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Creating a Vibrant Entrepreneurial Ecosystem in India

No.32/15/2011-FR
Government of India
Planning Commission
(Financial Resources Division)

Yojana Bhavan, Parliament Street,
New Delhi the 17th October, 2011

Subject: Committee on Angel Investment and early Stage Venture Capital

1. India is emerging as an attractive destination for risk capital. There is, however, a need to further improve entrepreneurial eco-system by enhancing availability of risk capital to entrepreneurs at start-up and early stage. It is, therefore, decided to constitute a Committee to examine various issues and to recommend measures for accelerating Angel investment & early stage Venture Capital in India.

2. The composition of the Committee is as under:

   1. Shri Sunil Mitra Ex-Revenue Secretary Government of India Chairman
   2. Secretary Ministry of Micro, Small & Medium Enterprises, Government of India Member
   3. Chairman Small Industries Development Bank of Member India (SIDBI) Member
   4. Shri Saurabh Srivastava Founder & Past Chairman NASSCOM, Past Chairman IVCA, Founder India Angel Network Member
   5. Shri Ashish Dhawan Founder of Chryscapital, Member
   6. Shri Jayant Sinha Managing Director, Omidyar Network Member India Member
   7. Shri Anand Ladsariya Angel Investor from Mumbai Angels Member
   8. Shri Sumir Chadha Chairman IVCA, Westbridge Capital Partners Member
   9. Shri Alok Mittal MD Canaan Partners Member
   10. Shri Jyoti Sagar Founder JSA Law Member
   11. Shri Rajiv Memani Country Managing Partner Ernst & Young Member
   12. Shri Harkesh Mittal Adviser & Head, National Science & Technology Entrepreneurship Development Board Member

Secretary

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3. The Terms of Reference (TOR) of the Committee are as follows:

(i) Considering growth of angel investment and early stage venture capital in India and compare this with other countries such as the US, Israel, UK, China, etc.

(ii) Identifying key barriers and scale-up challenges for startups in India including hiring talented senior executives, financing working capital, gaining access to high-volume manufacturing, etc; assessing measures available in India to address such barriers and challenges and identifying gaps and suggesting remedial measures.

(iii) Assessing policy and institutional measures that have enabled fast-paced innovation and the formation of more business angel groups and early stage venture capital in other countries identified above.

(iv) Analyzing early stage capital flows in India and around the world, both for angel and early stage venture capital and comparing soft and hard innovation infrastructure (incubators, research labs, early stage funds, angel networks, innovation awards, business plan competitions etc.) in India with leading countries such as US, Israel, China, and UK.

(v) Assessing factors that could enhance the domestic capital pool available for angel investment and early stage venture capital in India, in particular, studying options such as an SME exchange to facilitate exits for investors in early stage companies as a means to encouraging more flow of capital to this segment.

(vi) Identifying ways and means to increase the flow of angel investment and early stage venture capital from overseas into India.

(vii) Assessing the need for accreditation and regulation of such angel/venture capital.

(viii) Recommending a package of policy and institutional measures that must be taken by Central Government. State Governments, Academic Institutions, Large Corporations, leading financial institutions and private foundations to fundamentally improve and increase entrepreneurial activity leading to innovation in providing goods and services to this fast growing economy in a sustainable way. This may include, inter alia, the following:

(a) Suggest measures to catalyze partnering between academia and industry to create innovative ventures including establishment of incubators, encouraging students and faculty to set up innovative ventures, etc.

(b) Suggest policy measures and institutional mechanisms that would facilitate the flow of angel investment and early venture capital.

(c) Suggest policy measures and mechanisms that would facilitate the flow of working capital to early stage companies in a timely manner.

4. The Committee would be serviced by the Financial Resource Division of the Planning Commission and the expenditure (including office expenses and travel) would be chargeable to the Plan Scheme on Plan Formulation, Appraisal and Review. The Headquarters of the Committee will be at New Delhi.
5. The Committee should submit its report within 6 (Six) months from the date of this order.

(T.K. Pandey)
Adviser (FR)
Planning Commission

Distribution:
Chairman & all Members of the Committee

Copy to:
1. PS to Deputy Chairman, Planning Commission
2. PS to MOS (Planning, PA, S&T and ES)
3. PS to all Members of the Planning Commission
4. PS to Member Secretary, Planning Commission
5. PS to Secretary (Expenditure), Ministry of Finance, North Block, New Delhi
6. PS to Secretary, Ministry of Home Affairs, North Block, New Delhi
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8. IFA Unit, Planning Commission
9. Deputy Secretary (Adm.), Planning Commission
10. Admin./ Accounts / General Branches, Planning Commission
11. Information Officer, Planning Commission
12. Library, Planning Commission
13. Plan Coordination Division, Planning Commission
14. Financial Resources Division, Planning Commission

(T.K. Pandey)
ORDER

Subject: Committee on Angel Investment and Early State Venture Capital

1. In continuation of the Order of even number dated 17th October, 2011, it is decided to include the following persons as Member of the Committee:

   1. Shri Som Mittal President, Nasscom
   2. Shri Vivek Pandit Partner, McKinsey & Company, Mumbai Office
   3. Shri Sri Rajan Partner, Bain & Company India Ltd.
   4. Shri A.K. Panda Director, Financial Resources Division, Planning Commission

2. All other terms & conditions of the Order will remain unchanged.

(T.K. Pandey)
Adviser (FR)
Planning Commission

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9. Deputy Secretary (Adm.), Planning Commission
10. Admn./ Accounts / General Branches, Planning Commission
11. Information Officer, Planning Commission
12. Library Planning Commission
13. Plan Coordination Division, Planning Commission
14. Financial Resources Division, Planning Commission

(T.K. Pandey)
Creating a Vibrant Entrepreneurial Ecosystem in India

Foreword

Last July, Deputy Chairman of the Planning Commission Shri Montek Singh Ahluwalia, asked me to join an effort to identify the factors that could improve Angel and Early Stage Venture Capital investments in the country. I had just retired from the Department of Revenue and had little experience in promoting business start-ups in earlier assignments – I was not even aware of business angels! I questioned my ability therefore, to add value in this exercise. Shri Ahluwalia told me that there would be little expected of me save coordinating the knowledge and experience of experts in this field with whom, he would constitute a team. Continuing with his candour, he explained that in view of my recent tenure in the Ministry of Finance, my inclusion in this team could cause the Ministry to attach some degree of credence to its recommendations – particularly those seeking fiscal benefits providing thereby, a fair chance to some of them going forward into implementation.

A Committee was duly constituted and a comprehensive Terms of Reference for it, was notified by the Planning Commission in October 2011. With multiple stakeholders characterizing the eco-system for start-up business ventures in the country, the ToRs required specific recommendation outcomes for each of them. True to his word, the Deputy Chairman put together a team that comprised the best pool of knowledge and experience in Angel and Venture Capital investing in India. The Committee’s request to co-opt Shri Som Mittal, President NASSCOM, Shri Srivatsan Rajan, Managing Director Bain & Company and Shri Vivek Pandit, Senior Partner & Director McKinsey & Co. to add greater depth to its experience and data access, was readily acceded to by the Planning Commission. With only two officials of the Government of India – Secretary MSME and Shri H K Mittal, Secretary Technology Development Board, Ministry of Science & Technology in the 15-member Committee, the addition of Shri Akshya Kumar Panda, Director, Planning Commission, provided valuable guidance in respect of the Commission’s expectations in reporting by the Committee. Though not notified as a formal member, the association of Ms Padmaja Ruparel, President Indian Angels Network by the Committee, kept its deliberations singularly on track and facilitated along with Shri Harsh Vardhan and Shri Akash Bhargava of Bain & Company and their team, an extensive number of invaluable off-line exchanges with several stakeholders, in follow-up. The Committee has also appreciated the significant effort put in by the Bain team under the leadership of Shri Srivatsan Rajan, to painstakingly research the issues that have gone into the compilation of its Report.

The Committee observed at the outset, that the entrepreneurial eco-system is an inextricable part of systemic complexities that impede the prospects of doing business in India. Recognizing that several of these macro disorders lie within the domain of other expert bodies, the Committee considered it practicable to retain its deliberations within the realms of achievable measures in respect of specific stakeholders who impact the setting up and nurturing of business start-ups in India. The Committee presents its findings and suggestions in this Report, in this context.

The formulation of the Report has necessitated ten meetings of the Committee in Yojana Bhavan, New Delhi. This has been augmented by a large number of research interactions with stakeholders and informal discussions within the Committee to structure findings thereof, conducted off-line; a number of tele-conferences and extensive consultations on e-mail among
members. These were necessitated by the functional commitments of majority members that did not allow all of them to get together at any one venue on mutually convenient dates and the necessity of completing their deliberations within a reasonable period of the 6 months assigned by the Planning Commission.

Though not specifically required by the ToRs, the Committee became increasingly aware that its efforts will have little relevance in the absence of their acceptance for implementation by the multiple stake-holders that impact the domestic entrepreneurial financing eco-system. Within the short time-span available and given the number of policy interventions necessary, the Committee was constrained in pursuing conclusive discussions with each stake-holder for a prior acceptance of its recommendations, leading to the delineation of a firm and time-bound Action Plan for their implementation. It is in view of the significant impact of taking forward these recommendations in the strategic area of employment and wealth creation in the country within the coming decade, that the Committee has proposed the entrustment of this critical coordination task to a National Entrepreneurship Mission.

Working on this assignment and with the team notified by the Planning Commission, has been a significant learning and therefore, rewarding experience for me personally. While each of the Committee members gave of their best in the several rounds of discussions whether in structured meetings or in off-line and informal consultations, I would like to acknowledge specially, the guidance and wise counsel of Shri Saurabh Srivastava, Shri Jyoti Sagar, Shri Jayant Sinha and Shri Harkesh Mittal from their vast experience respectively, in pioneering angel investing in India; complex legal realities; ‘bottom of pyramid’ investment issues and those related to the country’s incubation programmes run by the Government of India. Shri Amarendra Sinha; Additional Secretary, Department of Micro, Small & Medium Enterprises; Shri Ananta P Sarma, Chief Executive Officer, SIDBI Venture Capital Limited and Shri Alok Mittal, Managing Director, Canaan Partners, brought new perspectives to bear on the Committee’s deliberations from their valuable insights in financing business ventures in India. I would also like to commend Shri Harkesh Mittal’s efforts in convening the Committee’s meetings, performing the difficult task of keeping records of its free-wheeling discussions and pursuing the completion of the Committee’s tasks as its Member Secretary.

Sunil Mitra

Kolkata, the 25th June 2012
Executive Summary

India needs to create 1-1.5 crore (10-15 million) jobs per year for the next decade to provide gainful employment to its young population. Accelerating entrepreneurship and business creation is crucial for such large-scale employment generation. Moreover, entrepreneurship tends to be innovation-driven and will also help generate solutions to India’s myriad social problems including high-quality education, affordable health care, clean energy and waste management, and financial inclusion. Entrepreneurship-led economic growth is also more inclusive and typically does not involve exploitation of natural resources.

Large Indian businesses – both in the public and private sector – have not generated significant employment in the past few decades and are unlikely to do so in the coming decade or two. Public sector and government employment has declined in the last few years, and is expected to grow very slowly in the coming years. Large private sector firms have also been slow in generating employment, which is unlikely to change due to increasing automation, digitization, and productivity gains. For example, the banking sector in India has recorded almost no employment growth in the last two decades despite multifold growth in its revenue and assets. Agriculture employs nearly a half of India’s workforce but employment is likely to decline in this sector, due to improvements in productivity.

India is an entrepreneurial country, but its entrepreneurs have had to struggle to create and grow their business ventures. There is, however, a growing group of first-generation Indian entrepreneurs – the founders of companies such as HCL, Cognizant, Infosys, Bharti and others - that have generated large scale employment and significant wealth. They and others such as IndiaBulls, Makemytrip and Naukri have also demonstrated value creation through a public listing. These successes have encouraged a new breed of entrepreneurs especially in the internet and e-commerce space.

The Committee believes India’s entrepreneurial growth can be accelerated by creating more conducive conditions – a catalytic government and regulatory environment, adequate capital flows (both debt and equity), support from businesses and society, and availability of appropriate talent and mentoring. Such an environment could replicate the success demonstrated by the Indian Information Technology (IT) and IT enabled services (ITES) industry over the last two decades. Starting in the early 1990s, the industry now directly employs 28 lakh (2.8 million) and indirectly an additional 89 lakh (8.9 million) people. Its revenues have grown from Rs. 350 crore in 1990 to Rs 4.5 lakh crore ($88 billion) in FY 2012. Several leading companies in this industry started as first-generation entrepreneurial ventures. By 2020, the IT and ITES industry is projected to contribute 9% of GDP with a revenue of over Rs 12 lakh crore ($225 billion) and direct and indirect employment to 30 million people.

India has the potential to build about 2,500 highly scalable businesses in the next 10 years – and given the probability of entrepreneurial success that means 10,000 start-ups will need to be spawned to get to 2,500 large-scale businesses. These businesses could generate revenues of Rs 10 lakh crore ($200 billion) – a contribution to GDP and creation of employment at the same

1 NASSCOM Strategic Review 2012
2 NASSCOM Perspective 2020: Transform Business, Transform India
scale as projected for IT and ITES industry. Experience across countries suggests that vibrant entrepreneurial activity significantly improves social harmony, living standards, and quality of life.

However, there are significant roadblocks that hold back and dampen entrepreneurial activity in India. The country ranks low on comparative ratings across entrepreneurship, innovation and ease of doing business. The ecosystem for starting and running new ventures has many gaps. Regulations and procedures are restrictive and time-consuming and add significant cost for an emerging venture. Banks and financial institutions are wary of lending to first-generation entrepreneurs and to MSMEs in general, due to various norms like tangible asset coverage, DER etc., even though such enterprises make a major contribution to the economy, employment, and exports. This imposes constraints on their credit absorption capacity and consequently, growth. Established businesses have generally been passive in engaging with emerging ventures. Educational institutions are yet to actively promote entrepreneurship over careerism. Lack of collaboration between all stakeholders leads to further roadblocks.

The entrepreneur’s journey proceeds from idea generation to venture formation to scaling up a business. Typically, the steps are:

- An entrepreneur begins with an idea and works towards a prototype with either his own funds or those taken from friends and family. He/she then seeks to create a more formalized venture, often with the aid of an incubator that provides him real estate and other services, which may also include introduction to potential investors. Angel investors play an important role at this stage by both funding and mentoring the entrepreneurs.

- Further scale-up then requires higher amount of capital, which is typically provided by venture capital funds.

- Apart from equity capital, the venture also needs debt for working capital. In the absence of formal sources of debt, the entrepreneur is often compelled to use equity capital for working capital, which limits the ability of the entrepreneur to scale the business.

- In addition to funds, the entrepreneur needs support from a range of other players in the ecosystem - educational institutions, large businesses and government – as also access to skilled labour, research, and a market. In other words, an environment that eases this journey.

Creating a vibrant entrepreneurial ecosystem will require strong capital flows to entrepreneurial ventures – the Committee expects that Rs. 3 lakh crore (or around $55 billion) of capital would be needed over the next decade with around half of this in form of debt.

Currently, early stage investing in India is inadequate:

- Angel investors drive significant early-stage investments in countries with high entrepreneurial activity. Apart from capital, Angel investors also provide mentoring and network access to entrepreneurs. They play a critical role in scaling up businesses to make them attractive for institutional investors such as venture capital funds. Angel investing is
just beginning in India. In 2011, Indian angels, constrained by regulations that make both investing and exits cumbersome, invested only about Rs 100 crore (approximately $20 million) in around 50 deals as compared to Canada\(^3\)– where angels invested Rs 2,000 crore ($390 million). Even as a proportion of early-stage investing (investing in the initial or growth phase of the venture), angel investments in India comprise around 7 per cent as against around 75 per cent in the US. We estimate that a well-developed ecosystem would expand these investments to around Rs. 3,500 crore ($700 million) annually in next 10 years.

- India also lags in early-stage venture capital investing\(^4\). Annual investments are around Rs. 1,200 crore ($240 million) as against Rs. 29,000 crore ($6.3 billion) in the US and Rs. 3,000 crore ($700 million) in China. Around 90% of the early stage venture funds in India come from offshore sources rather than from domestic investors. We estimate that these investments could increase to around Rs. 14,000 crore ($3 billion) annually in the next 10 years as both the number of funds and propensity to invest increases with a larger entrepreneurial base.

