>
Social Technology Net		<a href="http://rts.utopia.com.br/tiki-index.php?page=Destaques">http://rts.utopia.com.br/tiki-index.php?page=Destaques</a>
Tecnoparque Internacional, Panama		<a href="http://www.cdspanama.org/index.php?set_language=es&amp;ccpage=tecnoparque">http://www.cdspanama.org/index.php?set_language=es&amp;ccpage=tecnoparque</a>
YABT	Young Americas Business Trust	<a href="http://www.ybiz.net">http://www.ybiz.net</a>

## **Executive Summary**

The workshop Promoting Innovation and Entrepreneurship in Latin America and the Caribbean: Strategies and Partnerships, was held in Montevideo, Uruguay, during May 15-18, 2006. This regional workshop was organized by InfoDev in partnership with the Technological Laboratory of Uruguay, the Multilateral Investment Facility, and the Latin American Division of the International Association of Science Parks. The workshop brought together 143 participants from the public and private sectors of 17 Latin American and Caribbean (LAC) countries, including business incubators and parks, ICT-enabled small and medium size enterprises, investors, policy makers and donor agencies, to discuss opportunities and challenges for promoting innovation and entrepreneurship in the LAC region.

During the workshop, the incubation and entrepreneurship concepts were placed in the wider context of innovation and innovation systems. Concepts were broadened, with a wide spectrum of incubation activities covered, from the incubation of high-growth high-technology firms to social incubation. Much innovation in “social technologies” is happening, including the incubation of cooperatives and even entire communities, where the companies belong to the community. There are numerous incubation activities along the agriculture value chain, from incubation of cooperatives of agricultural producers to agricultural biotechnology companies.

A number of issues and challenges for innovation and entrepreneurship in the region emerged from the presentations and discussions: (i) lack of entrepreneurial culture; (ii) limited use of Information and Communications Technologies (ICTs) and ICT enabling; (iii) limited growth of incubated companies; (iv) need for training; (v) sustainability; (vi) access to markets; (vii) limited networking; (viii) lack of monitoring and evaluation; (ix) scarcity of seed capital and financing in general; (x) advocacy; and (xi) fragmented innovation systems.

In addition, a number of strategies addressing the identified challenges were showcased. Business simulations, business plans competitions, social entrepreneurship, training of youth, and media campaigns are being used to foster an entrepreneurial culture. Generic information systems, coupled with telecenter use, are enabling remote incubation. Strategies to improve the management of the incubation processes include modular training and public-private partnerships. The involvement of the diaspora was shown as a mechanism to help incubated companies access external markets. Also, there is already work on indicators for social incubation, and InfoDev is starting a systematic approach to monitoring and evaluation. Strategies to solve the lack of financing include the establishment of competitive funds for seed capital, angel networks, and venture capital fora.

A very important activity carried out during the workshop was starting the process to establish a regional network of incubators and other promoters of innovation and entrepreneurship. Participants worked in groups to identify the objectives for such a network, to prioritize those objectives, and start thinking about the characteristics of the network. Across working groups, there was concurrence in wanting to promote, in priority order: (i) virtual networking, collaboration and sharing of information; (ii) training and mentoring; (iii) face to face networking, sharing and exchanges; and (iv) advocacy.

The following were identified as important next steps to advance the establishment and functioning of the LAC network: (i) InfoDev will work with the Brazilian Association of Promoters of Innovative Ventures (ANPROTEC) and workshop participants to further explore to what extent the Latin American Network of Technology Park and Enterprise Incubator Associations (RELAPI) and the proposed network may coincide; (ii) start using existing and simple virtual collaboration tools (e.g., an e-mail distribution list) to facilitate interactions and communications; (iii) select moderator/s for the network; and (iv) develop an action plan with specific objectives as the first task for the network.

## **Introduction**

### **Workshop Objectives**

This regional workshop was organized by InfoDev in partnership with the Technological Laboratory of Uruguay (LATU)/ Ingenio Incubator, the Multilateral Investment Facility (MIF) of the Inter-American Development Bank, and the Latin America Division of the International Association of Science Parks (IASP). The workshop brought together 143 participants from the private sector, including business incubators, ICT-enabled small and medium size enterprises (SMEs) and investors, as well as the public sector, including policy makers and donor agencies, to discuss the opportunities and challenges for promoting innovation and entrepreneurship in the Latin America and the Caribbean (LAC) region. Seventeen LAC countries were represented in the workshop. In addition, there were participants from the United States, South Africa, Australia and New Zealand (see Annex 1 for the workshop agenda and Annex 2 for a complete list of participants).

### **Workshop Structure**

During the three-day event, participants shared experiences on overcoming some of the fundamental constraints facing entrepreneurs in the region, such as access to growth financing and a challenging business environment. The workshop was structured into four tracks. Each track began with a plenary session highlighting specific issues that was further discussed during interactive workshop sessions. Within the context of innovation and entrepreneurship in the LAC region, the workshop tracks explored:

1. Challenges and strategies;
2. The role of the public sector;
3. Strategies and partnerships; and
4. Regional networking.

### **This Report**

The purpose of this report is to serve as a “memory” for the workshop, and a point of reference for workshop participants. The first section of the report provides an overview of the workshop and a discussion on the establishment of a regional network of incubators and related organizations, as well as steps to follow to make the network a reality. The second section presents key issues and challenges for innovation and entrepreneurship in the region, which emerged from workshop presentations and discussions. Also, strategies to overcome those challenges are identified and exemplified, referring to the corresponding workshop sessions. Finally, the third section provides brief summaries for the workshop presentations. These summaries are intended as a guide to the corresponding power point presentations, which can be downloaded from the workshop web page:

<http://lacworkshop.ingenio.org.uy/>

Also, a list of organizations and programs referred to in the text, as well as their corresponding web-pages is included for easy access to additional resources at the beginning of this document.

## **Workshop Overview, the Latin American and Caribbean Network, and Next Steps**

The workshop broadened the scope of and concepts related to entrepreneurship and innovation, while focusing on their key specific aspects. Very importantly, it also promoted the formation of a Latin American and Caribbean network of incubators.

The workshop placed the incubation and entrepreneurship concepts in the wider context of innovation and innovation systems. Concepts were broadened, with a wide spectrum of incubation activities covered, from the incubation of high-growth high-technology firms to social incubation. Much innovation in “social technologies<sup>1</sup>” is happening, including the incubation of cooperatives and even entire communities, where the companies belong to the community. In this context, telecenters (centers of public access to the internet) are being used to lever and deliver services, particularly in marginal urban and rural areas. There are numerous incubation activities along the agriculture value change, from incubation of cooperatives of agricultural producers to agricultural biotechnology companies. Also, there is an increasing realization of the importance of fostering the development of innovation and entrepreneurship ecosystems beyond national boundaries, which is particularly important for creating a critical mass in smaller countries.

In addition to helping define the most important challenges for entrepreneurship and innovation in the region, the workshop focused on specific strategies to overcome those challenges. Both, challenges and strategies are summarized in Table 1. Public-Private Partnerships (PPP) were showcased as particular powerful tools for competitiveness, incubation, commercialization of Research and Development (R&D) results and for addressing finance gaps. PPP are needed at the local and national levels, and all sectors need to be involved. However, PPPs are not yet well understood in terms of the roles that different participants play, their diverse dimensions (e.g. universities, foundations, micro-finance facilitation, etc.), mechanisms and structures. They cannot be imposed and different contextual aspects need to be taken into account (inclusion, political, cultural, corruption, etc.). But common objectives, strategies and a systematic approach are crucial. PPPs can ensure that commercialization is market focused and lever private investment.

### **The Regional Network**

*The advantages of networks are that they provide access to “soft knowledge”. Soft knowledge is knowledge that is not so easily articulated nor captured and can consist of experience, work knowledge that has not been internalized and tacit knowledge that may not appear in publications – but is nevertheless vital to efficient functioning.<sup>2</sup>*

A very important activity carried out during the workshop was the start of the process to establish a network of incubators in the Latin America and Caribbean Region. InfoDev would be supporting these efforts, since the regional network is an important building block needed to accomplish InfoDev’s objectives of:

- a) Improving performance of existing incubators and developing viable programs in

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<sup>1</sup> Social Technology is defined as “a group of methods, processes and techniques that is developed together with the society and aims to solve social problems” (Workshop presentation by José Alberto Aranha).

<sup>2</sup> Hildreth, P., Kimble, C. and Wright P. 2000. Communities of practice in the distributed international environment. *Journal of Knowledge Management*, Vol. 4(1), 27-38; as cited by Steve Giddings in his presentation “The Africa Regional Network Experience”.

- developing countries;
- b) Knowledge generation and dissemination, including successful practices and toolkits;  
and
- c) Fostering national and international partnerships and networking.

During the workshop, participants worked in groups to identify the objectives for such a network, to prioritize those objectives, and start thinking about the characteristics of the network. Across working groups, there was coincidence in wanting to promote, in priority order:

1. Virtual networking, collaboration and sharing of information, including:
  - a. Regional issues, experiences and good practices, benchmarking, quality assurance/ accreditation of incubators;
  - b. Database of expertise (who is who and doing what);
  - c. Development and sharing of operational manuals, practices, guidelines, client company information; and
  - d. Translation of iDISC into Spanish.
2. Training and mentoring, in areas such as:
  - a. Incubator management;
  - b. Sustainability;
  - c. Access to funding;
  - d. Entrepreneurship;
  - e. Intellectual property; and
  - f. Marketing of client products and services.
3. Face to face networking and exchanges:
  - a. Staff/ entrepreneur exchange programs;
  - b. Internships; and
  - c. Face to face meetings and an annual event.
4. Advocacy, including:
  - a. Lobbying to influence local, national and regional government policy (e.g., legislation, funding mechanisms) on innovation and entrepreneurship;
  - b. Collective proposals for new private and public finance mechanisms for SMEs, to address finance gaps; and for international development assistance;
  - c. The creation of associations in countries where they do not exist;
  - d. The use of RELAPI mechanisms;
  - e. Multiculturalism and indigenous issues; and
  - f. Integration into international networks.

