SCHOOL OF COMMUNICATION AND MANAGEMENT STUDIES

SCMS

SCMS JOURNAL OF INDIAN MANAGEMENT

VOLUME VII, NUMBER I
JANUARY-MARCH 2010

Listed in Cabell's Directory

ISSN 0973-3167

SCMS Journal of Indian Management

SCMS-COCHIN

SCMS New Campus, Prathap Nagar
Muttom, Aluva-683 106, Kochi, Kerala, India
Ph: 91-484-262 3803 / 262 3804 / 262 3885 / 262 3887 Fax: 91-484-262 3855
E-mail: editor@scmsgroup.org / scmseditorcochin@yahoo.com
Website: www.scmsgroup.org

SCMS Journal of Indian Management
a quarterly publication
of
SCMS-COCHIN

Dates of Release: -

Number I – January-March on 1 April

Number II – April-June on 1 July

Number III – July-September on 1 October

Number IV – October-December on 1 January

SCMS JOURNAL OF INDIAN MANAGEMENT

Aims and Scope

The *SCMS Journal of Indian Management* is a **blind peer-reviewed Journal.** The Journal deems it its mission to submit to the readers fresh fruit of management thoughts and rich cream of current innovative research. The format of the Journal is designed reader-friendly. The academia and the corporates have an easy access to the Journal.

The Journal looks for articles conceptually sound, at once methodologically rigorous. The Journal loves to deal knowledge in management theory and practice individually and in unison. We wish our effort would bear fruit. We hope the Journal will have a long life in the shelves catering to the needs of b-students and b-faculty.

§ Proposals for articles that demonstrate clear and bold thinking, fresh and useful ideas, accessible and jargon-free expression, and unambiguous authority are invited. The following may be noted while articles are prepared.

§ What is the central message of the article you propose to write? Moreover, what is new, useful, counterintuitive, or important about your idea?

§ What are the real-world implications of the proposed article? Can the central message be applied in businesses today, and if so, how?

§ Who is the audience for your article? Why should a busy manager stop and read it?

§ What kind of research have you conducted to support the argument or logic in your article?

§ What academic, professional, or personal experience will you draw on to make the argument convincing? In other words, what is the source of your authority?

§ The manuscript of reasonable length shall be sent to the Editor—*SCMS Journal of India Management* (Both for postal and electronic submission details are given here under).

The manuscript should accompany the following separately:

§ An abstract (about 100 words), a brief biographical sketch of above 100 words for authors describing designation, affiliation, specialization, number of books and articles published in the referee journals, membership on editorial boards and companies etc.

§ The declaration to the effect that the work is original and it has not been published earlier shall be sent.

§ Tables, charts and graphs should be typed in separate sheets. They should be numbered as Table 1, Graph 1 etc.

§ References used should be listed at the end of the text.

§ Editors reserve the right to modify and improve the manuscripts to meet the Journal's standards of presentation and style.

§ Editors have full right to accept or reject an article for publication. Editorial decisions will be communicated with in a period of four weeks of the receipt of the manuscripts.

§ All footnotes will be appended at the end of the article as a separate page. The typo script should use smaller size fonts.

Address for Submission

Electronic Submission: E-mail: editor@scmsgroup.org/
scmseditorcochin@yahoo.com
The electronic submission must be in the form of an attachment with a covering letter to be sent as e-mail

Post Submission : The Editor
SCMS Journal of Indian Management,
SCMS New Campus, Prathap Nagar, Muttom,
Aluva – 683106, Kochi, Kerala, India
Ph : +91 484 2623803, 2623804, 2623885, 2623887
Fax : +91 484 2623855

Printed by Dr.D.Radhakrishnan Nair, published by Dr.D.Radhakrishnan Nair on behalf of
SCMS-COCHIN [School of Communication and Management Studies]
and printed at Maptho Printings, Kalamassery, Cochin-683104
and published at Muttom, Aluva-683106, Cochin,
Editor-Dr.D.Radhakrishnan Nair.

ISSN-0973-3167

SCMS Journal of Indian Management is included
in EBSCO Database

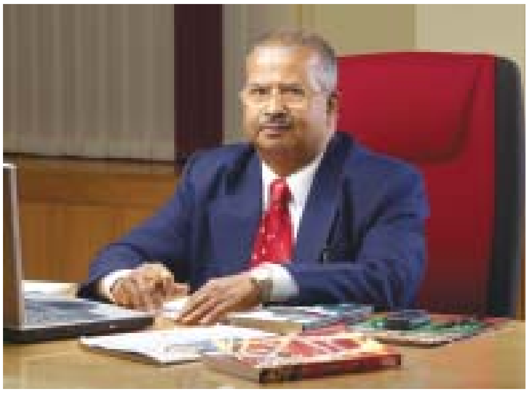
SCMS Journal of Indian Management Volume VII, Number I, January - March 2010 , Pages 1-132

SCMS JOURNAL OF INDIAN MANAGEMENT

Contents

Volume 7 January - March 2010 Number 1

The Chairman speaks ...



Women, in general, are the most disadvantaged in the Indian society. Empowering them, especially those in rural areas, is an urgent need of our society. The central government and the state governments have initiated several schemes for uplifting the socioeconomic status of women.

Among them Kudumbashree is a successful and popular government-to-people initiative of the Government of Kerala aimed at empowering women through their self-help groups. Microcredit and entrepreneurship are the two key constituents of the programme. The project covers more than 50 percent of the households in Kerala and has given a new dimension to eradication of poverty among women.

The project, which was started in 1998, was initially aimed to eradicate poverty among women living below the poverty line. But now, after more than a decade of its operation, the name Kudumbashree has become synonymous with the socioeconomic empowerment of women in Kerala.

The lead article in this issue is on Kudumbashree, its significance, evolution and present status, written by none other than Dr.Thomas Isaac, Minister of Finance, Government of Kerala, who is also an ardent promoter of the project. I am sure you will find it very informative.

The second article is a study paper on evolving strategies for improving organizational effectiveness through transformational leadership in South Africa.

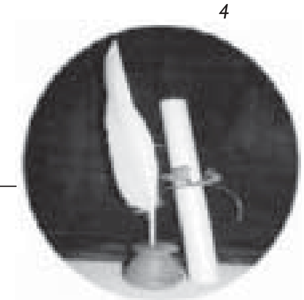
A variety of other topics like retail marketing, decision making, public private partnership, rural marketing, culture and change, stress management, inventory models, and microfinancing are also discussed in this issue. I hope you will find them interesting and informative.

Dr.G.P.C.NAYAR
Chairman, SCMS Group of Educational Institutions

SCMS Journal of Indian Management

A Quarterly Publication of

SCMS-COCHIN



Editorial

Culture and Business

Culture is a word, semantically a hard nut to crack. It's more so in the present context, may be because of the convergence of interests of the earlier kinds of its meanings.

Culture is a complex term. It is a noun of process: culture refers to (cultivation) of crops, or (rearing and breeding) of animals. By extension of meaning, culture lifts us off to the culture (active cultivation) of the human mind. Culture in the course of time has become a noun of *configuration* or *generalization* of the spirit which informs the whole way of life of a distinct people. In the 19^{th} century, Herder (1784-91) first used "cultures" in deliberate distinction from any singular. We use it for linear sense of civilization. Culture designates a whole and distinctive way of life. It raises certain fundamental questions. It is the nature of the formative/determining elements which produce culture. There has been a strong development of the sense of culture as the active cultivation of the mind.

Culture until recently was neglected by sociologists. But it is now the subject of lively and controversial discussions in most of the fields of activities, even in the sphere of business.

Culture evoked a developed state of mind - as in the usage "a person of culture." It underwent a change to mean the process of this development as in the "cultural interests" and "cultural activities." From this sense, it changed into the means of these processes as in culture as the "acts" the human intellectual works, the one rated as the most common accepted theory.

There are two main kinds of culture: a) giving emphasis of an 'informing' spirit of a whole way of life manifest over the whole range of social activities: language, styles of art, and various kinds of intellectual work, and b) giving accent on a whole social order in which a specifiable culture in styles, art and kinds of intellectual work, seen as the product of a social order. These positions are classified into: Idealist and Materialist. Both these positions are undergoing changes as business that has crept into the concept of institutions, formations, means of production, identifications, forms, reproduction, and organization of culture has totally changed human life.

In a rapidly expanding global marketplace, it is crucial to understand the economic benefits cultural awareness can bring into the world of business.

Dr.D.Radhakrishnan Nair

Editorial Assistant: Mr. E.V. Johnson **Assistant Editor: Dr. Poornima Narayan R.**

Kudumbashree: Microcredit Alternative

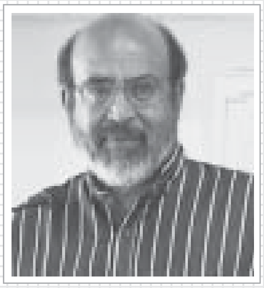
Thomas Isaac T.M.

Abstract

Synonym

The paper is the re-rendering of the speech delivered by the author, Former Fellow, Centre for Development Studies, India while he was inaugurating the International Conference on Micro-finance: Gender and Poverty organized by SCMS-COCHIN in association with the University of Central Lancashire, UK in December 2009. In it the author scans the activities of Kudumbashree with a massive membership of 3.7 million women belonging to the weaker section. Microfinance, a tiny tag for micro-financial services, is a pristine product in spite of its being the rebirth of a pattern once existed. The author owing to his leftist leanings does not forget to give a dig at the machination of the World Bank concerns with spurs on such deliberations all over the world, kindling controversies and bringing in capitalist tastes.

Kudumbashree neighbourhood groups in Kerala constitute one of the largest Micro-credit networks in the world with a membership of about 37 lakh households, each being represented by a woman family member. It covers more than 50 percent of the households in Kerala. The total thrift comes to nearly Rs.1000 crore, and a nearly equivalent amount is taken from the banks for micro-lending. Besides providing Microcredit, it attempts to supplement the livelihoods of members through income earning activities, provides a platform for the convergence of anti-poverty programmes of the State government and constitutes a basic community organization contributing to women empowerment. Kudumbashree differs from conventional programmes in that it perceives poverty not just as the deprivation of money, but also as the deprivation of basic rights. The poor need to find a collective voice to help claim these rights. The local self-governments provide the basic organizational support and co-ordination, thus linking these groups to the processes of local democratization.



Dr.Thomas Isaac T.M., State Minister for Finance, National Savings, Stores Purchase, Commercial Taxes, Agricultural Income Tax, Treasuries, Lotteries, Local Fund Audit, Financial Enterprises, State Insurance and Stamps and Stamp Duties. Room No.118, First Floor, North Block, Government Secretariat, Thiruvananthapuram - 1, Email: minister-finance@kerala.gov.in

Microcredit networks are not in anyway unique to Kerala. They are a world-wide phenomenon reflecting certain comparative advantages of micro-financial services to provide credit to the poor, who are normally excluded from the formal credit system. Therefore, the starting point of our discussion is the significance of Micro-credit and its distinctive features. The modern micro-financial service—or microfinance in short—are the offshoots of the various informal community based small-scale savings and credit arrangements that have existed in all traditional societies. Microfinance organizations, originally developed by social activists and organizations in the third world have been increasingly incorporated into the policy prescriptions of international development agencies. This appropriation by international development agencies has brought considerable changes to microfinance organizations in terms of motives, procedures, assessment techniques, and policy frame work. It has also led to the dramatic acceleration in the creation of microfinance groups around the world and has placed them at the centre of many programmes for poverty eradication.

The entry of the World Bank into the microfinance arena, promotion of the so called "best practices," emergence of the Micro-credit industry, and growing evidence of Micro-credit programme as part of the structural adjustment programme has made microfinance a controversial subject. The World Bank views microfinance SHGs as an effective local response to poverty alleviation for the world's poorest of the poor. The common model of microfinance SHGs is underpinned by the belief that the lack of access to credit is the primary cause of poverty, and therefore access to credit is the primary solution to eradicating poverty. In addition to seeing access to credit as the primary remedy for poverty eradication, the model espoused by international development agencies conceives of a process that provides a minimal role for the state in poverty alleviation, but instead links microfinance SHGs to NGOs. The World Bank approach is critically discussed in Section 2.

The claim of microfinance as the panacea of the poverty cannot stand serious scrutiny. Poverty as an inevitable outcome of crisis-ridden capitalist development and the present globalization tends to aggravate the process of immiserisation. Apart from the problematic design and bureaucratic implementation, the failure to adopt a holistic view of poverty, the absence of democratic decentralised planning, and existence of a highly iniquitous caste system and agrarian relations are largely responsible for the failure in poverty alleviation. Nevertheless, anti-poverty programmes in India have been designed within the framework of relatively more autonomous capitalist development path that our country had adopted during the period before the new introduction of neo-liberal reforms. No wonder the traditional poverty alleviation programme and targeted lending in India have failed to achieve their objectives. In Section 3, we argue that, instead of dismantling anti-poverty programmes and placing the sole responsibility for poverty alleviation on microfinance institutions, a model that joins the two and links them to local-level planning and participatory democratic processes is what is required.

It is our argument that Kudumbashree programme was consciously designed as an alternative to the mainstream models of women SHGs espoused by the World Bank in their profit-oriented and NGO-led model as well as the state-managed traditional Indian model. The challenge is to develop an effective network of women NHGs with organic linkages to both local self-governments and broader NHGs of the local community. They were envisaged to play a larger social role than the narrow microfinance and micro-enterprise functions.

In Section 4 of the paper, we shall discuss how the fledgling models of microfinance that had emerged from main stream antipoverty programmes were transformed into Kudumbashree Neighbourhood Network under the influence of the People's Plan Campaign.

The experience of Kerala proves the potential of Women Neighbourhood Groups in the local development processes. Today, Kudumbashree has a network outreach that covers all-the local self-governments in the State and is involved in multifarious activities. A brief survey of the present situation is given in Section 5.

II Significance of Microfinance

Credit is vital to the poor for overcoming the inevitable and frequent mismatch between the income and expenditure and also for investment in their marginal farms or small-scale non-farm self-employment ventures. However, their access to formal banking channels is limited owing to their own low resource base and the nature of the functioning of formal credit institutions. The popularity of the microfinance SHGs stems from recognition that formal banking channels have been largely ineffective in catering to the credit needs of the poor.

The transaction costs of the formal lending institutions in lending to die poor are high because of difficulties in screening the credit worthiness of the borrowers, monitoring the utilization of funds and enforcing repayment. Therefore, tiny savings and loans are an unattractive business proposition to the banks. For risk aversion, they demand collateral security that the borrower does not possess. Further, they insist on procedures of formal banking that are too time-consuming and complicated for the illiterate poor. Even in the implementation of direct lending programmes, formal institutions find it difficult to overcome the problem of targeting. The experience is that the rich and powerful typically manage to corner the scarce loanable funds. As die formal banking channels remain largely inaccessible to the poor in India, the poor continue to be dependent on informal sector lending, paying exorbitant rates or underselling the product and their labour power to the creditors. It was in response to this situation that Micro-credit mechanisms were innovated.

Informal community based small-scale savings and credit arrangements have existed in most of the traditional societies. For example, merry-go-rounds or similar systems of rotating savings and credit associations were a form of traditional lending system. The members make regular and periodic contributions to a common fund, which is lent as a lump-sum amount to each member in turns.

In some parts of Kerala, a variant of this system existed with coconut trees providing the basis of the common fund. A fixed number of coconut trees of every participant were set aside for the common fund. Informal system of credit rotation was very much a part of die traditional social system in Kerala, in 40's and 50's, especially among the poor women. Credit Systems like 'chayasatkaram' (tea party) in Kozhikodu, Kumarakam (feast to which the guest is expected to bring a cash gift) in Kannur, Njayarazcha chitty (Sunday credit) in Kutnarakom, ari chitty (rice credit) in Trivandrum all are markers of a very strong community support and networking among women towards voluntary credit rotation. This indicates that poor understand intuitively that goodwill among neighbours is in fact, a survival mechanism. The individual was seen as part of a web of supportive relationships and thus cooperation was formalised in number of informal social institutions. Informal system of credit rotation continues to be very popular even today, especially in parts of northern Kerala. Micro-credit systems have been evolved drawing on these traditional experiences.

The most popular form of modern microfinance organizations is women SHGs (SHGs), consisting of a loose group of members who live in close proximity to each other and who meet at regular intervals (most often weekly). The primary focus of women SHGs is savings and loans: the groups collect regular thrift, the amount of which is collectively pre-agreed upon, from the members and provide loans from the thrift fund to members. The groups may also access loanable funds from financial intermediaries, including commercial banks, cooperatives, special government agencies, or non-governmental organizations.

There is no uniformity in the size of women SHGs, with the range of number of members generally falling between 20 and 100. One factor that has often kept group size smaller in India is the Companies Act, which limits the number of people who may associate to undertake profitable activity without registration to 20. Though there is no uniformity in size, it is generally accepted that smaller groups contribute to better participation in the decision-making process and facilitate greater transparency, greater dissemination of information, and easier management. The larger groups, on the other hand, have greater potential for community-based action.

There are three principal forms of inter-group relations regarding women SHGs: nuclear, centralized, and federated. First, in the nuclear organizational structure, each group is an independent entity with separate bank accounts. Groups based on the nuclear model may be linked to a central institution which provides training and guidance. But it should be stressed that the individual groups are autonomous and independent. While the nuclear model provides the greatest level of autonomy for the group, it often can not take advantage of the economies of scale. In contrast, in the centralized model, the central institution is the primary decision maker and acts as a financial intermediary for the groups with the banking institutions. The individual group's decision-making power is limited to things like deciding loan recipients within the group. The centralized system tends to be bureaucratic and delimits group initiatives, but brings the advantage of economies of scale. The federated system attempts to combine the positive aspects of both the above systems. While each self-help group retains full autonomy and independent bank accounts, they are federated at sub-regional and regional levels with a democratically elected apex body, which carries out the coordinating function, provides training and guidance, and if necessary helps procure external funds.

The celebrated Bangladesh Grameen Bank system is different from the above models of SHGs. The Grameen Bank is primarily a loan operation with little emphasis on thrift. Borrowers of the Grameen Bank are formed into groups of five members, with groups linked to a loan centre. Initially only two members of the group are given loans and eligibility of the other members is made conditional to regular repayment of the earlier borrowers. Hence, peer group pressure ensures timely repayment. While in the SHG-models outlined above, savings is the initiator of group formation, group formation in the Grameen Bank model is centred on loan grants. A third impetus for group formation is micro-enterprise, with group members involved in the common micro-enterprise activity.

Thus far, we have discussed microfinance systems based on group models (i.e. groups are the primary entity making loans and administering savings). Another very important system prevalent in the developing world is Micro-credit directly to individuals (i.e. individuals are not part of any group and seek loans directly from the lending institution). In this model, banks are the primary lending institutions. This form of lending is very similar to formal bank lending or cooperative credit activity, and the primary difference is die small size of loans involved. Repayment is often guaranteed through the practice of agents personally going to individual homes.

The various forms of Microcredit systems have proven successful in delivering credit to the poor and ensuring high rate of repayment when compared to the formal channels. Because Microcredit systems have been effective in reaching the poor, many developing countries have set up special financial institutions that either directly provide credit to SHGs and the facilitating NGOs or help refinance commercial and cooperative banks that provide the credit. International agencies as well as the national government and microfinance channels in turn fund these national microfinance institutions.