- Financing of MSMEs, particularly service sector enterprises is also below par because these industries often do not create tangible assets. Capital is required for product development, R&D, marketing, hiring professional teams, etc. Thus, access to adequate and timely finance continues to be an issue for MSMEs. Early stage companies in innovation-driven industries such as IT services, business process outsourcing, healthcare, etc., especially, if promoted by first generation entrepreneurs, also find it difficult to access funds from banks.

- Impact investing, or investing for both social and financial return, is an imperative in India. This kind of investing seeks out businesses and social ventures that can deliver measurable social and/or environmental impact as well as appropriate financial returns in sectors such as education, healthcare, sanitation, environment, and infrastructure. In 2011, around Rs 400 crore ($80 million) of such investments were made by impact investors. Impact investing needs to grow dramatically to support businesses that target India’s 900 million strong base-of-pyramid population.

Sectors with higher potential for rapid entrepreneurship-driven growth include manufacturing (IT hardware and electronics, automotive components, food processing), software, technology and telecom, affordable healthcare, clean technology (alternative energy, clean water, and sanitation) and personal care amongst many others. These sectors are seeing growing consumer demand and have already received some investment from both angel investors and venture capital funds albeit to a somewhat limited extent.

The Committee has identified five major drivers for creating a vibrant entrepreneurial ecosystem. We present below our key recommendations:

1. **Catalytic government policy and regulatory framework**: The government and its agencies could play a proactive role in facilitating entrepreneurship. Following are key steps that should be taken:

\(^3\) Investment Activity by Canadian Angel Groups: 2010 Report, NACO

\(^4\) Early stage investments defined as investments of up to $ 10 Million in early stage ventures
a. **Facilitate investments**: Recognition and promotion of early-stage investments and early-stage investors such as angel investors, venture and seed funds, and impact investors through development of appropriate policy measures and fiscal incentives. The Committee recommends the following definitions:

i. **Angel investing**: An angel investor is an individual who invests his own money directly in a seed stage venture in which there is no family connection. The angel investor could be acting alone or in a formal or informal angel group. Such investment in the venture for the individual is less than Rs 5 crore and in aggregate for a group is less than Rs. 10 crore. Seed stage venture is defined as a business which (a) has a turnover below Rs 25 crore; (b) is unlisted and (c) is not promoted, sponsored or related to an Industrial Group whose group turnover is in excess of Rs. 300 crore. The limits on investments and turnover threshold for the seed stage should be indexed to inflation.

ii. **Early-stage venture capital investing**: Investments in an early stage venture by an entity which is registered with the appropriate financial regulatory authority (such as appropriate AIF or FVCI). Early-stage venture is defined as a business which (a) has a turnover of less than Rs 50 crore; (b) is unlisted; and (c) is not promoted, sponsored or related to an Industrial Group whose group turnover is in excess of Rs. 300 crore. The limits on investment and turnover threshold for the early stage should be indexed to inflation.

iii. **Impact investing**: Investments in businesses and social ventures with the intention to generate measurable social and environmental impact alongside a financial return and which target a range of returns from below market to market rate. Impact investing is based on the conviction that such investments play a crucial role in addressing social and environmental challenges.

b. **Enhance and scale-up venture incubation programs**: Incubators are a very critical part of the entrepreneurial ecosystem:

i. Currently there are 120 incubators in India – almost all are government sponsored and largely affiliated to educational institutions. The number of incubators needs to be exponentially increased. In the next decade we should aim to have 1000 incubators covering most of Tier I and II cities in India.

ii. In addition to physical infrastructure, Incubators must enhance their services to include mentoring, providing access to business networks, and investors.

iii. For rapid scale up of the Incubators and enhancement of services, participation of the private sector will be critical – whether through PPP or other appropriate models including for-profit models.

iv. We also need to establish incubators that focus on socially relevant businesses such as the renewable-energy dedicated arm of CIIE (IIM Ahmedabad’s incubator).
c. **Ease entrepreneurial activity:** Regulations and processes for setting up, operating, and exiting a business in India are time-consuming and complex. Governments and their agencies can at all levels – central, state, and local - reduce transaction time and costs through measures such as single-window clearance and access to well developed industrial clusters. Also, a mechanism where businesses of a certain scale can self-certify regulatory compliance would be useful. A model along the lines of Software Technology Parks of India (STPI) could be created for early stage ventures which could get affiliated to “entrepreneurial hubs” that enjoy similar facilities as STPI units.

d. **Ease exits for investors:** Policy framework for easier exits will encourage early stage investments by Angels and others:

   i. Provide appropriate fiscal incentive on capital gains to Angels and other early stage investors.

   ii. Simplify IPO requirements including permitting overseas listing without requirement of domestic listing and exclusion of such investors from “lock in” provisions.

   iii. Enable preferential treatment of such investment in liquidation.

e. **Establish expeditious procedures for closing of businesses:** Closing down or winding up a business in India is a complex and time consuming process. Entrepreneurial ecosystem recognizes that business ventures fail and such failure is neither a stigma nor a constraint on future entrepreneurial activity. The complexity of closing down a business is a disincentive to setting up a business in the first place. Cost and complications of retrenchment of workers is a prime disincentive for establishment of labour intensive businesses.

2. **Easy access to equity capital and debt**

   a. **Remove regulatory hurdles that inhibit domestic fund raising:** Permitting pension funds, insurance funds and provident funds to invest a small part of their corpus in early-stage venture funds could significantly improve capital flows. Special incentives such as tax credits could be provided to HNIs, corporates and institutions that invest in early stage venture funds or to incubators and to angel investors. Banks must also be encouraged to invest in early-stage venture capital funds by treating such investments as “priority sector” funding without capital market exposure and provisioning norms being applied.

   b. **Government could establish a “fund-of-funds (FOF)” to seed other early stage venture funds:** With a corpus of Rs. 5000 crore this FOF will invest as an anchor investor, in a number of Alternative Investment Funds. These AIFs will raise capital from other sources – domestic and foreign - thereby creating a multiplier effect. This could result in capital flow of up to Rs. 25,000 crore over the next 10 years. The India Opportunities Venture Fund, set up under SIDBI by the Government of India should also play this role.
c. **Develop and scale-up debt offerings**: Debt is critical to meeting working capital requirements. Traditional debt providers, however, do not lend without collateral. As such, early stage ventures cannot meet lender requirements. Measures to mitigate this can include:

i. **Expand the lender base** by incentivizing banks to offer SIDBI-like schemes to early stage ventures. Banks to create capacity and capability for lending to such ventures.

ii. **SIDBI can expand its role** in the area of venture debt by providing funds to specialized NBFCs focused on venture debt (similar to Silicon Valley Bank).

iii. **Establish and promote UNIDO like mutual credit guarantee schemes** which have played an important role, particularly, in Europe and Brazil. These measures would require the support of Ministry of Micro, Small & Medium Enterprises and the banking system to work successfully.

iv. **Improve credit rating models and their coverage**: SMERA, CRISIL and other rating agencies empanelled under ‘Performance and Credit Rating Scheme’ of the Ministry of MSME need to actively work towards improving quality and reach of their credit models for small businesses. This would be a key enabler in allowing banks and other financial institutions to provide debt capital to such ventures.

3. **Businesses as entrepreneurial hubs**: Greater engagement of established businesses with emerging ventures is needed.

a. **Private sector could participate in setting up and operating incubators in PPP** or other appropriate models including for profit. Such incubators would have access to high quality managerial and technical resources of the sponsoring private enterprise.

b. **Industry bodies and chambers of commerce could drive greater collaboration** between established and emerging businesses, leading to:

i. **Greater collaboration both as a buyer and a supplier**: Established businesses can work with small businesses strategically to source innovation and technology. They will also better understand buying needs of emerging firms and hence develop solutions and products specifically tailored for them.

ii. **Greater M&A activity**: Established businesses need to also proactively look at entrepreneurial ventures as sources of inorganic growth—both intellectual property (IP) and non-IP related. Greater engagement with new ventures will improve established businesses’ understanding of such ventures and encourage acquisitions as a preferred mode over organic development, with the benefits of the access to passion-driven talent and reduced time-to-market.

4. **Culture and institutions which encourage entrepreneurship over careerism**: There is a mutually reinforcing relationship between thriving entrepreneurial activity and a culture
that supports entrepreneurship – risk-taking and greater tolerance of failure. Measures taken by educational institutions greatly assist in creation of such a culture over time.

a. **Upgrade courses and programs**: India needs more entrepreneurship courses (including social entrepreneurship) and programs across institutions of higher learning. Such programs will be a valuable complement to programs that have traditionally focused on technical and theoretical learning.

b. **Enhance linkages between educational institutions and entrepreneurial ecosystem**: This can be done through a sustained engagement of entrepreneurs, angel investors, and venture capitalists as faculty and mentors.

c. **Promote innovation and commercialization**: India has several institutions dedicated to advanced research. However, the commercialization of research is lacking. Engagement with entrepreneurial ecosystem can provide such institutions with a mutually beneficial and reinforcing relationship leading to opportunities of commercializing the IP through appropriate licensing arrangements.

d. **Celebrate success stories**: The media – TV, print and online – should disseminate entrepreneurial success stories to inspire and encourage entrepreneurship.

5. **Adequate and effective collaboration forums**: A vibrant entrepreneurial ecosystem needs forums, virtual or physical, where all stakeholders can come together to share experience, expertise and develop symbiotic relationships. There are several models of developing such forums including:

a. **Develop online portals**: Creating an online portal that provides comprehensive information to a new entrepreneur is highly valuable. In addition to providing information on government policies and regulations, such portals can also provide means for virtual mentorship support. The government can play a role by aligning all arms – various ministries, regulators, etc - to help develop such a comprehensive information portal which will host all relevant information on statutory compliances for setting up and operating businesses.Collaborative forums could also participate in creation of such a portal by providing inputs and encouraging its use.

b. **Encourage creation of collaborative forums** along the lines of TiE and MentorSquare to make mentorship networks available to a wider audience of entrepreneurs.

c. **Set up Innovation Labs (iLabs)**: India should develop a network of 15-20 iLabs that can serve as the focal points for collaboration across the region. Such iLabs could also serve as a hub for incubators, accelerators and other enablers in the region.
Key recommendation: National Entrepreneurship Mission

The Committee has made extensive recommendations that are relevant to a number of stakeholders both within the Governmental and Regulatory fold and those outside their immediate purview. The Committee believes however, that to build a vibrant entrepreneurial ecosystem leading to significant employment and wealth creation in the country, there has to be a sustained and continuous focus on the simultaneous and coordinated implementation of these measures.

Towards this objective, we recommend that the Central Government set up a National Entrepreneurship Mission (the “Mission”), whose sole focus will be to establish a vibrant entrepreneurial ecosystem in India. The Mission’s mandate, as one single entity within the Governments both at the National and State levels, will require it to pursue exclusively, the task of facilitating entrepreneurs and entrepreneurship. The Mission’s key roles will be:

1. The Mission will collaborate and work with all other entities, within Government and outside it, with the following objectives:
   
   A. Ensure that the promotion of entrepreneurship is continuously high on the agenda of all stakeholders
   
   B. Educate & inform all best practices globally & put forward well researched recommendations and action plans that would facilitate entrepreneurship
   
   C. Create appropriate measurements, methodologies and systems to track performance across various industries, in this area. A few of these for example, could be India’s global ranking in entrepreneurship, ease of doing business

2. The Mission would work closely with Government ministries/departments of Finance, MSME, HRD, Industry, IT, etc. at both National and State levels, many of whom have developed strategic plans of their own and seek to help them strengthen the element of entrepreneurship in those plans.

3. It would similarly work with Regulators, Banks, Financial Institutions, Angel investors, Venture Capitalists, industry bodies & Chambers of Commerce and educational institutions, both public and private, with the objective of regulatory outcomes which promote and facilitate entrepreneurship.

4. While the general approach would be to work in an enabling and coordinating capacity, it would have the lead role in the area of driving the financing part of the ecosystem which is the most critical component. In this area it would need to have appropriate empowerment whilst engaging with other stakeholders. In the area of financing, the Mission would be the sole recommending authority to the Government of India and counterpart bodies set up at the State levels.

5. This Mission would derive its unique strength and importance from the fact that it would be the most knowledgeable entity in India on the subject of creation and development of
an entrepreneurial eco system that will foster levels of innovation, enterprise and employment that the country needs, on a sustainable basis. It would therefore, be able to achieve a vast majority of its objectives without having an overarching mandate over other entities of Governments.

6. It would also become the nodal point for an entrepreneurship movement and in that capacity, articulate and disseminate the viewpoint of the entrepreneurs amongst all the stakeholders within Government and outside – a capacity that is lacking today.

7. The Mission will develop a clearly defined plan of action, ownership of initiatives, key dependencies, resource requirements for research as well as designing, devising, driving, tracking, and monitoring progress of the initiatives and plans.

8. The Mission should ideally be set up under the Prime Minister’s Office which will give it the ability to exercise adequate influence without necessarily, a statutory authority.

9. The Mission would set up appropriate mechanisms and metrics that will allow it to track its impact on the entrepreneurial eco system in the country.

10. It would similarly help all other stakeholders in drawing up mechanisms to measure their impact on increasing entrepreneurial activity.
Chapter 1: Critical role of entrepreneurship in shaping India’s future

1.1 Need for entrepreneurship in India

Entrepreneurship and innovation are critical for the growth of any economy, in an increasingly competitive world. The Industrial Revolution, the rise of the US to its preeminent state, the recovery of Germany post-World War, and, more recently, Israel’s status of a developed economy have all been driven by entrepreneurship and innovation. They become even more critical for India as its demographic dividend can only be realized with rapid creation of employment and income generation opportunities.

Global experience shows that, apart from creating wealth and boosting the economy, new businesses also create disproportionately more jobs than established ones. According to Kauffman Foundation, a well-regarded research body in the US, “On an average, existing firms are net job destroyers; losing 1 million jobs net combined every year. By contrast, new, less than one year old firms added an average of 3 million jobs in total”\(^5\). Noted management scholar, Peter Drucker attributed the surge in employment in the US between 1965 and 1985, that is, the creation of 40mn new jobs in the US, solely to entrepreneurs\(^6\). Israel has very little natural resources but is considered a part of the developed world, driven by the strength of its entrepreneurs.

Historically, India was considered an innovation driven country, at the forefront of trade, mathematics, astronomy and philosophy. Not surprisingly we accounted for almost 25% of world GDP barely 300 odd years ago\(^7\), arguably the largest in the world. Colonisation and missing the Industrial Revolution brought us down to 2% of global GDP by 1947\(^8\). By the beginning of 1990’s, with virtual bankruptcy facing the country, India’s share of world GDP was down to 0.2%\(^9\).

However, economic liberalisation initiated in 1991 appears to have revived the old DNA. Business and industry rebounded. The stagnant and sluggish early single digit rate of growth zoomed to almost double digits. The last two decades have given us a glimpse of what entrepreneurship can do for the country. In barely 20 years, the Indian IT services industry, driven by first generation, middle class entrepreneurs, has grown from its early stages to around Rs 4.5 lakh crore ($88 billion), creating 117 lakh (11.7 million) jobs—28 lakh (2.8 million) directly and additional 89 lakh (8.9 million) indirectly, and accounting 25% of our exports, and 7.5% of our GDP\(^10\). The telecom industry is another shining example where a first generation entrepreneur is now India’s largest and amongst the world’s leading telecom service provider (by subscriber base) with over 200 million subscribers\(^11\).

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5 Barbara Pruitt, Kauffman Foundation, July 7, 2010 and Bain Research
6 Indian Angel Network research
8 Indian Angel Network research
9 Indian Angel Network research
10 NASSCOM Strategic Review 2012
11 Airtel Quarterly Report, Q3, 2011
1.2 Impact of entrepreneurship: Size of prize

The economy is now poised for its next stage of growth with its young demographic profile. However, realization of this demographic dividend will depend upon creation of a large number of jobs- 14 crore (140 million) jobs over the next decade.