The following paragraphs summarize the elaboration on the network objectives by the working teams.

### **Virtual Networking**

The need to determine in the short-term the communications platform to be used, benefits and responsibilities of participants, protocols (e.g. responses should be expected within one week), and services to be provided was discussed. A directory of all members should be established. Contents to be included in the virtual platform include operations related documents, such as manuals, methodologies, examples of contracts, licensing agreements, etc. Also, it should include references to positive and negative experiences. Some type of categorization would allow easy access to information. Some suggested categories are people

and institutions (database of network members), experiences, and a database for incubatees with the purpose of business match-making within the network. Issues to be considered in the mid-term include funds for network sustainability and organizational aspects.

### **Training, mentoring, and face-to-face networking**

These proposed activities are very much interrelated, as much of the face-to-face interactions (e.g. staff/ entrepreneur exchanges) are geared towards learning opportunities. Basically, the general aim is to build or improve the capacity of network members, drawing upon the more experienced practitioners and countries.

### **Membership**

There was consensus on the concept of generating a space for wide participation of stakeholders to share and communicate experiences in the region. Participation would be extensive to all relevant actors in the region, whether or not they were InfoDev beneficiaries. During the meetings, it was emphasized that not only incubator managers would participate in network activities, but also incubator staff and entrepreneurs would directly participate. For instance, entrepreneurs could have their own space for sharing information on access to markets, mobility, and partnerships. Despite the diversity of membership, the intention is to build a common identity to share credentials and build a solid image for the mutual credibility of members.

Participants want the network to be open to other networks that already exist, to draw together all players involved in innovation and entrepreneurship. There was an acknowledgement of multiple networking levels, and the priorities are to strengthen the network from the local to the regional to the global level. Furthermore, there are trade-offs in having a very broad, loosely defined network on one hand (e.g. on innovation and entrepreneurship), and a much focused network (on incubators and technology parks only) on the other hand. A compromise could be reached by having a very open membership while also having focused thematic groups for discussions and exchange of materials.

Regarding coordination/moderation of the network, many participants pointed to the need of defining coordinator/s and focal point/s for the network and their responsibilities. There was an inclination to think in terms of only one coordinator (one person or institution) for the network. Given the potential big size of the network, the wealth of experience of many network members, and the availability of numerous ICT tools, it was noted that the network could have a number of coordinators/ animators, which would be responsible for particular thematic areas or geographic zones. Newer ICT tools can be considered for use, such as web-logs, wikies, and *linked-in*.

### **RELAPI, the Latin American Network of Technological Park and Enterprise Incubator Associations**

José Eduardo Fiates, President of the Brazilian National Association of Promoters of Innovative Ventures (ANPROTEC), explained some of the characteristics of RELAPI. RELAPI was recently created in the context of the Latin American chapter of the International Association of Science Parks (IASP), and is currently integrated by the associations of Argentina, Brazil, Colombia, Chile, Mexico, Peru, Uruguay and Venezuela. RELAPI's objectives are to:

- promote meetings to exchange experiences and knowledge;
- form alliances among resident and graduated enterprises for business opportunities; and
- facilitate institutional and political articulation to propose multilateral cooperative actions among the countries represented in the Network.<sup>3</sup>

Fiates noted that RELAPI does not have a hierarchy and is simply a network for articulation and mobilization of efforts at the national level. Also, there is no overall Latin American coordination, and the action mainly happens at the national level. The major potential of RELAPI is to facilitate a policy dialog at the government level.

Comments of the workshop participants – most of which did not know about RELAPI- were related to considering an alignment of objectives between RELAPI and the “nascent” network of incubators and technology parks. There was not a clear rationale to have two parallel networks, but there could be coincidence of objectives and goals so that only one network is needed. A possibility would be that RELAPI enhances its objectives and activities to include those defined by the individual incubators and technology parks during the workshop.

It is also important to note that InfoDev has recently approved a grant to be administered by ANPROTEC to promote regional networking, taking into account the inputs received from workshop participants.

### **Next steps**

The following were identified as important next steps to advance the establishment and functioning of the LAC network:

1. InfoDev will work with ANPROTEC and workshop participants to further explore to what extent RELAPI and the proposed network may coincide;
2. Start using existing and simple virtual collaboration tools (e.g. an e-mail distribution list) to facilitate interactions and communications;
3. Select moderator/s for the network; and
4. Develop an action plan with specific objectives as the first task for the network.

## **Key Challenges and Strategies**

A number of issues and challenges related to innovation and entrepreneurship in the region emerged from the presentations and discussions. Also, different strategies to tackle the identified challenges were showcased, and additional possibilities were proposed. Both, challenges and strategies are discussed below and summarized in Table 1. They were organized according to areas of work, which follow the knowledge taxonomy in the iDISC

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<sup>3</sup> RELAPI's website (<http://www.relapi.org>)

Toolkit.<sup>4</sup>

## **Entrepreneurship and ICTs**

### ***Lack of entrepreneurial culture***

This seems to be the main underlying obstacle for innovation and entrepreneurship in the region. The education systems and expectations of families are attuned to safe jobs and not to entrepreneurial ventures. Thus, the prevailing culture does not embrace entrepreneurship, is more oriented to products than services, and emphasizes face-to-face business interactions. Many enterprises are family oriented, which again holds back innovation and entrepreneurship. It was recognized that personal development is a foundation for entrepreneurship, on top of which skills and resources can be added.

There is increasing interest in promoting a more entrepreneurial culture in the region, as a vehicle for increased competitiveness through innovative company creation, and with the additional benefit of job creation. There are several ongoing efforts to promote an entrepreneurial culture, targeting different age and socio-economic groups. Perhaps with the exception of Desafío SEBRAE, efforts are not yet massive enough as to produce a significant change. Brazil's Desafío SEBRAE uses on-line business simulation games to instill business skills in students at universities in Brazil, Argentina, Paraguay, Uruguay and Colombia. 59,000 students at 1,614 universities participated in the initiative in 2005 (see Session 1 for more details). Business simulation experiences are also provided by the Young Americas Business Trust (YABT), through its Business Labs (Session 7).

Business plan competitions (e.g., MIT 50K competitions, Session 1; and Banco Rio's in Argentina, Session 2) are commonly used tools. Even though these competitions cannot tell who will be a successful entrepreneur, it is the process and follow up afterwards that are important. However, they can have negative impact for those who do not win –discouraging and de-motivating the potential entrepreneur. Also, they do not necessarily lead to dynamic growing companies, which are typically created by people past 30 years-old and not fresh graduates, but the focus of business plan competitions is often on young people. As an example, McDonalds was founded by a 55-year-old sales man.

In an increasingly knowledge intensive economy, universities have an important role and need to change their teaching approach to foster entrepreneurial attitudes, beliefs and skills. However, business education at the undergraduate level is not widespread enough. Also, joint engineering-business programs as well as management courses in non-business careers are not common.

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<sup>4</sup> For practical purposes, the areas of incubator planning, incubation process, infrastructure and services, and incubator management were merged into one area: management of the incubation process.

<b>Table 1. Innovation and Entrepreneurship Challenges and Strategies identified by workshop participants</b>		
<b>Areas of Work</b>	<b>Issues / Challenges</b>	<b>Examples of Existing / Proposed Strategies<sup>5</sup></b>
Entrepreneurship and TICs	Lack of entrepreneurial culture	<ul style="list-style-type: none"> <li>• Business simulation (e.g., Desafío SEBRAE and YABT's Business Labs)</li> <li>• Endeavor</li> <li>• Business plan competitions (e.g., MIT 50K competitions; Banco Rio in Argentina)</li> <li>• Competitions for ideas (e.g., Uruguay)</li> <li>• Social entrepreneurship (e.g., Agroinnova in Colombia; ITCP's popular cooperatives and Genesis' community incubation in Brazil)</li> <li>• CAEMP (Brazil, Peru)</li> <li>• Education and training at all ages (e.g., ParqueSoft's entrepreneurship "nursery" for children and youth)</li> <li>• Use of media campaigns (e.g., Monterrey's INEM)</li> </ul>
	Obstacles for the use of ICTs (connectivity, literacy, culture) and limited ICT enabling	<ul style="list-style-type: none"> <li>• Use of telecenters (e.g., Agroinnova, ITCP, Pichincha)</li> <li>• ITCP's integrated management (remote support) and e-learning systems</li> <li>• CIDE's generic information system for incubation management and competition for ICT prototypes</li> <li>• Fundación Chile's incubation of companies that use ICT in key sectors of the economy (low-tech)</li> </ul>
Management of the incubation process	Limited growth and/ or international competitiveness of incubated companies	<ul style="list-style-type: none"> <li>• High growth potential as a pre-requisite for acceptance of incubatee (e.g., Octantis in Chile and New Zealand Trade and Enterprise)</li> </ul>
	Need for on-the-job training and exchange of incubator's staff and entrepreneurs	<ul style="list-style-type: none"> <li>• Modular training (e.g., ANPROTEC workshops; Panama's Tecnoparque Internacional)</li> </ul>
	Sustainability	<ul style="list-style-type: none"> <li>• Public-Private Partnerships (e.g., Monterrey's INEM, Colombia' Agroinnova)</li> </ul>
External support and networks	Access to markets for incubated companies	<ul style="list-style-type: none"> <li>• Involvement of the diaspora (e.g. ChileGlobal, KEA Network for New Zealand)</li> <li>• Proposed co-incubation by incubators in different countries</li> </ul>
	Need for peer-to-peer networking and elaboration of a regional action plan	<ul style="list-style-type: none"> <li>• Proposed as a first activity for the Latin American and Caribbean network</li> </ul>
Evaluation	Implementation of Monitoring and Evaluation processes	<ul style="list-style-type: none"> <li>• Indicators for social incubation developed by ITCP</li> </ul>
Public Policies	Financing of start-up/ SMEs companies in general and provision of seed capital in particular	<ul style="list-style-type: none"> <li>• Competitive Fund for Seed Capital (e.g., CORFO in Chile; also planned in Uruguay with support of the World Bank)</li> <li>• Angel Networks (e.g., in Argentina and Mexico)</li> <li>• Venture Capital Fora (e.g. in Argentina by SECYT)</li> <li>• Angel network and seed fund established by technology park (e.g., Panama)</li> </ul>
	Advocacy	<ul style="list-style-type: none"> <li>• Latin American Network of Technology Parks and Incubators Associations (RELAPI)</li> </ul>
	Incubators and technology parks are not linked to national innovation systems, which are typically fragmented	<ul style="list-style-type: none"> <li>• Public-Private Partnerships (e.g. Cooperative Research Consortia in Chile)</li> </ul>