Table 1: Comparison of Microfinanace and Formal Banking

Characteristic	Microfinance	Formal Banking
Size of loan	Small/tiny size of credit	Medium/large credit
Duration of loan	Short duration	Medium and Long
Thrift	Emphasis on thrift as well as loan	Focus on loan only
Screening and monitoring	Group formation and informal methods	Formal procedures
Enforcement of repayment	Peer pressure and weekly repayment	Collateral and legal pressures for repayment
Nature of organisation	Social organisational form	Commercial organisational form
Motivation	Self-help motivated	Profit motivated
Outreach	Access to poor without collateral (all members)	Access limited

The key features of microfinance vis-a-vis formal banking have been summarised in Chart 1. In contrast to formal banking, Microcredit is characterized by small size, shorter loan duration, emphasis on thrift, and the absence of collateral security and informal procedures. In the absence of collateral security and formal documents there can be little legal recourse against defaulters. Peer group pressure has proven even more effective than loan repayment mechanisms in the formal banking system. While the banking system is a purely commercial organisation, the lower tiers in the microfinance system are social organisations and motivated by non-economic objectives.

II World Bank and the Micro-credit Programmes

The effort of the World Bank is to integrate the Microcredit movement with the globalisation process and to transform it into a complimentary component of its financial sectoral reforms. We shall now briefly examine the background of this development and then critically discuss the World Bank's perspective on Microcredit programme.

The intensification of globalisation in the 1990s has been accompanied by a significant deceleration of the global economy when compared to the previous decades. This deceleration in world economic growth has also been accompanied by a widening of inequality between the developed and developing countries as well as between the rich and poor within countries. In other words, world poverty has worsened and even World Bank has not claimed a sharp reduction in poverty during the recent decades.

An important feature of the present process of global immiseration is the feminisation of poverty, which refers to the fact that the burden of poverty falls unequally on women. Of the 1.3 billion poor of the world, 70 percent are women. The UNDP estimates that during the period 1965-70 to 1985-90 the number of rural poor men increased by 30 percent, while the number of rural poor women increased by 48 percent. Further, statistics reveal a significant increase in the number of rural female-headed households most of which fall below the poverty line. The realisation of the feminisation of poverty and the growing criticism by a range of groups around the world is one of the reasons for the World Bank's wholehearted support Micro-credit schemes.

The World Bank's first official declaration on the topic of Microcredit came from its President at the 1995 International Women Conference in Beijing. At this conference, Microcredit was put forward as the solution to poverty eradication as well as a form of women empowerment. The World Bank then formed the Consultative Group to Assist the Poorest (CGAP), a programme within the World Bank, "to systematically increase resources in microfinance." Though CGAP has a modest budget of 200 million dollars and does not make direct loans, it has emerged as the most influential actor in Micro-credit programmes through its selective grants, its coordinating role among donors, the funding of studies and research, and the promotion of what it considers "best practices."

The World Bank-sponsored "Micro-credit Summit" in Washington DC in 1997 was supported by a number of international developmental institutions, international NGOs and multinational banks like Citicorp, Chase Manhattan, and American Express. The summit launched a global campaign to extend Microcredit to 100 million of the world's poorest by 2005. This Microcredit campaign especially targeted women of the poorest families and was meant to help initiate self-employment activities. By the end of 1997, the United Nations adopted a resolution endorsing the "Micro-credit Summit" and its plan of action. The UN now accepted Micro-credit as a key instrument for poverty reduction and made it mandatory for member countries to coordinate their efforts with the global microfinance campaign. The claim that microfinance was the solution to poverty eradication dovetailed nicely with UN's declaration that the decade 1997-2006 was "United Nations' Decade for the Eradication of Poverty." With the UN endorsement, CGAP formally emerged as the central coordinating mechanism of the worldwide Micro-credit programme.

For 2025, the projected additional demand for Micro-credit was estimated at $90 billion. The scale of projected demand in the microfinance system may be appreciated in comparison to the 1995 estimate of actual Microcredit finance of $2.5 billion. To finance such a dramatic increase in microfinance spending and to ensure this scale of fund flow, international financial markets would have to be tapped, as the resources of aid donors would simply not meet the demand. Moving beyond the resources of aid donors into the international 'financial market meant that

Microcredit had to become a profitable avenue for international commercial lenders. What this effectively meant was that in order for Microcredit to be a viable solution to poverty alleviation, it had to become financially self-sufficient and ideally a profitable venture. To ensure this, two options were tabled. First, the cost of Microcredit lending had to be minimised; and second, the income from Microcredit lending (i.e. the interest rate) had to be allowed to rise.

The pursuit of cost reduction has led to promotion of "best practices" that includes institutional efficiency in management, accounting, marketing, servicing, and product designs. The NGOs have been identified as the most cost effective method of providing Microcredit, extending the outreach, and ensuring recovery. By using NGOs as the intermediary, it is generally believed that heavy overhead costs will be avoided and informal mechanisms more easily utilised. To channel funds to NGOs specialised national and regional institutions would be set up. The NGOs are encouraged to strive for financial self-sufficiency by meeting their expenditures through the margin permitted on the interest rate as well as the service charges collected from the SHGs.

With regard to the rising interest rate as a means for financing self-help programme the mainstream view is that the poor can both afford and are willing to pay commercial interest rates. In addition, they are more concerned with the timely availability of credit than the rate of interest. As a result, in the mainstream view, subsidies on interest rates are opposed. In some countries, the World Bank has insisted on amendments to national laws on usurious interest rates and stronger debt collection laws.

If Micro-credit institutions have to become financially self-sufficient and their scale extended, it is important that the new system should not have subsidised competing alternatives and should be dismantled. For example, priority sector lending, subsidised credit schemes and traditional rural credit institutions are among the various subsidised systems that compete with the Microcredit system and they ultimately should be dismantled. The formal financial sector is allowed to withdraw from rural and small-scale sectors, which are now to be serviced exclusively through SHGs and specialised financial institutions. Again, the microfinance system is thus set up to ensure a profitable return to the international financial markets.

The result is the emergence of "the microfinance industry." At the international level, there are the multinational banks and other international financial institutions that lend to national-level microfinance institutions (MFIs) at commercial interest rates. The national-level microfinance institutions either directly lend to the NGOs or refinance the financial institutions that lend to the NGOs. At the bottom of the pyramid are the women SHGs. The idea is that the spread of the interest rate structure should be such that every level— MFIs, NGOs, and SHGs— is financially self-sufficient, and ail of them absorb some of the interest rate costs. Thus, Micro-credit programmes are rendered a profitable venture for international finance capital, while also ensuring sufficient outreach and sustainability in order to make a dent in poverty. Poverty eradication through women SHGs is thus made a profitable venture.

While Micro-credit is championed as the panacea for poverty eradication, the fact that the globalisation policies are destroying the sustainability and survival of the self-employment activities, is conveniently ignored. The mainstream view fails to see poverty as systemic and inherent to contemporary capitalist development. The lack of access to credit is an important factor while trying to understand the causes of poverty, but equally important are the distortions in other markets such as labour or product markets. In order for Microcredit ventures to be viable, they need to be part of a larger development agenda that includes linkages to product markets, local government programmes and rural development policies.

The strategy for poverty eradication is bound to fail if it is viewed as a substitute for social sector spending in education, health care, shelter, drinking water and nutrition. Poverty and solutions to poverty must be addressed in a holistic approach, which includes a role for subsidised credit without which many poor will be priced out of the market. The price and cost of the credit is as important as the availability of credit (or any service) for the poorest of the poor.

While Micro-credit programmes have certainly proven successful in reaching the poor, the effectiveness of micro-enterprises as the chief agency in poverty alleviation has yet to be proven. An understanding of the aspirations and desires of the poor will be crucial for effectively developing a long-term poverty eradication programme. For example, do people want to be in micro-enterprise production, or are their aspirations to become a wage worker? Indeed, a major portion of the poor hails from the wage labourer class. Appreciating the desires and aspirations of the group targeted should not be underestimated in the long-term viability of any programme.

In addition to poverty eradication, the mainstream view farther holds that women SHGs empower women through the availability of credit, employment, and higher income. The extent to which Microcredit organisations actually help to empower is unclear at best. Many argue that the role of women in these organisations merely transforms them into a conduit for credit to the family where the loan is appropriated and controlled by men. While the men control the funds within the family, the women bear the responsibility of loan repayment. Many of the self-employment activities of these groups reinforce traditional female roles and the gender division of labour, while at the same time often contributes to an increase in the burden and workload of the women as their responsibilities in the home have not lessened with their involvement in women SHGs. Such arguments tend to highlight the importance of a holistic approach to poverty eradication and women empowerment.

Ill Poverty Alleviation: Need for a Holistic Approach

The evolution of poverty alleviation programme and Micro-credit in India has been characterised by certain distinctive features that are in contrast to the current international trends we discussed in the previous section. First, in India there has been an emphasis on social banking in the provision of credit to the poor. Second, a large number of state-designed and implemented poverty alleviation schemes have been part of the five-year plans. And third, an extensive network of nation-wide administrative infrastructure has been developed in order to implement the poverty alleviation schemes. We shall briefly review these three features before we discuss the experience of Kerala State.

Debt bondage was an important ingredient of the semi-feudal system that existed at the time of independence and a major cause of poverty and agrarian stagnation. In 1951, 92.8 percent of credit to rural households in India was being met by the informal sector, mostly at ruinous usurious interest rates. Informal moneylenders supplied 46 percent and rich farmers, landlords and merchants supplied 34 percent of the rural credit. Therefore, the development strategy during die initial plan periods laid considerable emphasis on the spread of co-operative networks in the rural areas. By 1971 the share of cooperatives in rural credit had risen to 20 percent (see Table 1). In 1969, the leading banks were nationalised and public ownership was utilised to extend bank credit to the rural sector by rapidly expanding the rural bank branches and directing lending to priority sectors. As a result, between 1971 and 1991 the share of the commercial banks on rural credit increased from 2.2 percent to 33.7 percent.

Table 2: Distribution of Rural Credit by Source

Source	1951	1971	1992	2002
Government	2.7	6.7	6.1	2.3
Co-operatives	3.5	20.1	21.6	27.3
Commercial Banks	_	2.2	33.7	24.5
Insurance	_	0.1	0.3	0.3
Provident Fund	_	0.1	0.7	0.3
Others	_	_	1.6	2.4
Total Formal Sectors	7.2	29.2	32.7	42.9
Landlords	3.5	8.6	4.0	1.0
Fanners	25.2	23.1	7.1	10.0

Money Lenders	46.4	13.8	10.5	19.6
Merchants	5.1	8.7	2.5	2.6
Friends and Relatives	11.5	13.8	5.5	7.1
Others	1.1	2.8	6.5	2.6
Total Informal Sectors	92.8	70.8	36.1	42.9

The 1970s witnessed rapid expansion of targeted poverty alleviation programme attempting to increase the self-employment opportunities and wage employment for the poor. The most ambitious of them was the Integrated Rural Development Programme (IRDP), a credit based self-employment programme with substantial back-end subsidy. In 1982-83 Development of Women and Children in Rural Areas (DWCRA) was launched as a sub-scheme of IRDP, which facilitated women taking up self-employment in groups. Larger loans and subsidies were provided so that economically viable non-farm enterprises could be started through group activity. Special schemes for providing training and tools for the self-employed were also launched. During the latter half of the 1990s, the IRDP and related schemes were integrated into a more holistic programme of Swarnajayanthi Grama Swarozgar Yojana (SGSY), where the emphasis is on SHGs of rural poor. Besides, promotional social security measures such as shelter, drinking water, mother and childcare, sanitation, primary education have also been given emphasis in the rural development programmes.

The Community Development Blocks that had been introduced during the second five-year plan became the focal point for implementing the rural poverty alleviation programmes. Yet another important administrative network was the Aganavadi (Mother and Child Care Centres) through ICDS programme. In addition to these programme targeting rural poverty, there are 90,000 primary agricultural co-operative societies and nearly 60,000 commercial and rural banks catering to the rural population throughout India.

Despite these efforts, it remains doubtful to what extent poverty has been alleviated. Indeed, poverty persists without a viable solution. Though a significant transformation of the credit profile of the rural sector has been achieved, as is evident from Table 1, two disconcerting points may be noted: first, the majority of the rural poor still remain outside the reach of formal credit channels. One estimate is that only 20 percent of the 60 million households falling below or marginally above the poverty line have access to formal credit channels. As per the rural credit and debt survey, the share of non-institutional credit sources was 58 percent in the case of the poorest group (owning less than rupees 5,000 in assets) as against 19 percent among the highest asset group (owning more than rupees two lakh in assets). A second and perhaps even more ominous development has been a reversal of the gains in rural credit provision as a result of neo-liberal policies. The share of debt outstanding from the formal sector has sharply fallen between 1991 and 2001, with a proportional rise in the role of moneylenders. There is a growing danger that in the new international environment, the Micro-credit schemes will replace the traditional programmes and institutions and be championed as the only solution to rural poverty. It is in this context that the experience of Kerala assumes significance. The poor performance of traditional schemes like the IRDP in terms of targeting, improvement of skills and earnings, and financial viability is also contributing to their replacement with new Micro-credit programmes.

Kerala is one state that has been successful in achieving a perceptible reduction in poverty (official statistics show it to have achieved the sharpest reduction in the proportion of households below poverty line during the recent decades). The success of Kerala was realised through a holistic approach emphasising structural changes such as land reforms, public provisions of health, education, and other social infrastructure, a universal public distribution system and, more recently, community participation through decentralised planning.

The contemporary challenge is to link the Micro-credit programme with the structural changes in the rural areas, the emerging Panchayat Raj Institutions, and participatory local level planning. SHGs are not a substitute for, but a complimentary part of, poverty alleviation and social security programmes. The Kudumbashree Neighbourhood Groups (NHGs) introduced during the late 1990s in Kerala was a conscious attempt to develop such links and deepen the democratic potential in these programmes.

IV Evolution of Kudumbashree Neighbourhood Groups

The genealogy of Kudumbashree takes us to the Community Development Society (CDS), an innovation in Alappuzha Municipality in 1993. The Urban Basic Services for the Poor (UBSP) implemented in Alappuzha Municipality in 1992 focused on a community based and participatory approach to planning and implementing poverty reduction programme. This was when the nine point index for identifying families at risk of poverty was first evolved. It conceived poverty as a basket of relative deprivations and vulnerabilities and developed an innovative methodology to identify the poor using non-economic parameters. This methodology has since been incorporated into the policy framework of the State for identification of the poor.

The poverty index on the basis of simple exclusion criteria was evolved to identify the poor through a participatory process. High risk (poverty) is defined as the presence in a family of four or more of the following nine risk factors:

1) Family belonging to Schedule Caste/Schedule Tribes.
2) Family with children under five years old.
3) Family having even one illiterate adult.
4) Family with only one or no adult employed.
5) Family living in Kutcha house.
6) Family without a household latrine.
7) Family with no access to safe drinking water.
8) Family consuming only two or less meals per day.
9) Family with an alcoholic or drug addict.

Families with four or more of any of the above risk factors were identified as poor, and subsequently organised into Neighbourhood groups. The Neighbourhood groups were federated at the ward level as Area Development Society (ADS) and at Municipal levels as Community Development Society (CDS). The risk index analysis gave a picture of the multiple needs of poor families, which then was used for planning purposes and transparent criteria for prioritization during implementation. The micro-plans at the Neighbourhood group level are consolidated at ward level and then integrated to form an Action Plan of the CDS.

The Alappuzha CDS was a remarkable success and gained international recognition by receiving "We the People Award" in 1995. Because of its success, it was decided to extend the Alappuzha model to all other municipal towns in the state. The centrally sponsored urban poverty alleviation programmes was incorporated into the CDS. Statutory provision was made to allocate two percent of municipalities' own revenue for poverty eradication through CDS structure. An Urban Poverty Cell was also constituted at the state level to coordinate the CDS activities.

Another important development was the extension of the CDS scheme to the whole of Malappuram district as post total literacy programme. The enthusiasm of the literacy campaigners was harnessed to identify the poor and organise the CDS structure at the panchayat and municipal levels. Based on the success of Malappuram, the programme was extended to the entire state and a committee was constituted with representation of NABARD, Department of Local Administration, and the State Planning Board. On the recommendations of the committee, the Kudumbashree Poverty Eradication Mission was constituted and the CDS programme in the Malappuram district and urban municipalities was brought under the mission.

At the same time the People's Plan Campaign was launched, which was a state wide campaign that included devolving 35 percent to 40 percent of state funds to local self-government institutions (LSGIs). Many of the functions related to the provisioning of basic needs, employment and income-generating activities in agriculture and other small-scale sectors were devolved to the local self-governments. A mass campaign, similar to the total literacy campaign of the late 1980s, was launched in order to empower the LSGIs to prepare the local plans in a participatory and transparent manner. The success of the democratic decentralisation process had significant implications for the anti-poverty programme in the state. With the LSGIs spending Rupees 500 to 600 crores annually for programme targeting the poor, it was evident that the Kudumbashree Neighbourhood group system would have to be closely integrated to the local plans. Peoples Plan Campaigners saw NHGs as a powerful and potential mechanism for ensuring sustained participation in plan formulation and implementation.

The objective of the People's Plan Campaign was not to reproduce miniature versions of the bureaucratic centre and state governments. The attempt was to create a new participatory model of local-level governance. The existing constitutional mechanism, the grama sabhas, proved to have too many limitations in the context of Kerala. They were too large and their boundaries purely administrative. Therefore, NHGs of 20 to 50 families were formed below the grama sabha with each family having a male and female member. The ward-level committee of the NHGs acted as the Executive Committee of the Grama sabha in many cases. A panchayat-level development council was also formed. The NHGs were delegated many of the powers of the grama sabhas and invariably met before the grama sabhas were convened. This system of NHGs as a sub-structure of the grama sabha was innovated in Kalliyasserri Panchayat under the KSSP (People's Science Movement) action research programme. The model spread to around 200 panchayats under the People's Plan Campaign with varying degrees of effectiveness of the NHGs. The sustainability of participation in these local participatory bodies was a serious concern of People's Plan Campaign.

A simultaneous development was the rapid spread of women SHGs. In most cases, the general Neighbourhood groups took initiative in the formation of women SHGs engaged in micro-savings and credit activity. Many women SHGs were also formed independent of the general NHGs. The enthusiasm for the women SHGs stemmed from special focus placed on gender in People's Plan Campaign.

Ten percent of the plan outlay of the local plan was set apart for projects that were directly beneficial to the women and, most importantly, directly managed by women. These projects were to constitute the Women Component Plan (WCP) and the women SHGs came to be accepted as an ideal organisational form of management for the WCP's projects. In addition, the plan guidelines also permitted financial assistance to women SHGs.

The women SHGs were much more self-sustaining and regular in their activities than the general NHGs. This led to the question of whether the two—general NHGs and women SHGs—could be integrated. It was decided that the women SHGs could be formed as subset of the general NHGs. The women SHGs would function on a regular and continuous basis, while the general NHG could be convened when occasions warrant. The integration of the two groups offers one solution to the problem of sustained participation.

In the first phase of extending the Kudumbashree SHGs to die rural areas, an additional problem emerged with regard to a family's status on the poverty index. In almost all the panchayats, the women SHGs were composite groups of families below poverty line (BPL) and above poverty line (APL). The question arose as to whether women from APL families should be excluded from the SHGs.

There were three primary arguments in favour of excluding women from the APL families. First, composite groups may undermine the objective of targeting the poor as some funds were specifically earmarked for BPL families. If women from APL families were included the exclusive focus on poverty eradication would be diluted. Second, the presence of APL families could undermine opportunities of the BPL, which ultimately could adversely affect the social sustainability of the group. Third, the groups upon which the model was derived (i.e. groups in the urban area and Malappuram district) were exclusively BPL families.