**Figure 1:** Emerging industries and ventures are critical to fill the rapid job creation required in India

<table>
<thead>
<tr>
<th>Sector</th>
<th>Current employment</th>
<th>Employment creation potential</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector</td>
<td>-9%</td>
<td>Low</td>
<td>Employment declined by -1% (00-05)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11th 5 yr plan estimates only 8% contribution to new opportunities required</td>
</tr>
<tr>
<td>Traditional private sector</td>
<td>-91%</td>
<td>Low</td>
<td>Witnessing negligible employment growth due to digitization and productivity increase, e.g. Indian banks witnessed -0% employment growth (91-11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Agriculture employment stagnant</td>
</tr>
</tbody>
</table>

*existing firms are net job destroyers, losing 1 million jobs net combined per year. By contrast, in their first year, new firms add an average of 3 million jobs*

Kaufman Foundation

With 23% annual growth in new businesses, Israel saw unemployment fall from 9% in 2000 to 5.5% in 2011

Both public and private sector enterprises have not been able to generate employment of this order in the last 10-20 years, and are unlikely to do so in the future. Public sector as a whole has seen employment decline in the last few years, and is expected to add only a small number of jobs in the coming years. Established private sector too has not fared much better, and it is not likely to drive employment in the coming years as automation, digitization, and productivity increases reduce the need for manpower. For example, there was almost no employment growth in the last two decades between 1991-2011 in the banking sector despite a several fold multiplication of revenue and assets. Agriculture, which employs nearly a half of India’s employed, has been stagnant in total number of persons employed.

It is therefore imperative that we create a vibrant entrepreneurial eco system in India that creates wealth, employment, and economic growth that the country needs. Our analysis shows that from a large number of ventures that could be spawned, by 2022 there could be over 2500 successful high growth ventures generating revenues of over Rs 10 lakh crore ($200 billion) per annum - a contribution to GDP and creation of employment at the same

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12 Technical Note on Employment for the Eleventh Five Year Plan Report
13 RBI Statistics
14 The World Factbook, Central Intelligence Agency
scale as projected for IT and ITES industry. In essence, this will require developing 3-4 industries such as the IT services sector providing an increment of over 3% to the GDP.

In the Indian context, entrepreneurship is critical not just for job creation but also to solve some of India’s chronic developmental issues. Affordable healthcare, clean water and sanitation, post harvest agricultural processing and robust infrastructure development can be accelerated by promoting entrepreneurs.

Many sectors could provide significant opportunity for successful entrepreneurship to flourish. Industries which hold promise include manufacturing (such as electronics, chemicals, auto-components, food processing, etc), technology (such as e-commerce, mobile value added services such as those related to financial inclusion, etc), healthcare (ranging from diagnostic centres, medical tourism, pharma, etc), personal care services, infrastructure (maintenance services, water and waste management and other clean-tech solutions) and education services (such as content services, test preparation, vocational education, etc).

Manufacturing and allied services is one such key sector which can provide a sizeable opportunity for new businesses due to both domestic demand and exports. For example, India’s passenger car production is expected to grow over four-fold by 2020.\(^\text{15}\) To support this growth, similar robust growth is needed in the auto components sector. India has some inherent advantages that could foster entrepreneurship in the overall manufacturing sector. Strong manufacturing and engineering capabilities, large pool of skilled resources, large domestic demand, and the country’s size and geographic location offers it a strategic advantage for servicing markets from Myanmar to Australia and West Asia.\(^\text{16}\)

The growing IT-telecom infrastructure presents another huge opportunity area for technology-focused businesses. Companies such as Flipkart and InMobi have already shown some progress on this front. The Telecom Regulatory Authority of India (TRAI) is targeting a 10-fold increase in broadband subscriber base to 10 crore (100 million) by 2014.\(^\text{17}\) Mobile penetration has already grown very rapidly to around 85 crore (850 million) by Jan 2012, though smart-phone penetration is still low at around 15\%.\(^\text{17}\)

Similarly, the healthcare industry is projected to grow 7 times\(^\text{18}\) while spend on higher education is poised to expand 5 times by 2020.\(^\text{19}\) Urban infrastructure is expected to see over Rs 30 lakh crore (or around $600 billion) of investment in next 20 years,\(^\text{20}\) and electricity generation needs to more than triple despite the growth challenges for traditional power sources such as coal and gas.\(^\text{21}\)

\(^{15}\) Live Mint, March 15, 2011 and Bain Research  
\(^{16}\) Ashoak Upadhyay, Business Line, May 23, 2011 and Bain Research  
\(^{17}\) Business Today, November 2011 and Bain Research  
\(^{18}\) Emerging Trends in Healthcare 2011, KPMG Report  
\(^{19}\) Ernst & Young - EDGE 2011 report  
\(^{20}\) Strategic Plan of Ministry of Urban Development for 2011-16, Government of India Report  
\(^{21}\) Technology Development Prospects for The Indian Power Sector 2011 Report
The under-served rural population comprises another important attractive market for entrepreneurs. It presents huge opportunities to provide innovative, affordable and quality products and services in sectors such as healthcare and infrastructure.

**Figure 2: Potential sectors of entrepreneurship growth**

<table>
<thead>
<tr>
<th>Key Sectors</th>
<th>Sub-sectors</th>
<th>Recent examples of VC invested companies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing and allied services</strong></td>
<td>• Auto components, electronics, chemicals, metals, etc</td>
<td>• Century Metal Recycling, Jamna Auto Industries, Bilube, Esdee Aluminium, Amara Raja Batteries</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>• Online services (such as e-commerce, digital content, advertising, etc) and mobile and convergence services (applications, etc.)</td>
<td>• Flipkart, InMobi, Sourcebits, Ybrant, ValueFirst, Druva</td>
</tr>
<tr>
<td><strong>Healthcare and related services</strong></td>
<td>• Medical equipment, hospitals, diagnostic centers, pharma, medical tourism</td>
<td>• Aravind Eyecare, Eris, XCyton, Radiant Life Care</td>
</tr>
<tr>
<td><strong>Luxury and personal care services</strong></td>
<td>• Gyms, spas, hotels, restaurants</td>
<td>• Primus, Humming Bird, Indian Cookery</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>• Infra services (operations and maintenance of highways, railways, ports, airports etc.), alternative energy solutions (renewable power generation- wind, solar, biomass), water and waste management and other clean-tech solutions</td>
<td>• Selco, Applied Solar Technologies, Prompt Renewables, d.light, Orb Energy, WaterHealth International, Waterlife India</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>• Content services, test preparation, vocational training</td>
<td>• Pristine, Career Launcher, K12 Techno Services, Shree Eduserve, Vienova</td>
</tr>
</tbody>
</table>

Promoting such entrepreneurship will require infusion of capital both in the form of equity and debt through angel investors, incubators, venture capital funds and banks and financial institutions. We estimate that **Rs 3 lakh crore (or around $55 billion) would be needed over the next decade**. A significant part of this would need to be impact investing to address some of India’s key development issues such as sanitation, clean drinking water, affordable healthcare and clean technology.
Figure 3: VC and angel backed companies will need Rs 3 lakh crore (or around $55 billion) over the next 10 years

In addition to better access to capital, the ecosystem would need enablers such as catalytic government policy and regulatory environment, established businesses fostering entrepreneurship and providing source of exits, a culture which promotes risk taking, and collaboration forums to connect various stakeholders. Concerted effort could lead to an improvement in India’s entrepreneurship rank from 74 to top 20 on the GEDI rankings in 10 years’ time.

The benefits of thriving entrepreneurship go beyond job and income creation. Entrepreneurship promotes innovation, productivity improvement and significant advances in human development. Increased income levels, social and financial equity improve living standards in the long run, along with improvements in health, education and happiness.

Note: Split of capital into various sources to be based on development of different stakeholders and markets – indicative split $20B of VC, $3B of angel, $3B of incubator seed funding and $29B of debt
Successful ventures computed using historic and benchmarked failure rate – 10% for angel and 40% for VC
Source: Thomson Reuters; Bain PE deal database; Expert interviews; Bain analysis

22 The Global Entrepreneurship and Development Index (GEDI) 2012 Report, Center for Entrepreneurship and Public Policy
Box 1 - Case example – Self Employed Women’s Association 23,24,25,26

- SEWA is an institution which provides formal rights for self-employed women working in the informal sector, and caters to the needs and demands of a large proportion of the total female labour force in India.

- Nearly 30 years after it was founded by Ela Bhatt in Gujarat, today **SEWA is present in nine states in India.** A lesser known fact perhaps is that SEWA has been working across Afghanistan, Nepal, Bangladesh and even Pakistan.

- From 1,017 members in Gujarat at time of its inception in 1972, **SEWA has today grown to include over 13 lakh (1.3 million) members** all over the country, with about half of the members living in states outside Gujarat.

- The impact of SEWA can be seen through the success of some of its initiatives:
  - **SEWA Bank**, which disbursed loans worth Rs 52 crore (approximately $11 million) to self-employed women in 2011. In the absence of collateral, SEWA Bank requires that women save regularly for at least one year before being eligible for a loan.
  - SEWA’s “green energy and green livelihood” campaign resulted in an **annual income of nearly Rs 120 crore (approximately $260 million)** for 139,685 members in 2009.

Entrepreneurship is found to be closely linked to equitable economic development. This leads to improvement in living standards and increase in level of happiness and satisfaction, leading to social harmony and reduction in crime.

**Figure 4:** Entrepreneurship and balanced economic development show high correlation

Even economic development (LPI, 2011)

\[ R^2 = 0.65 \]
\[ \# \text{ of Observation} = 110 \]

Source: Legatum Prosperity Index; Bain analysis

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23 Outlook Business Feature: Lady with the Bank by Rajiv Bhuva (Sep 05, 2009)
24 Self Employed Women’s Association, retrieved from www.sewa.org
25 SEWA’s Annual General Meeting December 2011
26 SEWA’s electronic newsletter no. 25, January 2010
Studies have shown that entrepreneurship leads to long term improvement in health and education in the country. Apart from improving incomes and hence access to healthcare and education, entrepreneurship in health and education leads to innovative solutions. As per Stanford Social Innovation, “[…] as entrepreneurs invented and distributed these improved goods and services, they deserve considerable credit for the rise in Americans’ health and longevity. Entrepreneurs, it turns out, are good for your health.”

Box 2 – Case example – Aravind Eye Care: Affordable treatment of blindness

- Alternate health care model for treating blindness, and training doctors and assistants
- Grown from an 11 bed clinic in 1976 to 7 hospitals, and around 4,000 beds
- Around 30 lakh (3 million) patients treated annually. Free medical and surgical treatment to 60% of the patients from the revenue generated by the remaining 40% who can pay

27 All Entrepreneurship is Social, Stanford Social Innovation Review, Spring 2010
28 Case studies on Aravind Eye Care System, www.aravind.org
29 A brief introduction, www.aravind.org
Chapter 2: Understanding the Entrepreneurial Ecosystem

2.1 The entrepreneurial journey and the ecosystem that supports it

2.1.1 To understand how we can promote entrepreneurship in India to meet the needs of employment and income generation, it is important to understand the entrepreneurial journey and the role various types of capital providers play along this journey.

Figure 5: The early entrepreneurial journey & the role of capital providers

The entrepreneurial lifecycle begins with an idea which needs start-up capital. After developing his/her own conviction in the idea, the entrepreneur looks at various sources of funds to establish it as a business. Early sources of capital typically include:

A. **Friends and family**: This is the first source of funds for an entrepreneur with limited funds of his/her own. The investments here are primarily at the idea stage with little or no operational business. This is the most critical element of funding to help convert an idea into a business venture. In India, with a culture strongly rooted in communities, extended family has been the most important source of capital. A few shortcomings of this source of financing are tough scrutiny, need for validation of the idea and lack of informed business guidance. Furthermore, for entrepreneurs who are not from financially strong family and community background, this source of capital is not available.

B. **Incubators**: Incubators are institutions which help entrepreneurs to develop their ideas to a point where investors can see the viability of the business model. Incubators usually provide hard infrastructure (for example, plug and play office space) and services such as mentoring, advisory, access to technology experts and potentially seed funding. Incubators could be run by government, private sector and educational institutions. Incubators usually charge a small fee from the entrepreneur and could take a stake in the venture.

C. **Angel investors**: Angels are generally high net worth individuals (HNWIs), successful serial entrepreneurs or senior professionals. Such angels operate either individually or through formal or informal networks. They not only provide capital but they also act as great scouts of emerging ideas, helping them scale at a stage where institutional seed and venture funds would typically not invest. They are viewed as a very critical element of the entrepreneurial eco-system and perform a number of different roles:

   i. **Provide high risk capital**: Angel investors tend to play an even bigger role than institutional investors in funding new businesses. They typically have a higher risk appetite as they provide smaller ticket investments at earlier stages in the life
Creating a Vibrant Entrepreneurial Ecosystem in India

of a venture well before formal venture capital funds show interest in the venture. It is important to note that angel investors are often among the first “external” capital providers i.e. providers not related to the entrepreneurs and hence their investment provides the business model much needed credibility.

ii. **Mentor entrepreneurs**: Angel investors tend to invest in industries that they are well-versed with. They are also either senior professionals or entrepreneurs themselves and are thus able to guide emerging businesses. As individual investors, they are also able to establish personal rapport with the entrepreneur and become an active friend, philosopher and guide.

iii. **Provide access to networks**: Being successful in their own right, angels have access to relationship networks that can help an entrepreneur on multiple counts:
   a) Professional services: legal, accounting etc.
   b) Supplier and buyers
   c) Institutional investors for subsequent funding

<table>
<thead>
<tr>
<th>Box 3 – How an angel group works: Indian Angel Network (IAN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• IAN has over 200 Angel Investors who comprise a significant representation of successful entrepreneurs / CEOs in India. They come together to invest entrepreneurial opportunities and to not only make financial investments but also bring to bear their strategic thought leadership, provide operational direction and leverage their large global networks to help the entrepreneur build a high growth company.</td>
</tr>
<tr>
<td>• Entrepreneurs from shortlisted ventures present to IAN members usually in a face to face meeting, where the deal is shortlisted for further detailed diligence. It is important to note, that even if the entrepreneur is declined at this initial stage, he receives significant feedback that helps him/her refine the business model. A lead / lead group then engages with the entrepreneur and an extensive strategy and diligence, along with entrepreneur checks are conducted, terminating in an offer of a term sheet (the amount of the investment offered, equity that the investors propose to take and key investment terms).</td>
</tr>
<tr>
<td>• The agreed terms of investment with the investment proposition is then shared with the entire IAN investor group who then individually decide and commit if they want to invest. This in effect means that every investment will have a different set of investors and there is no pooled money (like a VC Fund) concept.</td>
</tr>
<tr>
<td>• Once the investment is raised, financial and legal diligence completed, a Share Purchase Agreement is signed between the company and all the investors. One or two of the investors, usually members of the lead group take a board seat on the Company’s board representing the Angel investors. All inputs to strategy, suggestions etc. from the Investor group are channelised through these board directors insulating the entrepreneur from frequent investor interaction.</td>
</tr>
<tr>
<td>• The entrepreneur of course has the ability to request for help or engage with any investor. This model leverages the best of the high powered angel group for the entrepreneur, help raise the next round investment, open up customers / partnerships, etc.</td>
</tr>
</tbody>
</table>

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30 Inputs from Indian Angel Network senior management
D. **Venture capital and seed funds:** These are institutional investors which invest capital in firms with a proven business model and need capital to scale the business up. Such investors typically follow incubation or angel investments. A VC Fund is a pooled investment vehicle where institutional and high net-worth individual investors pool their money which is then managed by an asset management company (AMC). The AMC typically comprises of a small group of professionals with entrepreneurial / operational experience and / or financial / investment experience. The Fund typically pays the AMC a fee of 2.0 to 3.0 % of the total corpus on an annual basis (depending on the size of the fund) and 20% of the upside, subject to a hurdle rate. There is a private placement memorandum which defines the contract between the investors and the fund managers, outlining the areas in which investments will be made, size and number of investments, etc. Institutional investors in a Fund normally are banks, pension funds, insurance companies, university endowments, corporates, family offices and government.

E. **Corporate investments:** Large businesses can play an active part in investing in emerging ventures, especially in ones that are strategically important for them. Such ventures could be their vendors or those that work in related domains or sectors. A good example is the automotive industry where large OEM’s often invest in developing vendors that supply them components. Globally, companies such as CISCO, Intel, etc. have also created corporate venture funds for this purpose.

F. **Debt:** Entrepreneurs, like any established business, need debt to finance working capital. Banks and financial institutions along with specialized vehicles which focus on new ventures are the best sources of such debt capital.

