# Investing for Sustainable Growth: The Aavishkaar Experiment for Sustainable Financing<sup>1</sup>

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## Table of Contents

### Abstract

		<u>Page</u>
1.	Finance as a locomotive of growth	4
2.	Evolution of Venture Capital Industry in America	5
3.	Venture Capital unlocks 'catch-up' growth	6
4.	Non-traditional venture capital institutions	7
5.	Availability of Finance for the poor in India	7
6.	Venture Capital in India	9
7.	Rural Innovations in India	10
8.	Aavishkaar is a modest attempt	11
9.	Aavishkaar Mission and Organisation	12
10.	Aavishkaar source of funds and sustainability	13
11.	Aavishkaar Portfolio	14
12.	Enhancing Aavishkaar sustainability and growth	16
13.	A Catalyst for Positive Change	17

#### **Abstract**

The centrality of finance for enhancing development and growth even in developing countries is well established. In the United States, venture capital industry has been in existence since the end of World War II. It has helped to create many of today's global enterprises and a recent research report confirms that companies supported by venture capital in their formative years outperform those that were not, on many parameters.

However, despite the need for venture capital in bridging urban-rural income and growth divide, its availability in rural areas is sketchy even in America. Non-traditional venture capital is hamstrung by many constraints and successes are few. In India, venture capital industry in its present form and with a sound regulatory framework really came into existence in the second half of the Nineties. Venture capital funded firms have been predominantly in the areas of computer software and information and communication technologies.

Availability of all forms of financing for the poor - rural or urban - is improving slowly and yet the ground to be covered is vast. In this milieu, Aavishkaar (a Hindi word that means innovation) India Micro Venture Capital Fund came into existence to finance socially relevant, commercially viable and environmentally friendly enterprises that do not have access to project financing - loan or equity - from traditional financial institutions.

Aavishkaar India has made two investments and is breaking new ground. It is a pioneering concept for a developing nation and one that is funded purely by individual investors – a source of non-concessional funding.

Changes in the regulatory and banking environment, facilitating flow of funds to a non-traditional venture fund like Aavishkaar India, would strengthen its financial foundation and thus enhance its ability to promote sustainable growth.

#### Finance as a locomotive of growth

It is trite to say that finance matters for economic activity. In their insightful book<sup>2</sup>, Raghuram R. Rajan and Luigi Zingales present a forceful argument for unshackling and freeing finance such that it could play its due role in fostering innovation and supporting entrepreneurship. The authors cite the example of how restrictions in the US on foreigners raising money in US dollars led to the development of the Euro-dollar market in London and the development of London as a parallel global financial centre to New York.

Capital that is made available on the basis of relationships and patronage works to protect incumbents and thus indirectly stifles innovation and competition. On the contrary, capital that is free to find the most attractive use for it - unencumbered by non-economic considerations and protected by contracts and law - becomes a facilitator. Encouraged by the protection afforded by a legal framework and one that is functional, capital can be easily and will be made available to all those who need it.

The authors describe a search fund mechanism that enabled a Business School graduate to own a firm within two years of graduation. Search funds provide financing for budding entrepreneurs to search for firms that are willing to be bought out. Once the principal (the Business School graduate in this case) identifies such a firm, the contributors to the search fund get the first chance to invest in the acquisition of the firm by the Principal at favourable terms.

Hence, free availability of finance is a key pre-requisite for innovation and entrepreneurship, which, in turn, are necessary if not sufficient conditions for growth. Finance can take many forms. Laws and covenants of the debt contract usually protect debt. The borrower has to pay a fixed interest for the continuous utilisation of the loan amount during a specified period. Further, debt is usually secured against collaterals.

Equity is capital that allows companies and other legal business entities to raise further funds many times multiple of the same. Equity constitutes the residual ownership of the firm after other claimants are satisfied. Hence, equity owners bear a higher proportion of risk. Therefore, their participation in the firm's upside is unlimited once fixed obligations are paid off. Corporate structures also limit the liabilities of equity owners to the extent of capital committed and paid up. Thus, limited liability turned out to be an important innovation that allowed equity financing to take off and flow to enterprise activity.

