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Rural Markets for Technologies - Present Indian Scenario

K. CHATTERJEE
National Metallurgical Laboratory, Jamshedpur-831 007

Abstract : Indian villages were literally self sufficient in ancient days as is evident from our Puranas and Vedic literatures. The colonial rule had destroyed that fabric in their own interest and we lost our tradition not only of self-sufficiency but also of the creative mindset necessary for starting any new thing. Long years of subordination made us to lose our entrepreneurial qualities. India lost its ingenuity not only in its industrial sector but also in education and art.

Independent India tried to break loose of this by setting up large industries and industrial townships that led to a migration of rural masses to these flourishing neighbourhoods. But after 50 years of independence with a partial shift of focus a congenial atmosphere has been created with now compels us to look into the rural markets or unorganised sector as a whole. Consumer companies have already made an inroad to these consumers and have already paved the way for entrepreneurs to tap that market.

Keywords : *Rural market, Indian scenario, Market pull, Technology diffusion.*

INTRODUCTION

It is evident from history that India was literally self-sufficient in earlier days in all fields of life. Ancient India can boast of technological accomplishments like: The most well planned civilisation of Harappa and Mahenjodaro, Damuscus Sword, Iron Pillar of Delhi, Arts and Artefacts (Investment/Dokra Casting & fine filligree works), Moslins and so many other things mentioned in Puranas and Vedic literatures. To name a few Pushpak Rath of Ravana,

Use of Vishalyakarani to bring back Lakshman from coma/death, Technique of making oneself Invisible as used by Meghnath, Ekaghni Ban - a target oriented Misile released by Karna for destruction of Arjuna as mentioned in Mahabharata where Ghatothkach had to take the position of Arjuna and sacrifice himself.

Repeated invasions and Colonial rule had destroyed that fabric of self-sufficiency covering the Indian society in their own interest and we lost our tradition of self-sufficient. Not only that, we lost our creative mindset needed for starting any new thing or coping up with the challenge. Long years of subordination crippled us both in body and mind and made us to lose our entrepreneurial qualities. India lost its ingenuity in every sphere of life- art, education and industrial sector.

However, these are some exceptions to this. The Handkerchief Exporter of Murshidabad whose family had been exporting silk handkerchiefs to UK and France from time immemorial and whose product had been appreciated and used by Colonial Masters of India who bought those from England is one such example of triumph of creative entrepreneurial mind. The 20x20 inches dark blue silk handkerchiefs with motifs of different colours including red and yellow were liked by aristocrats of England, not to mention only Carmaikel. He used to buy these by aristocrats of England, not to mention only Lord Carmaikel. He used to buy these from a shop in Edinborougha. In 1911 when he reached Madras to rule as the Governor he started searching for this type of handkerchiefs. He was told that this might be available in Bangladesh. Soon after he became the Governor of Bengal and started a frantic search. In this process Calcutta, Bombay, Burma, Japan-these names started appearing in this list. In the meantime Indian Industry and Trade Dept came to the conclusion that these were not of Indian origin and might be traced to southern provinces of France. Having no other options, Lord Caramel gave orders to that shop in Edinborougha, requesting them to inform him about its origin and to all of their astonishment came the answer-Murshidabad of Bengal.

There in Kaghra, Beherampur one man called Sasakamohan Bagchi - a silk merchant - used to get these handkerchiefs and

dress materials for gown etc. done by two local looms of finest weavers of Murshidabad and used to export these to France.

Not to mention that these raw materials were Indian, even the different dyes which were used for colouring the materials were made from plants and vegetables.

Why I mentioned this in detail is because these creative qualities are the driving forces in one's life and the building blocks of a developed society.Creativity is behind all the thinking process which leads to newer ideas necessary for development, adoption, transformation and survival.This is true for all those which have life - plants, animals and human beings and for their existence in this world. This is equally true for all the activities related to a human being.

The main resource for transformation of any input to output is the man or men behind it - the entrepreneurs, the artisans, the industrialists whatever you may call them.

Independent India tried to break loose of the colonial subordination by setting up large industries with the help of new age entrepreneurs like Tatas, Birlas, Godrej, Ambanis and also under public sector. Industrial belts and townships with better job opportunities and modern amenities led to a migration of rural masses from villages to these flourishing neighbourhoods.

But after 50 years of independence with a partial shift of focus coupled with agricultural success and land reforms a congenial atmosphere has been created which now compels us to look into the rural markets or unorganised sector as a whole. The fact that exodus to towns has substantially reduced due to shrinking job opportunities in towns and creation of new earning opportunities in villages has helped to create a new rural market with 70% of total Indian population living in these rural areas. Consumer companies have already made an inroad to these consumers and have already paved the way for the entrepreneurs to tap that market.