2.1.2 Beyond sources of finance, there are multiple elements of the entrepreneurial ecosystem.

**Figure 6:** The entrepreneurial ecosystem
A. **Policy and regulatory environment:** Government (at all levels) and regulators play the most critical role in catalyzing entrepreneurship. Successful countries have created a framework of policies and procedures that makes it easy for entrepreneurs to create and operate new ventures, take risks, raise financing at different stages – incubation, angel, VC & PE, debt, public markets (for both small and large companies). The policies encourage and create incentives for both institutions and individuals to invest in entrepreneurs, incubators and VC Funds in order to create adequate flow of capital. Moreover, the government can itself play a key role as a provider of funds through grants, seed funds and other schemes. Government and regulators must have a mindset that prioritizes entrepreneurship as a national goal and aim to become service providers to emerging businesses.

B. **End consumers:** Entrepreneurship thrives in an environment where consumers are open to innovative products, services or even innovative delivery options for existing products. At the same time, it is important for entrepreneurs to design business models that are aligned to the market they serve.

C. **Hard infrastructure:** Successful countries also ensure that entrepreneurs can remain solely focused on the business issues and on competing locally and globally. They do this by providing easy to use hard infrastructure – real estate, transportation and logistics, utilities, communication, economic zones and so on.

D. **Culture:** Successful countries have a culture of taking risks, of accepting failure, and entrepreneurs are celebrated above corporate executives, professionals or government employees. Such a culture not only encourages greater entrepreneurial activity but it also enables entrepreneurial ventures to access quality talent.

E. **Academia and educational institutions:** In successful entrepreneurial countries, academia plays a key role in breeding entrepreneurship – through designing appropriate curricula, encouraging research and experimentation, encouraging faculty to be directly involved in business ventures, creating incubators and creating strong links with business and entrepreneurial ecosystems. Educational institutions play an even broader role through incubators as well as encouraging their graduates to work with emerging businesses (skilled labour force).

F. **Established businesses:** Large businesses play an active role in fostering entrepreneurship beyond being sources of funding. They are both buyers and suppliers for entrepreneurs. They also provide mentorship and talent to emerging businesses and can thus play a critical role in being supporters of entrepreneurial growth. Entrepreneurial and innovative countries often witness close, symbiotic equations between established and emerging businesses.

G. **Collaboration and mentor networks:** A hallmark of successful entrepreneurial countries is their ability to enable collaboration between different parts of the ecosystem. Formal and informal networks play a critical part in this. Collaboration and mentor networks serve as sources of information, provide access to investors
and buyers, help exchange best practices and create an environment where an entrepreneur has ready access to resources needed for him/her to succeed.

2.2 International experience

India could learn a lot from best practices across the world in further developing the entrepreneurial ecosystem.

2.2.1 Policy and regulatory environment

A. USA

Small Business Investment Corporation (SBIC) under the government's Small Business Administration Programme\textsuperscript{31}

i. Operates as a fund of funds to supplement the flow of private venture capital and long term funds for financing growth, expansion and modernisation of small businesses.

ii. It invests up to 75\% of a downstream VC fund's capital, subject to a maximum of $108 million.

iii. SBIC has invested up to $18 billion so far.

B. Israel

i. The government of Israel has played both a direct and indirect role in the growth of entrepreneurship and innovation. It has funded incubators as well as venture funds, while creating an environment conducive for entrepreneurship.

\textsuperscript{31}Indian Angel Network research
Figure 7: The Technological Incubators Program of the government of Israel in partnership with private sector has driven the success of incubation

<table>
<thead>
<tr>
<th>Israel’s incubation program has seen immense growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds raised in incubator graduated companies, cumulative (Rs Crore)</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

- Technological Incubators Program (1991)- Office of the Chief Scientist
  - 23 technological; 2 tech based industrial; 1 biotech
  - 16 located in peripheral areas
- Not-for-profit, usually sponsored by a university, municipality, or large firm
- Currently 200 incubates in various stages of R&D
  - Medical devices- 40%
  - ICT- 25%
  - Biotechnology and Pharma- 15%
  - Cleantech- 15%
  - Others including machinery and materials- 5%

Source: State of Israel, Ministry of Industry Trade and Labor, Technological Incubators Program, Technion

<table>
<thead>
<tr>
<th>Public-private partnership has driven success of the program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractive financial model</td>
</tr>
<tr>
<td>• At least 50% initial ownership by entrepreneur/ developer</td>
</tr>
<tr>
<td>• At least 10% by key staff members</td>
</tr>
<tr>
<td>• &lt;20% by provider of supplementary financing (other than govt.)</td>
</tr>
<tr>
<td>• &lt;20% by incubator</td>
</tr>
<tr>
<td>Attractive financial model</td>
</tr>
<tr>
<td>• 2 year term and ~Rs 3 crore budget- 85% financed by the government, remaining by incubator</td>
</tr>
<tr>
<td>• Government grant paid back through royalties from revenue (3%)</td>
</tr>
<tr>
<td>Domestic capability building</td>
</tr>
<tr>
<td>• New product must be manufactured in Israel</td>
</tr>
<tr>
<td>Post-incubation support</td>
</tr>
<tr>
<td>• Post-incubation support through R&amp;D support programs</td>
</tr>
</tbody>
</table>

Yozma: YOZMA was set up by the government to invest directly and also to operate as a fund of funds. Its objective was to promote technology initiatives and involvement of private venture capital in the Israeli technological sector. It can take up to 40% of a total fund size and has invested more than US$200mn.

Figure 8: Israel government’s Yozma program helped create the venture capital industry

<table>
<thead>
<tr>
<th>Initiation by government</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Government invested ~Rs 220 crore in early 90s</td>
</tr>
<tr>
<td>• Rs 180 crore to set up 10 private sector venture funds</td>
</tr>
<tr>
<td>• Rs 40 crore for direct investments in high-tech enterprises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Encouragement of foreign capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Each fund required to partner with foreign VC fund and Israeli investment company or bank</td>
</tr>
<tr>
<td>• 40% of capital was public funds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Encouragement of foreign capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>• After 5 years, funds could buy out government’s share</td>
</tr>
</tbody>
</table>

Source: Danish Business Authority, Profile of Israel, 2010 Entrepreneurship Index, StartUp Nation
ii. Policy measures taken by the government have also encouraged both entrepreneurs and investors, including setting up the Office of the Chief Scientist.

**Figure 9:** Conducive government policy has encouraged both investors and entrepreneurs in Israel

<table>
<thead>
<tr>
<th>Access to capital for Vcs</th>
<th>Fiscal benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to capital from pension funds, endowment funds, corporate or strategic investors and HNWIs</td>
<td>Law for the Encouragement of Capital Investments</td>
</tr>
<tr>
<td><strong>Tax regime for Vcs</strong></td>
<td>- Company tax @ 10% for priority areas and 15% for other areas</td>
</tr>
<tr>
<td>Non-Israeli investors in a VC fund exempt from capital gains tax, subject to certain conditions</td>
<td>- Planned reduction in rate for priority areas to 6% by 2015 and 12% for other areas</td>
</tr>
<tr>
<td>Tax treaties with &gt;40 nations to avoid double taxation</td>
<td>- Priority areas eligible for 20% grant</td>
</tr>
<tr>
<td><strong>Access to capital for Vcs</strong></td>
<td>- No termination period for benefit</td>
</tr>
<tr>
<td><strong>Tax regime for Vcs</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td>Under Absorption Law, government absorbs a % of losses that institutional investors might suffer from VC investments</td>
<td>Grants to R&amp;D centers that employ high-salary staff</td>
</tr>
<tr>
<td><strong>Access to capital for Vcs</strong></td>
<td>- 5%-45% salary grant per employee, dependent on number of employees eligible</td>
</tr>
<tr>
<td><strong>Tax regime for Vcs</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td><strong>Access to capital for Vcs</strong></td>
<td>Grants to businesses employing new immigrants with Advanced Degrees</td>
</tr>
<tr>
<td>Non-Israeli investors in a VC fund exempt from capital gains tax, subject to certain conditions</td>
<td>- Up to ~Rs 4 lakh or Rs 5 lakh per employee for 3 years for immigrants holding masters or doctorate degree resp.</td>
</tr>
<tr>
<td>Tax treaties with &gt;40 nations to avoid double taxation</td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td><strong>Access to capital for Vcs</strong></td>
<td>Grants to businesses employing returning residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td>Under Absorption Law, government absorbs a % of losses that institutional investors might suffer from VC investments</td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td><strong>Training support programs</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td>Venture debt financing encouraged - debt plus warrants to give investor a share in company’s growth</td>
<td>Grants to businesses employing returning residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td><strong>Use of debt instruments</strong></td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td>VC funds usually take preferred equity, whereas angel investors may take ordinary shares</td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td><strong>Exits</strong></td>
<td>Grants to businesses employing returning residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td>licenses not required for Fund Promoters, Managers and Principals</td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td>Most funds register as LLPs and create management company in Israel</td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td>- Annual management fee of 2.25% of total fund commitments</td>
<td>Grants to businesses employing returning residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td><strong>Exits</strong></td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td><strong>Fiscal benefits</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td><strong>Access to capital for Vcs</strong></td>
<td>Grants to businesses employing return residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td><strong>Tax regime for Vcs</strong></td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td><strong>Exits</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td><strong>Use of debt instruments</strong></td>
<td>Grants to businesses employing returning residents: returning scientists or those with advanced degrees</td>
</tr>
<tr>
<td><strong>Exits</strong></td>
<td>- 1 year grant for employees who have lived abroad for at least 2 years</td>
</tr>
<tr>
<td><strong>Training support programs</strong></td>
<td><strong>Gov. grants</strong></td>
</tr>
<tr>
<td>The Manpower Training Department bears training cost of industrial companies</td>
<td>- Company has to guarantee to absorb at least 50% of class graduates</td>
</tr>
</tbody>
</table>


**Figure 10:** Office of Chief Scientist runs multiple programs to encourage R&D and innovation

<table>
<thead>
<tr>
<th>Pre-seed</th>
<th>Seed</th>
<th>Competitive R&amp;D</th>
<th>Generic R&amp;D</th>
<th>Partnering Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-seed</strong></td>
<td><strong>Seed</strong></td>
<td><strong>Competitive R&amp;D</strong></td>
<td><strong>Generic R&amp;D</strong></td>
<td><strong>Partnering Services</strong></td>
</tr>
<tr>
<td>Technological incubators: Framework and support for nascent companies</td>
<td>Heznek: Government matches private investment in share capital of seed company</td>
<td>Bi-national funds: Joint R&amp;D program with foreign counterpart, such as BIRD (with US), SIIRD (with Singapore) etc.</td>
<td>Generic R&amp;D: Grants for companies to increase existing R&amp;D investment in generic long term R&amp;D</td>
<td>Matimop: Joint industrial R&amp;D between Israeli and foreign companies</td>
</tr>
<tr>
<td>Tnufa: Grants for individual entrepreneurs</td>
<td></td>
<td>Eureka: Europe-wide collaborative market-driven R&amp;D projects</td>
<td>Magnet: Formation of industry/academic consortia to develop generic R&amp;D</td>
<td>Global Enterprise R&amp;D Cooperation Framework: Joint industrial R&amp;D between Israeli companies and MNCs</td>
</tr>
<tr>
<td>Nofar: Grants for academic research in biotechnology</td>
<td></td>
<td>Mini-Magnet: Joint industry/academia development-one company and one University</td>
<td></td>
<td>Europe’s R&amp;D Framework Agreement (ISERD): Joint programs for Israeli companies/research organizations with their European counterparts</td>
</tr>
</tbody>
</table>

Source: Israel Ministry of Industry, Trade and Labor; Entrepreneurship and Tech Transfer in Israel, Technion Israel
C. Singapore

Box 4: Singapore – Angel Investors tax deduction scheme

- **Overview**
  - Tax incentive to stimulate angel investment into Singapore based new ventures
  - Applies to approved angel investors who commit a minimum of Rs 37 lakh ($80K)
    - Tax deduction of up to 50% of investment amount
    - Holding period of 2 years
    - Subject to max of Rs 93 lakh ($200K)

- **Criteria**
  - Not applicable to investments made via corporations, trusts, institutionalised funds and other investment vehicles
  - Criteria for angels- must have either of
    - Early stage investment experience
    - Experience as a serial entrepreneur or senior management professional
  - Criteria for investee company- must be
    - Private limited
    - Incorporated in Singapore for no more than 3 years

D. New Zealand

Box 5: New Zealand Seed Co-investment Fund (SCIF)

- **Overview**
  - Managed by New Zealand Venture Investment Fund Ltd (NZVIF)
  - “Aims to enhance the development of angel investor networks, stimulate investment into innovative start-up companies and to increase capacity in the market for matching experienced angel investors with new, innovative start-up companies.”

- **Features**
  - Government has made available Rs 147 crore ($31M) to make investments alongside “approved co-investors”/angel groups over a period of 12 years
  - Investments are made in a 50/50 ratio with an expected investment period of 5-6 years
  - Total investment per co-investment partner limited to Rs 14.8 crore ($3.2M) and each investment per investee company limited to max of Rs 93 lakh ($200K)

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32 Angel Investors Tax Deduction Scheme, SPRING Singapore website
33 OECD report 2011, Financing High-Growth Firms, The role of Angel Networks
2.2.2 Financial institutions

<table>
<thead>
<tr>
<th>Box 6 – Mutual Credit Guarantee Scheme (MCGS) - funded by government of Italy(^{34, 35, 36})</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clusters in Italy (e.g. groups based on geographic areas, business sectors etc.), <strong>come together to form mutual credit guarantee consortia called CONFIDIs</strong>. These associations can be formed by companies, associations, agencies and commercial banks.</td>
</tr>
<tr>
<td>• Members of these CONFIDIs <strong>pool in funds and the funds constitute a corpus</strong> which is used to provide guarantee for providing loans without collateral. These <strong>collective guarantees are backed by counter-guarantees from a national counter-guarantor and a platform of supra-national counter-guarantee</strong> organised and funded by the EU Commission and managed by the European Investment Fund (EIF)</td>
</tr>
<tr>
<td>- There are <strong>over 450 CONFIDIs in Italy</strong>, as of 2010</td>
</tr>
<tr>
<td>- <strong>Around 60 per cent of Italian bank loans</strong> are channelled through the CONFIDIs</td>
</tr>
<tr>
<td>• <strong>Due diligence is performed by specialists to identify benefactors of the MCGS scheme</strong> in Italy. Worldwide, regional and national associations are involved in the scheme - <strong>encouraging best practices and leading to formal training curriculum</strong></td>
</tr>
<tr>
<td>• One of their major achievements is keeping the <strong>average default rate of the guaranteed loans far less than the average of the banking system</strong>. Insolvency in CONFIDI-guaranteed loans are <strong>reportedly lower by 1.5 - 2 per cent</strong> of the national insolvency rate</td>
</tr>
</tbody>
</table>

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\(^{34}\) Views expressed by United Nations Industrial Development Organization (UNIDO) representatives

\(^{35}\) The Financial Express: SME World, May-July 2011

2.2.3 Established businesses

**Box 7- Google case study: Promoting entrepreneurship across all dimensions**

**Acquisitions**
- Around 60 acquisitions in 2011, with the majority of transactions being less than Rs 45 crore (approx. $10 million)\(^3^7\)

**Promoter of culture**
- Around 14% of firm revenue spent on R&D\(^3^8\)
- Internal promotion of innovation: one fifth of an employee’s time is allocated for innovation\(^3^9\)
- Programs and mentorship to connect with customers, promote businesses, networking, investment opportunities. E.g. Women Entrepreneurs on the Web (WEOW) initiative, India\(^4^0\)

**Resource provision**
- Competitions and programs to provide seed capital. For instance, around Rs 45 crore (approx. $10 million) invested in five firms globally\(^4^1\)
- Campus (Internet University) launched in London\(^4^2\)
- Incubator set up in South Africa, 2011. Upcoming incubator in Israel, 2012\(^4^3\)

**Supplier**
- Web start-ups utilizing proprietary tools: More than 4 million businesses use Google Apps\(^4^4\)
- Licensing fee waivers and discounts for small businesses\(^4^5\)

**Market**
- Opportunity for start-ups to be hardware and application-development partners for Android and other Google products

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\(^{3^7}\)Evelyn M. Rusli, DealBook, October 27, 2011 and Bain Research

\(^{3^8}\)Google financial statements, accessed from Reuters

\(^{3^9}\)Google Jobs

\(^{4^0}\)Indu Nandakumar, The Economic Times, February 1, 2012 and Bain Research

\(^{4^1}\)Google Project 10 to the 100

\(^{4^2}\)Campus project, http://www.campuslondon.com/

\(^{4^3}\)Amir Efrati, The Wall Street Journal, November 14, 2011 and Bain Research

\(^{4^4}\)Google Apps for Business

\(^{4^5}\)Business Standard, November 3, 2011 and Bain Research
2.2.4 Educational institutions

Box 8: Stanford case study: Pioneer in promoting entrepreneurship and innovation

Stanford University is renowned for the number of successful ventures started by students and alumni, and well-defined structures and processes which promote the spirit of entrepreneurship and innovation.