The different arguments for and against inclusion of APL families' stems from the different understanding of the role of women SHGs. One view sees women SHGs as an instrument for the implementation of governmental programme, while the other sees them also as part of a larger social and democratic process. A poverty line in terms of income level or deprivation, however defined, cannot be the basis of social classification. In other words, the dividing line between families below the poverty line and those above the poverty line is vague. A more nuanced understanding would recognise that most of the families are likely to belong to social classes of marginal farmers, artisans or wage workers. Recognising the arbitrariness of such demarcations, does not deny the necessity for a clear demarcation of the poor for the implementation of government programme. Therefore, from the perspective of social development, it would be better to evolve such demarcation through participatory processes as well as develop strict mechanisms to guarantee against the leakage of funds. The transparency and the social consensus in the selection of poor would be a stronger guarantee than any bureaucratic procedure against the misuse of funds. For many activities like micro-savings and credit operations all members can participate, and for those subsidised programmes, like micro-enterprises, only individuals from BPL families would be eligible.

Some argue that the presence of APL families will render women NHGs too heterogeneous, while others counter this with the argument that gender and neighbourhoodness render adequate cohesion. An additional fear raised was that upper and middle class families would dominate the groups, which again was largely found to be an exaggerated claim as women from such social strata are normally not interested in micro-savings and credit. Further, the strict enforcement of rotating the weekly meetings among every household proved a sufficient deterrent against such elite strata. It is the poor families, those below and just above the poverty line, who are eager to participate in women SHGs.

A compelling reason to include women from the APL families in the women groups is that it is precisely from these lower-middle class strata that the grassroots-level leadership in Kerala hails. Depriving the SHGs of this leadership is likely to exacerbate any tendencies toward bureaucratic and patronage control as well as the control by men. Further, excluding women from APL families reduces the potential of women SHGs acting as general community fora. An alternate suggestion on having separate SHGs for BPL and APL families can be socially divisive.

It is also important to note that the dramatic reduction of poverty in Kerala has not been because of targeted poverty alleviation programme, but rather owing to larger social processes. The democratic decentralisation process aims at a fundamental transformation of the economy of the society. Through participatory local-level planning it offers an opportunity for another round of dramatic reduction in the poverty level in the state.

After extensive discussions, modifications were made when the Kudumbashree scheme was extended to the other panchayats. While the existing groups under Kudumbashree are exclusively for BPL families, the newly-joined panchayats have included membership open to APL families. Another change was the decision to not have any federating structure above the panchayat in order to discourage unhealthy tendencies of the vertical programmes. Specifications were also made to ensure that Kudumbashree NHGs are organically linked to the local self-governments and the local plans. Kudumbashree was an attempt to develop an alternative to mainstream neo-liberal model.

Table 3: Mainstream Models of Micro-credit and Kudumbashree: Key Contrasting Features

Feature	Mainstream Models	Kudumbashree
Nature of Network	SHGs	NHGs
Target group	The poorest of the poor (BPL families)	Self selection process: BPL and APL families
Linkage to other sectoral programmes	Alternative to other poverty alleviation programmes	Complimentary to other poverty alleviation programmes.
Bank linkage	Safety net for financial sector reforms against subsidised credit.	Priority sector linkage and link to co-operatives and social banking

Focus	Micro Finance and Narrow Economic Activities	Larger Social Focus: Women Empowerment and Local Democracy
Support Organisation	N o n-Govemmental Organisations	Local Self-Governments

V The Present Status of Kudumbashree

At the inception, the coverage of the programme was confined to urban local bodies. During 2000-01 (262 GPs), 2001-02 (438 GPs), and 2002-03 (291 GPs) the programme was scaled up to the entire rural areas of the State in three different phases. The Neighbourhood Groups of Kudumbashree encompass 3682746 families networked into 175057 Neighbourhood Groups, which are federated into 15983 Area Development Societies (ADSs) and 1058 Community Development Societies (CDSs).

The three tier organisation of poor women poses an effective platform for the convergence of various anti-poverty programmes of the State and Central Governments. The different agencies related to the poverty reduction programme such as the NABARD, financial institutions, welfare boards and other autonomous agencies and departments are also utilising this platform for the effective implementation of their programmes. The Kudumbashree became the poverty alleviation wing of the Local Self-Government.

1. The main activities of groups are related to microfinance. The total thrift collected by NHGs in the state comes to Rs.1176 crore and the internal loans generated are to the tune of Rs.3020 crore (as of March 2009). For the year 2008-09, the total thrift collected by NHGs is Rs.172.7 crores and the internal loans generated are Rs.481 crores respectively. Under linkage Banking Scheme 100053 NHGs were graded and 75332 NHGs were linked with banks. Credit flow from the banks to the NHGs is Rs 378.01 crores (see Table 2). It is also seen from Table 3 that the bulk of the microfinance programme comes from the rural areas. A critical review revealed that weaknesses in the accounting system continues to persist and needs immediate rectification.

2. The second major activity of the NHGs is related to setting up of micro-enterprises generating gainful employment for the members. These include "traditional" enterprises tike goat-rearing and dairying, catering units, agro-processing units, multi-purpose job clubs, health care enterprises, computer hardware and data entry units, innovative enterprises like clean Kerala business in solid waste collection and so on. The State Poverty Eradication Mission has recently conducted a detailed study on the socio-economic impact of micro-enterprises created in Local Self-Governments. A total of 27061 functional units across various programmes and funding agencies were covered in the survey. Of these, 60.9 percent of the enterprises are in the agricultural sector and 23.99 percent from the industrial sector. The issues identified through the study include (1) management concerns, with focus on accounting and financial management (2) capacity building needs especially in marketing (3) lack of diversification and income augmentation (4) weak marketing networks (5) absence of quality control, packaging strategies, and brand development opportunities (6) and limited technology options.

3. Two major recent interventions in the micro enterprise sector have been the establishment of clusters taking into account the resource endowment of the locality and the marketing support being offered for the micro enterprises. At present it takes the form of monthly fairs in selected centres and festival fairs in all the panchayats and municipalities. Kudumbhashree also announced a scheme for creating a net work of permanent market oudets distributed throughout the state. Today, Kudumbashree is on its way to developing a unique community brand that is ethnic, homely and

Table 4: Status of Linkage Banking (as on November 2006)

Name of District	No. of SHGs	Total Thrift (Rs)	No.of NHGs Bank Linked (as on Sept. '08
Thiruvananthapuram	19012	1254979660	10969
Kollam	12443	776276231	9318
Pathanamthitta	6715	362848988	2697
Alappuzha	13727	975949312	10204
Kottayam	11122	616540719	4395
Idukki	9265	701607126	5333
Ernakulam	13373	801640460	9847
Thrissur	15399	718828496	7982
Palakkad	20570	1162311989	12424
Malappuram	15210	953364718	5095
Kozhikkode	14544	1130600864	6174
Wayanad	7482	388330373	6755
Kannur	11378	763025090	1913
Kasargode	6031	429804458	3224
Total	176271	11036108484	96330

Table 5: Micro-Enterprise Programmer-November 2006

No.	Programme	Individual	Group	Total Beneficiaries
1	SJSRY	20760	1589	34304
2	Rural Micron Enterprise	890	2268	15033
3	Yuvashree	238	327	1780
	Total	21888	4184	51117

environment-friendly, while seeking no compromise on quality. One of the successful strategies of Kudumbashree has been the conversion of social needs into business opportunities.

4. Women Group Farming: This is an important area identified by Kudumbashree for securing livelihood opportunities to the poor families. The Neighbourhood Groups (NHG) of Kudumbashree identifies the idling land in their vicinity and takes over it on lease for one to five years. The Group members start agricultural operations in the land and earn a reasonable income. The Grama panchayats and the Community Development Society facilitate the aspiring groups to obtain land from the landowners and negotiate lease amount. The vacant lands of Panchayats and public institutions are also given to the NHG members for agriculture. At present 24741 hectares of land has been brought under cultivation through the women groups in

the State with the involvement of 36468 NHGs. This has benefited 367270 families.

5. Rehabilitation of destitutes: This is the major anti-poverty programme of Kudumbashree targeting a segment of the population who are too weak for any self-help measure. The varying needs of the destitute include, (a) survival needs such as food, health, pension, education, (b) infrastructure needs such as land for housing, construction of house, safe drinking water, sanitation (c) development needs such as employment, skill development, livelihood for sustenance (d) psychological needs such as lack of competitiveness, initiative, awareness, social exclusion etc. To address these issues faced by the most vulnerable sections, separate strategies have to be worked out to enable them to move out of the poverty trap. A package of care services which encompasses food security, education, health care, reasonable pension, shelter, sanitation, drinking water, building competitiveness and initiatives, and preventing social exclusion are designed. The project is now being implemented in 600 Local Self-Government Institutions covering 47919 destitute families. The Asraya, by which name the project is known, is the first of its kind in the country targeting the excluded poor.

6. Balasabhas are informal forums of children for improving their creativity and talent. So far, 32444 balasabhas with 570710 children have been formed under Kudumbashree. Bala Panchayats have been formulated in 140 grama panchayats. The Bala panchayats are constituted by selecting the leaders from among the balasabhas.

7. Microhousing Scheme: The Kudumbashree also runs a loan based housing scheme under which Rs.40,000 is given at 7.25 percent with a repayment period of ten years. So far 31970 loans have been sanctioned.

8. Community Health Care: Community Health Care is yet another focus area. A convergence of health programmes are attempted to achieve 100 percent immunisation and better monitoring and control of poverty diseases. Promotion of hygiene and sanitation is an important activity. Kudumbhashree has been recognised by the State as the nodal agency for mobilising the beneficiaries for the health insurance scheme being implemented in the state. Santhwanam is a scheme for setting up health care enterprises from among science graduates of NHG families for providing home based health screening facility.

9. Organiser of NREG: An interesting feature of NREG in Kerala is that more than 80 percent of the beneficiaries are women. The reason is reserve price of male labour is much higher than Rs.125 being offered in NREG. Kudumbahshree has been the automatic choice for organising and supervising work in many of the Panchayats.

The activities of Kudumbashree have continued to diversify reflecting the multi-faceted character of poverty at one level and the tendency to utilise the Kudumbashree network for implementing various types of government schemes, at another level.

Kudumbashree was increasingly confined to narrow economic roles or as implementation agency of official programmes. A major casualty was the scuttling of Local Women Status Report Programme (LWSRP). Every, panchayat was to be encouraged to prepare a women's status report. There would be a panchayat level team that would act as facilitator for leading a structured discussion on various aspects of women's status, documenting the conclusions and preparing a report. The women NHGs were expected to provide the organisation for undertaking the above activities. The report preparation could thus be converted into a self-study and awareness programme spread over a couple of years. The resultant report would not only be a future guideline for future WCP's, but also a basic document for discussions on gender in the panchayat involving both men and women.

Similarly, the efforts that were made to improve the quality of deliberations and participation in the grama sabhas through linking the Kudumbashree NHGs to the grama sabhas, were also given up. The Kudumbashree NHG households with their men folk and other non-member households could constitute a subset of the grama sabha that would meet before each grama sabha meeting. These trends are currently being reversed by the present government.

The cardinal points of our vision on Kudumbashree are the following:

1. Neighbourhoodness constitutes the bask criteria for homogeneity.

2. Autonomy of the women neighbourhood groups is vital ensure democratic space for grass root level intervention.

3. Coordination role is to be played by the local self-government i.e. neither by the NGO nor the state government.

4. Holistic view of the functions of NHGs and poverty alleviation process.

The above principles have been evolved in the concrete circumstances of Kerala and may not have significance in another context. Thus, for example, in the context of caste segregated habitat pattern, an overemphasis on neighbourhood groups can prove undemocratic. Despite the diversity that would mark the regional experience with reference to self-help group movements, Kerala's experience does offer certain vital lessons. The Kerala experience gives compelling reasons for a broader conception of development that links women microfinance organisations to women empowerment in both the economic and political arenas and places them firmly within a broader development agenda, such as implementation of agrarian reforms, development of social infrastructure, provision of public distribution and participatory governance.

Leadership and Vision: Evolving Strategies

Kandy Dayaram

Abstract

Maturing

In spite of change initiatives proposed at state level, the question of the processes of reformation and redress within the South African education landscape remains obscure. The potential for linking leadership and strategy to debates about consensus and divergence of transformation policies and procedures, poses a major challenge to the facilitators of the change mechanisms, particularly after a decade of South Africa achieving democracy. This paper assesses the evolving strategies of transformational progress with particular focus on the prospective processes which may assist key policy makers and executors to move towards effective public service delivery, nationally and globally.

The renaissance of governance within South Africa began with the adoption of a new piece of legislation. The *Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)* heralded a new phase in the structure and development of the country's education system. For example, this is illustrated in section 29 (1) (b), of the Constitution, 1996 (Act 108 of 1996), whereby it is stated:

"Every one has the right: ... to further education, which the state, through reasonable measures, must make progressively available and accessible."

In their quest towards the redress of past inequities, the Ministry of Education developed a new landscape. Further Education and Training was identified as key to the human resources future of the country (*Department of Education 2001:1*). Specifically, this initiative outlined the merger of technical colleges and the removal of past forms of discrimination within the Further Education and Training (FET) sector (*Department of Education 2001*). Such a policy change was driven by the need to build institutional strength via the development of human resources, building economies of scale and a redistribution of resources between previously advantaged and disadvantaged institutions (*Department of Education 1997, 2001*). This action was a significant endeavour undertaken to transform the South African Education sector. Whilst many mergers have taken place for decades, both in the

Dr. Kandy Dayaram, Senior Lecturer, Curtin Business School, Curtin University, GPO Box U1987, Perth, Western Australia, 6845, Email: Kandy.Dayaram@cbs.curtin.edu.au

private sectors and international sectors, mergers in the South African educational institutions are more recent phenomena (Harman and Meek 1988, Skodvin 1999, Harman and Harman 2003). Moreover, South African history is also unique in that it has been conceived from a legacy of apartheid with major inequities between educational institutions (*Department of Education 1997*, Reddy 1998, *National Merger Plan 2001*, Harman and Harman 2003). However, the impact of such a sea change necessitates strategies that range from individual leaders working alone to effect gradual change, to working with others in a more engaged and all-embracing change effort. Kotter (2007) argues that developing a compelling vision and strategy, communicating the vision and empowering employees to act on the vision are crucial ingredients of leading major change. Against the backdrop of these challenges, an investigation into the impact of change leadership on variables such as vision and strategic direction, communication and empowerment, and their implications for contemporary public policies and change practices will be undertaken.

Furthermore, the mergers of education institutions were involuntary and driven by local rather than global needs. The rhetoric of the period immediately following the first democratic elections in 1994 was the need for redress and equity. Yet by the second election in 1998, it was noted that the progress towards a changing South African landscape was slow. Accordingly, the Government of the day, with a sense of fervour towards transformation, established working parties such as the National Committee on FET to investigate the education landscape within South Africa and develop an agenda for change, especially in public sector organisations.

Policy Development

A salient outcome from the National Committee on FET (*Department of Education 2001*) was a document that highlighted the need for revitalising human resource management practices; developing strategies to address issues of equity; sharing of resources; and joint planning among providers of further education and training. These recommendations led to the development of a strategy which outlined the merger of FET Colleges. The merger process would entail an integration of previously advantaged and disadvantaged academic institutions. The report outlined challenges such as the prevailing legacy of past authority which promoted authoritarianism based on racial, gender and cultural domination. The staff profile in current institutions failed to reflect the reality of South African demographics, especially in governance, the lack of staff support and counselling for ensuring equal opportunity, equity support and career development. Furthermore, the report argued that the legislative provision for state controlled institutions has created a culture of dependency in the case of historically Black Colleges and thus serves to undermine staff capacity for sustainable self-management of an inclusive participatory governance and management, teamwork, gender equity and quality promotion. The strategy adopted by the National Department of Education to manage the change process, is to develop human resources who will be able to meet the objectives of the *Further Education and Training Act, 1998 (Act 98 of 1998*). The view that the attitude of employees in the public sector is an important phenomenon in the internal environment of institutions and can make a significant contribution to the quality of public management is supported by Bellou (2007), Willems et al. (2004) and Coyle-Shapiro et al. (2003).

Against the above background, within each of the nine provinces in South Africa, the FET landscape was restructured to merge institutions. Within the KwaZulu-Natal Province, 24 institutions were merged to create nine FET colleges (*Department of Education 2002*). In aligning the agenda setting of merging public sector organisations, this paper investigates the leadership and strategies employed to manage the merger process of three such FET institutions. Crain (2000) asserts that the success of a merger requires a strong commitment by participating institutions and their staff, with strong leadership from heads of participating institutions, a shared vision of the future potential benefits from a merger, wide consultation with staff and their involvement in the planning and integration processes, and transparency in key decision-making processes. It is therefore understood that both management and employees within the merging institutions will be affected and, as such different behaviours tend to manifest which ultimately impinge on both the change process and public service delivery (O'Connor 1993, Crain, 2000). However, to achieve strategic change, the leader has to predict the future, maintain flexibility and empower followers to achieve the change objectives (Daft 2008).

Leading the Change Process

According to Ralston and Wilson (2006) whilst vision, strategy and culture are the foremost responsibilities of leaders in steering the change process, leaders need to provide resources and commitment and champion the results to both the organisation and its stakeholders. For any change to succeed, leaders need to challenge the organisation to think critically about possibilities and learn more effectively from past experiences. Dotlich and Cairo (2002) agree that effective leaders are individuals that refuse to be prisoners of experience. Instead, they create a culture that embraces change and view situations with a critical perspective. While much can be learned from past experiences, effective leaders are also aware of the changing nature of the environment and society. Underpinning the change process is the leader's crucial role in managing and creating a change culture. Whereas the culture of an organisation provides the context within which strategies can be created and implemented (Ireland and Hitt 2005); the behaviour of a leader, both consciously and unconsciously, tends to shape this organisational culture and the way strategies are implemented (Hagen et al. 1998, George et al. 1999). By shaping a change culture, a leader creates and develops a system of values which sets a strategic view of the future and offers a measure of the day-to-day activities of the organisation (George et al. 1999). Wheatley (1999) suggests that when leaders provide a clear image of the destination, the more force the future will exert on the present, enticing followers to the desired state that permeates the entire organisation. Schmoker (1999) accedes that leaders are uniquely positioned to ensure that amidst the demands and bombardment that all organisations endure, the dream remains central.

Linking Vision to Strategy

Clear articulation of the organisation's mission and vision is essential in order to view most day-to-day issues and challenges more laterally. According to Calder (2006) such practices enables the organisation to leverage a competitive advantage over other industry players. A vision must be communicated in and outside the institution in order to inspire and motivate stakeholders to willingly contribute their valuable resources to enable the realisation of the vision. Moreover, within the cycle of effective organisational change is the setting of goals and outlining the path to success. Schmöker (1999) asserts that goals can provide a concrete sense of progress toward the organisation's vision. Ralston and Wilson (2006) propose incorporating the vision into an organisation's culture and then using tools such as scenario planning to provide the long-term perspective needed to develop strategies required to realise the organisation's vision. Calder (2006) suggests a re-evaluation of an organisation's culture and its vision. Its purpose or mission is the foundation for any strategic change processes. One measure of an institution's readiness to embark upon a comprehensive strategic change course is its ability to embrace the development of a new or revised vision and mission. Garman (2006) asserts that strategy, when crafted and communicated effectively, enhances employees' understanding of their common purpose. Indeed the commitment to strategic change needs unmistakable resolve by everyone involved in developing a cogent vision and its subsequent mission to stakeholders.

