

REVOLUTION ON THE PERIPHERY

They are young and driven by a vision. Of empowering rural India by incubating ideas, setting up enterprises, generating employment and co-creating wealth in the villages of the country, says **K. G. Sreenivas**

Sreejith, Saloni and Paul are driven by a shared vision. Sreejith N.N. heads ROPE International, Saloni Malhotra leads DesiCrew while Paul Basil steers Villgro. ROPE, or Rural Opportunities Production Enterprise, co-founded by Sreejith and Patrick Fischer, aims to “bring manufacturing opportunities to rural India and create employment opportunities for the rural unorganised sector workers through a replicable, scalable and commercially viable ICT-enabled rural distributed manufacturing model,” says Sreejith.

In the mid-2000s, the BPO rush began in India. Saloni observed that though it offered an amazing rush of jobs and seemed to be an attractive financial proposition for freshers, salaries were still small and attrition was high. “It would be more useful and productive to take jobs where it would be closer to people’s homes. Also, in a rural context, the money would be distributed locally, supporting the local economy and generating incomes,” said Saloni whose DesiCrew today is quietly ushering in a back-end services-driven BPO market in the rural environs of Tamil Nadu.

On the other hand is Paul who through Villgro is forging an ecosystem to incubate ideas and innovations, like ROPE and DesiCrew, to fuel development in rural India. “Villgro stands for growth of villages. The dream of a prosperous rural India is what set me on this journey a decade ago. I was convinced that innovation and enterprise could address the rural poor, specifically, the small and marginal farming communities,” says Paul.

Sreejith has set up a network of rural production centres in a host of villages in Erode, Madurai, Thanjavur, Theni and Thiruvalluvar in Tamil Nadu where artisans use locally available and environment-friendly materials, such as banana fibre, elephant grass, *korai* and *sisal* (types of reed) to craft custom designed complimentary and lifestyle products. Sreejith’s ROPE, which sub-supplies to global furniture maker IKEA, today services top clients like AIIIMS, FabIndia, Indstree Crafts and Mihika besides a number of overseas customers.

How did Sreejith tap the social, economic and commercial context while setting up ROPE? “Inspired by the success of outsourcing from the West to the East in creating large-scale job opportunities in Indian cities and inspired by attempts at setting up BPO centres in smaller Indian towns to bring further shift of jobs from cities to semi-urban and rural areas, a small group at the TeNeT (Telecommunications and Computer Networks) of IIT Madras thought about a similar model to bring manufacturing opportunities to Indian villages. Thus ROPE was born initially as Rural Outsourced Production Enterprise in January 2007.

ROPE found rural India needs more manufacturing opportunities (as it cannot any longer depend on agriculture alone) and rural India has the potential to do large-scale manufacturing.” A distributed production system, however, would be key to the entire process. “ROPE decided to focus on a distributed production system in the form of networked small-scale production units as



the most scalable, environment-friendly, sustainable approach to a rural manufacturing model. Globally, too, the concept of distributed production systems is gaining ground as opposed to large industrial set-ups,” Sreejith says.

“Distributed production systems are more flexible, more economically resilient, less environmentally polluting, can lead to more efficient use and value addition of local resources, creates more equitable growth, helps greater diversity in products and lead to greater team spirit and more product and process innovations within small units,” he adds.

A similar paradigm was also central to Saloni’s model. “The question was how you could demonstrate a successful commercial model in smaller towns? Why or how cannot, for example, an insurance company set up back-up operations in a small village? Of course, BPOs are about economies of scale and dollar convergence. But our attempt was to work a smaller but scalable model, say about a 25-30 seater BPO,” says Saloni.

The engineering and success of a vision is dependent on goal-setting. What were Sreejith’s immediate and long-term goals? “The immediate goal was to identify and focus on a suitable market or a dedicated buy-back partner in the form of an established industry, set up the first few distributed rural production centres and develop the required IT-based systems and processes for production and supply chain management. The long-term goal was to pioneer this manufacturing model and establish a large

number of such networked rural production centres catering to the demands of a number of industries, both inside and outside India.”