Sourcing of talent
- Diverse set of students with varying levels of experience, socioeconomic, cultural, geographic and educational backgrounds
- Around 40-45% of faculty at Stanford University’s Graduate School of Business (GSB) is former or current industry practitioners, including several VCs or entrepreneurs
- Administrative staff also has relevant industry background

Teaching and support
- Two centres for entrepreneurship: Centre for Entrepreneurial Studies (CES) at the GSB, and Stanford Technology Ventures Program (STVP) at School of Engineering - hubs for entrepreneurial activity through dedicated programs and courses
- Several independent labs and dedicated research centres used for multi-disciplinary research at Stanford along with Industrial affiliate programs
- Office of Technology Licensing has equity in more than 170 companies
- Several formal networks for mentorship including CareerConnect, Stanford Alumni Mentorship.
- Incubation efforts on campus led by StartX

Output
- Around 16 per cent of graduating class of 2011 (GSB) chose to explore entrepreneurial ventures
- List of successful start-ups from Stanford include Google, Sun, Yahoo and others

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46 Stanford University, http://www.stanford.edu
47 Discussion with former member of Stanford TVP
Creating a Vibrant Entrepreneurial Ecosystem in India

A large part of Israel’s success as an entrepreneurial nation has been driven by its educational institutions.

**Figure 11:** Academic institutions in Israel play an important role in encouraging entrepreneurship among students

<table>
<thead>
<tr>
<th>Country</th>
<th>Quality of scientific research institutions</th>
<th>Global competitiveness score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>6.3</td>
<td>8</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.3</td>
<td>50</td>
</tr>
<tr>
<td>UK</td>
<td>6.1</td>
<td>100</td>
</tr>
<tr>
<td>USA</td>
<td>5.8</td>
<td>150</td>
</tr>
<tr>
<td>India</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>4.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: Global Competitiveness Report 2011-12; Entrepreneurship and Tech transfer In Israel, Technion, Israel

### 2.2.5 Collaboration forums

**Box 9- Harvard Innovation Lab**

- **Overview**
  - Founded in 2011 with 30,000 sq ft of physical space and supported through donations from alumni
  - Includes
    - Classrooms
    - Conference rooms
    - Offices
    - 5,000 sq ft of open space for community events
  - Is industry agnostic

- **Services**
  - Serves all Harvard associates and their business partners- students, alumni, employees, faculty
  - Provides
    - Entrepreneurship classes
    - Links with small businesses in local community
    - Exposure to experts- investors, lawyers, marketers and product design firms

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48 Harvard Innovation Lab website, http://i-lab.harvard.edu/
49 Views expressed by Professor Joseph B. Lassiter, key administrator of the innovation lab
2.2.6 Impact of entrepreneurship

Israel’s success as an entrepreneurial nation has shown its impact on multiple financial parameters – employment, capital formation and eventually on national income.

**Figure 12:** Innovation and entrepreneurship have driven overall growth of employment, capital formation and GDP in Israel

![Graph showing the increase in the number of entrepreneurs, employment, fixed capital formation, and GDP in Israel.](image)

- **Number of entrepreneurs has increased**
  - CAGR (07-10): 23%
  - 2001: 36, 2010: 238

- **Fixed capital formation has increased**
  - CAGR (95-11): 6%

- **GDP has seen reasonable growth**
  - CAGR (85-10): 3.6%

Source: World Economic Forum; NASDAQ; OECD

Unemployment rate fallen from 9% in 2000 to 5.5% in 2011
Chapter 3: Current status of entrepreneurship in India and key gaps

3.1 The committee examined in depth the current status of the entrepreneurial ecosystem to determine the gaps that may exist to achieve an entrepreneurial and an innovation-led economy.

Figure 13: India lags on both entrepreneurship and innovation

India is placed very low on entrepreneurship with a rank of 74 among 79 countries. On innovation too, India does only marginally better (ranked 62 out of 125 nations). As a consequence, India has lagged on promoting early stage investments, both in absolute terms as well as a proportion of GDP. Currently, around 500 companies are incubated in India annually as compared to about 8,000 in China. Less than 150 start-ups are promoted by venture capital or angel investors annually in India as against over 60,000 angel investments alone in the US.
Creating a Vibrant Entrepreneurial Ecosystem in India

Figure 14: India trails countries like US and UK on VC and angel investment

VC and angel investment as a % of GDP 2010

Note: Angel investing does not include FFF due to limitation on sizing the market; India’s angel investing estimated using expert & stakeholder interviews; Source: OECD Financing High-Growth Firms THE ROLE OF ANGEL INVESTORS – 2011; BBAA, CVR, Lit. search; Key stakeholder interviews; Thomson Reuters; India Private Equity Report, 2011, Bain and Co and IVCA; Bain PE deal database; Bain analysis; Economist Intelligence Unit

3.2 To examine the reasons for the above, we have looked at the entire ecosystem for entrepreneurship in India to understand the current status and key gaps that need to be addressed.

3.2.1 Policy and regulatory environment: Supportive and proactive policies are needed to encourage entrepreneurial activity. These policies include those that help provide easier finance to entrepreneurial ventures as well as those that improve the overall business climate. At present, we find many gaps in the policy and regulatory framework which inhibits rather than promotes entrepreneurship.

A. Supply of funds: Early-stage investing as a distinct class of investments is not formally recognized in India. Multiple regulations hinder establishment of domestic venture funds that can access domestic capital for venture investments. Angel investors are hampered by issues such as inefficient financial structures for investments and exits. Debt providers too do not feel encouraged to specifically allocate funds to emerging businesses (part of a larger priority sector definition). VC funds are also severely restricted from providing debt. Extensive procedures and compliance requirements for M&A and restrictions on IPOs, along with regulations on liquidation are key deterrents to exits for venture capital investors. The government also acts as a provider of funds, especially through grants and seed funding programs such as Technopreneur Promotion Programme (TePP), proof of concept funds and Technology Development Board (TDB). However, these are often available after extensive paperwork, slow processing and inconsistent procedures followed by different departments.

B. For businesses: According to the World Bank “Doing Business 2012” Report, India ranks 132 out of 183 countries in ease of doing business. Starting a business and securing construction permits are especially difficult. India is placed at almost the last position in enforcement of contracts. First-generation entrepreneurs are
significantly affected by such an environment where the cost and time involved in establishing business can be significant and can become deterrents especially to business ideas that need a first-mover advantage. Exiting a business takes even longer. Many processes especially at the State Government level still remain extremely complex and resource consuming.

**Figure 15:** Governments and regulatory bodies can facilitate and promote entrepreneurship in multiple ways

- **Facilitate collaboration** with overall ecosystem
  - Funding of iLabs
  - Participation in dialogue with all stakeholders to ensure consultative policy formation
- Facilitate effective provision of services by incubators
- Creation of accreditation frameworks for certifying quality of start-ups
- Hard infrastructure development

- Procedural and regulatory reform for all stages of business
  - **Entry**: single window clearance, information availability, industrial clusters etc.
  - **Operations**: labour laws, IP laws etc.
  - **Exit mechanisms** and modalities including paperwork and restrictions

- Enabling venture capital funds, angel investors and businesses to provide **equity to entrepreneurs**
  - Fiscal policy initiatives
  - Regulatory reform affecting fund raising, operations & exit, especially domestic capital raising
- Enabling banks and FIs to provide **debt to entrepreneurs**
  - Regulatory reform for promoting credit to start-ups
  - Creation of innovative products for providing non-collateralized debt
3.2.2 **End consumers**: India’s large and diverse population offers a unique customer base for businesses. It is critical for nascent businesses to design business models aligned to the idiosyncrasies of this market. “Me-too” ideas that are copied from international successes often fail. Online retailing businesses in India, for example, have used cash-on-delivery innovation to successfully target an Indian population that has low possession and usage of credit-cards. This approach, however, is not used by many upcoming entrepreneurs leading to early failures in business models. Entrepreneurs must also consider the large base-of-pyramid market to build financially viable and scalable businesses.

**Figure 16**: Indian start-ups must keep in mind the local market conditions

3.2.3 **Supply of risk capital**: The flow of capital to entrepreneurial businesses is restricted due to various reasons.

A. **Angel investors**: Despite a growing population of high net-worth individuals (HNWIs)\(^{50}\), angel investments are at a nascent stage in India with less than 500 angel investors and investments of around Rs 100 crore (about $22 million) annually. Most investments are accomplished through angel groups such as Indian Angel Network and Mumbai Angels\(^{51}\). This is around 7 to 8% of the total annual early-stage investing – negligible in contrast to over Rs 1 lakh crore (approximately $27B) of venture capital and angel investing in the US annually, of which around 75% comes from angels. It is noteworthy to mention that angel investing is already beginning to show some success in India.

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\(^{50}\) HNWIs are defined as those having investible assets of Rs 5 crore or more, excluding primary residence, collectibles, consumables, and consumer durables (Asset valuation in HNWI definition converted from $1M to Rs crore using 46 as exchange rate)

\(^{51}\) Discussions held with angel investors, angel groups and entrepreneurs
Creating a Vibrant Entrepreneurial Ecosystem in India

Box 10 - InMobi: Successful investment made by Mumbai Angels

InMobi (then mKhoj) began as a local search service for attractive shopping deals and later transitioned into a “Mobile Advertising Marketplace”.

- Founded in 2006 with 4 employees
- Received $500K angel funding from Mumbai Angels in 2006 and further ~$208M from several venture funds

Now:
- No of employees (2012): 600; operates in Asia Pacific, Africa, US, Europe, and Japan
- InMobi has grown to become the world’s largest independent ad network serving over 100 billion mobile ads, and has claimed increasing market share against Google AdMob

Box 11: Druva, funded by Indian Angel Network

Provider of secure, non-intrusive endpoint protection and availability solutions for large enterprises

- From its initial days in 2009 with 7 employees, it has already grown to 100 employees in 2012

Received $400K funding from IAN. In addition, angels provided mentoring as well as assistance in hiring and business building.

- 2010: Received $5 million funding from Sequoia and ASLLP
- 2011: Received $12 million funding from Sequoia and Nexus

B. Venture capital funds:

i. At around Rs 5000 crore over the last five years, early-stage venture capital investment in India is very small compared to global peers. For example, during the same time frame, US invested nearly twenty six times as much at around Rs 1.5 lakh crore, almost three times as a percentage of cumulative GDP in that period.

ii. India also has a significantly large share of offshore funds - these funds arguably have a limited understanding of the local environment, both in terms of markets and working with local regulations and are thus tend to focus more on growth stage capital. Fund raising is much lower than global benchmarks. Over the last five years, domestic funds that focus on early, growth and late stage venture capital investing raised around Rs 27,000 crore in India whereas funds in China raised around Rs 2 lakh crore, or more than two times as a percentage of cumulative GDP in that period.

iii. Investments in India seem significantly biased towards services, especially technology and e-commerce. These investments have however already started showing success.

52 Mumbai Angels research
53 Indian Angel Network research
54 Thomson Reuters database
55 Discussions with major venture capital firms and IVCA
56 VCC Edge database
Box 12: Info Edge, funded by ICICI Venture

Comprehensive internet-centric business with operations in 41 cities in India as well as Middle-East
- Started in 1997 with self-funding and family funds.

Received Rs 7.3 crore funding from ICICI Venture in April, 2000 when annual revenue run rate was approximately Rs 4 crore. VCs played a critical role in the firm’s success by raising the bar on corporate governance (reporting, targets setting and evaluation, establishment of MIS), encouraging growth, helping incorporate Independent Directors, audit committee and eventually assisting in the IPO.

Now (April 2012):
- 7 different businesses
- Rs 400 crore turnover; Rs 122 crore PAT
- Listed on BSE and NSE with a market capitalization over Rs 4000 crore

C. Impact investors: Impact investing that focuses on social as well as financial outcomes, is still at a nascent stage in India. While many global and local funds have presence here, we have only seen investments to the tune of around Rs 1,200 crore (or around $260 million) in the last 5 years by such funds. This area of investing does see a substantial in-flow of new ideas but quality and scalable models that capital providers find attractive are limited.

Figure 17: Impact investing is growing in India but still nascent

Note: Impact investment deals consist of known impact investment firms in India
Source: VCCEdge database; Bain India PE / VC database

57 Discussion with founder and public reports
D. **Debt:** Access to debt is constrained for small and early-stage firms in India, banks and FIs are wary to lend due to the lack of robust credit ratings and collateral. Such institutions rarely use innovative solutions like venture debt, hybrid instruments and factoring. The skills and culture required to lend without collateral (which is the case with most emerging businesses) are found lacking in the banking system. While schemes such as the credit guarantee scheme by SIDBI have been very useful, they are unable to address this gap completely.

**Figure 18:** MSMEs struggle to access formal sources of debt

<table>
<thead>
<tr>
<th>Box 13: Silicon Valley Bank (SVB): Pioneer of venture debt financing in India[^58^-^61]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Operates as a NBFC in India (SVB India Finance)</td>
</tr>
<tr>
<td>• Focuses on early and growth stage ventures - looks at both pre-profit and profitable ventures</td>
</tr>
<tr>
<td>• Concluded 17 venture debt deals since its launch in 2008 (such as SMS GupShup, Geodesic Techniques, iYogi Technical Services, etc) and has <strong>completed 3 exits</strong>, as of <strong>May 2011</strong></td>
</tr>
<tr>
<td>• Typical ticket size is Rs 5-15 crore (or around $1-3M) with time duration of <strong>6 months to 3 years</strong> and disbursed at interest rates comparable to banks loans for small and medium enterprises</td>
</tr>
</tbody>
</table>

“[…] firms such as SVB India act faster than traditional banks. They don’t rely on a firm’s track record, but instead study their business plans and expected patterns of cash flow…”

CFO, iYogi

[^58]: Namitha Jagadeesh, Live Mint, August 18, 2008 and Bain Research
[^60]: SVB India website
[^61]: Discussions with SVB India Managing Director
Box 14: Indian Overseas Bank (IOB) - Expanding SIDBI’s reach

- First partner for SIDBI to extend reach of programs
- Received award from President for MSME lending during 2010-11
- For 2011-12, clocked 20-25 per cent growth for MSME credit, compared to 18-20 per cent expected for total loans
- Rapidly expanding number of branches - recently added 75 branches and plans to add 200 more this fiscal taking total tally to 2,400 branches, including 658 rural and 644 semi-urban
- Received Rs 100 crore (or around $ 20 million) from SIDBI as part of refinancing agreement in Jan 2012

3.2.4 Demand for funds: While India has seen a growing class of entrepreneurs in last five years, the quality and number of such entrepreneurs is still behind most global benchmarks. This is reflected in the low ratio of applicants to funded ventures at angel groups (1-2% invested in India versus 15-20% in the US). India thus sees around 150 investments by angels and VCs annually versus over 60,000 angel investments alone in the US in 2010. The quality of entrepreneurs is affected by the lack of business training even in case of viable ideas.

3.2.5 Established businesses: Large businesses in India have traditionally been not very active in the entrepreneurial ecosystem.

A. As buyers, businesses, especially public sector undertakings, have pre-qualification criteria that prevent small businesses from even participating in contracts. Even when such criteria are absent, there is often distrust between large and small businesses that prevents the development of symbiotic relations. Global firms such as Volkswagen and Toyota have spawned an entire ecosystem of auto-component suppliers based on such mutually beneficial relationships. Even in India we have seen the Future Group develop a network of suppliers for their retail business. But such examples are limited.

B. As sources of funds through incubation, venture funding or acquisitions, large Indian businesses have played a limited role. While there are some examples like Future Ventures which operates a venture fund in India, or Info Edge which has made equity investments into several new businesses, these have been few and far between.

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62 Money Control, January 6, 2012 and Bain Research
63 Business Standard, January 7, 2012 and Bain Research
64 The Economic Times, January 13, 2012 and Bain Research
65 The Economic Times, January 13, 2012 and Bain Research
66 Bain research and discussions with angel groups in India
68 Discussions with Future Group current and former management team
69 Future Group website
Box 15: Info Edge (Naukri) case study: Investing successfully in various start-ups

- Info Edge considers investing in start-ups as one of the four basic business growth drivers
- Small ticket investments made in some start-ups, with an aim to profit from the enhanced value, or to absorb the start-ups at a later, appropriate stage
- In addition to seed capital, the firm also provides support for the investee businesses at the incubation stage to help with strategy, positioning and growth
- Portfolio of investee companies: Policybazaar.com, Zomato.com (Foodiebay), Mydala.com, Nogle Technologies, 99labels.com

C. Businesses have also not been very active in furthering research and innovation through educational institutions or helping commercialize R&D by educational institutions.