Communicating the Vision

Organisational change affects people; people want to hear meaningful expression regarding what concerns them. Leaders, therefore, need to personally vocalise their plan, direction, and purpose to accentuate their vision and mission explicitly. Thus, internationally it is understood that leaders in all fields are being charged to develop and communicate a guiding vision for their organisations and yet stay attuned to their own needs and the self efficacy of their followers (Edgehouse et al. 2007). Ralston and Wilson (2006) advocate communicating various change scenarios which the organisation might encounter in preparing to respond to possible changes and trends. However, it is imperative that leaders gain deeper insights into the local and global environment and attempt to achieve the culture change that is at the core of the organisation's change strategy. To succeed in communicating and transferring corporate culture, leaders need to reinforce key components of the desired culture by their behaviours and how they structure the organisation (George et al. 1999). This could be through their attention to details, performance measures and mechanisms of control subject to organisational goals. Ralston and Wilson (2006) argue that leaders and their followers need to reach consensus as to what the most important challenges facing the organisation's external environment are and concur on the issues and trends of major changes. The core of communication is the perceived level of support leaders' offer as role-models, or coaches and their human resource practices. According to George et al. (1999) this mentorship role helps shape the organisation's culture and prepares employees to embark on the change process.

Empowerment to Change

Unfortunately, in any long term reform effort, it is possible for people to lose sight of their organisation's vision and the goals that they had set to reach it (Duke 2004, Fullan and Hargreaves 1996). Therefore, change agents need to be prepared for the possibility of these implementation dips, and other forces, that might limit their reform efforts (Senge et. al. 1999). Moreover, when leaders involve others in developing a shared vision and goals for reaching the vision, their actions give meaning, challenge, motivation and a common purpose to everyone in the organisation (Bass and Avolio 1994, Schmöker 1999, Edgehouse et al. 2007). Deployment of these values and vision throughout the organisation is also key to organisational change efforts. According to Wheatley (1994), self-reference facilitates orderly change in turbulent environments. A clear sense of identity of the values, traditions, aspirations, competencies, and culture that guide the organisation provides a reference point for change. Hersey et al. (2001) advocate practising democratic leadership, team leadership and servant-leadership as behaviours which will enable followers to work towards greatness. Calabrese (2002) suggests establishing an environment in which expectations and guidelines are clearly articulated and valued as this creates a psychologically safe atmosphere to embark on change. Taking away the fear of losing a position or status within the organisation because of trying something new allows employees to focus on innovation and creativity. Rinke (2004) proposes trusting and argues that establishing an environment that is high in trust is fundamental to having a successful and vibrant organisation. Most literature supports that the work environment should be open and supportive of dialogue, particularly between employees and leaders. Dotlich and Cairo (2002) identify an environment that is supportive of dialogue as a necessary component of implementing change. To encourage dialogue, behaviours should be adopted by leaders which include exposing their own vulnerabilities, being active learners, and forming teams that create discomfort by having a variety of opinions. However, a major challenge in creating a climate that promotes employee empowerment is the manner in which power is used. Rinke (2004) contends that a leader's ego is the most common impediment to creating an environment that encourages meaningful dialogue. Yet, leaders that are receptive to viewpoints and opinions that differ from their own are typically in those organisations that excel during times of change (Rinke 2004, Dotlich and Cairo 2002).

Method

Subjects

Respondents for this study were full time members of the administrative and academic staff from the three FET institutions (A, B and C). A sample size comprising 148 participants (>50 percent) from the target population of 234 participated in the survey. It was considered representative for statistical tests to be performed, since it represented 63 percent of the target population. The questionnaires were distributed to the CEO, senior managers of each college, departmental managers and all other academic and administrative staff.

Site

College A was established in 1963, with a 100 percent white student and staff composition. College B was established in 1975, with a 100 percent black student composition, and a 50 percent white and a 50 percent black staffing ratio. College C was established in 1963 and had a 100 percent black student enrolment, with a 100 percent white staff composition. These three colleges were merged to form a new FET institution that continued to operate at the original three sites. The newly merged FET College consisted of 184 full time academic staff members and 50 administrative staff members. Colleges A and B were classified as advantaged institutions in terms of infrastructure and institutional capacity, whilst College C was classified as a previously disadvantaged institution.

Procedure and Measure

This paper employs data from two sources. The first is published state government policy documents relating specifically to further education and training and more generally to issues closely related to this policy area (eg transformation and historical development). The second source of data is reliant on a climate survey questionnaire.

The survey instrument was distributed to a representative sample of the workforce, in terms of occupational classification, gender and race. General and casual staff did not form part of the study group. A total of 148 questionnaires were made available for distribution to the three campuses, using stratified random sampling. A total of 102 completed questionnaires were received. The researcher conducted a climate audit using questionnaires as a means of data collection for the quantitative analysis of the research study. The instrument used for this survey consisted of a pre-coded questionnaire drawn from the Hay and McBer Organisational Climate Survey II (1996). The questionnaire was carefully constructed to facilitate maximum response and at the same time obtain more detailed information. The questionnaire employed five point Likert scales to elicit the degree of agreement or disagreement. The questionnaire had provision for respondents to supply demographic and perceptual data. Demographics of gender, age, race groups and formal education were obtained. The survey instrument provided responses for measuring respondents' perceptions that leadership had a vision and strategy for the change process, there was adequate communication and that leadership empowered employees to manage the change process.

Analyses

After accurately imputing the data, two main types of analyses were conducted. Demographic data was subjected to frequency assessments. Contrasts of mean scores by Anova of Variance (ANOVA) were undertaken for the four variables, strategy, vision, communication and empowerment. These means were contrasted for difference at the $p < 0.05$ level. The reliability of the study was estimated with Cronbach's alpha.

Results

Table 1 presents a demographic profile of the study respondents. The data show that across all three institutions males comprise the majority of respondents which reflects the past workplace practices of private and public organisations in South Africa. Whilst Colleges A and B reveal similar age and racial groupings of respondents, the demographics of College C differs, in that the majority of respondents were younger people and a greater number of Blacks were being employed, which would be more representative of the current demographics within the South African workforce. Furthermore, Colleges A and B have a majority of white staff members, which is consistent with the Department of Education's rationale for a transformed landscape (*Department of Education* 1997, *National Merger Plan* 2001).

Table 1

Institutions	Gender Male/Female	Race Black/White	Education VET* /Tertiary	Age <29	30-	40-	50+
An = 33	19.6/12.8	10.8/21.5	21.5/10.8	1.0	9.8	13.7	7.8
Bn = 34	19.6/13.7	3.7/19.6	20.6/12.8	4.9	10.8	12.8	4.9
Cn = 35	20.6/13.7	28.4/06.0	16.7/17.6	6.9	14.7	6.7	6.0

Table 1: Demographics % (N = 102)

Notes:VET* includes Secondary Education, Technical and Vocational Educational and Training

In contrast, College C reveals a higher number of respondents holding tertiary qualifications as compared to the other two organisations. Whilst it may be argued that the FET sector focuses on the development of vocational skills, hence a greater number of staff possess Technical and Vocational Qualification. However, the National Commission on Higher Education (1996) stressed that the education system, in particular human resource development, is fundamentally flawed by inequities, imbalances and distortions derived from both its history and current structure. Overall, the findings are consistent with the pursuit of the constitutional obligation towards the redressing of inequities, human resource

Table 2

Variables	Colleges			ANOVA		Scheffe' Means Contrasts
	A n=34	B n=33	C n=35			
	1	2	3	F	P<	P<0.05
strategy	1.86 (.586)	1.93 (.620)	1.42 (.468)	8.295	.00	1,2 > 3 2>1
Vision	2.78 (.853)	2.75 (.586)	2.02 (.766)	6.770	00	1,2 >3
Communication	2.45 (.97)	2.71 (1.04)	2.31 (.423)	1.475	.23	ns
Empowerment	2.93 (.391)	3.022 (.485)	2.06 (.730)	11.146	.00	1, 2 > 3 2>1

Table 2: Means, Standard Deviations and Comparisons across Colleges Undergoing Change

Notes:Values in parentheses are the standard deviations of the means.

development and the removal of past forms of discrimination within the Further Education and Training (FET) sector (*Department of Education* 2001).

Table 2 presents the means as well as the standard deviations of the assessed four variables of strategy, vision, communication and empowerment. The means contrast results confirm that College C is significantly different from Colleges A and B. For instance, the four variables have the lowest means in College C, which indicates a positive set of perceptions that leadership has both a vision and strategy aimed at bringing about transformation and that leadership has embarked on an empowerment programme to drive the change process. Furthermore, College C was classified as a previously disadvantaged institution and would benefit from integration with other well resourced organisations. These results are consistent with the recommendations of the National Committee on FET (*Department of Education 2001*) that redress of the education landscape and the development of human resources are prerequisites to meet the objectives of the amended legislation: *Further Education and Training Act, 1998.* However, the variables of strategy and empowerment reveal a significantly higher means score for College B (which compares with College A) but contrasts with the scores of College C. This finding suggests that whilst both respondents from Colleges A and B demonstrate lower confidence levels in leadership developing a change strategy and empowering employees, College B experiences a greater negative disposition towards leaders enabling the merger process and achieving its objectives. Furthermore, for the variable vision, College C had the lowest mean score while College A had a significantly greater score, which suggests College A had the least favourable belief that leadership provided a clear direction for the future. Although the means score for the variable of communication was lower for Colleges A and C, the means contrasts produced results that were not significant. The standard deviation greater than one indicates a spread of response rates. This indicates that the respondents were ambivalent about communication during the merger. Conversely, overall the results indicate that College C displays a greater degree of confidence in leadership successfully driving the change programme, as well as a more favourable disposition to change than respondents of the other two institutions.

Discussion

The research findings demonstrate that whilst employees value the importance of leadership, there are strong indications that past institutional practices and employee attitudes impinge on current and future transformation initiatives. Despite leadership theorists such as Bass and

Avolio (1994), Schmöker (1999), Calder (2006) and Edgehouse et al. (2007) strongly advocating that a clear vision, strategy and leadership direction are critical ingredients in a change process, these findings suggest that culture can be an overriding factor during transformation initiatives. This is evident from the perceptions of respondents in College C which indicates strong agreement that leadership has demonstrated a clear vision and strategy. In contrast, Colleges A and B perceive otherwise. The findings also reveal that a re-alignment with contemporary best practices is needed. For instance, it was revealed that College C, which was previously classified as a disadvantaged institution (i.e., poor physical resources and limited employment opportunities), compared to College A, which was previously deemed to be advantaged is a reflection of how such government and management policies hindered human resource development and organisational effectiveness. Whilst it is understood that variables such as vision, strategy, communication and empowerment are a fraction of the whole assimilation process, ignoring or underestimating past practices and organisational culture could be a considerable oversight. The South African example of integration of various arenas within the public sector provides a thrust for other countries seeking similar turnaround strategies to analyse its strengths, its diversity from other countries, and to identify the most suitable strategies for optimising its potential whilst determining its own course towards global competitiveness. The experiences within the FET sector seem to reveal that without effective leadership there is uncertainty and a lack of focus on the future. The South African change agents would need to ensure that the approach they take clearly identifies the uncertainties the organisation faces, and that the strategy that is adopted reflects the risks and rewards posed by those uncertainties.

The FET sector has the ability to play a pivotal role in the political, economic and cultural reconstruction and development of South Africa. This stream of education is fundamental in building critical skills that are imperative in a developing economy. In order for a balanced transformation to occur, a new system of further education and training characterised by increased participation by all sectors of society, and greater institutional responsiveness to policy imperatives, need to be underway.

Conclusion

This study has attempted to examine the relevance of leadership during the change process. A major challenge for those leaders tasked with the transformation process will be to manage change with considerable respect for, and understanding of, future directions: the creation of employment equity; and a review of the organisational culture towards concepts in favour of empowerment and democratic participation. Indeed, the study findings have implications for future change initiatives and HRD studies and highlight some directions for future research. Further research into prevailing cultures, especially given the uniqueness of the South African political landscape and governance, is recommended. The finding of the differences in perceptions between the different stakeholders towards leadership and change does not imply inaccuracy in ratings by one of these groups. Instead, it suggests that when it to comes to implementing change, different stakeholders hold diverse perceptions, depending on issues such as benefits, power, uncertainty and loss. Policy makers and change agents need to be aware that measures such as vision and strategy are necessary elements of a successful change programme however they do not necessarily reflect the perceptions of all stakeholders. Underlying aspects such as culture needs to be analysed as well as developing an empowerment and communication strategy aimed at reducing uncertainty during transformation initiatives. Since the merging of South African public institutions are a relatively new phenomenon, studies further down the merger trajectory would determine the success of policy changes and the levels of stakeholder receptiveness to change.

The findings of this study are of significance not only to researchers, but also to policy analysts, HR practitioners and their institutions. The study findings clearly demonstrate differences in employee perceptions of strategic leadership and the change process within the FET sector. A profound implication of this finding is that policy makers and change agents cannot presume that all employees would generally accept and support the changes. This case study reflects the need for a greater understanding of organisational cultures, discourse and dialogue. Central to transformation and a democratic future for South Africa is the question of whether dialogic engagement is possible between the different cultural groups and the power-interests of policy makers.

Keywords: Strategy, Change, Public Policy, South Africa.

References

Bass, B.M., and Avolio, B.J. *Improving Organisational Effectiveness through Transformational Leadership*. Thousand Oaks, CA: Sage Publications, 1994.

Bellou, V. "Shaping Psychological Contracts in the Public and Private Sectors: A Human Resources Management Perspective." *International Public Management Journal*. Stamford, 0(3), (2007): 327-323.

Calabrese, R.L. *The leadership assignment: Creating change*. Boston: Allyn and Bacon, 2002.

Calder, B. "The Community College Enterprise." *Livoni.*, (2006): 12 (2).

Coyle-Shapiro, J., and A-M., Kessler, I. "The Employment Relationship in the UK Public Sector: A Psychological Contract Perspective." *Journal of Public Administration Research and Theory.* 13(2), (2003): 213-230.

Crain, R. "Why Most Mergers Turn Sour: They're Not a Natural Combo." *Advertising Age*. Vol.71 (52), (2000): 26-28.

Daft, R.L. *The Leadership Experience*. South-Western: Thomson Learning, 4th Edition, Mason: Ohio, 2008.

Dotlich, D.L., and Cairo, P.C. *Unnatural Leadership: Going Intuition and Experience to Develop Ten New Leadership Instincts*. Wiley and Sons, Inc., 2002.

Duke, D. *The Challenges of Educational Change*. Boston: Pearson Education, Inc., 2004.

Edgehouse, M.R., *Edwards,* A., Gore, S., *Harrison,* S. and *Zimmerman,* J. Initiating and Leading Change: A Consideration of Four New Models. *The Catalyst.* Carlsbad: Summer (2007): 36 (2).

Fullan, M., and Hargreaves, A. *What's worth fighting for in your school*? New York: Teachers College Press, 1996.

Garman, A. "Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework." *Personnel Psychology*. Durham: Autumn, 59 (3). (2006): 55- 758.

George, G., Sleeth, R.G., and Siders, M.A. "Organizing Culture: Leader Roles, Behaviours, and Reinforcement Mechanisms." *Journal of Business and Psychology.* 13 (4), (1999): 545-560.

Gowing, K.M., Kraft, J.D., and Quick, J.C., Editors. *The New Organisational Reality: Downsizing, Restructuring and Revitalization*. Washington: American Psychological Association, 1998.

Harman, G., and Harman, K. Institutional Mergers in Higher Education: Lessons from International Experience. *Tertiary Education and Management.* Dordrecht, 9(1), (2003): 29-44.

Harman, G. and Meek, V. L. (eds). "Institutional Amalgamations in Higher Education: Process and Outcome in Five Countries*." Armidale*: Department of Administrative and Higher Education Studies, University of New England, 1988.

Hersey, P., Blanchard, K.H., and Johnson, D.E. *Management of Organizational Behaviour: Leading Human Resource.* (8th Ed.) Upper Saddle River, New Jersey: Prentice-Hall, 2001.

Ireland, D.R., and Hitt, M.A. "Achieving and Maintaining Strategic Competitiveness in the 21st century: The role of Strategic Leadership." *Academy of Management Executive.* 19 (4), (2005): 66-77.

Kotter, J.P. "Leading Change: Why Transformation Efforts Fail." *Harvard Business Review*. Boston. 85 (1), (2007): 96.

O'Connor, C.A. "Resistance: The Repercussions of Change." *Leadership and Organisational Development Journal*. 14 (6), (1993): 54.

Pfeffer, J. "Managing with Power: Politics and Influence in Organizations." Boston, *Mass:* Harvard Business School Press, 1992.

Ralston, B. and Wilson, I. *The Scenario Planning Handbook: Developing Strategies in uncertain Times*. Thomson/ Southwestern, 2006.

Reddy, J. "Regional Consortia, Partnerships, Mergers and their Implications for Transformation of the South African Higher Education System." *Johannesburg:* USAID, 1998.

Republic of South Africa. "Constitution of the Republic South Africa*." (Act 108 of 1996). Pretoria:* Government Printer, 1996.

Republic of South Africa. "Further Education and Training Act*." (Act 98 of 1998). Pretoria*: Government Printer, 1988.

Republic of South Africa. "Further Education and Training Act, 1998 (Act 98 of 1998)*." Pretoria:* Government Printer, 1998.

Republic of South Africa. Department of Education. "Report of the National Committee on Further Education." *A Framework for the Transformation of Further Education and Training in South Africa.* August. Pretoria: Government Printer, 1997.

Republic of South Africa. Department of Education. "A New Institutional Landscape for Public FET Colleges: Reform of South Africa's Technical Colleges: Provincial Plans." *Pretoria*: Government Printer, July 2001.

Republic of South Africa. Department of Labour. "Human Resource Development Strategy for South Africa – A Nation at Work for a Better Life for All." *Pretoria*: Government Printer, 2001.

Rinke, W.J. *Don't oil the squeaky wheel and 19 other contrarian ways to improve your leadership effectiveness*. New York: McGraw-Hill, 2004.

Schmoker, M. *Results: The key to continuous school improvement*, Second Edition. Alexandria, VA: Association for Supervision and Curriculum Development, 1999.

Senge P., Kleiner, A., Roberts, C, Ross, R., Roth, G., and Smith, B. (1999). *The Dance of Change*. New York: Random House.

Skodvin, O.J. "Mergers in higher education: Success or failure?" *Tertiary Education and Management.* Dordrecht, 5(1), (1999): 65-80.

Wheatley, M.J. *Leadership and the new science: Discovering order in a chaotic world* (2nd ed.). San Francisco: Berrett-Koehler Publishers, 1999.

Willems, L., R. Janvier, and E. Henderickx. "The Unique Nature of Psychological Contracts in the Public Sector: An Exploration." Paper presented at the *EGPA Annual Conference, Ljubljana (Slovenia).* September 2004.

Swine Flu on Retail Market

Handling with Care

Fazlollah Kazemi and Malihe Esmaeili

Abstract

Tackling

The year 2009 is the outbreak of Swine flu virus which started from Mexico where about more than 100 people lost their lives. In Pune city till (September 20, 2009), 54 H1N1 deaths were reported. This paper seeks to present a framework depicting the impact of Swine flu on retail market of Pune city, and what retail managers could do to get away from heavy loss. This paper combines literature from various fields to develop a much needed conceptual framework of retail managers' ability to handle the market situation properly.