As far as Paul was concerned, envisioning and goal-setting was a drawn-out process and work in progress. “The vision evolved over time. While the dream was to create a prosperous rural India, the vision was to use innovation and enterprise for that and the mission was to enable innovations to reach the markets. Over time, we realised that our vision should be much broader, that is, creating an eco-system that favoured innovation and enterprise,” says Paul. (see *interview*)

IDEATION AND TURNING POINT

Dr. Ashok Jhunjhunwala, a much decorated and distinguished grassroots visionary, and who heads the Electrical Engineering Department at IIT-Madras and is also Chairman of the Board of Directors of what is now an iconic institution, the Rural Technology and Business Incubator (RTBI), has been a common link among Sreejith, Saloni and Paul. The catchline of the institution is emblematic: *incubate... ideate... innovate*.

Asked about what was perhaps RTBI’s most outstanding success thus far, Prof Jhunjhunwala said, “We would rather see it in terms of having brought in a culture of entrepreneurship into rural India; of having helped in forging an academia-industry relationship; and, of positioning technology to play a key role in the life of the deprived.” (see *interview*)



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This opened our eyes to the richness and diversity of eco-friendly, renewable natural fibre resources of our villages. As the world moves towards 'green' natural products, ROPE decided that the use of renewable, environment-friendly natural fibres, together with locally available skills to manufacture custom designed products for buyers, as the best fit for a distributed manufacturing model.”

—Sreejith N.N.



Referring to the process and time taken to incubate an idea, Prof Jhunjhunwala says, "Typically in a rural setting handholding is longer while in urban centers it is shorter. It is self-explanatory. The environments are different, rural India has far more complex problems. DesiCrew, for example, took two years. Other mentors come in, funders come in and a lot of new ideas too come in. Ideas come in, especially from three sources: experienced industry persons; faculty with wide knowledge; and, youngsters, who have just joined a company and come up with crazy ideas. They have the ability to plunge into ideas."

Sreejith corroborates: "Our evolution was a result of continuous discussions held by Patrick Fischer, another co-founder of the company, and I with Dr. Ashok Jhunjhunwala and Dr. Aarti Kawla, another board member of ROPE, who is an expert in design and crafts and was also a consultant to TeNeT at that time. The acceptance of our model by Dr. Jhunjhunwala and his Rural Technology and Business Incubator (IIT Madras); support from Villgro Innovations Foundation, Chennai; investment by National Research Development Corporation (NRDC); my meeting Fischer who joined us as my partner and co-founder of the company; and our chancing upon Industree Crafts' bulk raw material requirement through the efforts of Dr. Aarti Kawla were all critical turning points for the company."

Saloni says: "Prof Jhunjhunwala helped us in setting up DesiCrew. We had three options — Rural Technologies, Rural Edu-

The ROPE market

- The Global home decor and furnishings market is worth \$1.2 trillion, including kitchen, housewares, furniture, home textiles, appliances, outdoor living, art/wall decor and lighting. The US market alone is worth \$270 billion
- The global home furnishings market size is \$70 billion, growing at an average of 5 percent per annum. High-value Indian exports in this is \$1.2bn/annum, growing at 30 pc
- Though the specific market size for eco-friendly natural products in the above segments is not available, a significant percentage is available for natural products and that market is growing at a faster pace
- The current Indian exports of specifically non-cotton, non-silk, non-wool natural fibre based home decorative accessories is estimated at just \$25 million growing at 20pc per annum
- Dry flower exports from India is approximately \$100 million and is another target segment of ROPE
- New and unconventional demand for natural fibre uses are also emerging like paper manufacturing, use in veneers, packaging, wall panels, etc. Some of ROPE's existing customers are in these segments

cation and Rural BPO. He advised us to look at the rural BPO sector. IIT Madras does a lot of work in rural areas of the country. They helped us understand the nuances of development, particularly rural development. They also helped us network with a wide variety of people and resource persons." Paul acknowledges the importance of 'ecosystem' and symbiosis (between Villgro and IIT-Madras), ideas Prof Jhunjhunwala says are crucial to incubation. "We have now set ourselves in that direction [innovation and enterprise]. This explains why we are located at the fabulous IIT-Madras Research Park, an eco-system of technology-based institutions," says Paul.