TRAITS OF ENTREPRENEURSHIP - A NEW BREED FOR RURAL INDIA

Apart from all other qualities or abilities the entrepreneur must have risk taking capability is at the core. Risk taking ability: In

its own domain everyone is an entrepreneur - in its immediate environment a scientist either engaged in basic or industrial research and is processing something is an entrepreneur in himself or herself. In the larger environment an industrialist who is translating these processes is an entrepreneur and we will concentrate on this category. Here comes the test for ability of the entrepreneur to take risk that may be classified as (i) Technological Risk (ii) Market Risk and (iii) Financial Risk

Technological Risk: To understand this let us define what we mean by Technology. Technology may be conceived of having two parts (i) Software - culmination of research activities into a process and (ii) Hardware - the diffusion/ transfer of software for ultimate utilization. An entrepreneur who is venturing into a project will definitely want the technological risk to be minimum. Reasons behind this may be that Technology - this and only this can give the entrepreneur the tangible output which he/she wants, a failure will lead to a doomsday. The entrepreneur is not a technologist and hence cannot handle any failure , this fear psychosis plays the role of a constant inhibitor. The entrepreneur has to take the market risk and financial risk - which he feels he can handle and don't want to increase his burden by taking technological risk over and above the other risks. This is true everywhere - whether in cities or suburbs or villages - only the degree of risk varies. Hence the technology package is to be designed in such a way that it acts as a stimulator by reducing the level of varying degree of risk.

Market Pull

Like in all other organised sector creation of something durable depends particularly on two types of societal demand - the eternal and internal inspiration and the external immediate need. And one must remember that this demand has been necessitated out of that same internal state of revelations. Once this gets fulfilled it will try to reduce the societal imbalance and harmonise our rural and urban context. Consumer durables and modern day gadgets have already penetrated this market. But logistical difficulties, inadequate networking, non-availability of spare parts,

poor servicing facilities have prevented the rural market from opening up although the latent need is there amongst a certain section of the rural people whose per capita income has increased in recent years. This indicates that the entrepreneur who will be able to identify these potential customers and their needs properly will be able to reduce the market risk by translating this need into demand for his product.

Financial Risks

Governmental initiatives to develop the infrastructural facilities in the backward and remote areas which are full of natural resources of one kind or the other by creating industrial zones, constructing fast track highways, giving tax holidays, etc. and also governmental policies to upgrade the economic and living conditions of village people by giving power to every hamlet, connecting every villages by road, fixing minimum wage rates, formalising crop insurance have helped in the reduction of financial risk perception.

However, it must be remembered that these rural markets are neither early adopter nor do they fall in the category of early majority in the so called adoption process. This category is more interested in applications than technology per se and needless to say that this is the prevailing attitude even in organised sector also.

Nevertheless one must not differ that they constitute a potential market for transferring the technologies.

DIFFUSION OF TECHNOLOGY: SMART MOVES

Keeping these external and internal conditions in view smart moves consist of offering relevant proven technology in different tailor - made packages as per the demographic, societal, local and individual requirement. This will reduce the risk and will help in easier adoption. The lack of confidence may be overcome by training the prospective work force at site. One may shift transferring only the core technology to: (i) Transfer of augmented product process/ new uses/ applications using the core technology for different segment or (ii) Penetrate such markets by adopting the Bowling strategy (Fig. 1)

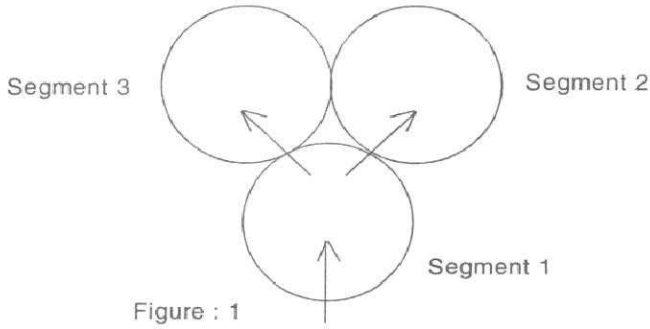

Figure : 1

Collaborative/ co-operative approach is gaining confidence. Technologies for things having effect on mass like medicinal plants, floriculture, ayurvedic drugs, herbal cosmetics, milk products (Amul, Mother Dairy), food products (Lijjat Papad), low cost construction materials , electrical goods and so many others have a good rural market and this will pave the way for adoption of more advanced technologies in near future.

CONCLUSIONS

With the in road by the consumer companies the opportune moment to penetrate the Indian rural market which may give a small return unit wise but as a whole the multiplying effect will be tremendous for anyone venturing into that area. Moreover, the governmental initiatives for building the infrastructure in those backward areas have also helped. It must be remembered that these rural markets are neither early adopter nor do they fall in the category of early majority in the so called adoption process. This category is more interested in applications than technology per se and needless to say that this is prevailing attitude even in organised sector also.

Nevertheless one must not differ that they constitute a potential market for transferring the technologies. Smart Moves to overcome these difficulties consist of offering the relevant but same technology package tailored as per the demographic, societal, local and individual requirement. This will help in easier adoption. One may shift from transferring only the core technology to transfer of augmented product process using the core technology. The Bowling Alley strategy may be adopted for penetrating such markets.