<sup>5</sup> See the table at the beginning of the document for websites corresponding to the examples given here

Social entrepreneurship provides strategies for reaching potential entrepreneurs with low levels of education and income. Examples include the incubation of cooperatives, such as Agroinnova Colombia, working with agricultural cooperatives (Session 3), and the Technological Incubator of Popular Cooperatives (ITCP) in Rio de Janeiro, Brazil, working in the areas of sewing, handicrafts, informatics, food, recycling and maintenance services (Session 3). An incubatee at ITCP, Cooperative Arco-Iris (cleaning services) was showcased (Session 7). In addition, the incubator Genesis, also in Rio de Janeiro, is working on community incubation, “to form entrepreneurs and innovative enterprises based on the local identity of a community and using social technology” (Session 4).

### ***Obstacles for the use of ICTs and limited ICT enabling***

Although there were references to digital divides, lack of qualified human resources, limited connectivity, and digital literacy, these obstacles seem to be of relative lower impact for innovation and entrepreneurship in the region. They are viewed mainly as a limitation for incubated ICT-based companies to reach customers. These limitations, however, should provide opportunities for new entrants for connectivity services (e.g. wireless) or ICT applications (e.g. E-government services).

Technology companies are overly favored, as opposed to ICT enabling, ICT applications and the importance of management and entrepreneurship. For instance, venture capital selection is based upon the entrepreneur, management team, business model, market potential, and exit possibilities, but not necessarily on the technology or the product itself. So far, ICTs are being used mostly as enablers for the incubation process, rather than enhancers of the business models of tenant companies. For instance, the integrated management system (SIG-IncubCoope) developed by ITCP is being used by 10 incubators in Brazil. Other tools by ITCP include a portal on popular cooperativism and an e-learning system (Session 3).

ICT enabled services for the agricultural and manufacturing industries have great potential. For instance, Fundación Chile supports the creation of companies that use technology to add value to productive chains in key sectors of the economy, which are related to the exploitation of natural resources, such as aquaculture, agro-industry, mining, and forestry (Session 5).

### **Management of the Incubation Process**

It was emphasized during the workshop the importance of the selection of incubatees and the management of the different steps of the incubation process. Good management is critical; it was said: “*If we support entrepreneurs we should be entrepreneurs ourselves and be market focused*”. Incubation management is not a trivial task. Clear focus is required to help entrepreneurs compete and achieve sustainable growth, with customer focused products and services. Incubation is not a mass activity. All entrepreneurs are different and need to be treated this way by incubators (case managed). For instance, fixed graduation periods do not address the differences between companies and may force graduation too early in some cases.

There is a clear need to link the entrepreneur with the technologist. Working with the technologist alone has proven ineffective. The key is to network entrepreneurial, business,

and technology capacity, and people are grappling with how to do this effectively. Selection based on entrepreneurial traits and capability, and not just on business plans, is important: human factors of leadership, vision, commitment and creativity are more important than the business plan: “*incubate entrepreneurial people and not a company.*” Finally, it was emphasized the importance of collaboration between incubators and within the innovation ecosystem: networks and networking are crucial to gain access to a vast array of needed resources.

***Limited growth and/or international competitiveness of incubated companies***

Ideally, incubated companies should have the potential for high-growth, high-returns, which usually are associated with international markets, due to the relative small domestic markets in the region. This is not for the sake of growth for itself, but to generate meaningful job creation and attain increased international competitiveness. However, it seems that graduate companies experience slow growth in the region, if any at all. This issue merits further study. There may be several reasons contributing to slow growth. Many companies enter the incubation process with a business model geared to copying, having an import replacement perspective, but no international projection. The international projection seems to be an afterthought in the minds of both entrepreneurs and incubator managers, while it should be a very desirable selection criterion for entrepreneurs to enter the incubator. Another reason perhaps is the lack of financing and a culture that does not favor ambition. Many companies have no option but bootstrapping (growing with their own savings), therefore slowing the growth cycle. But the lack of market potential could also detract investors. Strategies to tackle these issues are provided by the Chilean Incubator Octantis and the New Zealand Trade and Enterprise Incubator, for which high growth potential is a pre-requisite for acceptance (eligibility criterion) into the incubator (Sessions 6 and 4, respectively).

Having a management team and a business plan focused on international markets may not be sufficient, however, to gain international competitiveness. Other factors are at play; particularly access to market opportunities, in itself a challenge (see below). Business incubators are viewed as ‘soft landings’ to help companies internationalize. For instance, incubatees are being included in SME clusters being promoted abroad to develop international strength and competitiveness. Networking (locally and internationally) is important for incubating growth companies, and more support is required to help companies internationalize, post-incubation.

***Need for on-the-job training and exchange of incubator’s staff and entrepreneurs***

Training is a high priority among the incubator managers that participated in the workshop, who emphasized the importance of peer-to-peer networking and learning (see Network section above). This applies to all levels of incubator staff. Associated to this, there is also a shortage of skilled advisors and mentors (whom are different from consultants). It is important to understand the unique and important role of mentoring.

Training in the region is mostly of the traditional “classroom-type”, in modules or workshops, such as those provided by the Panama’s Tecnoparque Internacional (Session 3) or ANPROTEC,<sup>6</sup> respectively. However, the systematic exchange of staff (and

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<sup>6</sup> <http://www.seminarionacional.com.br/proge.htm>

entrepreneurs) across incubators/parks could prove to be a very effective tool for mutual learning and cross-fertilization of ideas. A program like this one –proposed by many workshop participants- could be a very concrete activity or service to be provided by the LAC network.

### ***Sustainability***

This is a key issue for many incubators in the region. Particularly for new incubators, sustainability should be a goal, addressed from the outset. Donor and project funding are typically short-term and project focused, and do not necessarily lead to sustainable incubation. Business incubation is a long-term endeavor and requires local support over time, until sustainability is achieved. With PPPs, incubation can be strengthened to make programs more permanent. Sustainability may require ongoing government support, with PPP mechanisms, as in many developed countries, where incubators are not necessarily self-sustainable on their own.

In general, incubators in the region enjoy multiple partnerships, particularly for the provision of services. However, private sector participation may still be limited in aspects such as participation in advisory boards and mentoring, access to markets, and funding.

### **External support and networks**

#### ***Access to markets for incubated companies***

This is an issue very much related to the challenge of growth and international competitiveness described above. Market access needs to be addressed from the outset of the incubation process, and as a continued endeavor. A strategy with preliminary positive results is provided by Fundación Chile's ChileGlobal, which is using successful Chilean businesspersons in the diaspora to support and facilitate international trade missions (Session 5).

#### ***Need for peer-to-peer networking for learning/ collaboration and to add value to incubatees***

Networking in the region has not been extensive so far, and there is a strong need for peer-to-peer networking for learning/ collaboration and to add value to incubatees. Facilitation mechanisms are needed, which would be put in place as follow-up to the workshop. In addition to unstructured networking -which is very useful- there is a strong sense for some structure, to focus efforts in addressing the priorities identified during the workshop. The elaboration of an action plan was proposed as a first activity for the LAC network (see Network section).

### **Evaluation**

#### ***Monitoring and evaluation (M&E) processes***

There is not much in the region on M&E. However, the development of indicators for social incubation in Brazil by ITCP is noteworthy. InfoDev offered its M&E methodology, currently under development, to incubators/ parks in general, which showed strong interest.

## **Public Policies**

### ***Financing of start-up/ SME companies in general and provision of seed capital in particular***

The financing scene in the region shows availability of funding at the extremes of companies' needs: micro finance and later stage finance for exports are available, but there is a gap in the middle of the financing spectrum. This is a wide gap, however, encompassing seed capital, angel investment and risk capital. The need is most critically felt at the seed capital level, with scarcity inhibiting the very start of promising companies. Seed stage funds are needed to go with incubation, often at the US\$20-\$50K level or up to US\$100K in the region. The lack of such funds means that later stage opportunities for Venture Capitalists (VCs) are limited. Public investment is called for at this stage, although over time VCs may enter earlier to create their own later stage market. There are examples in the region of competitive funding mechanisms that provide seed capital to companies, such as those administered by Chile's Corporation for the Promotion of the Private Sector (CORFO, Session 4) and proposed for Uruguay under a World Bank loan.

Investor clubs and angel investors have a big potential making use of champions and their trusted networks. However, while they work well in some countries, this is not necessarily the case for other countries. One reason may be that private investors often want to remain 'hidden' and not be identified. It also works better in the main cities rather than in regional areas. Angel Networks have been organized in countries such as Argentina and Mexico, but are not common throughout the region.