PUTTING VISION INTO ACTION

Social entrepreneurship needs to be commercially viable too, to be of credible benefit for all stakeholders, particularly for those at the bottom of the pyramid who form the heart of the system. Sreejith elaborates: "The search for a commercially viable business model using distributed and networked production centres led ROPE to think that we should look into the sustainable and competitive advantages or strengths of our villages while looking for suitable sectors to enter.

"At the same time, a Bangalore-based organisation called Industree Crafts approached us to set up banana fibre rope production centres to meet the growing demand for this raw material which is used to manufacture natural products. This



Relationships matter a great deal in growing, scaling and diversifying the business module that Sreejith's ROPE International (far left) and Saloni's DesiCrew (above) follow.

opened our eyes to the richness and diversity of eco-friendly, renewable natural fibre resources of our villages. Each and every village in India has certain natural fibre resource available and there is great diversity and uniqueness in these renewable fibres available in each region. As the world moves towards 'green' natural products, ROPE decided that the use of renewable, environment-friendly natural fibres, together with locally available skills to manufacture custom designed products for buyers, as the best fit for a distributed manufacturing model. With this business model, ROPE was incorporated as a private limited company in December 2007 and soon ROPE's expansion was changed into Rural Opportunities Production Enterprise (ROPE) to represent



INTERVIEW / PAUL BASIL

FOR AN ECO-SYSTEM OF INNOVATION AND ENTERPRISE



Villgro seeks to adapt technology-based innovations to offer new solutions to an existing problem or an existing solution to a new problem. Left: Various Villgro rural enterprises.

Founding vision of Villgro...

Villgro stands for growth of villages. I was fairly convinced that innovation and enterprise could address the rural poor, specifically, the small and marginal farming communities.

The vision evolved over time. It was to use innovation and enterprise for that and the mission was to enable innovations to reach the markets. Over time we realised that our vision should be much broader, that is, creating an eco-system that favoured innovation and enterprise. As we were incubating innovations, we found a few pressing challenges. The first being last-mile access to the end customers of ours, the rural poor. All entrepreneurs that we were incubating had to set up

their own marketing channels. Imagine the cost and time it would take to build channels among the poor. Thus came the vision of Villgro Innovation Marketing Private Limited, a for-profit chain of stores in villages, supported by a network of village level entrepreneurs.

Incubation is a very time-consuming, costly and risky activity. We realised that to nurture this model, we need to partner with other players. And thus was born our co-incubation approach to incubate more and more enterprises. Co-incubation is nothing but two incubators coming together to offer services to the same incubatee. This way we leverage each other's strengths and make the best use of each

other's geographical locations while serving incubatees.

Around 2004, after C.K. Prahalad had written *The Fortune at the Bottom of the Pyramid* and at a time when micro-finance had really matured, a number of social venture funds were set up. However, few could fund in the range of \$50k-150k. This seed capital was necessary to kick-start these enterprises. Our vision was to set up the Villgro Fund for Innovation and Rural Enterprise.

Putting together the human and financial resources...

The start is a point of challenge for any organisation — limited resources and blurred vision. With regard to financial resources, Villgro was fortunate to

have a two-year funding support of Impact Partners and lots of personal support from its founder Deval Sanghavi. Subsequently, we attracted grants from foundations in India and the US. The new entities in the form of Villgro Marketing Pvt Ltd and Villgro Fund will attract patient commercial capital in the years to come.