As we understand, retailing involves all activities directly related to the sale of goods and services to the ultimate consumer for personal, non-business use. Simple retailing is maturing into a more microscopic and systematized process. The global economy about to come out of the hazard of depression, is now being hit with a progression of Swine Flu cases that is yet to be contained. The epidemic has started from Mexico where about more than 100 people have lost their lives. In India the cases are rising day by day especially in Pune city.


Mr. Fazlollah Kazemi, Research Scholar, Department of Management Sciences (PUMBA), University of Pune, India, Email: kazemi357@yahoo.com

Ms. Malihe Esmaeili, Research Scholar, Department of Management Sciences (PUMBA), University of Pune, India, Email: esmaeili06@yahoo.com

Swine Flu will show its genuine impact from October onwards due to winter and from subsequent month onwards if there is continuation in monsoons. The Swine Flu epidemic is so far purely a health crisis. And it will be so, for a while. But one of the downsides of not having managed to stem the tide earlier is slowly going to be seen on the economic front. Already, many avenues on those economic fronts are being hit hard and retail market of Pune city is one of them.

Since people will be staying home and not strolling in the malls and on the streets, with the festival and holiday season right around the corner, the impact is even worse, since many retailers make much of their annual income during these few months. The outbreak of Swine Flu has not been kind to retail market of Pune city, which suffered extensive losses due to the government mandated shutdown of some public and private houses and inhabitants' fear of virus, caused a significant drop in retail sales.

What is Swine Flu?

Swine Flu is a respiratory disease; WHO says it is caused by influenza type A which infects swine, or pigs. The infection is undergoing constant mutation or change and there are several types of Swine Flu.

How does the Swine Flu spread?

The flu spread most likely through coughing or sneezing. The symptoms are quite like that of any other flu. These include fever, cough, sore throat, body ache, runny nose, sneezing, chill and fatigue.

Treatment for Swine Flu

Till now there is no vaccine for the treatment of Swine Flu. Tamiflu is the generic drug that can be used for the treatment.

What is Retailing?

According to, (El-Ansary et al 2001), "Retailing consists of the activities involved in selling goods and services to ultimate consumers for personal consumption."

Economical Impact of Swine Flu

Given this extensive pandemic, disruptions in trade or commodity demand are likely and could have a strong impact on the already challenged global economy.

Trade restrictions can also harm the larger global economy. We have already seen some level of trade restrictions, with both China and Russia placing restrictions on pork imports from the United States, as well as several other countries, due to the perceived connection to swine.

Effects of Swine Flu on Retail Market of Pune City

There's so much we don't know about the *Swine Flu story,* the potential retail market impact is just one of them. Many in the markets and elsewhere are now trying to estimate what the eventual economic cost of the outbreak might be. It's safe to say that none of them has a clue. But, it seems the opposite is true, that the economic costs of this virus might actually be less than it would otherwise have been, because some of the output that might have been lost to flu has already been lost to the recession.

To put it bluntly, if unemployed people are forced to stay at home for a few weeks, that has a smaller economic cost than if they were all in work. And if people are already going out less to restaurants, cinemas and the like, the fall in consumption due to flu may be smaller than it would have been as well; here there are some effects as follows:

1. It will reduce the consumption power of people as people generally spend less in times of Pandemics. It is a severe blow to consumption related stocks which are already reeling under the impact of poor monsoons.

2. Consumption is generally high during festival season and high hopes of companies on festival sales will be severely impacted in September-October season.

3. Just when multiplexes thought business was reverse on trail, the virus has punch movie theaters. People avoid going to swarming places and public places for their entertainment and shopping which has huge impact on shops, movie theaters and multiplexes.

4. In retail sector significant portion of sales are in the consequently three months (festival season); but, things will transform significantly for retail players if people want to stay at home.

5. Department stores were allowed to remain open during this period, though consumers were urged to stay home and many smaller retail shops closed, due to lacking business.

6. Pune city and its suburbs are points of tourism attraction; people in general may shy away from public gathering places. And finally, a drop in tourism would magnify the impact on the sector, since tourists make up a significant percentage of the overall customer base.

7. Dining establishments are hurt too, customers prefer to stay home and prepare their own food as they

seem to prefer the sense of control over food preparation.

How can Retail Managers in Pune city deal with Swine Flu?

You're either sick with it or sick of the mention of it, but Swine Flu could have a serious impact on retail operations. Enough sensationalism, says, (Charlotte Hardie, 2009).

How at risk is the Retail Sector?

Unfortunately it ranks way up the top of the "at risk" list alongside others such as the travel and leisure industries and the healthcare sector because of employees' continual contact with members of the public.

Consumer sector would be among the most affected with high street footfall having particular impact on the main players in retail market.

How will its impact be felt?

With the spread of Swine Flu now described by the United Nations as "unstoppable" retailers will inevitably have to brace themselves for some negative effect on sales.

The issue for retailers is not just the shopping behaviour of the infected but also the non-infected – media reporting about the relatively tiny proportion of those who have died from the illness is not helping quell the already wide- spread public hysteria and some are already choosing to avoid the busiest shopping areas.

The higher risk of store staff infection also means that absenteeism levels could be higher than they will be elsewhere. And of course it's not just store staff who have a direct impact on store operations – retail businesses are equally reliant on their distribution centre workforce to get the product to the store in the first place.

Can Retailers claim for loss of earnings as a result of Swine Flu?

Probably not. The small print in loss of earnings policies varies greatly, particularly for larger firms where insurance is often bespoke. Retailers should check with their insurance provider or broker to see if they are covered against such "acts of God," but, according to, (Wilders, 2009), "In my experience, this would fall outside most standard policies."

What should the Basics of Business Continuity Planning involve?

The Swine Flu epidemic is not like normal continuity planning because it involves dealing with the loss of staff, rather than the loss of a site. Continuity planning is about exercising common sense and being prepared for every eventuality. Since the World Health Organization raised the alert status, the retailer's pandemic steering group of senior directors has been meeting regularly. "We have worked closely with our suppliers to put arrangements in place and briefed our people on current developments relating to the influenza and company policies," Steve Gray (2009).

According to Steve Gray (2009), "It's about taking a pragmatic approach, being fleet of foot and communicating properly with customers and colleagues."

How can Retailers manage Absenteeism effectively?

This is essential because it poses the greatest threat to business continuity. Houghton (2009), recommends defining the "single points of failure"– those individuals or perhaps small teams who have a unique skill that others cannot do. If that person or the whole team is off work for an extended period, the repercussions on the business are considerable. Managers might want to give basic training to other staff members to perform those skills in anticipation of large-scale absence.

Retailers also need to be aware of a government proposal, rules and regulations of the state of Maharashtra.

How can Retailers protect their Employees?

Wilders (2009) says the reasonable legal requirements to provide a safe working environment do not have to be complicated – it involves simply ensuring rooms are properly ventilated, having soap and hygiene gel available at all times, communicating company policy on illness and ensuring people with symptoms are sent home promptly.

For store staff, cleansing gel should be provided at each checkout to reduce the risk of contracting the virus from germs on goods and money. In cases where there is a sudden increase and mass absenteeism in a particular store, retailers need to ensure it is cleaned thoroughly.

To minimize time spent answering individual employee's queries, creating a comprehensive Q&A-style document. This could be used to raise awareness of symptoms, set out the business's flu sickness policy and provide key contact details; this may prove an invaluable tool in keeping employees informed.

Can Retail Staff refuse to come to work?

Yes, but only if they have reasonable grounds to think that by coming to work they would be at risk of contracting Swine Flu,(Wilders 2009). This poses more than a few problems for HR teams. Either they require employees to attend work, which could potentially lead to resignations or constructive dismissal claims, or they accept that this is a byproduct of the epidemic and productivity, customer service, sales and profits suffer the consequences (Wynn-Evans, 2009).

According to Wilders (2009) if manager has made attempts to minimize the risk but the employee still insists on staying away the retailer may pursue disciplinary action. But, he adds: "Reasonable persuasion should be the first recourse."

Can Employees demand to wear Face Masks?

There is actually little medical evidence that masks protect the wearer. Only some types are effective and only if worn properly. In addition, they only work if changed regularly – if they become damp from breathing they will harbour viruses. If masks interfere with their job function – in the case of store staff it would act as a major deterrent to customers.

Will Anyone benefit?

1. Online retailers – in fact, any retailer with a strong online presence, should benefit if the epidemic worsens. As Gray (2009) says: "If it does worsen, footfall will reduce but people will still want our products. They'll just switch channels."

2. Telecommunication (because people travel less and businesses will do video conferencing more often).

3. Health (Just look at the newspapers, everyone is selling mask and thermometers, even the flu medicines are selling like hot cakes, though they don't prevent Swine Flue).

4. Snacks products, ready to eat foods (people afraid of going out, they prefer to stay at home, eat snacks and watch TV!).

Limitations and Future Research

This conceptual framework presents the effects of Swine Flu on retail market of Pune city and how the retail managers of Pune city can deal with and take proper actions against this problem. Caution must be exercised before generalizing the concept across other industries. Future research should investigate on impact of Swine Flu on other industries in different cities of India.

Conclusion

The retail market of Pune city has faced significant obstacles in 2009 with the prolonged recession and economic fears. Now, another potential problem has emerged with the Swine Flu that not only threatens the lives of thousands, but the economic lifeline of businesses. The Swine Flu is no different than other problems of the past, but combined with economic and political uncertainty and the always looming natural disaster creates a unique perfect storm for retail market disruptions. The global nature of today's economy also makes the spread of diseases easier due to the mobility of the population and the distribution of global commerce. Now it's the duty of managers in the retail sector to deal with the virus and take proper actions to protect lives of their staff which is caused by Swine Flu and as well as their businesses from loss.

References

Adel I. El-Ansary, Anne T. Coughlan, Eric Anderson and Louis W. Stern. "Marketing Channels." Sixth Edition, (2001): 390.

Bennett, Coleman and Co. Ltd. *The Times of India*. Pune, and Pune Mirror.

Charlotte, Hardie. "Features Editor of Retail Week." UK: 2009.

Charles, Wynn-Evans. *Head of Dechert's London Employment Practice*. UK: 2009.

Houghton, Business *Directory*. UK: 2009.

James, Wilders. *Ickinson Dees Employment Law Partner.* UK. 2009.

Stave, Gray Lioyds. Pharmacy Operations Director, UK. 2009.

Decision Making:
Equity Investment

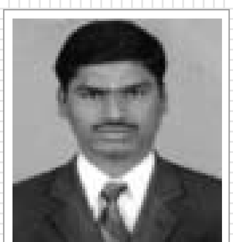
Bharathi N.

Abstract

Resolving

This paper presents the factors that determine the investment decision making by equity investors in particular. A quantitative methodology, using responses given by one hundred and fifty investors, is employed in the analysis. Findings reveal that in a significant choice criterion which includes return on investment, scope for trade, and level of competition, other factors which influence the investment decision making, are market environment, financial health of the corporate, competition, return and risk, nature of business, corporate policy and earning quality.

The General economic environment has totally revamped its pace since the introduction of economic reforms in the year 1991. India is an emerging economy being a part of BRIC and it attracts large pool of direct foreign investments next to China. Investment Climate in India is very cordial due to a set of large number of favourable factors. The development of stable government at the centre is an added advantage to the Capital Market operators. The Policy reforms initiated by the SEBI and the strong base of financial institutions are encouraging further milestones and hallmarks. The Capital Markets both primary and secondary are going in the right direction, is an evidence and builds confidence among the large scale investors within and outside India. The stable political system, interest rates, changing corporate philosophy, core competency of human resources, I.T. revolution, etc., are general parameters which measure the efficiency and strength of Indian Corporate. Investors today have a strong belief in Indian equity investment because of strong fundamentals and technical soundness. The following are the common factors considered while investing their hard earned money by the investors.



Dr.Bharathi N., Assistant Professor, Department of Commerce, Delhi College of Arts and Commerce (DCAC), University of Delhi, Netaji Nagar, New Delhi-110023, Email: bharathi7781@yahoo.co.in

Factors Determining Investment Decision

The motive behind our investments is to make money and increase our monetary wealth. With so many factors involved, investment decision is a complex one. Small investors often go with their gut feelings when trying to choose among numerous alternatives to invest. Big investors use various analyzing techniques. Globalization and the growth of internet have introduced many new opportunities and threats to ponder upon. When investing, you are committing your assets for sometime, that is why you need to cover all aspects before making an investment decision.

Expected Return

The most basic investment decisions revolve around the comparison of expected return and risk involved. No investor will take on higher risk if there is no chance of equally higher returns. Investors strive to reach on the best trade-off point between risk and return which go well with their financial requirements. These expected returns are not always equal to what an investor actually gets after some time. The possibility that actual return will not be the same what they expect is called risk.

Risk Factor

There is hardly some form of investment which doesn't involve risk. Government Securities (gilt edged) come close to be called risk free; but even they have some risks attached to them. Risk actually is the balancing factor of the financial markets. Various types of investment risk exist, such as financial risk, currency risk, inflation risk or capital risk are the most common one. Different investors react differently to these risks. While majority of the investors are risk averse, there are some investors who are seeking more risky ones with expectations of higher yields.

Investor's Hunch

Every investor will finish off with a different conclusion although the market, economy and all statistical facts and figures are same for everyone. This difference comes from the investor's intuition. Some will start from research; by collecting lots of information and then analyzing to decide, others start from defining their objectives and then going for opportunities that suit their needs.

Globalization Factor

Investors have slowly started to realize the advantages of international investments. Some emerging markets present better returns while other stable markets provide lesser risks. Investors have often conquered risk by diversification, and an international market provides more opportunities to achieve portfolio diversification as compared to a local market. Ignoring global markets for investment is turning your back on a whole new world of opportunities.

Review of Different Studies

M.Muthupandi (2003)[1] has conducted a study on the title "Factors influencing investment decisions" which reveals the various characteristics of an investor. Samples of 100 investors were selected in Madurai city. The study revealed that marital status, nature of occupation and income of investors affects the investment decision to the greater extent.

V.Rajarajan's (2004)[2], study on "Investment Life Styles and Investment Characteristics" examined the investment size, pattern and future investment preference of individual investors on the basis of their life styles. The study revealed that, active investors are dominated by the age group of below 35 years, industrialist group by above 50 years and passive investors group by the age group of 35-50 years. Active investors group has short-term perspective while making their investment decisions. And most of the investors read two or more sources of information to make their investment decision, and most of them tend to make investment decision of their own.

R. Shanmugam (2006)[3] studied a group of 201 investors to examine the factors influencing investment decisions. The objective of this study is to find out sources of information used by investors and factors influencing share investment decisions. It revealed that, financial newspaper comments are relied upon by most of the investors. Further, the analysis also leads to the conclusion that psychological and sociological factors dominate the economic factors in investment decision making.

L.C.Gupta (2007)[4] has carried out a study entitled "Stock market investor's biggest worries today." The objective of this study is to examine the investor's perceptions about the main sources of his worries concerning the stock market. A sample comprises middle class households spread over 21 states / union territories. The study reveals that the foremost cause of worry for households investor is fraudulent company management and, in the second place, is too much volatility and, in the third place is too much price manipulation.

Objectives of the Study

The paper attempts to identify the various factors that affect the choice of investors in choosing a stock for their equity investment, namely, expected return, risk factor, investor's hunch and globalization factors etc.

Research Methodology of the Study

The study is based on primary data, which has been collected from active equity investors with the help of a well drafted and structured questionnaire. For the collection of primary data, we have confined ourselves of Coimbatore (South India), India. Our sample size consists of a total 150 respondents. The respondents are basically equity investors, who have been selected by following the non-probabilistic sampling, simple purposive sampling and convenience sampling techniques.

Further, it is essential to mention two things: firstly, in convenience-sampling, respondents (who were seen using / have possession of equity investors) were selected because they happened to be in the right place at the right time and secondly, convenience-sampling technique is not recommended for descriptive of casual research, but they can be used in exploratory research for the generation of ideas (Malhotra, 2005). The questions inquired the factor affecting equity investors, and the users were given 13 statements. In addition, the respondents had to rate the equity investors according to the importance, on the 'five point Likert scale.'

Table 1: Profile of the Respondents

Variable	Profile	No. of Respondents	Percentage
Gender	Male	130	86.7
	Female	20	13.3
Age	Below 20 years	2	1.3
	21-30 years	38	25.3
	31-45 years	68	45.3
	Above 45 years	42	28
Martial Status	Unmarried	22	14.67
	Married	128	85.33
Educational Qualification	Up to HSC	20	13.3
	Graduate	46	30.7
	Post Graduate	50	33.3
	Professional	24	16.0
	Others	10	6.7
Occupation	Private	28	18.7
	Government	26	17.3
	Business	44	29.3
	Professional	30	20.0
	Others	22	14.7
Monthly Income	Below Rs.10000	4	2.7
	Rs.10001 – Rs.20000	34	22.7
	Rs.20001 – Rs.30000	60	40.0
	Above Rs.30000	52	34.7

Statistical Tools

In order to factor determining the equity investors, it is important to reduce the redundant parameters so that there is a limited set of parameters that represent the total consideration set. A Statistical approach –'t' Test and Factor Analysis has been used for the study. Finally, practical implications concerning the investors' choice of equity investment have been highlighted.

i. It can be observed from table 1, 86.7 percent of the respondents are male and the remaining 13.3 percent are female.

ii. It is understood from the table that 45.3 percent of the respondents are belonging to the age group of 31-45 years, 28 percent of the respondents are in the age group of above 45 years, 25.3 percent of the respondents are coming under 21-30 years and the remaining 1.3 percent of respondents are in the age group of below 20 years.

iii. Regarding marital status of the respondents is concerned 85.33 percent of the respondents are married remaining 14.67 percent of the respondents are unmarried.

iv. The status of literacy of the investors is shown that 33.3 percent of the respondents have Post Graduation as their qualification, 30.7 percent of the respondents completed Graduate, 16.0 percent of the respondents are having Professional, 13.3 percent of the respondents are having up to HSC and remaining 6.7 percent of the respondents are having others like Diploma holders, ITI etc.

v. Regarding occupation of respondents is concerned 29.3 percent of the respondents are doing business, 20 percent of the respondents are Professionals like, Doctors, Engineers, etc., 18.7 percent of the respondents are Private employee, 17.3 percent of the respondents are working in government service and remaining 14.7 percent of the respondents are others.

vi. As far as the distribution of monthly income is concerned majority of the respondents (40 percent) are earning a monthly salary of Rs.20001 – Rs.30000, 34.7 percent of the respondents are earning in the range of above Rs.30000, 22.7 percent of the respondents are earning monthly salary Rs.10001 – Rs.20000.

Factors Determining the Equity investors

The factors determining the investment decision making by equity investment rating them by 5 point scale. The result is presented in the table 2.

i. The above table 2 shows that 72.7 percent of the respondents strongly agree with Return on Investment, 68 percent of the respondents strongly agree with scope for trade / coverage of market and level of competition in the particular field and 67.3 percent of the respondents strongly agree with liquidity of share.

ii. 42.7 percent of the respondents agree with political condition, 41.3 percent of the respondents agree with scope for trade / coverage of market and 36.7 percent of the respondents agree with risk factor.

iii. 20 percent of the respondents are neutral with expected policy, 16 percent of the respondents neutral with management and, 8.7 percent of the respondents neutral with political condition.

iv. 8.7 percent of the respondents disagree with risk factors, 6.7 percent of the respondents disagree with expected policy and four percent of the respondents disagree with nature of industry.

v. Out of 100 percent, 2.7 percent of the respondents highly disagree with expected policy, nature of industry, management and growth prospects of company and above one percent of the respondents highly disagree with price movement of share, risk factor, political condition, scope for trade / coverage of market and level of competition in particular field.