3.2.6 Hard infrastructure: While this is a broader issue that affects not just entrepreneurial ventures, and is not the focus for this report, the absence of quality hard infrastructure—roads, utilities, real estate, logistics—increases the transaction costs disproportionately for new businesses. Lack of this supporting infrastructure causes greater cash burn and distraction of management from core business operations. This is even more acute for businesses operating in semi-urban areas and in rural areas.

3.2.7 Educational institutions: Educational institutions in India have largely been focused on preparing their graduates for employment in established organizations – government and business. Promotion of entrepreneurs is restricted to a few institutions.

A. Even premier institutes in India lag global benchmarks in producing entrepreneurs. Less than 5% of classes start new ventures versus more than 10% in premier global schools.

B. Structured courses and programs on entrepreneurship are found lacking across most institutions. Lack of industry and entrepreneurial experience of faculty is another factor that hampers promotion of entrepreneurship at educational institutions.

C. Educational institutions also lack structured means of engaging the broader ecosystem of businesses, investors, mentors and alumni to promote R&D, innovation and entrepreneurship. There are many best practices to be learnt from international experience in this area.

D. The success of incubators run by educational institutions has also been mixed. Success is determined more by the motivation and quality of faculty involved in the incubator than a robust and predictable operational and financial model. Adoption of best practices followed in countries such as the US, Israel and Brazil could help improve the functioning of these incubators.

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70 Info Edge Annual Report 2010-11
71 University websites and discussions held with placement teams at ISB, IIT Delhi and IIT Mumbai
Creating a Vibrant Entrepreneurial Ecosystem in India

Figure 19: Indian School of Business (ISB) has taken initiatives to promote entrepreneurship

<table>
<thead>
<tr>
<th>Courses and scholarships</th>
<th>Mentoring and industry connect</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Compulsory ‘core course’ on entrepreneurship</td>
<td>• Wadhwani Center for Entrepreneurship Development</td>
</tr>
<tr>
<td>- Potential for separate entrepreneurship track in MBA program</td>
<td>- Dedicated center for research, outreach and pilot initiatives</td>
</tr>
<tr>
<td>• Entrepreneurship electives as ‘1 of 6 majors’ available to students</td>
<td>• ISB K-Hub Entrepreneurship development Initiative (EDI): virtual incubator, supported by Govt. of AP</td>
</tr>
<tr>
<td>- No such classification at IIMA, IIMB or IIMC</td>
<td>- Financial support, mentoring, business resources</td>
</tr>
<tr>
<td>• ‘Develop India’ scholarships to aspiring entrepreneurs</td>
<td>- Physical incubator to be set up within a year</td>
</tr>
<tr>
<td>- Cover students’ loan EMI amount up to a period of two years</td>
<td>• Other initiatives at ISB</td>
</tr>
<tr>
<td>- Dedicated center for research, outreach and pilot initiatives</td>
<td>- ISBG: Small Business Growth Initiative by student teams</td>
</tr>
<tr>
<td>• Wadhwani Center for Entrepreneurship Development</td>
<td>- SME-SEZ connect: forum to bring policymakers together</td>
</tr>
<tr>
<td>• ISB K-Hub Entrepreneurship development Initiative (EDI): virtual incubator, supported by Govt. of AP</td>
<td>- Immersion program: social entrepreneurship focus</td>
</tr>
<tr>
<td>• Physical incubator to be set up within a year</td>
<td>- Open innovation platform: connect innovators to industry</td>
</tr>
</tbody>
</table>

Outreach programs of ISB

Propero

- Unique initiative connecting entrepreneurs with venture capitalists, angel investors and bankers (~40 investors in 2012)

Goldman Sachs - 10,000 Women

- ISB is the academic partner for the global initiative
- >300 women entrepreneurs reached across India in 3 years

Source: ISB website; Primary interviews

3.2.8 **Culture supporting entrepreneurship**: Despite changes in the last 5-10 years, entrepreneurship and working in start-ups is considered very risky in India. Stigma attached to failure is a deterrent both for starting businesses and for recruiting talent for new ventures. The Committee believes that while culture is a critical enabler, it would change as more success stories become visible and funding becomes more accessible.
Collaboration and mentor networks: Collaboration and mentor networks are beginning to establish presence in India (TiE is the most noteworthy example). These are critical to ensure cohesive functioning of the ecosystem and enable access of resources (material and non-material) to entrepreneurs. Information availability through comprehensive portals is particularly lacking.

Figure 20: The Indus Entrepreneurs (TiE) is one of the most successful mentoring networks

<table>
<thead>
<tr>
<th>Mentorship</th>
<th>Access to Angel, VCs &amp; Incubation</th>
<th>Information</th>
<th>Access to talent and skills</th>
<th>Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access to 2.5K mentors - Successful entrepreneurs, VCs, corporate executives, senior professionals • Provision of group mentoring (one-on-one sessions on request) • Targeted programs - Young Entrepreneurs program - Special Interest Groups - Women’s forum etc. • Provision of mentorship across functions - Eg. TiE Delhi legal helpline provides pro-bono legal assistance</td>
<td>• Support to budding entrepreneurs - Eg. TiEQuest Business Venture Competition, Toronto - with up to $1M funding reward • Support to students - Eg. All-Asia Business Plan Competition for graduate level student entrepreneurs</td>
<td>• Provides access to entrepreneurship related knowledge - TiE Spotlight provides monthly webcasts of expert speakers and thought leaders • TiE portal provides articles on entrepreneurship</td>
<td>• Provides practical training to members through TiE Institute</td>
<td>• Network of 10.5K entrepreneur and professional members • Conducts TiEcon, largest professional and networking conference for entrepreneurs</td>
</tr>
</tbody>
</table>

Source: TiE global, lit search

Developed business with market value >$200B since ’92
Chapter 4: Recommendations

While the economic and social benefits of thriving entrepreneurship and innovation are evident, it is critical to recognize that these benefits will only accrue if the key gaps in the ecosystem are addressed. We have identified five key areas that an entrepreneur would need addressed on a priority basis to be able to grow unfettered.

4.1. Catalytic government policy and regulatory framework: This is the most critical need of early-stage businesses. Government policies have an impact on the entire lifecycle of the entrepreneur as well as on all the other elements of the entrepreneurial ecosystem. In order to create a supportive policy and regulatory environment, it is important that governments—central, state and local—and regulators recognize the distinct nature of first-generation entrepreneurs and early-stage investors. Supportive fiscal and non-fiscal policies should be developed with an aim of making growth of entrepreneurship a national priority. Developing such a policy framework would entail a fundamental transformation of the role of government and regulators into service providers and facilitators for new businesses. Government policies should aim at increasing flow of capital—both debt and equity—into early stage ventures. Government must also significantly scale up incubator capacity to support new businesses. Also, the burden of compliance on new entrepreneurial firms can be reduced through greater reliance on self reporting and certification. Such policies should also ensure that closure of businesses becomes easier for entrepreneurs and hence does not remain an impediment in starting the business in the first place.

4.2. Easy access to equity capital and debt: Capital, both equity and debt, is the life-line of new ventures. Availability of capital is a key pre-requisite of thriving entrepreneurial activity. There are several measures that can increase capital flows into new ventures. These measures include broadening the investor base by opening up new sources of equity capital, promoting new venture funds, etc. Availability of debt is especially challenging for entrepreneurs as banks are reluctant to lend to new ventures without collateral. As a result, entrepreneurs are often compelled to use equity capital for meeting their working capital needs thereby constraining their growth. Encouraging banks to develop capabilities in lending to new ventures would be critical to promote entrepreneurship.

4.3. Businesses as entrepreneurial hubs: Established businesses are an important element of the entrepreneurial ecosystem. Private sector needs to participate more actively in providing mentoring support to entrepreneurs. Established businesses need to take broader roles on both financial (M&A, funding, sourcing, selling to and selling with) and non-financial (mentoring, collaboration) fronts to promote emerging entrepreneurs. Collaboration and co-operation between established and emerging businesses need to be fostered. Industry bodies and chambers of commerce can play a vital role in providing appropriate forums and mechanisms for such collaboration.

4.4. Fostering a culture that encourages entrepreneurship over careerism: For individuals to be motivated to become entrepreneurs, a culture that respects and promotes entrepreneurship is needed. Such a culture rewards risk taking and tolerates failures
without making it a stigma. Several participants in the society need to play a role in creating such a supportive culture. Educational institutions impart not only technical and business skills but also help develop an entrepreneurial mindset in students. These institutions in India can help promote entrepreneurship through more and improved courses and programs, increased collaboration with other parts of the entrepreneurial ecosystem, and greater focus on innovation and its commercialization. Media also plays an important role in developing an entrepreneurial culture by disseminating entrepreneurial success stories.

4.5. **Adequate and effective collaboration forums:** Entrepreneurs need support from other stakeholders to be successful. The current ecosystem in India suffers from issues of lack of co-ordination and coherence between different stakeholders. There is an urgent need to bring stakeholders together through both virtual (portals) and physical (innovation labs) networks to provide better mentoring and networking for entrepreneurs across the country.
The following are the highest priority recommendations across the above five themes that we believe must be addressed immediately:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key recommendation</th>
</tr>
</thead>
</table>
| Catalytic government policy and regulatory framework       | • Facilitate investment flows in early stage ventures by angels and venture capital; consequent incentive structures and easing of investment norms  
• Enhance incubator capacity – aim at 1000 operating incubators over next ten years  
• Set up STPI like structures for early stage businesses enabling single window approvals, self regulation and self compliance  
• Provide a framework for easier exits for early-stage investors  
• Provide expeditious procedures for closing businesses |
| Easy access to equity capital and debt                     | • Create new sources of capital for domestic VCs such as pension funds, insurance companies, financial institutions, and NRIIs (through automatic route)  
• Establish Rs. 5000 crore sovereign “fund-of-funds” mandated to make anchor investments in diverse early stage VC funds with participation of other investors – with a multiplier effect  
• SIDBI should provide risk capital and equity linked products to MSMEs directly as well as indirectly through banks and Alternate Investment Funds  
• Enhance and make venture debt and credit guarantees more widely available – emulation of SIDBI like schemes by the banking sector; early stage lending focused NBFCs; promotion of UNIDO like mutual credit guarantee schemes |
| Businesses as entrepreneurial hubs                         | • Active participation of private sector in setting up and operating incubators including PPP models  
• Industry associations and chambers of commerce to set up mechanisms for mentoring relationships between established businesses and early stage ventures |
| Promotion of entrepreneurship over careerism                | • Include “entrepreneurship” and related skills in curriculum  
• Enhance linkage between educational institutions and entrepreneurial ecosystem - for example, visiting faculty with entrepreneurial background  
• Create mechanisms for commercialization of research through entrepreneurship |
| Adequate and effective collaboration forums                  | • Establish online portal for comprehensive information on statutory compliances for setting up and operating a business  
• Set up collaborative forums for mentorship and networking |
In the following sections we present our detailed recommendations in the five key areas.

4.1 **Catalytic government policy and regulatory framework**

The government and regulatory bodies are a decisive part of the entrepreneurial ecosystem as they have the power to influence overall entrepreneurial environment. Hence, they must act as catalysts of entrepreneurship and innovation.

4.1.1 **Take the lead in the development of a thriving entrepreneurial ecosystem**

A. **Facilitate collaboration within overall ecosystem:** Central and state governments along with regulatory bodies could act as enablers for all parts of the entrepreneurial ecosystem.

   i. Governments and regulators must engage in continuous dialogue with all stakeholders to ensure consultative policy making. Such a dialogue could be facilitated through several mechanisms such as online portals, industrial cluster councils, collaboration forums, direct linkages with industry bodies, angel networks, venture capital funds etc. These efforts would also align policy measures to the needs of the entrepreneurs and investors.

   ii. Establishment of Innovation Labs (iLabs), possibly with a Public Private Partnership (PPP) model
      a) State governments could provide land for creation of iLabs. Potential other partners could be the Rajiv Gandhi Udyami Mitra Yojana (RGUMY) scheme of the Ministry of MSME or CSIR labs
      b) Central government (DST) could fund creation of R&D facilities, incubation facilities and infrastructure
      c) Private sector could provide management and operational support

B. **Create accreditation bodies:** Create bodies such as Indian Standards Institute (ISI) across growing industries to provide quality certification to new ventures. This is extremely important for emerging industries such as medical equipment manufacturing where customers are wary of procuring from start-ups due to fear of failure of products. We have already witnessed how the SEI-CMM certifications helped the Indian IT industry establish credibility internationally.

C. **Develop hard infrastructure:** Central and state governments could help new ventures by development of hard infrastructure throughout the country. Absence of adequate roads and transport-related facilities, utilities and real estate puts disproportionate burden on new ventures, especially in semi-urban and rural areas.

4.1.2 **Facilitate investments in early stage ventures**

Central government and regulatory bodies can enable flow of capital in the entrepreneurial ecosystem. They can create a policy environment which offers fiscal and non-fiscal incentives and easy investment norms for angel investors and venture capital
funds. At the very least, these classes of investments must be exempted from any restrictive policy measures that may require to be introduced by government due to other imperatives (such as the amendment proposed to Section 56 of the Income Tax Act 1961 vide Clause 21 of the Finance Bill 2012 that would have severely impacted angel and early stage investments).

There are several measures that would lead to creation of an investor friendly environment. It is important for early-stage investors to be uniformly defined by all arms of the government, including regulators. We propose the following definitions for angel investing, seed stage and early-stage venture capital investing and impact investing:

A. **Angel investing:** An angel investor is an individual acting alone or in a formal or informal group who invests her/his own money directly in an unlisted entity, in which there is no family connection, at the seed stage, and where the investment for the individual is less than Rs 5 crore and for the group less than 10 crore. The investments and turnover threshold for the seed stage should be indexed to inflation.

B. **Seed-stage venture capital investing:** Investments by an entity, which is registered with the appropriate financial regulatory authority, in early-stage ventures that must (a) have a turnover of less than Rs 25 crore; (b) are unlisted, and (c) not promoted, sponsored or related to an Industrial Group whose group turnover is in excess of Rs. 300 crore. The investment and turnover threshold for the seed stage should be indexed to inflation.

C. **Early-stage venture capital investing:** Investments in an early stage venture by an entity which is registered with the appropriate regulatory authority (such as an AIF or a FVCI). Early-stage venture is defined as a business which: (a) has a turnover of less than Rs 50 crore; (b) is unlisted; and (c) is not promoted, sponsored or related to an Industrial Group whose group turnover is in excess of Rs. 300 crore. The investment and turnover threshold for the early stage should be indexed to inflation.

D. **Impact investing:** Investments in businesses and social ventures with the intention to generate measurable social and environmental impact along with a financial return, and which target a range of returns from below market to market rate, depending upon the circumstances. Impact investing is based on the conviction that such investments play a crucial role in addressing social and environmental challenges.

A rapidly growing supply of capital is seeking placement in impact investments across geographies, sectors, and asset classes, with a wide range of return expectations. The glue that binds those who operate in the impact investing industry is the shared conviction that creative investments can play a crucial part in addressing social and environmental challenges. This investment interest is sparking the emergence of a new industry that operates in the largely uncharted area between philanthropy and a singular focus on profit-maximization.
All arms of government (ministries, regulators) should acknowledge such definitions to ensure prioritization of incentives to such investing.

4.1.3 Scale up and enhance incubation programs

Incubators play a very important role in promoting entrepreneurship. The number of incubators needs to be dramatically increased from the current 120 or so in operation. Following measures need to be undertaken in order to increase the number, the reach, and the quality of support provided by incubators:

A. **Establish simplified and cohesive seed funding process across departments and institutions:** Current processes for seed funding vary across departments making it difficult for firms being incubated to secure such funding. Moreover, most schemes currently limit seed funding to Rs 25 lakh ($53K) which is insufficient for demands of many technology or manufacturing-centric businesses. We recommend that this limit be raised to Rs 1 crore ($213K).