Our formative years were chaotic. Serving the rural poor through innovation and enterprise is not something that has been clearly structured in terms of formal training, though there are rural marketing courses. This need motivated us to inspire IIT-Madras to set up a credit course on Innovation and Social Entrepreneurship for its undergraduate students. We also

helped IIT-Madras to set up a new Centre for Social Innovation and Entrepreneurship with the objective of increasing research and education in the field of innovation and social entrepreneurship.

On the "innovations" route...

Technologies and technology-based innovations have always changed lives, impacted millions, such as mobile phones to ATMs to credit cards. However, when it comes to those who can't afford them, we keep away from even attempting to develop market-based solutions. Innovations like micro-finance have made millions bankable and have transformed their lives. In the initial years we were focused on product innova-

tions, we still continue to do so. But increasingly we have started pilots with services, innovations around business models. Innovations challenge the status quo, new solutions to an existing problem or an existing solution to a new problem — both ways, opportunities are plenty.

One defining characteristic of incubatees...

Our incubatees are committed and visionary innovators and entrepreneurs whose ideas are compelling and can impact the rural poor in a commercially viable manner and have the potential to scale. The markets that they have chosen to serve, perseverance in doing so, the ability to embrace uncertainty makes them unique. Incuba-

tees are both urban and rural. Example of a rural entrepreneur is P.Vivekanandan of Vivega Engineering Works who has developed the Pin Pulveriser.

Scouting for innovators...

Scouting is through multiple means. Wantrapreneur, our annual business plan competition, discovers innovative entrepreneurs. We sponsor other business plan competitions such as Sankalp and Genesis. Our team reviews the patent applications and discovers compelling ideas from that pool. Our partnership with the Agri-Business Incubator and ten other leading research institutions under the Indian Council for Agricultural Research gives us access to hundreds of new product ideas. We provide

seed funding, networking, mentoring, talent, go-to-market services etc. We exit when the incubatees have a good management team, sales turnovers look poised for growth and they have raised the first round of institutional investments.

A new idiom?

The poor have problems and these problems bring with it opportunities for solutions. The poor do not need charity. They need access to affordable and reliable products and services. By incubating such innovations, we bring to rural India a new wave of social capital, products/services, talent and an eco-system that furthers innovation and enterprise leading to rural prosperity.

a broader approach to huge opportunities presented by the unique strengths of our villages."

Leveraging the strengths of the rural local communities obviously is of the essence. Saloni says, "As a business, the BPOs are a proven model across the world. It is scalable too. We have at the moment around 170 people, we now plan to scale up to 1,000 to 2,000 in the next couple of years. Till last year, we had operations in Tamil Nadu alone but this year we are looking at Andhra Pradesh and Karnataka. Tamil Nadu is progressive, has excellent infrastructure, good literacy and internet penetration up to the taluka level. Even in rural areas, people understand English, they may not be proficient but they can communicate."

In fact, Saloni makes a deeper sociological point, which is also critical to the success of the idea of rural entrepreneurship. "People in small rural communities are committed. They may be lacking in communication skills and exposure that urban youngsters have in abundance. Traditionally, BPOs are well established,

mostly run like factory floors. We decided to do it differently. We help establish a certain comfort level for our employees, especially socially and culturally. Team leaders or managers go out and build relationships with the local community."

Obviously, relationships matter a great deal in growing, scaling and diversifying a business model that Sreejith, Saloni and Paul have embraced and are nurturing. Saloni elaborates: "In rural communities, for example the micro-finance model has worked exceedingly well. Repayments are as much 99 percent as opposed to urban credit card payments where default is very high. There are strong moral and social sanctions that bind the communities together. So, people take pride in their work and are conscious about how they are seen by the community." Social commitment and commercial viability are no contradiction in terms.