Risk capital funds (or Venture Capital, VC) are primarily tailored to later stage financing and have high transaction costs. Exit mechanisms in smaller countries focus upon acquisitions and strategic alliances rather than on an Initial Public Offering (IPO), and ideally relate to earlier stage co-investment. It is all about "*people (VCs) investing in people (company): first invest in people, their electricity and energy, and then the project.*" An interesting strategy to link demand for and supply of VC funding is provided by Argentina's Venture Capital Fora, which are spaces facilitated by the government for entrepreneurs to meet with VC providers (Session 2).

Another related challenge is that funding is concentrated in larger countries. Therefore, smaller countries need to work together, among themselves or with larger countries, to attract investment. For instance, Uruguay is exploring with Argentina the possibility to be incorporated into Venture Capital Fora activities.

### ***Advocacy***

Continued advocacy is needed to promote innovation and entrepreneurship, since the enabling environment for these activities still needs much development. Improvements are called for regarding: (i) the regulatory framework for SMEs, with consistent and transparent laws; (ii) Intellectual Property Rights (IPR); and (iii) systematic government policies to support incubation, rather than ongoing reliance upon donor support. Regarding the latter, funding is typically short-term and project based and not focused on important long-term institution building, causing problems for sustainability. The process of policy development is very important and should involve all stakeholders in a partnership.

Advocacy activities are carried out by national associations of incubators and technology parks, which are becoming commonplace in bigger countries. Smaller countries should consider sub-regional groupings, such as an association for Central American countries or for Caribbean countries. A very positive development in this area is the recent creation of the Latin American Network of Technology Park and Incubator Associations (RELAPI, see Network section). It would be desirable for RELAPI to extend its reach to Central American and Caribbean countries, as these could immensely benefit from the more experienced members of the network.

***Incubators and technology parks not linked to national innovation systems, which are typically fragmented***

Business incubation is not integrated with other support systems in many countries, and there is a lack of coherence between programs and policies. This issue is related to advocacy, but deserves attention of its own, since the efforts of all stakeholders are needed to overcome this challenge. This is a big challenge, because national innovation systems are very fragmented in the region, and are almost lacking in smaller countries. However, incubators can help bridge the isolated pockets of activity in a given country.

Public-Private Partnerships can be used as tools to bring cohesiveness to systems or help establish innovation systems. An interesting example is provided by the Cooperative Research Consortia initiative in Chile. This initiative brings together three government agencies on the funding side (National Commission for Scientific and Technological Research -CONICYT, CORFO and Foundation for Agricultural Innovation -FIA), and multiple companies (all sizes) and research centers organized in consortia. All partners make substantial contributions to the program, including cash (Session 5).

## **Session Summaries**

### **Track One: CHALLENGES & STRATEGIES**

This track provided lessons learnt from industry players and organizations providing incubation, innovation and entrepreneurship services, in designing and implementing strategies to overcome the challenges faced by ICT-enabled SMEs, as drivers for new economic opportunities. Some aspects considered were:

- Entrepreneurship, policy and regulation;
- Growth financing; and
- ICT Applications and infrastructure.

#### ***Session 1: Regional Perspective on Challenges and Strategies: Facilitating an Entrepreneurial Environment***

During this session the fundamental impediments to greater innovation and entrepreneurship in the region were discussed, and answers were explored to questions such as: *What sort of environment stimulates entrepreneurship? And how can it be created?*

**Mauricio Guedes, Director of the Technological Park of Rio, Brazil, highlighted the role of universities in the generation of knowledge, wealth, and an entrepreneurial environment.** Out of 300 business incubators in Brazil, 200 are linked to universities. ***Desafio SEBRAE*** is a

program that uses on-line business simulation games to instill business skills in students at universities in Brazil, Argentina, Paraguay, Uruguay and Colombia. 59,000 students in 1,614 universities in those countries participated in 2005, up from 43,000 students in 2002; having started with 800 students in 2000. The students work in 3-5 member teams, run a company, and make business decisions (e.g. deciding on prices); the software simulates market conditions and generates consequences following decisions made by the team. Teams are provided with relevant tools (management books, software). Only 30% of participants study careers related to business or management.

**Miguel Aldaz, with the Multilateral Investment Fund (MIF) at the Inter-American Development Bank (IDB),** explained what MIF is, how it works, and some lessons learnt from its work as a provider of non-reimbursable grants for *private sector development pilot projects, with emphases on micro and SMEs*. MIF is currently financing a new generation of projects (US\$3 million on average, to be implemented in 4 years) targeted to entrepreneurs with high potential and to private investors. Project's main characteristics include: (i) short-term objective of creating new dynamic enterprises, with enough profitability as to attract investors; (ii) long-term objective of creating a favorable entrepreneurial ecosystem; and (iii) activities such as business development services, financing, training for investors, dissemination of experiences, and public policy proposals. Challenges that need to be overcome in the region include: (i) exit strategies; (ii) inadequate business environment; (iii) high transaction costs; (iv) a family business culture; (v) financing gaps; (vi) a Latin culture that does not favor dynamic entrepreneurship; (vii) internationalization; and (viii) lack of synergies among regional initiatives.

**Domingo Giorsetti, Director of the MIT Club Argentina and the MIT 50K Business Plan Competition,** recommended actions, mostly related to education, to promote an entrepreneurial environment in the region. In the short-term, there is a need to work with people already willing to start enterprises of their own, supporting, mentoring and teaching them needed skills through: (i) comprehensive programs for entrepreneurs; (ii) regional and international events; (iii) angel clubs; (iv) incubators; (v) support for SMEs; (vi) business plan competitions; and (vii) promotion of entrepreneurship in research centers and technological universities. In the medium-term, the need is to teach entrepreneurship related concepts in all areas of university education (technological and humanities) and in all types of tertiary level institutions. Finally, in the long-term, the need is to extend the teaching to basic and secondary education, particularly those schools with a technological orientation. In all cases, it is important to promote teamwork, including team-based projects with a final presentation of their results.

**Esteban Cassin, Coordinator, Special Program for Incubators, Parks, and Technological Poles, of the Argentina's National Secretariat of Science and Technology (SECYT),** emphasized the need to have a systemic approach towards entrepreneurship, noting that innovation systems are practically inexistent in the region. There are isolated institutions that may look like a system, but there is still much to do to develop innovation systems in the region. The approach should target the generation of innovative environments. Oftentimes there is availability of resources from different government agencies, but they are fragmented or lack coordination. There are environments (cities, regions) with much potential, and the support mechanisms should be designed taking into account their particularities. Therefore, knowledge of these environments is essential. The big needs

relate to financing. There is no seed capital, risk capital, or angel investment. Not only companies need to be funded, but also supporting activities around them, such as networking, training, and technology transfer. In the region, financing is usually a one-time, short-term proposition, as opposed to the long-term financing available in European countries. These types of mechanisms (Parks, Poles, and Incubators) need a financing horizon of at least 5 years.

### ***Session 2: Financing Challenges for ICT and ICT-Enabled SMEs***

This session explored answers to the following questions: *What finance gaps exist? What financial mechanisms are used to foster growth of SMEs? Can good practices and lessons be drawn from experience? How can incubators help identify and leverage financial resources for their clients? How can networks be established?*

**Juan Carlos Carullo, Director, Venture Capital Program (CREAR-CIT, SECYT),** explained the initiative *Venture Capital Fora*, designed as meeting spaces for technology-based entrepreneurs and angel investors. The rationale is the diagnosed lack of “smart capital” (that brings management resources and networks) on one hand, and the lack of good investment prospects on the other hand. SECYT’s task is to select projects and present them to angel investors. It was found out that investors tend to invest in the areas where they live, and this prompted SECYT to organize Venture Capital Fora in different provinces. There is a lack of technology-based companies, or companies based in university-generated results. After an extensive screening of university projects, SECYT found only 25 worthwhile projects, however these were projects without entrepreneurs: researchers do not want to create companies. Also, it was noted that there can not be entrepreneurs without incubators. Key problems to be tackled are business acceleration and competitiveness, and key roles of incubators are the generation of networking opportunities and facilitating the approach to angel investors.

**Victor Zerbino, with *Prosperitas Venture Capital, Uruguay,*** focused on the financing value chain, making a comparison in evolution patterns in the USA and in Latin American countries. Prosperitas is the first VC investor in the country, with a closed investment fund of US\$10 million (including a contribution from MIF). The focus is on companies and entrepreneurs that can expand operations to foreign markets in the following sectors: high technology, services, and agri-business. So far it has invested in three companies, targeting a portfolio of 8-12 companies and individual investments ranging from US\$500,000 to US\$1.5 million. The financing value chain is broken in the early phases of funding, in between the promotion of entrepreneurship (e.g. *Endeavor*) and Management Consulting/ Capital Markets. Seed capital (most requirements in the US\$20K-50K range), angel investment (usually tied to traditional investments: family company, real state, financial), and risk capital are the missing links. Discipline and focus should be exercised, since VC in Uruguay is suddenly being jump-started, as opposed to a slow process that took decades to evolve in developed countries. The public sector should participate through credit guarantees for SMEs and funding specific investment promotion activities.