Table 2: Factors Determining the Equity Investors

Factors		Strongly Disagree	Disagree	Neural	Agree	Strongly Agree	Total
Return On Investment (V1)	No.	-	3	2	36	109	150
	%	-	2.0	1.3	24.0	72.7	100
Expected Policy (V2)	No.	4	10	30	54	52	150
	%	2.7	6.7	20.0	36.0	34.7	100
Dividend Policy (V3)	No.	-	4	17	46	83	150
	%	-	2.7	11.3	30.7	55.3	100
Nature of Industry (V4)	No.	4	6	9	38	93	150
	%	2.7	4.0	6.0	25.3	62.0	100
Management (V5)	No.	4	4	24	51	67	150
	%	2.7	2.7	16.0	34.0	44.7	100
Price Movement of Shares (V6)	No.	2	1	12	35	100	150
	%	1.3	7	8.0	23.3	66.7	100
Liquidity of Share (V7)	No.	-	1	6	42	101	150
	%	-	0.7	4.0	28.0	67.3	100
Price-Earning Ratio (V8)	No.	1	3	4	43	99	150
	%	0.7	2.0	2.7	28.7	66.0	100
Growth prospects of Company (V9)	No.	4	-	20	50	76	150
	%	2.7	-	13.3	33.3	50.7	100
Risk factors (V10)	No.	2	13	18	55	62	150
	%	1.3	8.7	12.0	36.7	41.3	100
Political Condition (V11)	No.	2	2	22	64	60	150
	%	1.3	1.3	14.7	42.7	40.0	100
Scope for trade / Coverage of Market (V12)	No.	2	4	14	62	68	150
	%	1.3	2.7	9.3	41.3	45.3	100
Level of competition in the particular field (V13)	No.	2	-	10	36	102	150
	%	1.3	-	6.7	24.0	68.0	100

t-Test

The significance of the sample is tested through't' value which shows that all the factors are statistically significant at 0.05 level. This means that the sample size is the true representation of the population (p-value is less than 0.05 in all cases).

Factor Analysis

The explanatory factor analysis is used to identify the factors determining the investment decision, making by equity investors from 150 respondents in Coimbatore. To test the suitability of the data for factor analysis, the following steps have been taken:

- The correlation matrices are computed and examined. It reveals that there are enough correlations to go ahead with factor analysis.
- Anti-image correlations were computed. These showed that partial correlations were low, indicating that true factors existed in the data.

Table 3: One-Sample Test

Variable	Mean	SD	df	Mean Difference	t-Statistics	Sig (2- tailed)
V1	1.326	0.607	149	1.326	26.745	0.000
V2	2.066	1.027	149	2.066	24.632	0.000
V3	1.613	0.792	149	1.613	24.934	0.000
V4	1.600	0.962	149	1.600	20.362	0.000
V5	1.846	0.967	149	1.846	23.377	0.000
V6	1.466	0.782	149	1.466	22.943	0.000
V7	1.380	0.598	149	1.380	28.248	0.000
V8	1.426	0.708	149	1.426	24.679	0.000
V9	1.706	0.894	149	1.706	23.380	0.000
V10	1.920	1.000	149	1.920	23.512	0.000
V11	1.813	0.830	149	1.813	26.741	0.000
V12	1.733	0.840	149	1.733	25.249	0.000
V13	1.426	0.735	149	1.426	23.743	0.000

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.664
Bartlett's Test of Sphericity	Approx. Chi-Square	159.481
	df	78
	Sig.	0.000

- Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) for individual variables is studied from the diagonal of partial correlation matrix (Table 3). It is found to be sufficiently high for all variables. The measure can be interpreted wit the following guidelines: 0.90 or above, marvelous: 0.80 or above, meritorious; 0.70 or above, middling; 0.60 or above, mediocre; 0.50 or above miserable, and below 0.50, unacceptable.

- To test the sampling adequacy, Kaiser-Meyer-Olkin measure of sampling adequacy is computed, which is found to be 0.664. It is indicated that the sample is good enough for sampling.

- The overall significance of correlation matrix is tested with the Bartlett test of Sphericity for attitude of railway passenger (approx. chi-square = 159.481, which is significant at 0.000) as well as support for the validity of the factor analysis of the data set.

Hence, all these standards indicate that the data is suitable for factor analysis. For extracting factors we have employed 'principal components analysis' and 'latent root criterion, rotation methods, orthogonal rotation with Varimax were also applied. As per the talent root criterion, only the factors having talent roots or Eigen values greater than 1 are considered significant; and all the other factors with

Table 5: Principal Component Analysis with Varimax Rotation

Variable	Factor I	Factor II	Factor III	Factor IV	Factor V	Factor VI	Factor VII	Communa-lities
V1	-0.037	-0.042	0.110	0.668	-0.048	-0.230	-0.155	0.541
V2	0.191	0.021	0.153	0.007	0.024	0.837	-0.155	0.785
V3	-0.179	-0.044	0.421	0.339	-0.198	0.166	0.618	0.638
V4	-0.086	0.179	-0.157	-0.297	0.731	0.071	0.105	0.703
V5	0.008	-0.285	0.137	0.257	0.756	-0.045	-0.070	0.745
V6	0.150	0.075	-0.045	-0.117	0.079	-0.134	0.861	0.809
V7	-0.115	0.662	0.281	0.049	-0.202	-0.147	0.107	0.607
V8	0.772	-0.152	-0.105	-0.068	-0.197	0.135	0.148	0.713
V9	0.122	0.844	-0.112	0.000	0.078	0.089	-0.022	0.755
V10	0.081	0.144	-0.318	0.723	0.062	0.279	0.151	0.756
V11	0.576	0.125	0.178	0.176	0.021	-0.549	-0.219	0.760
V12	0.630	0.284	0.348	0.028	0.196	0.144	0.055	0.662
V13	0.122	0.057	0.852	-0.074	0.009	0.060	-0.010	0.754
Eigen Value	1.826	1.409	1.336	1.249	1.202	1.126	1.079	
Percentage of Variance	14.049	10.839	10.278	9.611	9.249	8.660	8.303	
Communalities Percentage of Variance	14.049	24.888	35.166	44.777	54.026	62.686	70.989	

talent roots less than 1 are considered insignificant and disregarded.

Factors affecting the Investment Decision by Equity Investors

After the standards indicated that the data are suitable for factor analysis principal components analysis was employed for extracting the data which allowed determining the factor underlying the relationship between a numbers of variables. The total variable explained suggests that it extracts one factor accounts for 70.989 percent of the variance of the relationship between variable (Table 5).

Loading on factors can be positive or negative. A negative loading indicates that this variable has an inverse relationship with the rest of the functions. However, Comrey (1973: 1346) suggested that anything above 0.44 could be considered salient, with increased loading becoming more vital determining the factor. All the loading in the research are positive.

Rotation is necessary when extraction technique suggests that there are two or more function. The rotation of factors is designed to give an idea of how the factors unlimited extracted differ from each other and to provide a clear picture of which items load on which factors.

There are only seven factors, each having Eigen value exceeding one for determined the equity investors. The Eigen value seven functions were 1.826, 1.409, 1.336, 1.249, 1.202, 1.126 and 1.079 respectively (table-5). The percentage of total variance is used as an index to determine how well the total factors solution accounts for what the variable together represent index for present solution accounts for 70.989 percent of the total variation for determining the equity investors. It is pretty good extraction as it can economies on the number of factors (from thirteen it has reduced to seven factors) while we have lost 29.011 percent information content for factors determined the equity investors. The percent age of variance explained by factors one to seven factors affecting the equity investors are 14.049, 10.839, 10.278, 9.611, 9.249, 8.660 and 8.303 respectively (table 5). The table 5 tells as that after seven factors are extracted, is retained, the communalities are 0.541 for variable 1, 0.785 for variable 2 and so on. It means that 54 percentage of the variance of variable 1 is being accounted by the seven extracted factors together.

The proportion of variance on any one of the original variables, which is being captured by the extracted factor, is known as communality (Nargudkar 2002).

Large communalities indicate that a large number of variance has been accounted for by the factor solution. Varimax rotated factor analytic results for factor determining the equity investor is shown in table 6.

The seven factors shown in table 6 have been discussed below:

Factor 1:

Market Environment: The Significant loadings on this factor include variables of price-earning ratio, political condition and Scope for trade/Coverage of market. We can level these factors as supportive Market environment. It tries to motivate on the importance of investment for present and future for their financial safety and security.

Factor 2:

Financial Health: This factor reveals the significant loading of financial health including liquidity of share and Growth prospects of the company. These two variables suggest that the easy marketability of their investment and growth aspect is the major considerations at the time of investment.

Factor 3:

Competition: This factor shows the level of competition in the particular nature of business activity. At the time of selecting their choice the individual investors are very particular about the current as well as its future prospects.

Table 6: Name of the Factors

Naming of Factors	Name of the Dimensions	Label Loading	Name of the Problems	Factor Loading
F1	Market Environment	V8	Price-Earning Ratio	0.772
		V11	Political Condition	0.576
		V12	Scope for trade / Coverage of Market	0.630
F2	Financial Health	V7	Liquidity of Share	0.662
		V9	Growth prospects of Company	0.844
F3	Competition	V13	Level of competition in the particular field	0.852
F4	Risk & Return	V1	Return On Investment	0.668
		V10	Risk factors	0.723
F5	Nature of Business	V4	Nature of Industry	0.731
		V5	Management	0.756
F6	Corporate policy	V2	Expected Policy	0.837
F7	Earning Quality	V3	Dividend Policy	0.618
		V6	Price Movement of Shares	0.861

Factor 4:

Return and Risk: The risk and return are the closely associated variables in any investment. Investing in equity is comparatively a high risk activity. The investors knowingly come forward to invest largely in the form of equity only due to excessive and abnormal return and they bother little about the risk factor due to its attractive return.

Factor 5:

Nature of Business: This factor depicts the nature of industry as well as management quality influences to the larger extent of their investment decision. Investors voluntarily come forward very large numbers if they really like the nature of industry and core competency of the professional management. Both of the variables build confidence to take favourable and timely decisions with regard to their equity investment.

Factor 6:

Corporate policy: This factor expresses the fulfillment of expectations by the investors from the corporate with regard to diversification, modernization, merger, amalgamation, abortion, takeover, reconstruction, reengineering and various other favourable policies.

Factor 7:

Earning Quality: This factor reveals the dividend policy and price movement of shares are the utmost important variable directly influencing the investment decisions by the equity investors.

Conclusion

To increase the participation and business volume the regulators had introduced many kinds of investor protection measures as well as prudential guidelines. Dematerialization, T+2 settlement mechanisms, Compulsory PAN Number for opening up of DEMAT account and so on. In turn regulators have to understand the investor needs so as to take care of its investors' satisfaction. It is clear from the research conducted that investors are very clear before taking equity investment decisions in the following lines namely, expected return, risk factor, matching their requirement, global factors through data collection and analysis. Apart from the nature of industry, P/E ratio, growth prospects of the company where the investors particular about investment, scope for trade are the major factors which plays a vital role in taking investment decision by the investors. Another factor which is not predominantly determining the investment decision is price movement of a share, political condition, coverage of market and level of competition in particular field.

Bibliography

Avadhani, V.A. "Capital Market Management." *Himalaya Publishing House*. Mumbai: 1997.

Avadhani, V.A. "Securities Analysis and Portfolio Management." Himalaya Publishing House, Mumbai: 2000.

Chalam, G.V. "Investors Behaviour Pattern of Investment and their Preferences of Mutual Funds." *Southern Economists*. Vol.41, No.3, Feb., 1, (2003): 13.

Gopalakrishnan, C. *Investment Management.* Kalyani Publishers, New Delhi: 1998.

Gupta, L.G. "Stock Market Investors' Biggest Worries Today." *Portfolio Organiser.* Vol.41, Issue. 5, May, (2003): 47-51.

Gupta, S.P. "Statistical Methods." *Sultan Chand and Sons.* Delhi: 2001.

Henk, Vadrager. "Indian Equity Market is Relatively Safer." *Financial Express*. January 26, 2003.

Jasawy, N.J. "Equity Investment Strategy, New Delhi." Tata McGraw-Hill Publishing Company Limited, 1986.

Jawaharlal. "Understanding Indian Investors." *Global Business Press.* New Delhi: 1992.

Kothari, C.R. "Research Methodology Methods and Techniques." *New Age International (P) Ltd.* New Delhi: 2000.

Muhesh, Khani. "An Overview of the Indian System – Issues and Challenges." *The Journal of the Indian Institute* *of Bankers.* Vol.73, No.3, July-Sep, (2002): 30-36.

Murali, D. "Therapy for Traders." *Business Line*. August 31, 2003.

Muthuoandi, M. "Factors Influencing Investment Decision." *Banking Finance.* May, (2000): 6-8.

Preethi, Singh. "Investment Management." *Himalaya Publishing House.* Mumbai: 1999.

Rajarajan, V. "Investors Life Styles and Investment Character." Finance India. Vol. XIV, No.2, June, (2000): 465-478.

Sanjiv, Aagarwal. "Guide to Indian Capital Market." Bharat Law House, New Delhi: 2000.

Shanmugam, R. "Factor Influencing Investment Decisions." Tata McGraw Hill Publishing Company Ltd., New Delhi, (2000): 256-267.

Simha, S.L.N. "Reviving the Stock Market – Why and How?" *Southern Economists.* Vol.41, No.14, Nov., 15, (2002): 1-8.

Srivats, K.R. "SEBI Norms in Place for Ombudsmen Confidence Joshi." *Business Line.* Sep., 6. 2003.

Swedroe, E. Larry. "The Successful Investor Today – 14 Simple Truths You Must Know When You Invest." *Portfolio Organiser.* Nov., (2003): 71-74.

Varshney, P.N. and Mittal, D.K. "Indian Financial System." Sultan Chand and Sons, Delhi: 2000.

<www.amsiindia.com>, <www.bseindia.com>

Public Private Partnership: Indian Economy

Omdeep Gupta and Nibedita Biswas

Abstract

Twinning

Infrastructure is the backbone of an economy. For this reason the economies of the world over have been focusing on development of the infrastructure. Public Private Partnership (PPP) has emerged as one of the important ways of infrastructural and economic growth. PPP helps governments in building capacity, and acquiring and maintaining assets. Here the government role gets redefined, while the private partner plays the role of financier, builder, and operator of service or facility. The paper presents a summarised industry-wise and region-wise analysis of PPP projects in India.

One of the key responsibilities of any government is to develop and maintain the physical as well as social infrastructure like energy, transport, communication, education, sanitation, and health, without which most economic activity would be impossible. In fact, infrastructure spending used to be one of government's main activities. Of late, however, public spending on infrastructure, as a share of GDP, has been on the decline worldwide. This decline in public investment in infrastructure has created bottlenecks for economic growth. The status of physical infrastructure clearly affects a country's productivity, competitiveness in global markets, and ability to attract foreign investment.

Many companies have increased the investments in developing countries so that the benefits of lower labour cost, raw material, new markets and competing technologies can be availed as a part of competitive business strategy. The rise in FDI in developing countries reflects the growing trend towards globalization of business, and sends a clear signal that government leaders and business executives have a common ground on which to build new and important relationships.

Mr. Omdeep Gupta, Senior Lecturer-Marketing, Institute of Management Studies, Makkawala Greens, Mussoorie-Diversion Road, Dehradun 248009, Uttarakhand, Email: omdeepg@gmail.com

Ms. Nibedita Biswas, Lecturer - Marketing, Institute of Management Studies, Makkawala Greens, Mussoorie-Diversion Road, Dehradun 248009, Uttarakhand, Email: n.biswas3@gmail.com

Public-Private Partnerships can help governments build capacity, and acquire and maintain assets in environments of shrinking or diminished budgets that make public sector investments difficult, if not impossible. They also allow private companies to gain new business opportunities, share risks with their public partners, and enhance the social and economic environment in which they operate. Through public-private partnerships, all parties contribute to the creation of a more stable and improved environment that offers benefits to participants and society at large.

So the question arises whether the countries should increase public investment, mainly developing nation's infrastructure, how it is beneficial for domestic industries and PPP will give a sustainable growth to the economy? These are some of the issues explored in this paper.

Understanding PPP Concept and Evolution

PPPs refers to long-term, contractual partnerships between the public and private sector agencies, targeted towards financing, designing, implementing, and operating infrastructure facilities and services in the country. These collaborative ventures are built around the expertise and capacity of the project partners usually government and a private player and are based on a contractual agreement, which ensures appropriate and mutually agreed allocation of resources, risks, and returns. This approach of developing and operating public utilities and infrastructure by the private sector under terms and conditions agreeable to both the government and the private sector is called PPP or P3 or Private Sector Participation (PSP).

According to Indian Government, Public Private Partnership (PPP) is defined as 'a project based on a contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges. Where, Private Sector Company means a company in which 51 percent or more of the subscribed and paid up equity is owned and controlled by a private entity.' PPP has not newly emerged, in sixteenth-and seventeenth-century France, roads and bridges were concession for tolls in return for maintaining the routes. Canals were built and water was collected and distributed under concessions. By the 1820s, there were six private water companies operating in London. At the beginning of the nineteenth century, nearly all of the waterworks in the USA were private. Electricity utilities in the nineteenth century in Brazil, Chile, Costa Rica, and Mexico were private entities. In Argentina, Brazil, and Uruguay, private developers from Britain, France, and the United States built and operated many of the early railways in the nineteenth and twentieth centuries.

Under the PPP format, the government role gets redefined as one of facilitator and enabler, while the private partner plays the role of financier, builder, and operator of the service or facilities, e.g. Feedback Ventures Private Limited, India Consortium partners, Delhi Metro Rail Corporation (DMRC), India and Bankworld Inc., USA and Hemant Sahai Associates, India.

The government is accountable for the quality of service to be provided, price and the value for money, price of the partnership. PPP's goal is to combine the skills, expertise, and experience of both the public and private sectors to deliver quality standards of services to customers. The public sector contributes assurance in terms of stable governance, citizens' concerns, financing, and also assumes social, environmental, and political risks. The private sector brings with it operational efficiencies, innovative technologies, managerial effectiveness, access to additional finances, construction and commercial risk sharing.

Salient Features of PPP

All projects with private sector participation are not PPP projects. PPPs are those ventures in which the resources required by the projects in whole, along with the risks and rewards/returns, are shared on the basis of a predetermined, agreed contract. PPPs are different from privatization. While PPPs involve private management of public service through a long-term contract between an operator and a public authority, privatization involves outright sale of a public service or facility to the private sector. A typical PPP example would be a toll expressway project financed and constructed by a private developer. A PPP project is essentially based on a significant opportunity for the private sector to innovate in design, construction, service delivery, or use of an asset. To be viable, PPPs need to have clearly defined outputs, avenues for generating nongovernmental revenue, and sufficient capacity in the private sector to successfully deliver project objectives.

PPPs involve Infrastructure projects such as roads and bridges, water supply, sewerage and drainage involving large investment, long gestation period, poor cost recovery, and construction, social, and environmental risks. When infrastructure is developed as PPPs, the process is often characterized by detailed risk and cost appraisal, complex and long bidding procedures, difficult stakeholder management, and long-drawn negotiations to financial closure. To deal with these procedural complexities and potential pitfalls of PPPs, governments need to be clear, committed, and technically capable to handle the legal, regulatory policy, and governance issues.