<sup>&</sup>lt;sup>2</sup> Saving Capitalism from the Capitalists: how open financial markets challenge the establishment and spread prosperity to rich and poor alike, Random House Business Books (2003)

Venture Capital (VC) is an even riskier version of equity capital. The difference between equity capital provided to listed companies in a public fundraising and venture capital is that the early stage risks of a new enterprise are borne by venture capitalists. Venture capitalists usually support nothing more than a kernel of an idea.

#### Evolution of Venture Capital Industry in America

The OECD (1996) defines venture capital "as capital provided by firms who invest alongside management in young companies that are not quoted on the stock market. The objective is high return from the investment. Value is created by the young company in partnership with the venture capitalist's money and professional expertise."<sup>3</sup>

Twenty years ago, there were 25 American VC funds managing \$1billion, and investing about \$0.6 billion per year in 300 companies. By the year 2000, there were 1,000 VC firms in the US managing up to \$120 billion and investing over \$110 billion in over 7,000 companies.

"In the US, the breakthrough for venture capital occurred in 1979 when the US Department of Labour clarified the "prudent man rule" of the Employment Retirement Income Security Act (ERISA). Previously, the rule prevented pension fund managers from investing in risky businesses. In 1979, the Department of Labour decided that portfolio diversification was a good thing and that allocating a small fraction of a portfolio (about 5%) in venture capital funds would not be seen as imprudent. Thus was removed a major obstacle for huge amount of money flowing into the venture capital industry. "<sup>5</sup>

A study conducted by DRI-WEFA for the National Venture Capital Association (NVCA) in America claims that "venture capital-backed companies had approximately twice the sales, paid almost three times the federal taxes, generated almost twice the exports, and invested almost three times as much in R&D as the average non-venture capital-backed public company, per each \$1,000 of assets".

According to NVCA, the DRI-WEFA study also revealed that venture capital played a significant role in the creation of industry clusters. By funding the leading company within an emerging cluster, venture capital fosters a concentration of

<sup>&</sup>lt;sup>3</sup> Source: Venture Capital – New ways of financing technology innovation, II draft by Andreas Pfeil, Human Development Report Office, December 2000.

<sup>&</sup>lt;sup>4</sup> Same as in (3) above

<sup>&</sup>lt;sup>5</sup> Same as in (3) above

expertise and talent in that entity. When employees inevitably branch out to form their own businesses, a cluster of similar businesses with distinctive experience emerges. Examples of these clusters are presented in the box below.

Industry Cluster	Original Venture-Backed Company
Overnight delivery	Federal Express
Retail superstore	Home Depot and Staples
Online computer sales	Dell Computer
Internet service	AOL
Computer operating Systems	Microsoft
Biotechnology	Genentech
Source: DRI-WEFA and NVCA	

#### Venture Capital is a key that unlocks 'catch-up' growth

Venture capital is just as relevant for rural regions as it is for urban start-ups. Yet, capital does not flow there easily. This is as true for America as it is for India and other developing nations.

Traditional venture capital funds choose not to operate in rural places and in many small metropolitan areas because of $^6$ :

- Investment Opportunities with profit potential below that sought by traditional venture capital funds
- Too few investments to provide adequate deal flow
- Too great a physical distance between investment opportunities
- Inadequate infrastructure to support venture capital investment
- Difficulty in defining a viable exit strategy
- Limited interest by many small business owners in accepting the conditions set by the venture fund in order to get its money
- Difficulty in attracting venture capital staff to the region

#### Non-traditional venture capital institutions fills the void

Offsetting the absence of traditional venture capital funds are social or non-traditional venture capital funds. Although few and small, they offer a glimmer of

<sup>&</sup>lt;sup>6</sup> Source: NONTRADITIONAL VENTURE CAPITAL INSTITUTIONS: FILLING A FINANCIAL MARKET GAP. Part 2 of 4 of the Final Report. RUPRI Rural Equity Capital Initiative. Study of Nontraditional Venture Capital Institutions (Year 2001), page 6

hope to capital-short underdeveloped areas. Non-traditional venture capital differs from traditional ones in the following aspects<sup>7</sup>:

- (a) They tend to operate in areas to which traditional VC does not flow;
- (b) They accept returns that are lower than returns targeted by traditional  $\ensuremath{\text{VC}}$
- (c) They have a dual bottom line: acceptable financial returns with social and economic benefits to the areas served

They fall under six categories: Publicly funded and publicly managed institutions, Privately Managed Funds with Public funding or incentives, Community-Level Equity Programmes, Certified capital companies, Community Development Venture Funds and Small Business Investment Companies. Aavishkaar India could be considered as the Indian equivalent of a Small Business Investment Company.

The Ford Foundation's Program Related Investment (PRI), as old as late 1960s, was a pioneer in this regard. They also set up a \$ 100 million Local Initiative Support Corporation to fund local Community Development Corporations (CDCs) mainly working in housing and business restoration in depressed, crime-prone, inner city areas in the big US metros. Websites <a href="https://www.fordfound.org">www.fordfound.org</a> and <a href="https://www.trf.org">www.trf.org</a>, the latter being of The Reinvestment Fund, Philadelphia, provide more details.

There are a number of social venture funds in Europe too, such as the ones run by the Quakers in UK, the Triodos Bank in Netherlands and the Blue Orchard Fund.

#### Availability of finance for the poor in India

If the lack of availability of debt, equity and venture capital were the obstacle for rural and semi-urban America to bridge the gap with urban America, then one could hardly envisage a different scenario in a developing nation like India. More than venture capital, lack of all forms of reasonably priced finance remains on obstacle to the poor.

Mr. Vijay Mahajan, CEO of BASIX INDIA (a Micro Finance and Rural Livelihood Institution operating in India) in a presentation made to Micro Finance Institutions (MFI) from other parts of the world in October 2002 made the following observations:

(a) Banks in India were not willing to lend to micro-finance institutions as such lending was not counted towards their obligation to the priority

<sup>&</sup>lt;sup>7</sup> P2001-11A (Part 1 of 4 of the Final Report), RUPRI Rural Equity Capital Initiative, Study of Nontraditional Venture Capital Institutions (2001)

sector until the year 2000. Since then, after the rules were changed, it has risen to a cumulative outstanding of about USD 200 million.

- (b) Micro-finance institutions were not allowed to source funds from abroad. Thanks to efforts made in this direction, foreign lending to MFIs in India rose to USD10 million by 2002. There is also a lone equity investment, in BASIX, of \$ 2 million by the IFC, Triodos-Hivos and Shorebank.
- (c) Banks were allowed to lend to Self-Help Groups of women and such lending counted towards priority sector lending. Yet, they were unwilling to do so due to lack of understanding and transaction costs. Sustained educational efforts were needed to persuade them to do so. It has begun to pay dividends. Such lending has crossed a cumulative of USD 450 million by March 2003 -from nothing in 1995. Over 350 banks have lent to 700,000 Self-Help Groups with 12 million members.

Despite the impressive progress as seen above, timely availability of adequate finance to the poor remains an ongoing challenge. According to some estimates based on surveys, annualised credit usage by the nearly 50 million poor households in India from all sources is about USD 10 billion, of which over half to two-third is at usurious rates of interest from moneylenders and traders. The Census of India, 2001 showed that only about 30 % of Indian households have access to bank accounts - mostly savings, not loans.

The Census of Enterprises, 1998, showed that only about 4 percent of all enterprises in the informal sector accessed any credit from a bank or any other formal financial institution. This is despite various mandates and exhortations to Indian banks to lend to the "weaker sections" and all of this lending counting towards the "priority sector" (a much wider class, including agriculture, small industry, road transport and exports) obligation of 40%. One can calculate the distance that remains to be travelled.

#### Venture Capital is an infant industry in India

While urban India was somewhat better off in terms of access to loan capital, venture capital was not available on a wider scale even to the middle and upper income and wealth groups in a big way in India until quite recently.