**Eduardo Garrido, with *Banco Rio’s Universities Program,*** identified difficulties in the financing of technology-based SMEs, and explained Banco Rio’s actions in the area. On the side of the entrepreneurial team, difficulties include: (i) no or scarcely developed business

plan; (ii) no availability of seed and venture capital; and (iii) a technology biased team, with little commercial and management capabilities. Failures on the side of financial markets include: (i) lack of investment culture in entrepreneurial ventures; (ii) long investment horizons required (more than 4 years); (iii) no liquidity (lack of secondary markets); (iv) high risk; and (v) inadequate legal and tax frameworks. The banks do not enter this market because of risk aversion and high transaction costs (project analysis and supervision). Banco Rio acts as a nexus between entrepreneurs and investors, targeting centers for entrepreneurship and university incubators. Its areas of work include: (i) entrepreneurship awareness; (ii) advisory services to entrepreneurs, incubators and angel investor clubs; (iii) linkages with investors (business plan evaluations and presentations to investors); and (iv) selective capital contributions (up to 10%).

### ***Session 3: Development of Innovation and Entrepreneurial Support in Latin America and the Caribbean***

InfoDev grantees and other participants presented the status of their projects, aiming at sharing experiences and lessons learnt. The presentations followed a structured approach, and responded to questions such as: *What are the goals of the incubator/science park and its achievements? How are the policy and financial challenges addressed? Who are the partners of the incubator and how is cooperation organized? How does the organization support innovation? What is the role of ICT in achieving the goals and delivering services for clients? What are the incubator's business model and sources of revenue for long-term sustainability? What lessons have been learnt?*

**Ricardo Endara, with Tecnoparque Internacional, Panama, explained activities of the Technology Business Accelerator (ATEP)**, Tecnoparque's incubator, located in the City of Knowledge. The criteria for admission to the incubator include: (i) innovation and research; (ii) synergies with other tenants and the local network; and (iii) international quality. The fact of belonging to the park/incubator provides value added to the tenant companies in the form of credibility. ATEP's business cycle includes the stages of (i) pre-acceleration (business plan support); (ii) acceleration (incubation services with a 10% equity participation); and (iii) post-acceleration (business consulting and training to improve competitiveness). There is ample participation of stakeholders, training partners and international agencies. The following activities stand out: (i) course for Latin American incubator managers; (ii) establishment of an angel network and a seed capital fund; and (iii) virtual incubation. It was also pointed out the need to improve relationships with universities, and to experiment with co-incubation between incubators in different countries to get better market access.

**Antonio Holgado, with the incubator Access Nova, Chile, explained key aspects of the incubation process and lessons learnt**. Access Nova has focused in engineering companies geared to the Chilean market. 26 companies graduated so far, 14 of which did so after a two-year incubation period. Three graduate companies have operations in the Latin American market. Financing of incubatees is facilitated through government agencies financing lines (e.g. CORFO and CONICYT), and through linkages with big companies in need of service outsourcing. Success factors for the incubator include: (i) understanding that entrepreneurs –rather than enterprises- are incubated; (ii) generation of an adequate environment (synergies among incubatees); (iii) incubation ecosystem and networks; (iv) demand pull and push; (v) accountability; (vi) controlled growth; (vii) stimulation of

entrepreneurship (e.g., TEC of Monterrey and MIT's CRDI methodology); (viii) global view (rather than local); and consideration of students' ideas (even "crazy" ones). Also, the quality manuals of Access Nova are available to interested parties.

**Domingo González, with the *Innovation and Development Center (CIDE), Pontifical Catholic University of Peru*, explained the objectives, framework, and activities of the project "Improvement of the Peruvian network of technology business incubators using ICTs."**

The general objectives are to build capacity of incubators using ICTs and to generate a national movement to increase the number of ICT-based companies (Peruincuba, a national incubator association was established). A reference framework organized in "environments" (contextual, inter-organizational, and incubation) was presented. The incubation environment has the following aspects: (i) entrepreneurs and ideas; (ii) organizational structure; (iii) operational infrastructure; and (iv) financial infrastructure. Outstanding project activities include: (i) competitions of ICT prototypes and business plans; (ii) virtual training in ICT business planning; (iii) transfer of the CAEMP methodology (for the Building of Entrepreneurial Environments) from sister university in Rio de Janeiro; and (iv) generic information system for incubator management. This system supports the administration of competition calls, contracts, incubator's services and the different incubation stages.

**Gonzalo Guimarães, with the *Technological Incubator of Popular Cooperatives (ITCP) in Rio de Janeiro, Brazil*, established the generation of entrepreneurship as a methodology for social development.** The focus should be in the person and not in the company. It is people that have projects. The idea is to generate a management system with indicators related to cooperation. ITCP works with unemployed workers, or those working in the informal sector, through cooperatives in the areas of sewing, handicrafts, informatics, food, recycling and maintenance services (15 groups are currently being incubated). Services such as legal, accounting, management and marketing are provided by partner universities. Some key tools developed by ITCP are the integrated management system (*SIG-IncubCoope*, allowing for remote support), being used by 10 incubators in Brazil; a portal on popular cooperativism and an e-learning system. Key lessons learnt are: (i) knowledge and implementation of the diverse possibilities of ICT tools increase project scale and impact; (ii) need for local partnership building (education, communications) for entrepreneurial development; and (iii) turning implementation difficulties into opportunities to power project actions.

**María Bustamante, with the *incubator Agroinnova, Colombia*, explained Agroinnova's model, lessons learnt, difficulties found and needs for support.** Agroinnova aims at strengthening rural agricultural producers through the incubation of cooperatives, and was started in partnership with the association of regional producers (Corpotunia). Management weaknesses were addressed by institutional partnerships. Agroinnova's role is to articulate the demand networks (regional productive chains) with the supply networks (regional providers of services); and make use of rural telecenters to facilitate communications. Lessons learnt include: (i) importance of adapting services to the producer's needs; (ii) rural producers are active actors of development (as opposed to passive subjects that receive help); (iii) organizational and product innovation; and (iv) promotion of entrepreneurial culture as an education strategy. Difficulties and needs for support are related to the availability of financing for the incubator and incubatees, and having effective services, such

as those related to: (i) management methodologies and strategies; (ii) commercialization networks; (iii) technological development and technical transfer; (iv) ICT appropriation in rural communities; and (v) supporting government policies.

### **Track Two: THE ROLE OF THE PUBLIC SECTOR**

This track focused on policy initiatives for SMEs that governments have introduced to enhance innovation, entrepreneurship and SME development. Particular attention was given to initiatives that improve financing (from micro-credit to venture capital); marketing and other business development services; the legal (e.g. intellectual property rights) and regulatory environment; and ICT infrastructure and services. It profiled various policy frameworks so participants learnt about what has worked and what has not worked in other countries and may be applicable to their circumstances. Some aspects considered were:

- Innovation, business incubation and enterprise development policies;
- Financing policies for SMEs;
- Policy and regulatory reforms; and
- ICT infrastructure and cost of access.

#### ***Session 4: Regional Perspective of How the Public Sector Can Foster Innovation & Entrepreneurship***

During this session, the impact and lessons learnt from government efforts to support innovation, incubation and entrepreneurship were discussed, guided by the following questions: *What are governments doing to foster innovation, incubation and entrepreneurship and why? What policies have been most effective? What lessons have been learnt from a policy perspective? What are some of the programs that donor agencies are supporting? Are there any common road maps applicable across the region or adaptable from one country to another?*

**María Soledad Salvador, with Pichincha's Provincial Government and the incubator *Emprender*, in Ecuador,** described the new role of the Provincial Government, its participation in the incubator *Emprender*, and lessons learnt. Pichincha's objective is to build a competitive, innovative territory, and with solidarity. This is a process based on citizen participation and consensus building, to take advantage of local capacities. It is also essential to have articulation between the public and the private sectors. The new role of the Provincial Government is to create a favorable environment for local development and increase competitiveness in production and exports. Pichincha is in the process of elaborating a competitiveness agenda, which includes the upgrading of basic infrastructure services. The Government promoted the creation of ***Emprender*** (serving as its president), bringing companies to the partnership, and committing annual funding for 4 years, representing about 50 percent of total investment. Lessons learnt include: (i) the development of an incubator is a long-term proposition, (ii) returns should only be expected in the long-term; and (iii) indicators should be adapted to the development level of each region.

**Ramiro Sanhueza, Under-director for Entrepreneurship at CORFO (Development Corporation), Chile,** justified the state's intervention in entrepreneurship and innovation, and describe CORFO's financing mechanisms in the framework of the program *Innova Chile*. There is a public policy in this area, because enterprise growth is essential for the country's

development. There are positive social returns and a market failure in the first stages of enterprise creation. However, there is no relationship between the level of investment in innovation related projects and enterprise creation: universities still do not orient human resource formation towards entrepreneurship. CORFO's intervention covers the early stages of financing (seed funding, angel capital and risk capital) through: (i) pre-investment (US\$10,000 for the entrepreneur to elaborate a business plan, and US\$2,000 for the sponsor -a consultant or firm; incubators can be sponsors- supporting business planning for a 1-year period); (ii) support to start operations (US\$68,000 for entrepreneur and US\$12,000 for sponsor); and (iii) scaled financing, including support for angel networks (US\$120,000/network/year) and subsidies to risk capital administrators (a first fixed subsidy of US\$120,000 plus US\$24,000/subsequent year. Financing for incubators can reach as much as US\$300,000/year, through different programs administered by CORFO, with the objective of upgrading the incubation national system to an international level, expecting 25 incubators and 250 companies supported by 2007.

**Myriam Aldabalde, with the *Technology Development Program (PDT)*, at the Directorate for Science, Technology and Innovation (DICYT), Uruguay,** explained the differences between scientific, technological and innovation policies; concentrated on innovation policies, and described the situation in Uruguay, including some recent policy measures. The central objective of the government's innovation policies is wealth creation, and they are geared to promote innovation within companies and institutions, to generate innovation prone environments. The situation in Uruguay can be characterized as follows: (i) Research, Development and Innovation expenditures below 0.5% of GDP, with a very high public component (target: 1%); (ii) lack of policies for the creation of technology-based companies (soft credit, risk capital, internationalization); and (iii) a previous program co-financed by the IDB was successful in generating international quality knowledge, but little capacity was created to use this knowledge to promote a sustainable socio-economic model. Recent policy measures include: (i) creation of an Innovation Council and an Innovation Agency; and (ii) decision to design a National Strategic Plan on Science, Technology and Innovation, with a wide participation of stakeholders.