Forms and Formats of PPP

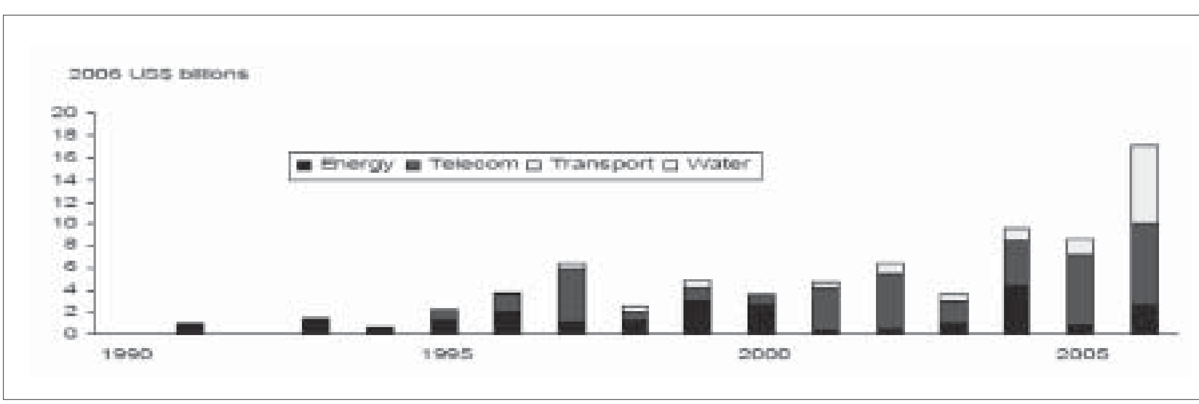
PPP project have a public sector agency and a private sector consortium which encompasses of contractors, maintenance companies, private investors, a consortium, a nongovernmental organization (NGO) and consulting firms. The consortium often forms a special company or a 'special purpose vehicle' (SPV). The SPV signs a contract with the government and with the subcontractors to build the facility and then maintain it.

The PPP is operationalized through a contractual relationship between a public body (the conceding authority) and a private company (the concessionaire). This partnership could take many contractual forms, which progressively vary with increasing risk, responsibility, and financing for the private sector. However, the most common partnership options are (i) Service Contract; (ii) Management Contract/Lease; (iii) Build Operate Transfer (BOT); (iv) Concession, (v) Joint Venture; and (vi) Community-based Provision. Most contracts take the form of 'Concession' and 'Design, Build, Finance, and operate' contracts, to cover the finance, design, management, and maintenance obligations. These contracts are usually financed by user fees or tariffs or government subsidies.

The public sponsor of the PPP decides the degree of private participation required for the particular project. This decision is usually based on the government's objectives of undertaking the project, the degree of control it desires, and the ability of the PPP consortium to deliver the required service. It is also influenced by the provisions of the existing legal and regulatory framework, the structuring of the project to attract private resources, and the potential to generate future cash flows.

Figure 1: Trends of PPP's Sector-wise from 1990-2007

Source: Draft Report of a PriceWaterhousecoopers study, 2007



Status of PPPs and Initiatives of Indian Government

In early 19th century India had PPPs but very few in numbers. The Great Indian Peninsular Railway Company operating between Bombay (now Mumbai) and Thana (now Thane) (1853), the Bombay Tramway Company running tramway services in Bombay (1874), and the power generation and distribution companies in Bombay and Calcutta (now Kolkata).

Initial Experience

Efforts to attract private participation began in early 90s and significant success achieved in Telecommunication and select Transport sub-sectors. India's PPP program, with investment commitments of over $10.5 billion during 2006 and 2007, is already one of the largest in middle and low-income countries. In 2006, PPI investments in transport and energy amounted to 1.1 percent of GDP Investment commitments to infrastructure projects with private participation in India are nearly twice of those in Brazil and China. PPI flows were slow in sectors outside telecom and energy. But now steep increasing trend is noted in transport PPPs Sector-wise PPI, 1990-2007: Telecom - 45 percent; Energy – 35 percent; Transport – 20 percent.

Since the opening of the economy in 1991 there have been several cautious and tentative attempts at PPP in India. However, most PPPs have been restricted to the roads sector. Large-scale private financing in water supply has so far been limited to a few cities like Visakhapatnam and Tirupur. Most PPPs in water supply projects have been through municipal bonds in cities such as Ahmedabad, Ludhiana, and Nagpur. West Bengal has recorded significant success in housing and health sectors. The housing projects coming up on the outskirts of Kolkata City are a good example of what a PPP model can deliver in terms of quality housing and quality living conditions to the lower middle class and the middle class. Gujarat and Maharashtra have had success especially in ports, roads, and urban infrastructure. Karnataka also has done well in the airport, power, and road sector. Punjab has had PPPs in the road sector.

However, successfully working PPP models can be understood best with these instances, like The Tirupur project in Tamil Nadu is regarded as a BOOT project, the first privately financed water and sewerage project in India, executed through an SPV. The project took more than ten years from concept to financial closure. The US$100 million Delhi-NOIDA Bridge Project, implemented on a BOOT framework on the basis of a 30-year concession, is the other major PPP initiative. The NOIDA toll bridge, Tirupur water supply project, national highways, port development, telecom industry, the strategic alliance model for building transmission infrastructure through IFC's sub-national finance window and involves a joint world bank-IFC.

Domestic versus Foreign Private Players Participation in PPP Projects

PPPs have been financing, designing, implementing and operating infrastructure facilities and services which were previously provided by the public sectors in India. The Central Government is working with the State Governments and all other stakeholders to expand the horizon of PPPs in infrastructure development of the country. It has created a favourable atmosphere, provided fiscal incentives and facilitated funding of PPP projects. The Government of India has now allowed FDI in most infrastructure sectors to the extent of 100 percent. The crucial initiatives to operational and institutionalize the flow of private capital has increased the infrastructure development in the country through PPP's, and the investment of Rs. 135871.42 crore.

Participation of Domestic Players

Successful PPP projects indicate that they have a clear boundaries and measurable performance for the private party, sufficiently large scale of operations, competitive market for provisioning of the services, significant service delivery, and ability for the private sector to control factors for which it is responsible.

On average, the domestic players have dominated the PPP projects both in terms of numbers and investment. Fig. 2 shows the sample of 300 projects 278 projects with investment of Rs.134145.57 crore. The road sector has dominated investment by domestic players with aggregate investment of Rs.51,398 crore. The port sector with total domestic player investment of Rs.23931 crore comes second and airports at Rs.19,111 crore. The energy space that includes hydro based power plants is dominated by domestic private players of Rs.17,802 crore.

Figure 2: Sector-wise Domestic Player Investment in PPP Projects

Source: World Bank and PPIAF, PPI Project Database

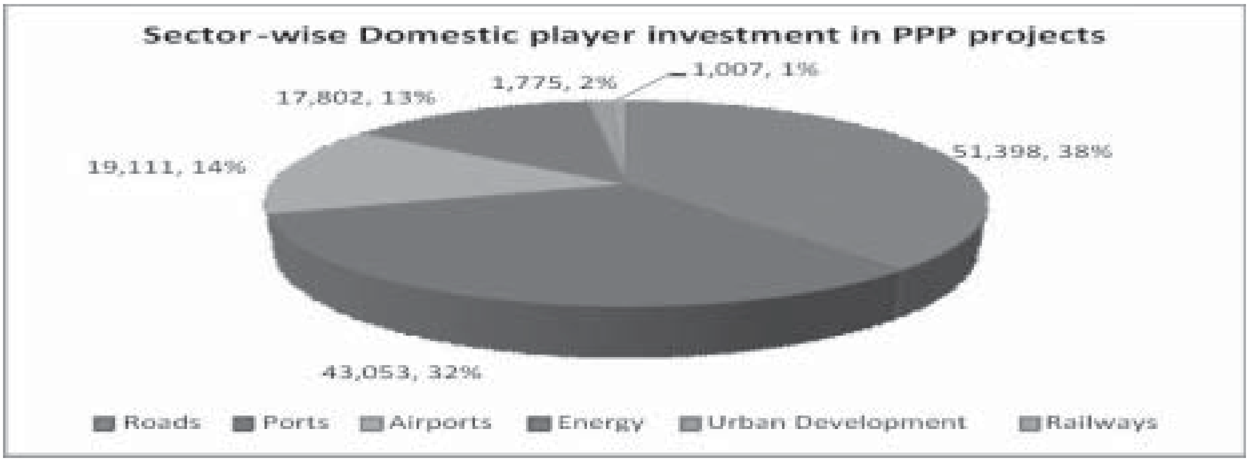


Table 1: Domestic Player in PPP Projects

Source: PWC Analysis

Domestic Players	Investment by Private Player (Rupees in crore)	Number of Projects
Major Domestic Players		
Larsen and Toubro Transportation Infrastructure Ltd.	3497.95	10
GMR Infrastructure Ltd.	1287.98	6
IVRCL Infrastructure and Projects Ltd.	936.6	4
Small Domestic Players		
DS Constructions	319.42	4
Sadbhav Engineering Limited	2085.68	11
MSK Projects (India) Limited	238.84	15
Total	8366.47	50

Among the big domestic players Larsen and Toubro lead with a total investment of, both in existing and under construction projects, totalling Rs.3498 crore mostly in road projects. It is followed with GMR and IVRCL Infrastructure and Projects Ltd., with total investment of Rs.1288 and Rs.937 respectively.

In case of small domestic projects on BOT basis Sadbhav Engineering Limited with investment in 11 projects with total investment of 2085.68 crore leads the domestic scene. The Delhi based DS Constructions Limited is second, with total investment of Rs.320 crore. Mumbai based MSK Projects (India) Limited is third in terms of investment, with 15 projects and total investment of Rs.238.84 crore. Among these three players they shared 30 projects out of 300 sample projects in table 1.

Foreign Player Participation in PPP Projects

According to the records available, in sample of 300, foreign multinationals have equity participation only in 22 PPP projects. Malaysian companies are leading investors in public private partnership (PPP) projects in India, involving nearly six major infrastructure ventures. Followed by the United Kingdom with four projects, Mauritius (three), two each for France, Germany, United Arab Emirates and the Philippines, and one each for the United States and Switzerland. Foreign equity participation of 27 foreign companies in PPP projects was only at Rs.1,725.85 crore which is meagre one percent of the total project investment. Prominent PPP projects where foreign companies have an equity stake include modernisation of Mumbai and Delhi international airports, Delhi-Noida toll bridge, Pipavav port, Bangalore international airports and JNPT container terminal etc. Mauritius-based ACSA Global (Airports Company South Africa), for example, has Rs.160 crore equity stake in modernization of Mumbai international airport project. Apollo Enterprises from UK has equity stakes of Rs.48 crore and Rs.11 crore in Lucknow-Sitapur road project and Raipur Durg expressway respectively.

Figure 3: Share of Indian Private Investors and Foreign Investors

Source:World Bank and PPIAF,PPI Project Database

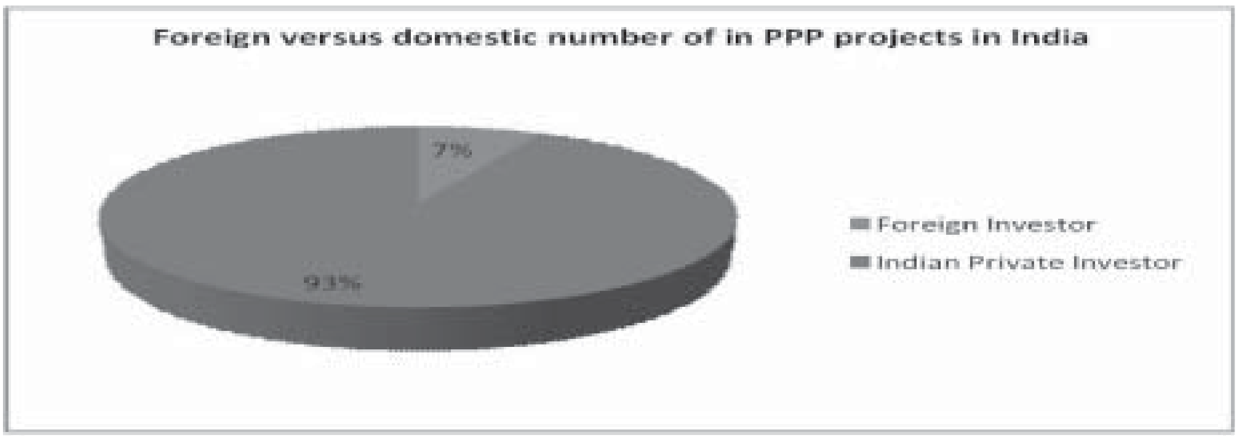


Table 2: Sector-wise Total Domestic and Foreign Investments

Source: PWC Analysis

Foreign versus Domestic Investment in PPP Projects in India			
Investor Type	Total Investment	% of Total Number of Projects	% of Total Project Cost
Foreign Investor	1725.85	7%	1%
Indian Private Investor	134145.57	93%	99%
Total	135871.42	100%	100%
Sector-wise Break-up of Foreign Investor Participation in PPP Projects			
Foreign Investor Versus Sector	**No. of Projects**	**Investment**	**% of Total Project Cost**
Ports	9	416.5	24%
Roads	9	256.22	15%
Airports	4	1053.13	61%
Total	22	1725.85	100%

Table 3: Statewise Total No. of PPP Projects

Source: PWC Analysis

STATE-WISE FIGURES						
	Total Number of Projects based on value of contracts					
State	Total Number of Projects	Based on 100 crore	Between 100 to 250 crore	Between 251 to 500 crore	More than 500 crore	Value of contacts
Andaman & Nicobar Islands	1	l				85
Andhra Pradesh	36	1?	5	8	6	10818
Bihar	2	1		1		422
Chhattisgarh	4	1	2	1		853
Delhi	8	5		1	2	9813
Gujarat	2?	5	3	9	11	17700
Haryana	4			3	1	658
Jharkhand	6	2	3	1		681
Kamataka	28	18	2	4	4	5252.7
Kerala	9	1	2	2	4	12463
Madhya Pradesh	25	14	2	8	1	4SS6
Maharashtra	25	2	5	3	15	31140.79
Orissa	4	1			3	3730
Pudducherry	3	1		1	1	2346
Punjab	20	14	2	4		1339
Rajasthan	37	33	2	2	1	2538.68
Sikkim	24	6	4	7	7	17110.59
Tamil Nadu	26	5	5	14	5	9948
Uttar Pradesh	6		1	6	2	2108
West Bengal	5		1	3	1	2055.4
Total	300	127	38	78	64	135876

Table 4: Sector-wise Total No. of Investment and Value of Contracts

Source:Correa and Others 2006

Sector	SECTOR-WISE FIGURES					Value of contacts
	Total Number of Projects based on value of contracts					
	Total Number of Projects	Based on 100 crore	Between 100 to 250 crore	Between 251 to 500 crore	More than 500 crore	
Airports	6			1	5	20041
Ports	38	4	5	6	23	43053
Railways	3		1	2		1007
Roads	186	86	23	54	23	47756
Urban Development	35	28	4	1	2	6218
Energy	32	13	4	7	8	17802
Total	300	131	37	71	61	135876

Delivering infrastructure services through Public Private Partnership (PPP) has garnered substantial pace since year 2000. Government of India have taken crucial initiatives to operationalize and institutionalize PPP policy to promote the flow of private capital for the accelerated infrastructure development in the country. In 20 states in India, in 300 projects, government is having an active promotion of PPP in the sectors such as transport, power, ports, urban infrastructure, tourism and railways where investments is estimated to be Rs.135876 crores. Some states have engaged in more PPPs than others with an extensive use of PPPs in some sectors than others.

It is evident from the above Tables 3 and 4 that road sector is dominating in projects, with 62 percent of total projects (35 percent of total project investment due to smaller average size of projects). Ports come second in terms of number of projects, i.e., 13 percent, which is 32 percent in terms of value of projects.

It is noteworthy that if ports and central road projects are excluded from the total, there is in fact a relatively small value of deal flow, at only Rs.45067 crore in basic infrastructure PPPs till date, suggesting a significant potential upside for PPP projects across sectors where states and municipalities have primary responsibility. The potential use of PPPs in e-governance, health and education sectors remains largely untapped across India as a whole, though off-late there have been some activities shaping in these sectors. Another addition to the database is the energy sector which indicates 32 projects with a total investment of Rs.17802 crore. Out of 32 projects in energy sector, 28 of them are hydro based power projects on BOOT basis which were negotiated MoUs between the state and the private parties.

Across states of India and central agencies, Rajasthan, Andhra Pradesh, Karnataka and Tamil Nadu, with 37, 36, 28 and 26 are leading users of PPP and, in the roads sector, and the National Highways Authority of India (NHAI), with about 77 projects. The main types of PPP contracts, almost all contracts have been of the BOT/BOOT type (either toll or annuity payment models) or close variants. In terms of approach to provider selection, all the 300 sample of railway and ports sector were competitively bided. From the table 5 the total number of projects allocated in all sectors were 271 and out of that 36 were domestic and 22 were international and 34 were negotiated for MoU's and total value of contracts amounted to Rs.12768.32 crore.

Table 5: Sector wise Contracts Awarded

Source: World Bank Analysis

Sector-wise Contract Award Method					
Sector	Total Number of Projects	Total Number of Projects based on Contract Award Method			
		Domestic Competitive Bidding	International Competitive Bidding	Negotiated MOU	Value of Contracts (Rs.Crore)
Airports	4		4		18308
Ports	28	5	12	11	39998.95
Roads	179				46385.07
Urban Development	29	22	6	1	4689.48
Railways	3	1		2	1007.22
Energy	28	8		20	16793.59
Total	271	36	22	34	127682.31

Pros and Cons of PPP

Since the 1990s, there has been a rapid growth of PPPs around the world. Governments in developing as well as developed countries are using PPP arrangements for improved delivery of infrastructure services. Governments are building transport (roads, railways, toll bridges), education (schools and universities), healthcare (hospitals and clinics), waste management (collection, waste-to-energy plants), and water (collection, treatment, and distribution) infrastructure through PPP. PPP is becoming the best method for public procurement of infrastructure and infrastructure services projects across the world.

Benefits and Strengths

PPP emerged as a mechanism bridging the potential infrastructural gap. PPPs primarily represent value for money in public procurement and efficient operation. Apart from providing private investment flows, PPPs also deliver efficiency gains and enhanced impact of the investments. The efficient use of resources, availability of modern technology, better project design and implementation, and improved operations combine to deliver efficient and effective gains which are not readily available in a public sector project. PPP projects also lead to speedy implementation, diminished lifecycle costs, and optimal risk allocation. Private management also increases accountability and incentives performance and maintenance of required service standards. Finally, PPPs result in improved delivery of public services and promote public sector reforms.

Major Propelling Factors towards PPPs

Limitations of Government Resources and Capacity to meet the Infrastructure Gap: Globally, governments are increasingly constrained in mobilizing the required financial and technical resources and the executive capacity to cope with the rising demand for water supply, sewerage, drainage, electricity supply, and solid waste management. Rapid economic growth, growing urban population, increasing rural–urban migration, and all-round social and economic development have compounded the pressure on the existing infrastructure, and increased the demand–supply gap in most of the developing world. Countries and governments, especially in the developing world, are experiencing increasing pressure from their citizens, civil society organizations, and the media to provide accessible and affordable infrastructure and basic services. While the infrastructure gap is rising, government budgetary resources are increasingly constrained in financing this deficit. The pressure has also come from the international compact on Millennium Development Goals (MDGs), under which country progress in terms of access to safe drinking water, sanitation, health, etc. is being monitored. Rising costs of maintaining and operating existing assets, inability to increase revenue and cut costs and waste, and rising constraints on budgets and borrowing, do not allow governments to make the required investments in upgrading or rehabilitating the existing infrastructure or creating new infrastructure.