Although the Government of India began toying with the idea of setting up a venture capital fund back in 1973, according to most observers, real VC investment did not begin to happen until 1998 when it exceeded 100 million US dollars for the

first time. However, a National Equity Fund (NEF) was established and administered by the Industrial Development Bank of India (IDBI) and later by the Small Industries Development Bank of India (SIDBI). This was used by banks to top up the "margin money" requirement from promoters, in deserving cases. In reality, the NEF amount was just another long-term loan, on which the bank took no risk. Only SIDBI did. Total disbursements are USD 30 million, too small for India's size, where the small and informal enterprises account for at least a third of the GDP of USD 450 billion.

Detailed regulations for the VC Industry were not introduced until 1995 and about twenty domestic VC firms were registered in the following five years. In 1999, VC investment in high-technology firms was of the order of USD320 million. $^8$ 

Most of these investments are above USD500,000 are more. They have served a purpose. They have unleashed the entrepreneurial zeal in the sectors where the urban educated were well positioned to take advantage of opportunities that arose from India's economic liberalisation.

However, given the scale of the problem of poverty and the need to achieve catch-up within a generation, Venture Capital has to be made available to prospective entrepreneurs who would require capital at far lower amounts than these and in rural India where two-thirds of India's population still lived. Agriculture, while being the mainstay of the average rural Indian, employed the most but contributed the least to GDP. Labour productivity in agriculture was not only low compared to other sectors (services and manufacturing) but also lower than it was in other countries.

The Deputy Governor of the Reserve Bank of India, Mr. Vepa Kamesam<sup>9</sup> refers to venture capital as a newer form of financing for Small and Medium Enterprises that needs to be fostered in India.

#### Rural Innovations in India

Innovations in rural India are such that the city-born and bred venture capitalist or banker has little empathy or understanding for. For example, given the resource needs and affordability constraints, India needs a small three-wheel tractor and not a 100 HP John Deer Tractor. It requires the use of bio-pesticides rather than

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<sup>&</sup>lt;sup>8</sup> Same as in (3) above (page 13)

<sup>&</sup>lt;sup>9</sup> 1 Address by Mr. Vepa Kamesam, Deputy Governor, Reserve Bank of India at OECD "Workshop on Entrepreneurship in a Global Economy: Strategic Issues and Policies" at Budapest in the panel "Identifying the Real Policy Issues" in the Session on "Improving Financing for Entrepreneurship and SMEs" on September 9, 2003

chemical pesticides. It needs to electrify its villages using micro-hydel systems, solar panels and solar lanterns.

#### The Cashew Processing units of Sindhudurg

Sindhudurg, a district in the western state of Maharashtra is famous for its cashew crop. The cashew produced in this town is taken to various part of the country for processing. The government felt that if processing units operate in the district itself, this would reduce the transportation cost and create small enterprises. The capital cost to set up such processing units was as low as US \$ 1000/- only. The Government introduced a subsidy of \$ 500 and remaining \$ 500 was made available to people as loan. 400 units came up in the district. However, 80% of these units closed down within a year. The reason was not far to seek. Subsidy and loans bought capital equipment but the entrepreneurs did not have the capacity to stock cashew for processing round the year.

Strictly speaking, this was the case of missing Working Capital and not Venture Capital. Nonetheless, the lack of timely access to funds prevents many promising enterprises from realising their potential.

While most of these innovations have tremendous and obvious social value, it is hard for the venture capitalist to figure out how to capture private commercial value from such innovations. As was pointed out by the Chief Executive Officer of Grassroots Innovations Augmentation Network (GIAN) in 2000 – arguably, the first grassroots innovations incubator in India – hardly any supporting mechanism existed in the country that supported innovations that save energy, improve efficiency and reduce drudgery in rural India.

The absence of an enabling environment meant that the innovator was not inclined towards entrepreneurship or in taking the idea and the product beyond his/her immediate surroundings. Where such inclination and skills existed, the innovator lacked financial support. It is hard to separate the cause and effect. Innovations require financing and financing is arranged when ideas seeking finance exist. They reinforce each other.