Sreejith says: "Our philosophy for social impact is to maximise rural employment in our villages through our distributed production centres instead of the 'maximising profit' motive of nor-

mal private enterprises. At the same time to be commercially viable we focus on being competitive in servicing our customers in terms of our pricing and consistently achieving quality and quantity targets. Marrying these two objectives, we are targeting high volume-manufacturing opportunities for large key account customers. These high volume-manufacturing opportunities will not give us high margins as we are competing with manufacturers from China, Thailand, Vietnam and other South Asian countries. So we target a commercially viable margin and maximise our returns and rural impact by the scale or volume of the units manufactured."

PUTTING IT ALL TOGETHER

Resourcing is key — seed capital, human resources and training. At DesiCrew, Saloni says she made a modest start but went on to expand. "As far as funding was concerned, I put in some of my personal funds while Prof Ashok's Rural Technology and Busi-

ness Incubator (RTBI) at Madras IIT helped us with the rest. Then in mid-2008, we had an angel investor in Rajiv Kochhar, an ex-Infoscion, who came on board. We now run on our own revenues."

Eventually, running on one's own steam would be critical to any self-sustaining venture. Serendipity could help occasionally, but there is little substitute for hard planning, envisioning and the right mix of people and resources. Sreejith elaborates on ROPE: "Patrick and I became co-founders and the senior management team. Dr. Aarti Kawlra was another promoter-director of the company. Patrick also invested in the company and apart from that we received an initial debt funding from LRAMP, which was an innovation nurturing and development programme founded by IIT Madras and Villgro Innovations Foundation with support from Lemelson Foundation, US."

Referring to the management side of it and oversight, Sreejith says, "We set up a Board of Directors comprising Kunal R Sachdev, Founder and Managing Director of Caravan Crafts Pvt.



INTERVIEW / ASHOK JHUNJHUNWALA

SHIFTING SERVICES AND MANUFACTURING TO RURAL INDIA WOULD BE THE MOST DEFINING IDEA OF THE FUTURE



“

We would rather see it (successes of incubation) in terms of having brought in a culture of entrepreneurship into rural India; of having helped in forging an academia-industry relationship; and, of positioning technology to play a key role in the life of the deprived”

—Ashok Jhunjhunwala

PB: When did the idea of “incubation” strike you? What was the founding vision of Rural Technology & Business Incubator?

The idea of incubation began forming around the mid-80s. I had joined IIT and had also begun consulting with industry who would often come to us with questions on machinery and technology. Could we fix this part of a machinery or could we fine-tune this part of a technology? Such were the queries. I found that generally innovation was missing in Indian industry.

We then thought we could perhaps tap our alumni who could devise and design products as solutions to questions industry often posed. They even set up two companies Benchmark Systems and Comportex Electronics geared towards innovations. Towards the mid-1990s, we set up Midas Communications to devise wireless (local loop) systems at a considerably lower cost. Subsequently, we helped incubate as many as 12 companies. Until then the whole idea of incubation was urban-centric.

At the end of the 20th century, there was refocusing... away from urban India to rural India. As of now, we have incubated 30 companies, 15 urban and 15 rural. It was also around the time that India began to make rapid strides in technology-driven development. But again it was rather urban-focused. In a democratic environment it was bound to create tensions. We decided, therefore, that technology people should focus on rural India and its concerns in a serious manner.

PB: The single most defining feature of the proposals you have received and incubated?

The key focus was to significantly reduce cost price. The price point needs to be right for customers to be able to afford technology or innovation. The order of magnitude was key. For example, telephony cost Rs. 40,000 in the 1990s, we innovated and made it available at Rs. 10,000. An ATM typically then cost Rs. 500,000. We devised one called ‘Gramateller’ for Vortex Engineering Pvt Ltd

at below Rs. 100,000. In terms of vision, DesiCrew and ROPE, for example, wanted to create and sustain employment in rural India. So we went from telecom to education to energy and so on. Today, as you see development has rapidly moved from the West to the East. Similarly, we should be able to shift services from urban to rural India.