B. **Significantly scale up incubators:** Currently there are 120 incubators in India – almost all are government sponsored and largely affiliated to educational institutions. In the next decade we should aim to have 1000 incubators covering most tier I and II cities in India. In select centres with high entrepreneurial activity, multiple incubators should be operated.

C. **Enhance incubators’ services to include mentoring, and providing access to business networks and investors:** Currently, very few incubators are providing such additional support. Appropriate changes to the operating model of incubators and also the profile of incubator manager, should be made so as to ensure provision of these additional services.

D. **Invite private sector participation:** For rapid scale up of the Incubators and enhancement of services, participation of the private sector will be critical – whether through PPP or other appropriate models including for-profit models. Several leading private sector groups have expressed interest in participating in setting up and operating such ventures. Their participation will make it easier for the incubators to provide high quality mentorship, access to professional advice, and also the business network of the private sector.

To encourage private participation, government should consider extending benefits to incubators such as those provided to ventures in Software Technology Parks (STPI). Firms based in STPI gain several fiscal and administrative concessions such as 100% foreign equity ownership, no corporate income tax for 10 years, duty free import of capital equipment, accelerated depreciation, free repatriation of capital, single window clearances, and so on. Similar incentives could also be provided to duly registered and accredited incubators. As these privately run incubators flourish, it will spark innovation and boost entrepreneurial activity across India.
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E. **Establish incubators that focus on socially relevant businesses** such as the renewable-energy dedicated arm of CIIE (IIM Ahmedabad’s incubator).

4.1.4 **Ease entrepreneurial activity**

Entrepreneurs face several challenges during the lifecycle of a business—at the time of opening of the business, during routine operations and at time of winding up of the business. Both central and state governments can significantly ease these pressures through procedural and regulatory reform.

A. **Establish “Single Window Clearance” mechanism:** The process of starting a new business is time consuming and difficult as it often requires interacting with multiple state departments. Through the single window clearance mechanism, state governments can ease the process significantly.

   i. Enact Single Window Clearance Act to legally create a nodal agency that is responsible and accountable for single window clearances

   ii. Establish time-bound processes and prescribe maximum time for each, including deadlines for correspondence for queries with businesses

B. **Set up industrial clusters:** Industrial clusters can be highly effective in promoting new businesses. State governments should extend benefits of industrial clusters to entrepreneurial ventures more pro-actively. They could provide them with real estate and infrastructure at lower prices. They could also:

   i. Ease selection criteria and approval for entrepreneurial ventures

   ii. Provide access to investors through partnerships with financial institutions as in the Ahmedabad Pharmaceutical cluster

   iii. Invest in collective research and technology innovation, potentially in partnership with academic institutions

   iv. Provide access to allied industries - encourage supplier, customer, partner relationships through identification and selection of relevant industries

In order to create effective clusters of entrepreneurial activities, a model along the lines of Software Technology Parks of India (STPI) could be created for early stage ventures which could get affiliated to “entrepreneurial hubs” which enjoy similar facilities as in case of STPI units. STPI’s were critical to the success of entrepreneurs in IT and IT enabled services growth in India. Broadening this model to a wider range of entrepreneurial activities could unleash similar growth in several other industries.

C. **Set up online information and application:** A one-stop online portal for all information and documentation relating to doing business would be a very useful
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resource for entrepreneurs. State governments should create a dissemination agency that ensures the information on the portal is up-to-date, aligned across sources and departments and includes:

i. Online application forms, submission and tracking

ii. Information about land, water and power availability and tariffs

iii. Circulars and notices regarding industrial policy and schemes

iv. Online forum and help-desk to address public queries and concerns effectively

D. **Permit self-regulation and self-compliance for businesses with turnover less than Rs 25 crore:** Governments could ease norms for early-stage businesses by allowing self-regulation and self-compliance along with stringent penalties for non-compliance and wrongful declarations. This would prevent any potential misuse of the provision.

E. **Facilitate labour law reform:** Entrepreneurs find current labour laws restrictive. Central and state governments should consider revision of labour laws but more importantly, ease compliance norms.

   i. Create one comprehensive filing instead of multiple filings for each labour matter e.g. for returns filing, attendance logs and overtime wages accounts

   ii. Implement computerized labour management systems for online registrations, returns filings, license applications and tracking of applications

F. **Improve Intellectual Property Rights (IPR) awareness and enforcement:** IPR creates incentives for entrepreneurs to invest in innovation and research. The central government can encourage innovation and entrepreneurship through effective IPR laws.

   i. Provide accurate and detailed information on the requirement and method for obtaining patents, licensing and IP management through various media such as online portals, incubators, and collaboration forums

   ii. Develop effective legal structures for contractual enforcement. This could involve setting up of fast-track courts to manage IP and contract enforcement issues for small businesses that have historically felt threatened by their large competitors

4.1.5 **Easy exit for investors**

For investors, exit options are crucial parameters to consider when making an investment. The government and regulators must make efforts to ensure easier exit possibilities to improve the attractiveness of an investment.

A. MoF and CBDT could treat tax on capital gains on investments by Angel Groups or VC Funds at par with capital gains on investments in listed companies or mutual funds
B. SEBI could further promote Small and Medium Enterprises (SME) exchanges and treat investments through them as investments in any other exchange

C. MoF could also allow companies registered in India to make an initial public offer on exchanges outside India without or before listing in India, as was the case earlier. Recent experience has shown that entrepreneurial ventures, especially in technology, receive better response from overseas investors.

D. Regulations could provide preference to angel and early VC investor shares (even if equity) on dissolution of business. It is customary for the investor agreement to have such a provision but these are not enforceable. An investor that takes greater risk at an early-stage is then treated at par with other investors.

E. Relax lock-in period for venture investors (angels and funds) and entrepreneur in case the entrepreneur holds less than 20% stake in the venture

4.1.6 **Establish expeditious procedures for closing of businesses**

Central government can ensure reduction in time and cost of closing businesses. Both these factors contribute to the fear of failure in entrepreneurs and the reluctance in investors to invest in riskier innovation or in R&D-centric ventures.

A. Relax requirements for closing of business by further refining the proposed Companies Bill with exceptions and exemptions for emerging businesses

   i. Reduce procedural requirements that lead to delays in exit

   ii. Reduce requirements that add to cost of closing business

B. Ease approval criteria for early stage manufacturing ventures with more than 100 employees to retrench employees or close businesses

4.2 **Easy access to equity capital and debt**

The measures outlined below will increase the flow of capital, both equity and debt, to new ventures.

4.2.1 **Ease investment norms for equity investments into early stage ventures**

Encourage capital contribution into early stage ventures and provide incentives and exemptions to angels, VC funds and businesses that take up high risk investments in these ventures
A. Angel investing:

i. Ministry of Company Affairs (MoCA), Reserve Bank of India (RBI), Central Board of Direct Taxation (CBDT) and Ministry of Finance (MoF) should allow domestic and overseas members of recognized angel groups to create intermediate structures such as a Limited Liability Partnership (LLP) with the benefit of complete tax pass through.

ii. MoF and CBDT could give tax benefit to angel investments through a recognized angel group. For instance, angels could get a 100 per cent write-off on investments of up to Rs 1 crore (around $200,000) per year. Such investments in privately held entrepreneurial ventures should be exempt so long as their individual holding in any of their investee companies is less than 20 per cent. This provision can carry a sunset clause i.e. it will lapse in 5 or 10 years unless renewed.

B. Venture Capital:

i. A large part of VC investments in India is through offshore funds that have traditionally not invested at the seed stage. To further encourage investments of less than Rs 5 crore ($1 million), we need to promote domestic capital especially through institutional investors. The pension and insurance regulators—Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory and Development Authority (IRDA)—could permit investment of part of the pension and insurance funds (capped at 1-2 per cent) in early stage VC funds (as defined by SEBI under AIF regulations).

ii. In the case of banks, investing in early stage VC Funds (say up to Rs 500 crore) should be treated as “priority sector” funding and should not be considered under “capital market exposure” or attract “provisioning” norms. This measure was actually in place till a few years ago and needs to be reinstituted.

iii. Department of Industrial Policy & Promotion (DIPP) could allow non-resident Indian (NRI) investments in early stage domestic VC funds through an automatic route

4.2.2 Establish a “Fund of Funds (FoF)” to seed early stage fund

Government should establish a FoF with a corpus of Rs 5000 crore ($1 billion). The objective of this FoF would be to make anchor investments in several venture capital funds. These venture capital funds would also raise additional capital from other institutional investors – domestic or international. Investments by this FoF in individual funds could be limited to Rs 50 crore or 50% of the total corpus of the VC funds, whichever is lower. This will ensure that the anchor investments by the government are

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72 Discussions with IVCA and leading venture capitalists
increased through a multiplier effect and eventually investments of Rs 20000 crore to Rs 25000 crore could be made into early stage ventures.

There are numerous examples across the world of governments setting up such FoF that have met with great success. In addition to significantly increasing capital flow into new ventures, such a fund will also send a very strong positive signal for the government’s commitment to growing entrepreneurship in the country.

4.2.3 **Develop and scale up debt offerings**

Debt is needed by entrepreneurial ventures both for funding growth as well as for working capital. Banks and financial institutions (FIs) play a key role in providing debt and enabling easier access to market borrowing via credit ratings. Lending to entrepreneurial ventures requires special skills as many such ventures have uncertain cash flows and are unable to offer collateral. It requires well-developed credit risk assessment capabilities and use of instruments of financing such as venture debt. Such instruments often combine loans with warrants, or rights to purchase equity, to compensate for the higher risk of default. These products require improved understanding and capabilities on behalf of banks and FIs.

In India, SIDBI has played a significant role in improving credit flow to small ventures, directly as well as through partner banks and FIs. Its credit guarantee scheme has approved over 650,000 guarantees for an amount of over Rs 30,000 crore (or around $60 billion)\(^73\). Similarly other schemes such as refinance, setting up of SIDBI Venture for equity investment and SME Rating Agency (SMERA) for increasing credit rating coverage, etc have played a fostering role. SIDBI must continue to be a critical enabler in improving the credit availability to start-ups directly, and by encouraging, incentivising and guiding banks and FIs.

However, for thriving entrepreneurial activity, it is important to widen the lender-base beyond SIDBI. It would be imperative to encourage and enable commercial banks to promote venture debt. In order to achieve this, we make the following recommendations:

A. **Encourage creation of “Venture Debt” offering** in India and entry of foreign players; SEBI and tax authorities could play a crucial role here:

i. SEBI could relax clause in the AIF (Alternative Investment Funds) regulations, restricting SEBI registered VC funds to invest maximum of 33.33 per cent of investible funds\(^74\) in debt or debt instruments of a venture in which an equity investment has already been made

ii. MoF and CBDT could exclude income from venture debt from interest income and treat it as capital gains, especially in cases where hybrid instruments have been used

\(^73\) T E Narasimhan, Business Standard, January 31, 2012 and Bain Research
\(^74\) Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996
B. **Speed up the implementation of the recommendations in the Nair Committee** on priority sector lending:

i. The target of domestic scheduled commercial banks for lending to priority sector may be retained at 40 per cent of adjusted net bank credit (ANBC) or credit equivalent of off-balance sheet exposure (CEOBE), whichever is higher.

ii. RBI must continue its efforts to promote lending to MSEs through measures such as 20 per cent year-on-year growth in credit to micro and small enterprises and allocation of 60% of the MSE advances to the micro enterprises.

iii. Banks may be encouraged to ensure that the number of outstanding beneficiary accounts under micro enterprises’ registers grow at a minimum rate of 15 per cent annually.

iv. The MSE sector may continue to be under priority sector. Within MSE sector, a sub target for micro enterprises is recommended equivalent to 7 per cent of ANBC or CEOBE, whichever is higher, to be achieved in stages by 2013-14.

v. The priority sector target for foreign banks may be increased to 40 per cent of ANBC or CEOBE, whichever is higher with sub-targets of 15 per cent for exports and 15 per cent for MSE sector, within which 7 per cent may be earmarked for micro enterprises.

vi. RBI could also help in improving the effectiveness of SIDBI though availability of cheaper sources of funds, by enabling ECB fund raising for SIDBI. SIDBI could be included in the list of Eligible Borrowers under the Automatic Route.

C. **Implement RBI’s recent directive to banks for having a dedicated SME vertical** which will help lending to this sector. Appropriate training and capability building efforts should be encouraged in order to make these SME dedicated verticals effective.

D. **Use of innovative instruments**: It is important for banks and FIs to improve their capabilities of risk assessment and management when lending to new entrepreneurial ventures. To build these capabilities they should undertake training programs for their employees. These verticals should offer key products for supporting entrepreneurial activities such as factoring and venture debt. Factoring must account for assets owned by the business other than physical assets such as receivables and IP (intellectual property). Banks would need to develop capabilities and guidelines to evaluate IP.

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75 Report of the Nair Committee on Priority Sector Lending, RBI press release, February 21, 2012  
76 RBI’s MSE Loan Policy  
77 RBI’s Master Circular on External Commercial Borrowings and Trade Credits - Master Circular No.09 /2011-12 (Updated as on January 20, 2012)  
78 Business Standard, February 5, 2012 and Bain Research
E. **Promote credit guarantee agencies and schemes:** Mutual credit guarantee is a structure that creates groups of entrepreneurial ventures to form agencies that act as guarantors to debt taken by members from banks and FIs. Such agencies also have the ability to diligence the debt requirements and thus guarantee viable businesses. Several such agencies, actively promoted by UNIDO, have been very successful in many parts of the world including developing countries like Brazil. We recommend that such agencies be promoted in India. SIDBI could provide technical and operational skills to mutual credit guarantee agencies to ensure that they are set-up and run in a consistent manner across the country with the requisite skills to evaluate credit worthiness of their members.

In addition to promoting new mutual guarantee schemes, efforts should be made for greater off-take of SIDBI’s schemes (such as credit guarantee and refinance). SIDBI has worked closely via joint collaboration programs to increase its reach of schemes, as in the case with Indian Overseas Bank (IOB). SIDBI should aim at a target of credit guarantees up to Rs 50,000 crore from the current Rs 30,000 crore guarantees. To improve off-take of these schemes, SIDBI should continue to increase reach by collaborating actively with more banks and FIs (such as NBFCs). Awareness and understanding of banks and FIs about these schemes should be increased through circulars, workshops and trainings.

F. **Establish innovative early stage investing focused NBFCs** (such as those involved in venture debt): Specialized non-banking finance companies (NBFCs) such as Silicon Valley Bank India Finance can provide innovative schemes for startups such as venture debt. These NBFCs must be encouraged, specifically through provision of low-cost funds by SIDBI.

G. **Develop innovative credit risk models and increase coverage:** While SMERA has already enhanced its credit rating coverage\(^79\), there is still a lack of comprehensive credit rating coverage for small businesses. SMERA and other credit rating agencies including those empanelled under ‘Performance and Credit Rating Scheme’ of the Ministry of MSME should continue to increase the coverage of emerging ventures. This can be achieved through scaling up operations, improving support infrastructure such as IT, and through actively working with new businesses, banks and National Small Industries Corporation (NSIC). These agencies should also work towards development of efficient credit risk models using simple-to-get data to enable lending to start-ups without ratings.

H. Technology Development Board (TDB) operates schemes to provide easy finance to new ventures. These schemes should be scaled up in scope and content for enhanced availability of finance to innovative enterprises.

\(^79\) SMERA website
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1. **Support borrowers through mentoring and counselling services:** Banks and FIs should guide borrowers by increasing their awareness and understanding of products. They could also mentor consumers about correct choices, similar to retail bank counselling services. This effort which involves training and guidelines for bank branch managers and staff could be spearheaded by SIDBI.

4.3 **Businesses as entrepreneurial hubs**

Businesses play a key role in the promotion of entrepreneurship and innovation both directly and indirectly. They provide exit options, resources, and often function as customers and / or suppliers to new ventures. Industry bodies and chambers of commerce, including Federation of Indian Chambers of Commerce and Industry (FICCI) and Confederation of Indian Industry (CII), could play a pivotal role in ensuring that businesses engage and collaborate with entrepreneurial ventures more meaningfully.

4.3.1 **Invite private sector participation in Incubators**

The ambitious aim of creating 1000 well-functioning incubators across the country will not be fulfilled without active participation and support of the private sector. Private sector could partner with government in setting up Incubators under the Public Private Partnership (PPP) model. Such a model has shown success in Israel and leads to the best alignment of incentives with government providing the initial capital for establishment and the private players providing skills and management to run the incubator.