Aavishkaar is a modest attempt to boost fortunes at the 'Bottom of the Pyramid' Noted Strategy Consultant, C. K. Prahalad understood this well and the need for empowering what he calls Tier 4 or population at the 'Bottom of the Pyramid' that he defines as those with an annual per capita income of less than USD1500 (based on Purchasing Power Parity)<sup>10</sup>.

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<sup>&</sup>lt;sup>10</sup> The Fortune at the Bottom of the Pyramid – C. K. Prahalad and Stuart Hart

Before being able to market its products to this segment, he exhorts businesses to take the lead in creating buying power, shaping aspirations, improving access and tailoring local solutions. Professor Prahalad cites the example of Bangladesh' Grameen Bank as a successful example of creating buying power. More than its success in Bangladesh, that Grameen Bank has spawned hundreds of copycat Micro Finance Institutions around the world is a more eloquent testimony of the intrinsic attractiveness of the model.

While Grameen Bank pioneered the concept of lending to the poorest of the poor who have absolutely no access to formal finance, no credit history nor collateral to offer, Hernando de Soto in his book, 'The Mystery of Capital' suggested unlocking the value of real estate that 'illegal' squatters in big cities in the developing world are sitting on. He suggests conferring legal title on their land much as the US Congress did to the English settlers in the eighteenth century. Such title would enable them to collateralise their holding and raise finances.

Hence, it is clear that all of the intervention mechanisms aimed at bridging the urban-rural divide and the rich-poor divide converge on finance as the key to closing the gaps. To reiterate, Venture Capital is more enabling than other forms of finance as it shares risk, does not demand collateral and provides expertise to the enterprise such that its vision is realised. If finance is an enabler, then venture capital is empowerment because it does not bind the entrepreneur to any legal obligation except to succeed for his/her own sake. Indeed, Prahalad concludes his paper with the observation that empowering local entrepreneurs & enterprises was the key to developing Tier 4 markets.

Aavishkaar India Micro Venture Capital Fund was conceived to empower local entrepreneurs and enterprises, not with a view to creating a market out of them but with the goal of contributing to an improvement in rural incomes and wealth. It seeks to achieve that goal through the provision of entrepreneurial capital and expertise.

Aavishkaar thus is meant to unlock not only finance from investors but also innovations from innovators and entrepreneurs.

# <u>Aavishkaar Mission and Organisation</u> Aavishkaar India Micro Venture Capital Fund ('Aavishkaar')

(a) Seeks to provide venture capital to sustainable - socially relevant, environmentally friendly - commercial ventures that otherwise would not have access to capital from traditional sources of finance.

- (b) Aims to achieve commercial returns for its global investors such that the chain of innovation financing commercialisation and growth continues to be strengthened and
- (c) To achieve both the above goals by leveraging its India network to maximize the impact, in terms of growth, employment, productivity and return on its investments

'Aavishkaar' means innovation in Hindi. Hence, Aavishkaar concentrates on supporting micro enterprises based on grassroots innovations. The projects that Aavishkaar supports will be in the range between Rs.500,000 and Rs.5,000,000. Typical venture funds look at projects involving a minimum outlay of 10 million rupees.

Aavishkaar fills an important niche. Aavishkaar India is positioned between microfinance and traditional venture capital funds with its promise of equity support to small businesses. In doing so, it aims to provide capital at lower need levels than the ones that the SIDBI Venture Fund, aimed at small businesses, caters for. Our understanding is that SIDBI Venture Fund considers ventures that are of the size of Rs.20 million and above, for funding.

Aavishkaar consists of two parts. One is the venture fund - Aavishkaar India Micro Venture Capital Fund - operating on-shore in India. It is organised as a 'for-profit' Trust, registered with and regulated by the Securities and Exchange Board of India (SEBI). SEBI is the capital markets regulator and is the regulator for venture funds investing in Indian ventures, as well. According to regulations of SEBI, domestic venture capital funds must achieve a minimum capitalisation of Rs.50.0 million during the life of the Fund. It translates into USD1.1 million at current exchange rates.