PB: Typically, how long is the guiding, funding and hand-holding stage of the incubatee?

Typically in a rural setting hand-

holding is longer while in urban centers it is shorter. It is self-explanatory. The environments are different, rural India has far more complex problems. DesiCrew, for example, took two years. Other mentors come in, funders come in and a lot of new ideas too come in. Ideas come in, especially from three sources: experienced industry persons; faculty with wide knowledge; and, youngsters, who come up with crazy ideas. They have the ability to plunge into ideas.

PB: What have been some of the most outstanding successes you have helped forge?

We would rather see it in terms of having brought in a culture of entrepreneurship into rural India; of having helped in forging an academia-industry relationship; and, of positioning technology to play a key role in the life of the deprived.

PB: On auditing projects and re-engineering project models...

We meet every month to evaluate these projects. The general

success rate has been 10 to 15 percent. We plan to raise it to 25 percent. However, newer business models and newer business leaders emerge. So, there are a slew of ideas.

PB: The defining ideas for the future, with reference to rural enterprise, innovation and development...

Shifting services and manufacturing to villages would be the most defining idea of the future. The direction of DesiCrew and ROPE is one such.

Ltd., Bangalore, who came on board as a representative of NRDC and who was previously CEO of the famous leather accessories brand Hidesign — apart from Dr. Aarti Kawra, Patrick and me. Dr. Ashok Jhunjhunwala and Paul Basil, Founder and CEO of Villgro, comprise the advisory committee and they both are permanent invitees to the board. Using the investments we received from Patrick, NRDC and Villgro and under the guidance of the Board and advisory committee the management team hired the other required human resources.”

TRAINING

For success on the ground, training is critical. Saloni keeps it simple, effective and customer/product oriented. “Our training is spread across three months. We have modules in English, Mathematics and Analytical Skills. We also impart training in manage-

ment, essentially in acquiring a client perspective and knowledge about product management. Their competition is with BPO markets like Vietnam and Philippines,” Saloni says.

At ROPE, Sreejith has outlined essentially two main types of training. It is interesting to note that again the training is customer oriented and order specific. Much if it is also gained on the job itself. “One for existing artisans like handloom weavers where it is mainly product specific and order specific training during which we educate them on the particular design and quality requirements of a product. A major portion of this training will be on the job itself,” Sreejith says.

A second area of training focuses on unskilled workers, mostly for hand-driven production skills like crochet or basket weaving. Classical assembly-line principles also come into play. “We have arranged professional trainers and conduct

classroom/formal training sessions. Later, they will be engaged to work on simple designs, gradually increasing the complexity of the product and their skill levels. In most of the orders for handmade products we adopt an assembly-line system through division of labour so that productivity is enhanced by specialisation while reducing the level of skill required by the worker/artisan.”

Have these rural entrepreneurs developed or evolved a new management idiom or a new management philosophy? Sreejith invokes C.K. Prahalad. “We believe we have not developed any new management idiom or philosophy. It was already identified by many that rural areas present unique opportunities for businesses. Prof. Prahalad visualised the potential of the bottom of the pyramid primarily as a big market. At the same time many others were considering

the bottom of the pyramid as possible supply sources for the urban market or for urban industrial companies. We were a bunch of people interested in the idea of wealth generation in rural areas and developing supply bases in rural areas for urban markets. Then found that given the enormity and diversity of our rural areas a decentralised approach suits it best.”

Paul puts it rather evocatively: “The poor have problems and these problems bring with it opportunities for solutions. The poor do not need charity. They need access to affordable and reliable products and services.

“By incubating such innovations, we bring to rural India a new wave of social capital, products, services, talent and an eco-system that furthers innovation and enterprise leading to rural prosperity.” ■