In addition to partnering for setting up new incubators, the private sector can also contribute to improving the functioning of existing incubators through initiatives such as providing seed capital, mentorship and training to the incubatee. Businesses could also conduct outreach programs at the incubators.

4.3.2 **Encourage industry bodies and chambers of commerce to take the lead in driving greater collaboration** between businesses and start-ups. This would also be beneficial for them as it would help them engage emerging industries and ventures more meaningfully and help them enrich their membership. Business education programs should be organised by these bodies through workshops, discussions and seminars.

There are several other areas where active participation of established businesses could contribute to fostering entrepreneurship.

4.3.3 **Enhance strategic sourcing of innovation to encourage small businesses as vendors**

A. Strategic procurement arms could be set up for working with small business vendors, in line with international practices.

i. Separate business divisions established in large businesses to identify small businesses and start-ups for procurement of goods and services

ii. Long-term relationships with start-ups and small businesses as vendors

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iii. Increased procurement and business opportunities for start-ups especially for innovative products and services

iv. Waivers and discounts on products, services and licenses sold to small businesses. In addition, specific solutions can be developed for nascent ventures.

v. Structured models set up by businesses for engaging with start-ups and small businesses in long-term relationships, reducing cost of sales and distribution

vi. On-time payment to start-ups for services and products

4.3.4 Encourage corporate mergers and acquisitions (M&A) through well designed structures and incentives

Corporate strategy divisions should be incentivized to identify innovative start-ups for acquisition. Incentivisation in such cases should not be linked to scale of acquisition.

4.3.5 Prioritise R&D, innovation, and mentoring

A. Businesses can explore increasing R&D spend to promote innovation.

B. Entrepreneurial and innovative thinking in employees could be encouraged

   i. Incentives in form of bonuses and awards for achievements in R&D could be instituted. These could also include equity or one-off payments for patents.

   ii. Exclusive time could be allotted for employees to focus on innovative ideas.

C. Formal mentorship and training programs should be considered to establish corporate connect for entrepreneurs. Training for students can also be done through seminars, conferences across educational institutes.

4.3.6 Provide resources for emerging ventures.

A. Seed funding could be provided for internal and external ventures through:

   i. Seed funds set up by businesses

   ii. Business-plan competitions conducted at the national level, where seed capital is provided as prize money to the winners

   iii. Funding mechanisms within the firm to promote ex-employee ventures and increased infusion of capital in spin-offs
4.3.7 **Consider providing manpower to assist start-ups in the early stages.** Start-ups find it difficult to acquire talent, and businesses can mitigate this dearth by deploying employees in investee companies or spin-offs.

4.4 **Promote entrepreneurship over careerism**

Lack of a risk-taking culture in India is seen as a major impediment to the growth of entrepreneurship. Educational institutions have a pivotal role in promoting entrepreneurship and innovation at different stages of the venture life cycle. They are the source of innovation from new business ideas and also provide the necessary talent for businesses. To foster entrepreneurship, educational institutions have to play a very important role. There are several key steps which can be taken by them:

4.4.1 **Include entrepreneurship and related skills in curriculum**

Structured entrepreneurship courses and programs should be introduced at school and college levels to introduce students to skills required for running a business.

A. Courses and programs on entrepreneurship and even vocational courses could be extended to all tiers of educational institutes

B. Social entrepreneurship courses and programs could be considered. Many international and Indian institutes already run such courses and this should be further encouraged

C. Universities could use sponsorships from large businesses and private individuals to set-up dedicated centres for entrepreneurship, similar to those run by top institutions both in India and internationally

D. Ensure better support in terms of formal teaching, focus on research, incubation, and active industry collaboration. Greater attention, on generating funds for research and development (R&D), from own revenue and corporate sponsorships is important. An increase in number of research laboratories and centres is critical, while celebration of faculty and student achievements in research through awards like The Shanti Swarup Bhatnagar Prize\(^{80}\) would also be helpful.

4.4.2 **Improve the quality of incubators associated with educational institutions along with a refined financial and operational model.** Also, incubators could focus on funding and incubating start-ups in specific sectors (especially with a social focus), an example of which is the Centre for Innovation Incubation and Entrepreneurship’s (CIIE) initiative of starting an exclusive fund for start-ups in the sustainable energy domain\(^{81}\). Such initiatives would also provide a fillip to ‘impact investment’ in India.

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\(^{80}\) Regulations Governing the Award of the Shanti Swarup Bhatnagar Prize For Science and Technology

\(^{81}\) Deepti Chaudhary, Live Mint, August 24, 2011 and Bain Research
4.4.3 Improve sourcing of students, faculty and administrative staff

A. More holistic student selection process could be followed to select a more diverse set of students from different backgrounds:

i. Weights of standardized tests in the selection process could be reduced. For example, current weight for the tests is 100 per cent at the Indian Institutes of Technology (IITs), 30-50per cent at the Indian Institutes of Management (IIMs)\(^82\).

ii. Focus can be shifted to individuality and originality of students to ensure multidimensional background and student profile (around 90per cent students at the top B-schools, the IIMs, are engineers\(^83\) \(^84\) \(^85\)).

B. Recruitment norms for administrative roles need to be redefined:

i. Key administrator and director should preferably have entrepreneurial or investment background, and could be an ex-entrepreneur, investor, or fund manager

ii. The concept of “resident” administrators should be introduced, wherein the administrators can be those investors and entrepreneurs who are on sabbatical

4.4.4 Encourage students to work with start-ups or explore entrepreneurial ventures upon completing the course

A. Deferred placements after two years should be made available to those students who create or join start-ups. This system is currently prevalent in a limited number of institutions and should be extended

B. Special fellowships and programs could be developed with funding from government or large businesses for graduating students who take up entrepreneurship immediately after graduating. Internship and interaction programs with start-ups could be initiated to help develop a culture of working with start-ups

C. Business-plan competitions at educational institutions should be run through entrepreneurship centres. These could involve sizeable funding of more than Rs 10 lakh (around $20,000) raised by involving angel investors and VCs and by sourcing direct seed funding through incubators for winners

4.4.5 Establish greater linkages between industry and faculty are critical to enable more practical teaching methodology and courses. For instance, currently at IIM Ahmedabad, only 20-25 per cent of professors have any industry experience\(^86\). However, greater

\(^82\) The Times of India, January 14, 2012 and Bain Research
\(^83\) Reports on admissions at IIMA
\(^84\) The Times of India, July 22, 2011 and Bain Research
\(^85\) IIM Bangalore website
\(^86\) IIMA website
collaboration with the industry is required. It can be achieved through structured programs and partnerships.

A. Research partnerships would formalize a more permanent involvement of the industry and promote exchange of ideas between the industry and academia. For example, Massachusetts Institute of Technology (MIT) partners with more than 190 firms for research. Three kinds of research partnerships are possible:

i. Business firms seek research from academic institutions

ii. Specific research by faculty or students is funded by business

iii. Research laboratories on campus set up by business

B. Industry-academia linkages should be boosted through formal networks provided by institutions themselves. While venture capitalists and angel investors can provide access to funds, established companies could engage through mentorship or by providing exits for start-ups.

i. Visiting faculty from industry should be encouraged for all colleges with increased scope and tenure

ii. Training programs and workshops for professors on entrepreneurship and innovation are likely to be very beneficial

4.4.6 Establish an Office of Technology Licensing at educational and research institutions, as seen internationally, since this will ensure focus on commercialization of research.

A. Technology licensing offices will make innovations more accessible to entrepreneurs thus enabling commercialization, acquisition of patents as well as management of equity and hence aligning research to business needs.

B. Suggested operational model includes:

i. Assessment and protection of intellectual property (IP) developed at the institute

ii. Marketing to find a licensee (existing businesses and start-ups)

iii. Licensing of IP to licensee

iv. Commercialization and revenue for institute as well as inventor

C. Extension of IP management practices to Council of Scientific and Industrial Research (CSIR) Labs and other government laboratories would be useful.

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87 Industrial Liaison Program, MIT Industry Guide
4.4.7 **Well-defined and structured mentorship programs** are required to serve cross-functional needs of legal, tax, regulatory, business and financial expertise. Institutions should better leverage alumni networks for mentorship and resource mobilization.

4.4.8 **Foster a culture of tolerance for failure and risk-taking through wide-spread celebration of successful entrepreneurs.** Media can also play a greater role in giving coverage to successful examples of enablers – incubators, iLabs, mentor networks etc.

Celebration of success stories by the media (print and electronic) is crucial for a shift in the entrepreneurial culture. Recognition of the entrepreneurs and a public broadcast of their inspirational stories would encourage risk-taking and entrepreneurship.

4.5 **Set up adequate and effective collaboration forums**

A collaboration forum is a platform to bring together various stakeholders involved in the entrepreneurial ecosystem. Adequate and effective collaboration forums are crucial to drive innovation and entrepreneurship in India. Several mentor networks have emerged in India in last few years. Networks such as TiE, MentorSquare, MentorEdge and NEN have established their presence nationally. However, currently the forums are nascent, sparse and sub-scale, with several gaps in their services.

The financial model adopted by these networks also varies from not-for-profit (e.g. TiE is a not-for-profit organization that does not pay mentors for their time and services but charges an annual membership fee to entrepreneurs and mentors. Day-to-day operations are funded through donations) to those based on clear financial incentives (e.g. MentorSquare charges entrepreneurs a membership fee and pays mentors hourly and offers them equity stake in MentorSquare).

Collaborative forums should focus on providing the following key services:

4.5.1 **Set up an online portal for comprehensive information**

An online information portal that covers all information and collaboration needs of the entrepreneurial ecosystem is a key requirement. Such portal(s) could be created via collaborative efforts between the central and state governments and mentor networks. Portals should include:

A. Tools and resources for entrepreneurs such as:
   
   i. Guidelines on how to set up a business
   
   ii. Effective ways of raising funds from incubators, angels and VCs

   iii. Information on and list of applications for government schemes and grants

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88 Discussions with TiE Delhi management
89 Discussions with MentorSquare management
iv. Information on business plan competitions

v. Information on cross-functional areas such as finance and accounting, legal and marketing

vi. Webcasts and blogs of experts and thought leaders

B. Information regarding current policy and regulations affecting the larger business environment as well as proposed legislations and amendments

C. Up-to-date information about industry developments, investor activity, initial public offerings and mergers and acquisitions

D. Virtual interaction and feedback through blogs and webinars between stakeholders—entrepreneurs, industry bodies such as Indian Private Equity and Venture Capital Association (IVCA), Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII), National Association of Software and Services Companies (NASSCOM), investors, government departments, regulatory bodies such as SEBI and RBI, research bodies, corporate executives, successful entrepreneurs and subject matter experts

4.5.2 Provide mentorship and networking support

Collaboration forums must provide mentorship services as access to mentors can help entrepreneurs gain invaluable insight into how to run a business better.

A. Schedule one-on-one sessions and group sessions with national and global mentors suited to each entrepreneur’s need

B. Provide access to an Advisory panel or a Board of Directors. For example, Endeavor works with entrepreneurs to build a team of 3-4 advisors from their global network90

C. Conduct events and conferences as a platform for experts to share insights and entrepreneurs to interact with potential partners, suppliers, customers and investors. These events could be focused on emerging trends, new industries and technology

D. Organize informal interactions between entrepreneurs and potential investors which become opportunities to identify and understand promising ideas

4.5.3 Facilitate access to investors

One of the most important functions of a collaboration forum is to facilitate access to investors. Such access would enable entrepreneurs to gain funding for seed and growth requirements.

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90 Endeavor website
A. Quarterly business plan competitions in association with angel networks or VC funds

B. Resident incubation and accelerator facilities

4.5.4 **Improve access to talent and skills**

A. Establish links with academic institutions to provide summer interns or volunteers to start-ups. Endeavor partners with Harvard, MIT, Kellogg to provide student consulting teams to start-ups over their summer internship

B. Offer entrepreneurship workshops and classes in association with academic institutions to make up for the lack of business education of most entrepreneurs

4.5.5 **Provide media management support**

Collaboration forums should actively engage the media to highlight successful venture stories in order to encourage entrepreneurship as a career.

4.5.6 **Establish 15-20 innovation labs across metros, tier 1 and tier 2 cities**

Delhi, Mumbai and Bangalore, the hubs of current investor activity, could be the first ones to be set up.

In Israel and the US, incubators and accelerators of many different kinds have sprung up to provide services to start-ups. They can be set up to focus on a specific industry e.g., mobile technology or medical devices. They can also be oriented towards a specific geographic area e.g., Silicon Valley or Boston. They generally follow three different operating models: academic, real estate oriented, or accelerators.

Academic incubators are generally situated on the campus of an academic institution such as Harvard University. The Harvard iLab\(^91\) is a good example of the academic incubator model. Membership is restricted to active students across the Universities’ various schools and colleges. Faculty members are deeply involved in the operations of the incubator and often teach courses at these facilities. Students are allowed to use the incubator facility by registering for one or two terms (ranging from 90 to 180 days), and then can “graduate” to a more formal location. Student teams typically participate in many different business plan and challenge competitions that provide some grant-based funding (in the range of $25,000 to $100,000). The Harvard iLab has permanent senior staff that provides mentorship and business advice to start-ups. The iLab also has an Advisory Board that includes partners from venture capital, legal, and accounting firms that can provide guidance to start-ups. Academic incubators, such as the iLab, are typically non-profit organizations with funding coming from the university.

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\(^{91}\) Omidyar Network Research
Creating a Vibrant Entrepreneurial Ecosystem in India

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<th>Key recommendation: National Entrepreneurship Mission</th>
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<td>The Committee has made extensive recommendations that are relevant to a number of stakeholders both within the Governmental and Regulatory fold and those outside their immediate purview. The Committee believes however, that to build a vibrant entrepreneurial ecosystem leading to significant employment and wealth creation in the country, there has to be a sustained and continuous focus on the simultaneous and coordinated implementation of these measures.</td>
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Towards this objective, we recommend that the Central Government set up a National Entrepreneurship Mission (the “Mission”), whose sole focus will be to establish a vibrant entrepreneurial ecosystem in India. The Mission’s mandate, as one single entity within the Governments both at the National and State levels, will require it to pursue exclusively, the task of facilitating entrepreneurs and entrepreneurship. The Mission’s key roles will be:

1. The Mission will collaborate and work with all other entities, within Government and outside it, with the following objectives:
   A. Ensure that the promotion of entrepreneurship is continuously high on the agenda of all stakeholders
   B. Educate & inform all best practices globally & put forward well researched recommendations and action plans that would facilitate entrepreneurship
   C. Create appropriate measurements, methodologies and systems to track performance across various industries, in this area. A few of these for example, could be India’s global ranking in entrepreneurship, ease of doing business

2. The Mission would work closely with Government ministries/departments of Finance, MSME, HRD, Industry, IT, etc. at both National and State levels, many of whom have developed strategic plans of their own and seek to help them strengthen the element of entrepreneurship in those plans.

3. It would similarly work with Regulators, Banks, Financial Institutions, Angel investors, Venture Capitalists, industry bodies & Chambers of Commerce and educational institutions, both public and private, with the objective of regulatory outcomes which promote and facilitate entrepreneurship.

4. While the general approach would be to work in an enabling and coordinating capacity, it would have the lead role in the area of driving the financing part of the ecosystem which is the most critical component. In this area it would need to have appropriate empowerment whilst engaging with other stakeholders. In the area of financing, the Mission would be the sole recommending authority to the Government of India and counterpart bodies set up at the State levels.

5. This Mission would derive its unique strength and importance from the fact that it would be the most knowledgeable entity in India on the subject of creation and development of
Creating a Vibrant Entrepreneurial Ecosystem in India

an entrepreneurial eco system that will foster levels of innovation, enterprise and employment that the country needs, on a sustainable basis. It would therefore, be able to achieve a vast majority of its objectives without having an overarching mandate over other entities of Governments.

6. It would also become the nodal point for an entrepreneurship movement and in that capacity, articulate and disseminate the view point of the entrepreneurs amongst all the stakeholders within Government and outside – a capacity that is lacking today.

7. The Mission will develop a clearly defined plan of action, ownership of initiatives, key dependencies, resource requirements for research as well as designing, devising, driving, tracking, and monitoring progress of the initiatives and plans.

8. The Mission should ideally be set up under the Prime Minister’s Office which will give it the ability to exercise adequate influence without necessarily, a statutory authority.

9. The Mission would set up appropriate mechanisms and metrics that will allow it to track its impact on the entrepreneurial eco system in the country.

10. It would similarly help all other stakeholders in drawing up mechanisms to measure their impact on increasing entrepreneurial activity.