Aavishkaar India has a three-member management team headed by a Chief Executive Officer and two project managers. Their tasks are, broadly, to source projects for investment, to evaluate projects, to prepare reports for the Management Board to approve investments, to invest in the selected projects in the approved manner, to monitor and mentor investments and to report the evolution of the commercial enterprise to investors and to the Management Board. While they work for a fixed remuneration, a suitable incentive scheme would be devised at the time of exiting investments.

The Management Board consists of six members and all of them serve in their voluntary capacity. In this regard, Aavishkaar India appears to be emulating the practice of the Small Enterprise Growth Fund in Maine. SEGF relies on a volunteer board for due diligence and investment decisions to reduce costs. One of the

limitations of a volunteer board is that the board cannot be held accountable by investors for investment decisions that went wrong. Aavishkaar solved that problem by co-opting investors to serve in the Management Board. Hence, it is in the interests of the Board that adequate care and diligence is exercised in approving investments and in nurturing the investment portfolio.

The second part of the Aavishkaar Organisation is Aavishkaar International Private Limited (AIPL). AIPL has been set up as a private limited company in Singapore to aggregate individual investments and remit the funds to AAvishkaar India under a single approval from the Foreign Investment Promotion Board of the Government of India.

#### Aavishkaar source of funds - is it sustainable?

To date, Aavishkaar International and Aavishkaar India boast of nearly 40 investors including two investors who have invested directly in Aavishkaar India in Indian Rupees. The reliance on individuals has its pluses and minuses. Funds were sought from a close circle of friends and relatives of the Fund promoters, in the first round. Hence, establishing trust and goal congruence was not a big hurdle.

However, many questioned (and still do) the viability of undertaking small investments and hence the indicated prospective return from investing in the venture fund was not alluring to them. The promoters reckoned that, based on certain assumptions about the failure rate of portfolio investments, the Internal rate of return generated by the projects, etc., a return slightly in excess of the rate offered on medium-term deposits in Indian Rupees of around 9% per annum. This was not an alluring proposition. However, most of the investors chose to participate in the Fund out of a desire to contribute to a novel concept and due to the obvious social value of boosting entrepreneurship at the bottom of the income pyramid.

The heartening prospect is that if the Fund is able to establish its commercial value based on positive cash flows from its portfolio or through successful exit from some of the investments, then substantial additional investment from existing investors would be likely as are positive referrals to others.

Aavishkaar has not succeeded in raising funds from institutional investors - whether Indian or foreign. Institutional investors would have been a mixed blessing, in any case. With their financial muscle, they could impose their investment preferences. They might not fully share the objectives of the fund to invest in enterprises that have obvious commercial and social value. Their slant could be more towards commercial value.

On the other hand, some institutional investors, who are intent on creating social value, find that Aavishkaar is not so committed to social value-creation, as they would like it to be. For instance, the world over, micro-finance is understood to stand for loans that are as little as USD50 or 100. Hence, they expect Aavishkaar India Micro Venture Capital Fund to provide equity capital to the tune of USD1000 or USD2000. That, in their view, would be consistent with the name of the Fund.

Aavishkaar, in the eyes of its promoters, occupies the vast middle ground between micro-finance and traditional venture capital. Equity financing at different levels is possible, subject to transaction costs and feasibility of identifying, mentoring and monitoring large number of such small equity investments.

We believe that, with its current mandate of offering equity financing from USD10,000 to USD100,000, Aavishkaar is ahead of its time and its success (or failure) would encourage (or dissuade) other traditional venture funds with deeper pockets to enter this domain. Hence, for Aavishkaar to truly become a microventure fund, as per internationally recognised meaning of 'micro', its viability and sustainability at the current scale of operations needs to be established first.

#### Aavishkaar Portfolio

Aavishkaar India made its first investment in November 2002 in Servals Automation Private Limited (SAPL). SAPL has licensed two patented innovations from the innovators. One is a rain-gun (water-sprinkler for small farms, lawns and gardens) and the other is a fuel-efficient and safety-enhancing burner for kerosene stoves.