**José Alberto Aranha, with *Genesis Institute*, Pontifical Catholic University of Rio de Janeiro, Brazil,** explained the situation of entrepreneurship and innovation in Brazil and how the incubator Genesis, is working on *community incubation*. There are two Brazils, very different from each other, and the government is promoting innovation in "Poor Brazil". Both, scientific production and skilled human resource formation drastically increased in the last few years; however, these were not accompanied by the development of the innovation field. There are strong financing mechanisms for Research, Development and Innovation in Brazil, including for instance 14 sectoral funds that administer a tax to companies in a particular sector of the economy, to support innovation projects relevant to that sector in SMEs and universities. In Brazil, there are 339 incubators distributed in 23 states, hosting 2,327 companies that generate 12,270 jobs. However, risk capital investors are not interested in investing in little educated, poor entrepreneurs. Social incubation refers not only to "profitable organizations, such as companies and cooperatives, but also to non-profitable organizations, together with their own civil society and its social movements."<sup>7</sup>

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<sup>7</sup> Innovation Urban Environment. XXI IASP World Conference on Science and Technology Parks; Aranha, Rocha, Magacho, Castro, Abreu.

The objective of community incubation is “to form entrepreneurs and innovative enterprises based on the local identity of a community and using social technology. Expected results are endogenous development and a pro-active attitude. Genesis worked with Vila Canoas, a low-income community (*favela*) in Rio de Janeiro, in the identification of areas of interest, entrepreneurial formation, and mapping of potential enterprises. As a result, a number of companies emerged in the areas of media (*Fala Canoas*), domiciliary lodging, local gastronomy, computer maintenance, landscaping, recycled paper products, decorative candles, confections, and clothing re-design.

**Richard White, Manager, Incubator Development, New Zealand Trade and Enterprise, explained why ICT is important to New Zealand (NZ), its focus on high growth businesses, and lessons learnt.** Both, ICT and high growth businesses are important to New Zealand, because of the small size of the country (4 million inhabitants) and its geographic isolation. “ICT facilitates the development of international networks and helps NZ’s global connectedness”. NZ expects to incubate the international, global companies of the future. The incubation program was created in 2001 (before that there were no incubators at all). Lessons learnt include the importance of: (i) focus for maximum impact; (ii) collaborative partnerships for implementation with industry and research centers; (iii) accountability; (iv) networking; (v) streamlining of procedures (removing administrative obstacles); (vi) a policy development process involving stakeholders; (vii) seed capital; and (viii) working with the best trained people. Recommendations for the region are as follows: (i) join existing international networks and set up own networks (national and regional); (ii) lobby governments to reduce trade barriers and implement support policies; (iii) engage with foreign trade promotion agencies to facilitate market entry; (iv) engage with ICT multi-nationals to encourage market entry; and (v) encourage the development of ICT and technology incubators to catalyze the growth of an effective innovation system.

#### ***Session 5: Public-Private-Partnerships: How Can the Public and Private Sectors Collectively Support Innovation and Entrepreneurship***

During this session the impact and lessons learnt from public-private-partnerships (PPPs) to support innovation, incubation and entrepreneurship were discussed.

**Carlos Gianella, with the International Association of Science Parks (IASP), explained the evolution of public-private relationships in Argentina and provided some examples.** Public-private relationships in Argentina are still viewed with a hint of suspicion, given previous experiences of preferential treatment for the selection of sub-contractors, and corruption tainted privatizations. There are not clear objectives on PPPs, but there are valuable experiences, which are not the product of systematic public policies. The incubator experience is one of them. There are, for instance, municipal governments supporting micro enterprises, which provide for increased employability, although often times they are not sustainable. Another example is provided by *Invap* in Bariloche, a public company that was intended to retain young scientists and engineers graduating from adjacent Balseiro Institute and commercialize Balseiro’s research results. Invap has sold research nuclear reactors to countries such as Australia, Peru, and Egypt and is a producer of satellite technologies. Based on examples like these, Argentina needs to elaborate a policy on PPPs.

**Andrés Benavides, with the National Commission for Scientific and Technological Research**

**(CONICYT), Chile,** explained the collaborative research consortia initiative as an example of the strengthening of public-private linkages around research and innovation, with increased participation of private sector financing and execution of Research and Development activities. Other tools to promote public-private linkages are insertion of researchers in enterprises and incentives for patenting. The Consortia are structured into formal joint venture partnerships among at least 3 companies and one research center, with clear agreements on intellectual property management. All participants are required to make cash and in-kind contributions. The subsidy provided by CONICYT may reach up to US\$ 1 million per year, and the private counterpart is required to cover 37 percent of project costs. The selection criteria for consortia include: (i) social and economic impact; (ii) opportunities for creation of permanent technological capacities; (iii) quality of participants, and (iv) financial commitment of participants. As an example, the Consortium for Technological Research in Health unites researchers in three Chilean universities and cancer specialists in Israel and Argentina. Together with three technological and pharmaceutical companies, they develop new therapeutic drugs for use during the diagnosis and the treatment of gastrointestinal cancer, which is of high incidence in Chile. The Technological Consortia for the Export Horticultural-Fruit Industry was established by 17 members to develop new fruit and plant varieties using biotechnology and genetic engineering, to address the lack of self-sufficiency on fruit varieties.

**Humberto Dingler, with Monterrey's municipality, Mexico,** explained his experience with private sector partners in the strengthening of the *Monterrey's Business Incubator (INEM)*. INEM is a traditional incubator for intermediate-technology companies that introduce innovation and added value to the industry, commerce and service sectors. PPPs are viewed as a source of sustainability, particularly after two previous failures due to changes in municipal government administration (3-year periods with no re-election). Public participation concentrates on funding and administration, while private participation concentrates in INEM's governance committees and strategic alliances for specific services or programs. Specific examples with intensive private participation are the: (i) mentoring and specialized advisors; (ii) Financial Management Committee, with participation of main banks and credit/subsidy programs; (iii) Entrepreneurship Promotion Program, involving media, radio, and public space publicity companies (with contributions valued at US\$100,000 in one year); (iv) Entrepreneur's Friends Program, where established companies support entrepreneurs by providing them with retail space, marketing trials, and software piloting; (v) Committed Suppliers Program, for the provision of lower cost products and services to entrepreneurs; and (vi) Win-Win program, in which consultants and firms volunteer for training sessions in exchange for visibility.

**Mercedes Inés Carazo, with the Technical Office for Innovation and Technology Transfer Centers (CITEs), Ministry of Production, Peru,** explained the government's competitiveness and continuous innovation agenda, and described the CITEs initiative. A National Competitiveness Council was created and a competitiveness plan for 2006-2011 is being drafted with the private sector. The objectives include the establishment of a sustainable and inclusive export model, doubling the value of exports and reaching 10% of SME participation in exports. The axis for the competitiveness plan are: (i) associability; (ii) norms and standards; (iii) innovation; (iv) culture of production; and (v) investment promotion and facilitation (includes incubators). 17 CITEs (mostly private) serve as tools to

support industrial development and enhance the value added of the regional production, through the provision of R&D and technological services to companies, particularly SMEs. The CITEs constitute a common space for private sector, public sector and university collaboration, facilitating associability and integration of companies to productive chains. The CITEs provide services such as: (i) technical assistance and training; (ii) quality control and lab tests; (iii) product development; (iv) information and market intelligence; (v) pilot plant facilities; and (iv) R&D geared to solve bottlenecks in productive chains.

**Marcelo Vásquez, Manager for ICTs, *Fundación Chile***, explained how *Fundación Chile* is organized and its activities to support the creation of ICT-based companies. *Fundación Chile* is a non-profit, public-private organization, devoted to increase the competitiveness of human resources and the productive and service sectors. It promotes and develops innovation, technology transfer and management of high impact for the country. *Fundación Chile* actively seeks high impact venture opportunities, invests up to 50% of total costs, and operates in the “death valley” area, making use of R&D subsidies and seed capital to develop pre-commercial pilots. In the area of ICTs, the mission is to generate and support the development of ICT companies that add value to productive chains in key sectors of the economy, which are related to the exploitation of natural resources, such as aquaculture, agro industry, mining, and forestry (e.g., software development for CODELCO, a world major copper producer). The objective is not to create ICT companies *per se*, but to: (i) address demands of well established value chains; (ii) generate a demonstration effect in the area of service outsourcing with global potential; and (iii) support the development of e-government. The project cycle includes the following stages: (i) identification of opportunities; (ii) feasibility analysis; (iii) validation of the business model; (iv) fundraising; (v) creation of the company; and (vi) follow-up. Key lessons learnt are as follows: (i) the cluster approach provides economies of scale; (ii) incubation in public-private networks is needed for innovation (transfer and innovation are not enough); (iii) intellectual property management is critical (it is not easy to copy anymore); (iv) both business models and technologies need validation and competencies; and (v) enterprise creation is the most effective transfer mechanism because of its demonstration effects. In addition, *Fundación Chile* is incubating *ChileGlobal*, a network of successful Chilean businesspersons abroad to promote knowledge-intensive businesses and partnerships, enhance technological transfer, and increase the supply of investment projects. So far, about sixty influential Chileans abroad are actively engaged in the network. In addition to supporting trade missions, they are increasingly participating in activities related to mentoring, social responsibility and public policies.