The fuel efficiency of the burner has been certified by the Central Scientific Instruments Organisation, a unit of the Council for Scientific and Industrial Research of the Government of India and repeat-tested and efficiency confirmed at Anna University in Chennai (Tamil Nadu, India). The burner will have wide application in rural India both in homes and in tea-stalls. Demand is likely to arise in other South Asian nations too.

Rain gun is an irrigation system, mostly in vogue in western countries and is a relatively new concept to India. It was an indigenously designed rain gun by a farmer from Karnataka. The innovator was inspired by the imported rain gun, but felt that they were too expensive for Indian farmers.

'ChandraPrabha', as the new rain gun is known is close to the normal sprinklers system but provides a jet of water that can irrigate land in a radius of 90 feet. The rain gun has the biggest social benefit due to its effective water saving of the

order of 50% over conventional flood irrigation systems. This is especially vital in case of crops like sugarcane that consumes a large quantity of water.

The second project that Aavishkaar India funded was Shri Kamdhenu Electronics Private Limited (SKEPL) in April 2003. The product portfolio of SKEPL (called 'Akash Ganga') includes Micro Processor based Milk Collection System, Computer based Milk Collection System, Milk Analyser, Dock Automation System and Truck Route Monitoring System with particular focus on Milk Collection system and Milk analyser. Aavishkaar India felt that 'Akash Ganga' products were examples of the exciting application of technology to the rural domain with a commercial objective.

Many others have shared our judgement. Digital Dividend, affiliated to the World Resources Institute, has published a case study on SKEPL (<a href="http://www.digitaldividend.org/knwldge\_bank/knwldge\_bank\_01\_akash.htm">http://www.digitaldividend.org/knwldge\_bank/knwldge\_bank\_01\_akash.htm</a>). The potential of SKEPL to make a difference to the dairy world in India is huge.

In his paper, 'The Fortune at the Bottom of the Pyramid', C.K. Prahalad gives a glimpse of that potential: "Twenty years ago, milk was in short supply in India. Today, India is the world's largest producer of milk. According to India's National Dairy Development Board, the country's dairy cooperative network now claims 10.7 million individual farmer member-owners, covers 96,000 village-level societies, includes 170 milk producer unions, and operates in more than 285 districts. Milk production has increased 4.7 percent per year since 1974. The per capita availability of milk in India has grown from 107 grams to 213 grams per day in 20 years.

Aavishkaar India made its third investment in TIDE Technocrats Pvt. Ltd (TTPL), a company established in January 1995 and located in Bangalore, Karnataka. TIDE Technocrat intends to operate in the niche area of renewable energy based power generation technologies such as micro hydel projects for electricity generation, bio-methanation digesters and Gasifier technologies for Industrial Boilers using biomass waste.

TTPL as an investment opportunity is about a combination of ideas that may have a long-term impact on rural India. There are few, if any, professionally managed businesses in the country operating in the areas of Micro Hydel Systems (MHS) and processed biomass.

Micro-hydel, at a conceptual level is an established technology. However, the market opportunity for Micro Hydel Installations is scattered. TTPL reckons that there are about 700 large plantations in Karnataka of which about 45% have indicated interest in adopting Micro Hydel technology.

Fronds Processing adds value to local unused material and the rides on its calorific value to find industrial end users. Sugar Factories in Karnataka are potential markets. 38 Sugar Factories and 40 biomass based Independent Power Producers are the identified markets for processed biomass.

The strength of TTPL lies in its promoters. The two promoters are young, enthusiastic and transparent individuals. Both posses good academic record and come from reputed Institutions (IRMA And INSEAD, France) and have a strong desire to operate within rural and renewable domain.

The other major strength of TTPL is its strong link with Indian Institute of Sciences and TIDE (an NGO operating in the renewable energy space). TTPL has board members from both institutions and share strong linkages professionally and personally.

The pipeline of projects seeking funding is steadily increasing as the news of the creation of Aavishkaar India and availability of venture capital for small and medium enterprises spreads.