### **Track Three: STRATEGIES & PARTNERSHIPS**

This track combined the discussions from tracks one and two, and proposed actions that the private and public sectors, as well as donors, can take to address the constraints to innovation and entrepreneurship in Latin America and the Caribbean. Some aspects considered were:

- SME development tools;
- Business incubation services;
- Network development of innovators and entrepreneurs; and
- New mechanisms for addressing constraints such as financing.

### ***Session 6: Working Models on ICT, Innovation, Entrepreneurship and Network Development***

During this session, the following questions were addressed: *How can ICT help service clients and scale up business development services? What models are effective, how and why? How can ICT facilitate networks among innovators including the Diaspora? How can SMEs leverage ICT for increasing their competitiveness?*

**Gabriel Hidalgo, with the incubator Octantis, in Chile,** explained the model of networked incubation for dynamic enterprises used by Octantis, the role of ICTs, and the results obtained so far. Networks are equally or more important than money, because they generate social capital. This is the differentiating factor in entrepreneurship between Latin America and Asia, where enterprises grow faster. Octantis selects entrepreneurs with projects and power them through a 3-stage process: (i) gestation or business design (3-6 months), working with business mentors and a network of potential clients and partners; (ii) support to the start of operations (2-3 months), working with institutional networks for business services; and (iii) initial development (9-12 months), working with commercial networking and networks of angel investors. ICTs are a facilitator of Octantis' operations and the core business of many of its client companies. The steps of the project cycle are supported by applications such as website for requests of support and information, a customer relationship management module for the business design stage, and a project management software (dotProject) for portfolio management. Results so far include: (i) 2,400 business prospects analyzed; (ii) 120 projects supported at the business design stage; (iii) 40 projects/companies in the portfolio; (iv) 16 enterprises already operating; (v) one company selling more than US\$3 million in its 2<sup>nd</sup> year; (vi) sales of client companies totaled US\$6 million; and (vii) total investment has exceeded US\$1,300,000 (US\$1 million contributed by angel networks).

**Luis Barnola, with the Institute for Connectivity in the Americas (ICA),** explained the role ICA is playing promoting the use of ICTs for development and the programs it finances. ICA is based in Ottawa, Canada and Montevideo, Uruguay, and was established as Canada's contribution to reduce the digital divide, as agreed in the Summit of the Americas held in Quebec in 2001. ICA funds ***applied research projects and implementation of ICT for development projects***, focusing on key crosscutting issues (appropriate technologies, policy innovation, and gender perspective) and thematic pillars (e-economy, e-enablers, and e-citizenship). The e-economy pillar includes: (i) ICT in the informal economy; (ii) SMEs, e-commerce and employment; (iii) youth, digital and creative industries; and (iv) IP rights and public goods. Among other areas, the e-enablers pillar focuses on education and skills for the e-economy. There are opportunities for research in e-economy and social entrepreneurship. ICA finances regional projects that: (i) strengthen knowledge management networks; (ii) facilitate capacity building; (iii) are geared towards influencing public policies; and (iv) make use of evaluation and dissemination tools. For instance, project "Lanz@" promotes an entrepreneurship culture in Central America, including improving the productivity of micro and SMEs through the training of managers.

**Carlos Galián, with the Misiones Technology Park, Argentina,** explained success factors for the knowledge economy, related weaknesses of SMEs, and areas of work needed to remove obstacles for the use of ICTs. Success factors include: (i) a favorable political environment;

(ii) human capital; (iii) digital capital; (iv) innovation and technology development financing; (v) new venture creation; (vi) infrastructure; (vii) organizational factors; and (viii) socio-cultural assets (social capital and entrepreneurship culture). Weaknesses in SMEs are related to: (i) limited capacity to access and administer information; (ii) management inefficiencies; (iii) small scale of commercial operations; (iv) lack of qualified human resources; (v) access to financing; and (vi) scarce technological innovation and limited access to research and development centers. The following are proposed to improve the use of ICTs, both, by SMEs and society: (i) improve internet access and connectivity; (ii) promote education and training; (iii) promote e-government; and (iv) develop solid legislative systems. Furthermore, there is a role for the state in promoting technology parks, incubators and productive clusters: reducing commercial costs, promoting quality standards and “virtual conglomerates”.

**John Restrepo, with ParqueSoft Association**, explained the *ParqueSoft* model and its expansion throughout Colombia. ParqueSoft was founded in 1999 in Cali by software entrepreneurs with a double focus on software and young people. It has several distinctive characteristics: companies are incubated, but do not graduate: they stay at the park, generating synergies among them. The Parks, which are non-profit, are owned by the entrepreneurs themselves (60% ownership). There is also a widespread use of in-sourcing, which is the outsourcing of park services to tenant companies, and of company’s services among tenant companies themselves. Other cities expressed interest in the model, and today there are ParqueSofts in 11 Colombian cities, making use of a free license. ParqueSoft is consolidating itself as an integrated network of parks, making extensive use of ICTs: all parks are being connected through a wide area network, with 512K for each park, including a video/teleconference channel, intranet, extranet, and a unified home page. Each park is a separate legal entity, and all of them are associated to ParqueSoft Association, a new umbrella organization. Results so far include: (i) 125 new established enterprises; (ii) US\$40 million in accumulated sales; (iii) 655 entrepreneurs; (iv) more than 1,000 jobs; (v) 10 applied research and development laboratories jointly established with universities; and (vi) 1,500 children and youth in entrepreneurship “nursery” programs (for entrepreneurship development).

***Session 7: Perspectives from the entrepreneurs and SMEs: Challenges and Strategies***

During this session, the following questions were addressed: *What are the main obstacles faced by entrepreneurs to set up new technology companies in developing regions? What lessons can be shared with other entrepreneurs and SMEs in the region? How have they used ICT to become more competitive? How have incubators and other organizations helped?*

**Roy Thomasson, with the Young Americas Business Trust (YABT)**, identified challenges and strategies for entrepreneurs and SMEs in the region, and explained related YABT activities. The Americas is a young continent: youth less than 30 years-old comprise up to 60% of the population, and the formal sector cannot create enough jobs for youth entering the labor market, while poverty remains as a central challenge. Engaging youth in entrepreneurship requires a systematic approach, a system that follows-on beyond raising expectations. It is a process, not a project, and discontinuity of funding should be avoided. YABT is a private sector, non-profit corporation affiliated with the Organization of American States. YABT provides information services, facilitates networking and organize an international business

plan competition. YABT's focus areas are: (i) leadership and networking (e.g. videoconferences in partnership with the World Bank's *Global Development Learning Network -GDLN*); (ii) training (e.g. business labs, on-line entrepreneurship education, and financial education); (iii) technology (e.g. mybyz.net and InfoBiz; and (iv) strategic alliances (e.g., with Agora partnerships' venture capital) and national YABTs in 12 countries. The *Talent and Innovation Competition* (or business plan competition) is currently identifying sub-regional lead organizations, and the competition itself will start in 2007.

**Catalina Escobar, entrepreneur, with *Emprendemos (e-marketplace services)*, Colombia,** talked about general challenges facing entrepreneurs and specific challenges with ICT ventures, and provided some recommendations for incubator improvement. General challenges include: (i) to make the decision to start the business, since opportunity costs are higher with professional advancement; (ii) being afraid of revealing the business idea; (iii) business plan competitions may raise expectations and discourage the entrepreneur if not selected; (iv) get the first partner/ally; and (v) flexibility to accept criticism and make changes. Specific challenges for ICT ventures include: (i) negative perceptions from the ".com" bubble burst; (ii) very low internet penetration, although rising; (iii) a culture that emphasize concrete products, rather than services, and face-to-face interactions; and (iv) finding open-minded partners. Incubators could improve by: (i) being flexible with methodologies; (ii) understanding very well the needs of individual entrepreneurs; (iii) generating an "internal market" (in-sourcing) among incubatees; and (iv) making a more intensive use of ICTs.

**Robson Souza, entrepreneur, with *Cooperative Arco-Iris (cleaning services)*, Brazil,** explained characteristics of popular cooperatives, challenges faced, use of ICTs, and lessons learnt. A popular cooperative is different from other cooperative approaches in that members of the former come from situations of social exclusion, and there is a democratic and participative management model with the objective of pursuing the common good (rather than profit). 10 years ago, Arco Iris' members were unemployed. Incubators help meet some of the challenges, however others remain, such as difficulties obtaining credit, low schooling among members, and difficulties obtaining first contracts (due to prejudices against poverty, and ignorance about cooperativism). ICTs are needed to compete, and for financial and administrative transparency (accountability to members) and management quality. However, there are obstacles for ICT use, including: (i) high cost equipment; (ii) high connectivity costs; and (iii) digital exclusion. Lessons learnt include the importance of partnerships, networks, information, business feasibility, product quality, management quality, and of improving the qualifications and formal education of cooperative members.

**Alvaro Margolis, entrepreneur, with *EviMed (medical software)*, in Uruguay,** explained EviMed business, benefits obtained from Ingenio incubator in Uruguay, and identified areas for incubation improvement. EviMed has been incubated by Ingenio for 2 years, and has been developing software (eviDoctor) that integrates clinical management (clinical patient information, medical history, and patient profile) with medical continuous education. Incubation was a success factor for EviMed, and helped by: (i) triggering the start of the venture; and providing: (ii) infrastructure; (iii) advice in different areas (e.g., business planning, market study, marketing, graphic design, and management); (iv) economic support (e.g., business launch, subsidized activities, internship programs, and use of facilities); and (v)

support to win a grant from the Government's *Technology Development Program (PDT)*. Suggestions for incubation improvement include: (i) greater support for internationalization; (ii) financing; (iii) high reliability infrastructure (e.g., electrical and telecommunications); (iv) a longer incubation period; and (v) post-incubation services.