#### Enhancing Aavishkaar sustainability and growth

The Indian Venture Capital Association (IVCA) is the nodal centre for venture activity in the country. The association was set up in 1992 and over the last few years, has built up an impressive database. According to the IVCA, the pool of funds available for investment to its 20 members in 1997 was Rs25.6bn. Out of this, Rs. Ten billion had been invested in 691 projects.

Traditional venture capital funds operating in India typically make investments in the following categories: less than US\$1mn, US\$1-5mn, US\$5-10mn, and greater than US\$10mn. As most funds are of a private equity kind, size of investments has been increasing. Information Technology (IT) start-ups generally require funds of about Rs. 30-40million in an early stage which fall outside (i.e., below) funding limits of most funds and that is why the government is promoting schemes to fund start-ups in general, and in IT in particular. <sup>11</sup>

If government support is required for funding purely commercial ventures, one can visualise the difficulties in attracting funding for non-traditional venture funds whose commercial returns are likely to be moderate and social returns high.

<sup>11</sup> Information provided in the first two paragraphs in this section are drawn from 'Venture Capital Lessons' provided by IndiaInfoLine.Com (http://www.indiainfoline.com/bisc/veca/ch05.html)

According to RUPRI, in the US, "the focus on social benefits and economic development goals may enable an institution to attract investments from banks seeking to meet Community Reinvestment Act (CRA) requirements. The Appalachian Ohio Development Fund (AODF) was successful in using CRA requirements to attract bank financing for capitalization of its fund." The Shorebank Group, started in 1976, is now a USD 1.5 billion institution, working though its banking and non-profit subsidiaries in the lower-income Southshore neighbourhood of Chicago and other areas in the US.

If banks could be allowed to contribute to the corpus non-traditional venture capital funds and if such contribution counted towards their obligations to the priority sector, then the flow of funds to the non-traditional venture capital industry would increase. Indeed, given that the Deputy Governor of the RBI had identified venture capital as the next frontier in the financing of SMEs, it should be possible for the apex bank to initiate steps in that direction.

Further, incubation centres attached to technical education institutions should be set up in sufficient number and within accessible distance of most village clusters such that innovations could be documented, incubated and made ready for commercialisation.

The contribution of venture capital funds lies not just in providing financial resources but also in managerial expertise. It is normally done through the VC Fund taking up a Board seat in the company funded. In India, there is a risk that external directors could be subject to legal risk for the acts of commission and omission of the management. Granting legal immunity for non-executive directors would facilitate their participation in and contribution to the management of the funded companies.

#### Aavishkaar India hopes to be a catalyst for positive change

It is little over twelve months since SEBI, the capital markets regulator, permitted Aavishkaar India to commence its investment activity in the country. This past twelve months has been a period of continuous excitement and learning for all of us in Aavishkaar and it is only the beginning. As a pioneering venture fund dedicated to small and medium enterprises, Aavishkaar Management Team and its Management Board members are constantly learning the grassroots realities, imperatives and funding needs. At the same time, Aavishkaar India Management Team is educating prospective entrepreneurs, alliance partners on the priorities of Aavishkaar India as a venture fund.

Preparation of a long-term business plan, sharing of information, financial projections over a five-year period, making implicit underlying assumptions explicit,

identifying operational and external risks are some of the aspects that Aavishkaar India constantly seeks to impress upon prospective entrepreneurs and most often, with success.

To reiterate, Aavishkaar India is breaking new ground. Hence, identifying projects to be considered for investing remains an unstructured exercise, conducted through mostly personal contacts in rural India, Internet Search and conversations with various grassroots organisations.

Aavishkaar India had anticipated this issue to some extent. It entered into Memorandums of Undertaking with several institutions to assist in identifying suitable projects for investment. Among these were Infrastructure Development and Finance Corporation (IDFC), Ashoka Foundation, Rural Innovation Network (RIN) and others.

Aavishkaar India believes that its presence, over time, would give rise to positive changes in the legal, regulatory and institutional structure of the non-traditional venture capital industry in India and smoothen the process of identification and funding of eligible projects. Through its hands-on investing experience and advocacy, Aavishkaar India is confident that it would be a catalyst for positive change in these areas.

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