**Marta Ojeda, entrepreneur, with *Jump*, creative management (project management), in Colombia**, identified obstacles and solutions for new ventures, and exemplified the intensive use of ICT by ParqueSoft (its host park) to overcome obstacles. Main obstacles are: (i) financing for entrepreneurs; (ii) lack of programs supporting the national technology law; (iii) lack of policies supporting micro-enterprises; and (iv) not much articulation among state agencies (to further leverage existing resources). They propose to establish partnerships between the park and technology development centers, and strengthen coaching activities, which are critical in areas such as quality, legal, and commercial. The ParqueSoft network (13 technology parks in 9 Colombian departments) utilizes a collective technology management strategy (supported by a wide area network) to: (i) develop a collaborative learning scheme across parks; (ii) strengthen external communications, showing a coherent image across parks; (iii) network tenant companies across parks; (iv) transfer the ParqueSoft model and strategies in record time; (v) generate a real community around technology issues; and (vi) create economies of scale to develop businesses and take advantage of business opportunities.

#### **Track Four: REGIONAL NETWORK**

This was a parallel track, allowing for the discussion of a regional network around innovation and entrepreneurship, based on incubators, technology parks and related organizations. The discussions and conclusions from this session are summarized in the second section of this document, *Workshop Overview, the Latin American and Caribbean Network*.

## Annex 1: Workshop Agenda

**May 15, 2006**

- Arrival of participants
- Pre-registration of foreign delegates and participants

**May 16, 2006 (Day 1) – By Invitation Only**

### **0800 Registration**

### **0900 Opening**

- Welcome Remarks
  - Uruguay's Minister of Industry, Energy and Mining, Jorge Lepra
  - President of LATU, Miguel Brechner
  - World Bank Country Manager, David Yuravlivker
  - Rector, ORT University, Jorge Grünberg
  - IASP representative, Esteban Cassin
- Introductory Remarks: Business Incubator Initiative, *InfoDev* Program, Vivek Chaudhry

### **1030 Coffee/Tea**

### **TRACK 1: CHALLENGES AND STRATEGIES**

This track provides lessons learnt from the private sector, industry players and organizations providing incubation, innovation and entrepreneurship services in designing and implementing strategies to overcome the challenges facing the growth of ICT and ICT-enabled small and medium enterprises (SMEs) and as drivers for new economic opportunities.

### **1045 Session 1: Regional Perspective of the Challenges and Strategies: Facilitating an Entrepreneurial Environment**

Discussion of the fundamental impediments to greater innovation and entrepreneurship in the region. What sort of environment stimulates entrepreneurship and how can it be created?

- **Chair: Manuel Bello**
  - Miguel Aldaz, MIF/ IDB
  - Domingo Giorsetti, MIT 50K Business Plan Competition, Argentina
  - Mauricio Guedes, Director, Rio's Technology Park, Brazil
  - Esteban Cassin, SECYT, Argentina

### **1230 Lunch**

### **1400 Session 2: Financing Challenges for ICT and ICT-Enabled SMEs**

What finance gaps exist? What financial mechanisms are used to foster growth of SMEs? Can good practices and lessons be drawn from experience? How can incubators help

identify and leverage financial resources for their clients? How can networks be established?

- **Chair: Julian Webb**
  - Pablo Angelelli, IDB
  - Juan Carlos Carullo, Venture Capital Program, SECYT, Argentina
  - Víctor Zerbino, Prosperitas Venture Capital, Uruguay
  - Eduardo Garrido, Universities Program, *Banco Río*, Argentina

### **1530 Coffee/Tea**

### **1545 Session 3: Development of Innovation and Entrepreneurial Support in Latin America and the Caribbean**

InfoDev grantees and other participants present the status of their project development aimed at sharing experience and lessons learnt. The presentations will follow a structured approach:

*What are the goals of the incubator/Science Park and its achievements? How are the policy and financial challenges addressed? Who are the partners of the incubator and how is cooperation organized? How does the organization support innovation? What is the role of ICT in achieving the goals and delivering services for clients? What are the incubator's business model and sources of revenue for long-term sustainability? What lessons have been learnt?*

- **Chair: Julio Fernández**
  - Domingo González, Innovation and Development Center, PUC, Peru
  - Gonzalo Guimarães, ITCP, Brasil
  - Antonio Holgado, AccessNova, Chile
  - Ricardo Endara, *Tecnoparque Internacional*, Panama
  - Maria Bustamente, Agroinnova Colombia

### **1730 – 1830 Networking time**

### **1830 Dinner**

**May 17, 2006 (Day 2) – By Invitation Only**

### **TRACK 2: THE ROLE OF THE PUBLIC SECTOR**

Innovation, entrepreneurship and incubation policy regional overview: What is happening; Are any trends evident; What is the Latin America and the Caribbean regional perspective?

### **0900 Session 4: Regional Perspective of How the Public Sector Can Foster Innovation & Entrepreneurship**

What are governments doing to foster innovation, incubation and entrepreneurship and why? Discussion of the impact and lessons learnt from government efforts to support innovation, incubation and entrepreneurship. What policies have been most effective? What lessons have been learnt from a policy perspective? What are some of the programs that donor agencies are supporting? Are there any common road maps applicable across the region or adaptable from one country to another?

- **Chair: Joan Hubbard**
  - María Soledad Salvador, Provincial Government, Pichincha, Ecuador
  - Myriam Aldabalde, Technology Development Program (PDT), Uruguay
  - Ramiro Sanhueza, CORFO, Chile

- Richard White, New Zealand Trade and Enterprise
- José Alberto Aranha, PUC – Rio de Janeiro, Brasil

### **1030 Coffee/Tea**

#### **1045 Session 5: Public-Private-Partnerships: How Can the Public and Private Sector Collectively Support Innovation and Entrepreneurship**

Discussion of the impact and lessons learnt from public-private-partnerships (PPPs) to support innovation, incubation and entrepreneurship. What are the lessons learnt from Science and Technology Parks?

- **Chair: Vivek Chaudhry**
  - Carlos Gianella, IASP
  - Andrés Benavides, *Programa Bicentenario*, CONICYT, Chile
  - Humberto Dingler, Monterrey Municipal Government, Mexico
  - Inés Carazo, Production Ministry, Peru
  - Marcelo Vásquez, *Fundación Chile*

### **1230 Lunch**

#### **TRACK THREE: INNOVATION AND ENTREPRENEURSHIP IN LATIN AMERICA AND THE CARIBBEAN: STRATEGIES AND PARTNERSHIPS**

This track will combine the discussions from track one and two and propose actions that the private sector and public sector including donors can take to address the constraints to innovation and entrepreneurship in Latin America and the Caribbean.

#### **1400 Workshop Session 6: Working Models on ICT, Innovation, Entrepreneurship and Network Development**

How can ICT help service clients and scale up business development services? What models are effective, how and why? How can ICT facilitate networks among innovators including Diaspora? How can SMEs leverage ICT for increasing their competitiveness?

- **Chair: Christiano Becker**
  - Luis Barnola, ICA Americas, Canada
  - Carlos Galián, IASP, Argentina
  - Gabriel Hidalgo, Octantis, Chile
  - John Restrepo, ParqueSoft, Cali, Colombia

### **1530 Coffee/Tea**

#### **1545 Workshop Session 7: Perspectives from the entrepreneurs and SMEs: Challenges and Strategies.**

What are the main obstacles faced by entrepreneurs to set up new technology companies in developing regions? What lessons can be shared with other entrepreneurs and SMEs in the region. How have they used ICT to become more competitive? How have incubators and other organizations helped?

- **Chair: Anne Morris**
  - Roy Thomasson, YABT, USA
  - Catalina Escobar, *Emprendemos*, Colombia
  - Robson Souza, *Cooperativa Arco-Iris*, Brasil

- Alvaro Margolis, EviMed, Uruguay
- Marta Ojeda, Jump, Colombia

**1700 Moderated Session**

- Summary of key priorities and challenges discussed during the Workshop
  - Discussion of concrete ways that policy makers, donors and the private sector could **address the impediments** to greater innovation and entrepreneurship in the region, particularly for ICT-enabled SMEs.
  - Discussion of concrete ways that policy makers, donors and the private sector could help successful entrepreneurs to grow their businesses by improving their **access to financial resources**.
  - Key emerging issues
- Opportunities for collective action and particular actions for the Latin America and the Caribbean regional network

**1830 Dinner**

**May 18, 2006 (Day 3) – By Invitation Only**

**TRACK FOUR: REGIONAL NETWORK**

This was a parallel track, which was concluded during the last day of the workshop. This track allowed for the discussion of a regional network around innovation and entrepreneurship, based on incubators, technology parks and related organizations.

**0900 Presentation of the African Network**

- Steven Giddings, Regional facilitator, African network

**1000 Monitoring, Evaluation and Impact Assessment**

- Anne Morris, Vivek Chaudhry, Joan Hubbard, and Julian Webb

**1045 Coffee/Tea**

**1100 Presentation on RELAPI**

- José Eduardo Fiates, President of ANPROTEC, Brazil

**1115 Latin America and the Caribbean Regional Network: Next Steps & Action Plan**

- Joan Hubbard, Vivek Chaudhry, César Yammal, and Julian Webb

**1230 Closing remarks**

- Vivek Chaudhry

**1300 Lunch**

**Afternoon Site Visits:**

ZONAMERICA Business and Technology Park  
Pando Technology Pole (PTP)  
INGENIO Business Incubator  
LATU, Technology Laboratory of Uruguay

## Annex 2: Workshop Participants

<b>Promoting Innovation and Entrepreneurship in Latin America and the Caribbean:</b>			
<b>Strategies and Partnerships</b>			
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