Need For New Financing And Institutional Mechanisms: The political economy of infrastructure shortages, constrained public resources, and rising pressure from citizens and civil society have combined to push governments and policymakers to explore new ways of financing and managing these services. Governments have been pushed to exploring new and innovative financing methods in which private sector investment can be attracted through a mutually beneficial arrangement. Since neither the public sector nor the private sector can meet the financial requirements for infrastructure in isolation, the PPP model has come to represent a logical, viable, and necessary option for them to work together.

Limitations of PPPs

Despite the growing interest in and adoption of PPPs, they have been facing criticism from civil society organizations, public interest groups, media, and other stakeholders. Wide publicity of some of the problematic PPPs has raised concerns about the role of the private sector in public services. Lack of trust in the private sector with public service, tariff increases, layoffs, and poor stakeholder management have contributed to these concerns. The detractors also accuse PPPs of high procurement costs, which deter small companies and curtail competition. However, many PPP experts attribute the failure of some of these projects to faulty, rushed, non-competitive, and non-transparent application of the PPP principles.

Conclusion

The above study brings a rationale and significance of PPP projects for faster economic growth especially in India. It is acknowledged that rapid economic growth, growing urban population, increasing rural–urban migration, and all-round social and economic development have put the tremendous pressure on the infrastructural development and because of this countries and governments, especially in the developing world, are experiencing an increasing pressure from their people, civil society organizations, and the media to provide accessible and affordable infrastructure and basic utility services. And as a result PPP emerged as a saviour for these nations especially India saving it from severe budgetary constraints.

However, PPPs are not far from the share of criticism from civil society organizations, public interest groups, media, and other stakeholders. Wide publicity of some of the problematic PPPs has raised concerns about the role of the private sector in public services. Lack of trust in the private sector with public service, tariff increases, layoffs, and poor stakeholder management have contributed to these concerns.

Despite its limitations, the emergence of PPPs is seen as a sustainable financing and institutional mechanism with the potential of bridging the infrastructure gap. PPPs primarily represent value for money in public procurement and efficient operation. Apart from enabling private investment flows, PPPs also deliver efficiency gains and enhanced impact of the investments. PPP enables a private investment inflow enhancing the economic growth.

References

"Business Partners for Development, Putting Partnering to Work: Results and Recommendations for Businesses." available at <http://www.bpdweb.com> Accessed January 2009.

Committee for Economic Development, Reducing Global Poverty: Engaging the Global Enterprise (New York, NY: Committee for Economic Development, 2003).

Debra, Dunn and Keith, Yamashita. "Microcapitalism and the Megacorporation." *Harvard Business Review.* August (2003): 46-54.

Tiphaine Bertsch, Rebecca Bouchet, Joanna Godrecka, Kiira Karkkainen, Tyra Malzy, Lola Zuckerman. "Corporate Sector Involvement in Education for All." *A Study for UNESCO.* June 2005.

US Agency for International Development. "The Global Development Alliance: Public-Private Alliances for Transformational Development." January 2006.

Warner, Michael. "Guidance Note for 'Getting Started.'" *Business Partners for* Development Natural Resources Cluster. Working Paper. No.6, March 2000.

Harris, Clive. 2008. "India Leads Developing Nations in Private Sector Investment." *Gridlines Series.* No. 30, PPIAF, Washington, DC.

The World Bank. Energy and Infrastructure Unit and Finance and Private Sector Development Unit, South Asia Region, INDIA Building Capacities for Public Private Partnerships, 36875, June 2006.

Patil Committee. 2005. Report of the High Level Expert Committee on Corporate Bonds and Securitization. New Delhi: Ministry of Finance. <http://www.sebi.gov.in/debt/expertreport.pdf.>

Pricewaterhouse Coopers. "Infrastructure Public-Private Partnership (PPP) Financing in India." *Draft report prepared for the World Bank with support from PPIAF*. Washington, DC: 2007.

US Agency for International Development. "The Global Development Alliance: Public-Private Alliances for Transformational Development." January 2006.

World Economic Forum. "Harnessing Private Sector Capabilities to Meet Public Needs: The Potential of Partnerships to Advance Progress on Hunger, Malaria and Basic Education." January 2006, available at <http://www.weforum.org/ pdf/ Initiatives / Harnessing private_sector.pdf> Accessed February 2009.

Government of India Portal. <http://www.india.gov.in/>

Ministry of Finance, Government of India, <http://www.finmin.nic.in/

Committee on Infrastructure, Planning Commission, <http://www.infrastructure.gov.in/>

Investment Commission of India <http://www.investmentcommission.in>

State Level Infrastructure, <http://business.gov.in/infrastructure/state_level.php>

3P Framework: Rural Marketing in India

Ajith Paninchukunnath

Abstract

Exploring

This paper coins and explains the term "Urban Myopia," and attempts to present a frame work for rural marketing in India. The marketing firms are blind to the six lakhs villages in India, perhaps the largest rural market, owing to urban myopia. These firms should adopt the 3P Framework of Rural Marketing. This model will not only help the marketing firm to develop innovative products for rural markets but will help to align the CSR activities to its marketing activities. To tap the rural market potential in a sustainable way, the marketing firm will have to adopt the 3P framework in toto. This will bring the rural consumers into the value-net of the firm and help create innovative and green products (nature friendly) even for urban consumers.

The Indian rural market with its vast size and demand base offers great opportunities to marketing firms. Rural India represents 50 percent of India's GDP (but 70 percent of its people) and 50 percent of rural GDP is non-agricultural: it comes from the self-employed in all kinds of services (Bijapurkar, 2007).

It is only natural that rural markets form an important part of the total market of India. According to the National Council of Applied Economic Research (NCAER), with about 74 percent of its population living in its villages, India has perhaps the largest potential rural market in the world. It has as many as 47,000 haats (Kashyap, 1998), compared to 35,000 supermarkets in the US. Plus, of the total FMCGs demand in India, nearly 53 percent comes from the rural market, for consumer durables, the figure is 59 percent.

India would continue to have the largest rural population in the world until 2050.This is as per the report titled "2007 Revision of World Urbanisation Prospects" released on 27th February 2008 by the United Nations (See Table 1). Both in terms of population and potential, Indian rural markets will play a crucial role in the overall Indian economy for at least the next forty years.

A change in consumption patterns and access to communication media have made the rural market a vital cog in the sales-growth

Mr. Ajith Paninchukunnath, Lecturer (Marketing), G D Goenka World Institute, G D Goenka Education City, Sohna Gurgaon Road, Haryana-122103, ajithmba@rediffmail.com

wheel, especially with demand for many categories plateauing in the urban markets. If marketing organizations have to sustain, the starting point has got to be the concern for the human being, who must be sufficiently empowered to consume by entering in to exchange relationship with them. Responsible and inclusive approach to marketing cannot neglect 72 percent of a country's population.

Defining Urban Myopia (UM)

Urban Myopia –When a marketing firm sees only the urban market to participate, in a country where rural markets are dominantly present is called Urban Myopia.

Companies suffering from UM will participate only in urban markets, most of which are over supplied by existing players. The intense competition these urban markets face, escalate the cost of participation .Even if they garner some market share, the cost of acquiring the same is very high. The intensity of Urban Myopia is so high that in spite of facing acute problems in urban markets like low market share, brand polygamy by consumers, competition from private labels, declining margins due to heavy competition and so on, companies with Urban Myopia still refuse to look beyond urban markets. Many of such companies undertake over segmentation of the urban market, making themselves a niche player-only to under utilize their actual potential or resort to line and brand extensions with minor differentiations. Such practices lead to clutter of brands in the urban markets and it is massively damaging our already fragile ecology. Dilution of brand equity, market leadership and there by the profitability lead these firms to adopt unethical practices. These firms keep on whining about the depleting market share and brand value and hardly do anything to create more opportunities for themselves and the rural consumers.

Adopting an inclusive approach to marketing is the need of the hour. Marketers suffering from Urban Myopia are not only blind to the big opportunity existing in rural market but are also undertaking a big risk of offering the same to a competitor on a platter. They also lose out on the biggest opportunity to innovate, since some of the innovative ideas from the rural consumers or the idea generated to cater to rural markets can be used to compete more effectively in urban markets. The rural need of small units of any product (due to low effective demand) can be packaging innovation for urban markets. The sale of shampoos in small sachets is a classic example in this context. Society is made up of both urban and rural consumers. Neglecting rural markets is equivalent to neglecting the society which is one of the stakeholders for the firm. Marketing firms with UM are oblivious of the deep linkages the rural consumers have with urban markets through the rural youth, many of whom work in urban areas and carry back urban products for use by their family members. This in turn creates aspirations for such products in the minds of rural consumers. Electronic acculturation is also adding to this aspiration.

Strategic innovation, which is a must for all marketing firms in today's market place, in developing markets is fundamentally different from what occurs in developed economies. It is not about locating new consumers (assuming the products and services are affordable, there are plenty of under- and non-consuming customers to tap). More often, it involves adapting existing products to customers with fewer resources or different cultural backgrounds and creating basic market ingredients such as distribution channels and customer demand from the ground up (Anderson and Markides, 2007).

Operating at all levels of Rural Urban continuum is very essential for a marketer to meet the needs of all stakeholders in the most balanced and in an innovative way. From the strategic marketing point of view, brand fight in a saturated market (most of the urban markets) is a loss game. Most of the firms in such a market are market followers. Competition in a developing market is creating new markets. An emerging market, like India, gives marketers enough opportunity to be a market creator. Parity treatment is the minimum expectation from a marketer. Treat urban and rural customers with equal importance. Discrimination by the marketer will be quickly identified by the consumers and it will have long-term repercussions. As we celebrate sixty years of independence and democratic rule in the country, the non-parity treatment or neglect of rural market by a marketer, which has resources for the same, will not be considered ethical and such a firm can never achieve true leadership and fulfill its corporate social responsibility.

Since liberalization, many marketing firms, both domestic and MNCs, have tried to attract the rural consumers to consume their products and most of them have met with failure due to not adopting an integrated approach to rural marketing. Though Pull Marketing alone, Push Marketing alone or both in combinations was adopted in various markets, they neglected the most important component i.e. the Pull up Marketing.

The need for a Holistic Framework to target Rural Markets

Rural markets of India can be approached only through an integrated approach of availability (of products), awareness (education about the benefits) and empowerment of rural consumers (by inviting them to be a part of the value creation process). Rural consumers not only consume a major portion of the products and services designed for urban markets but are a very vital source of ideas for innovation. The indigenous technology and the collective wisdom of rural consumers are not captured during the value creation process by most of the marketing firms. This is again due to the Urban Myopia, which makes the organization collect inputs only from urban consumers while conceiving new products as well as innovative products. Innovation is a key to rural marketing and those companies who manage to connect on a personal basis with villagers and give them customized and innovative products will win.

The 3P Framework of Rural Marketing proposed by the author has three components:

1. The Push Marketing
2. The Pull Marketing
3. The Pull up Marketing.

1. The Push marketing mainly aims at market penetration. Products sold in urban markets are made available to rural consumers without any modification. Longer, multiple and hybrid channels are adopted to reach the rural markets. Under this approach, though product is same across the country, the type and mix of channels vary from region to region. Push approach also involve partnering with many partners (Both for technology and logistics) to reach the remotest part of the country. Most of the firms adopt this approach to rural marketing. Push Marketing use marketing channels as the focal approach to target rural consumers-to access them and address their needs with the existing products of the firm. The product availability at the Rural Retail Outlet (RRO) is ensured under this approach. In Push Marketing, the marketer is leveraging the relationship and loyalty which rural consumers have with their retailer. The sales promo schemes are mostly trade schemes to attract channel members and to motivate them to carry company's products and also to get shelf space at RRO.

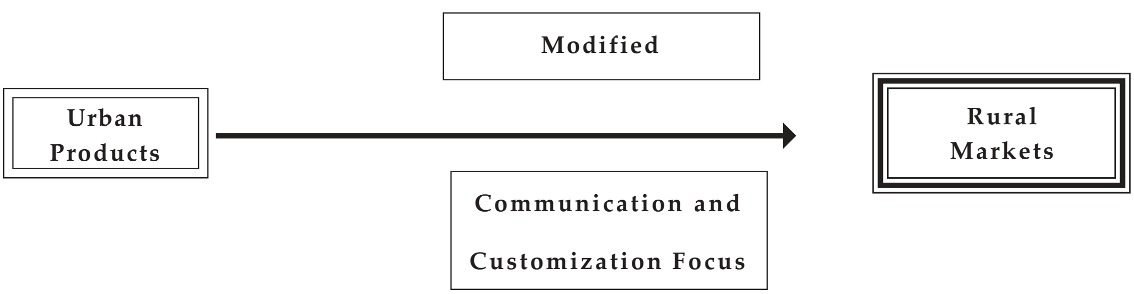
   Push Marketing is very important in Kerala since it is the only state in India with no uninhabited villages (Census of India 1991), thus reaching every RRO is crucial.

Figure 1: The Push Approach to Rural Marketing

2. The Pull marketing mainly aims at communicating with the rural consumers and reduce disconnect between what marketing firms offer and what rural consumers want. Vernacular advertisements, local opinion leaders and ambassadors are used to communicate with rural consumers. Products sold in rural markets under this approach are not the same? The products sold in urban markets are modified as per the preferences of rural consumers in various regions. Majority of the modifications are at the packaging level (smaller packs).Pull marketing use media, melas and haats as the focal approach to target rural consumers - to attract, educate and make them brand loyal. The promotional efforts aim at motivating rural consumers to buy company's brands from the feeder markets or small towns where the company's products are made available. Messages are designed keeping in mind the rural psyche and unconventional media. The sales promo schemes are mostly consumer schemes under Pull Marketing.

Pull Marketing is very crucial in Uttar Pradesh and Bihar as they have 11,147 and 10,184 uninhabited villages respectively(Census of India 1991).Gujarat and Rajasthan are the most media dark states of India(IRS 2001 Round 2).The reach of media(TV + Radio + Press + Cinema + Satellite) is 41.1 percent and 41.4 percent respectively. Non-conventional media like Periodic markets, Melas, Wall paintings, Video-vans, Folk media, Rural sports, Animal- parade will have to be used in the above states.

Figure 2: The Pull Approach to Rural Marketing



The Pull Up marketing aims at co-creation and innovation which involves collaboration with various organizations (both Govt. and NGOs) as well as close interaction with the rural consumers to understand their needs better, to empower them(create a source of livelihood) and also to capture their knowledge, wisdom and innovative ideas in the form of green products. The local sourcing of raw materials and adoption of indigenous technology are helped marketer to align CSR activities to its value chain. Empowerment of rural consumers may be through microfinance, education, training, micro enterprise, royalty for their ideas (traditional knowledge) etc. Finding good partners is a key component of the Pull-up marketing and these partners can be either from the public or the private sector. Pull up marketing use empowerment (CSR) and Co-creation (DART) as the focal approach to target rural consumers. Empowerment can also be done through assistance in sales and distribution, branding, export and processing of rural produce. Eliminating the long chain of intermediaries by providing logistics solutions which are efficient and by adopting transparent pricing methods, the rural producers will receive better returns and the urban consumers will get rural produce at reasonable rates, fast and on a regular basis.

Key features of all the three approaches are given in table two (See Table 2). Given below is the final framework consisting of The Push, The Pull and The Pull Up. By combining the economic and social objectives, the 3P Framework is a holistic framework for marketing firms targeting or planning to target the rural markets of India.

Table 1: India -Demographic Profile (2010-2050) - Projection by United Nations

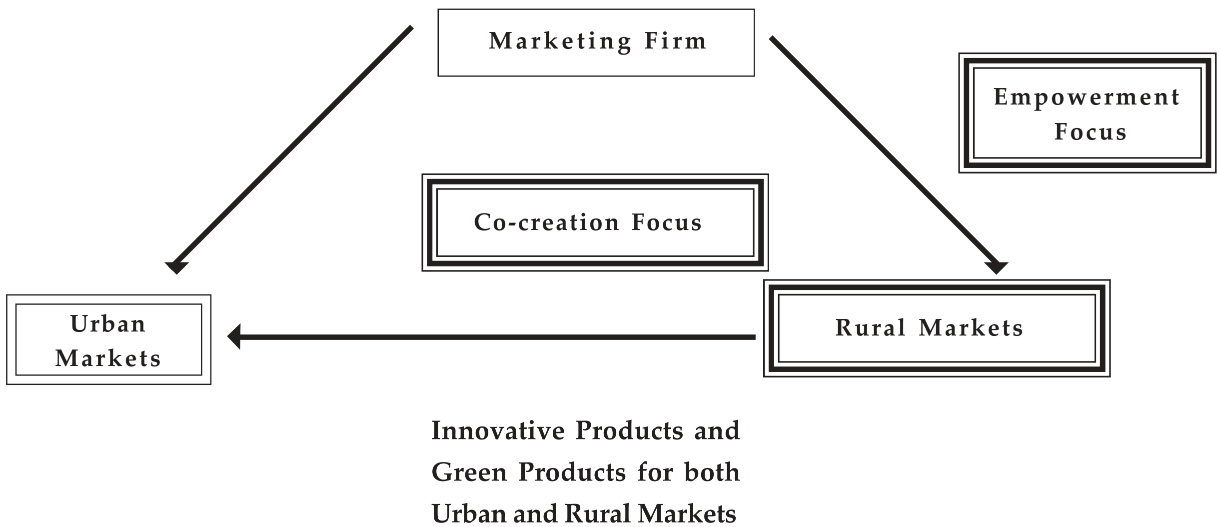
Indicator	2010	2015	2020	2025	2030	2035	2040	2045	2050
Rural population (thousands)	853 324	886 923	906 638	909 444	894 341	867 347	832 814	791 239	743 382
Urban population (thousands)	366 858	415 612	472 561	538 055	611 407	686 835	763 905	840 681	914 888
Percentage urban (%)	30.1	31.9	34.3	37.2	40.6	44.2	47.8	51.5	55.2
Indicator	2010-2015	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	
Rural annual growth rate (%)	0.77	0.44	0.06	-0.33	-0.61	-0.81	-1.02	-1.25	
Urban annual growth rate (%)	2.5	2.57	2.6	2.56	2.33	2.13	1.92	1.69	

Source: http://esa.un.org/unup/p2k0data.sap

Table 2: Key Features of Push, Pull and Pull up Marketing

Features	Push Marketing	Pull Marketing	Pull Up Marketing
Main Strategy	Penetration	Market Development	Product and Market Development
Focal Approach	Distribution	Brand building	Co-creation and Empowerment
Philosophy	Transaction dominant	Transaction dominant	Relationship dominant
Product Availability	Available at arms length	Available at feeder markets or small towns	Locally produced and distributed/exported
Main Partners/route	Channel and Rural Retail Outlets	Melas, Haats, Local artists	NGOs, Govt. agencies, Other firms operating in the same market.
Opportunity	Seek	Seek	Create(CSR, Co creation)
Communication	Mostly to channel members	Mostly to consumers	Dialogue with partners and consumers.
Market research is done among	Urban consumers	Rural consumers to know their special needs/wants/ tastes and preferences.	Rural consumers with special focus on inno-vative and nature friendly products co-creation.
Value	Extraction	Extraction	Creation and Extraction

Figure 3: The Pull Approach to Rural Marketing



Before making rural consumer a part of the marketing firms value net, few challenges have to be overcome. There are three challenges that a rural marketer must overcome. The first of these is the challenge of reach–markets in rural India are small and scattered, making them inaccessible, unviable, or both - The need for push approach.

The Push Approach Initiatives

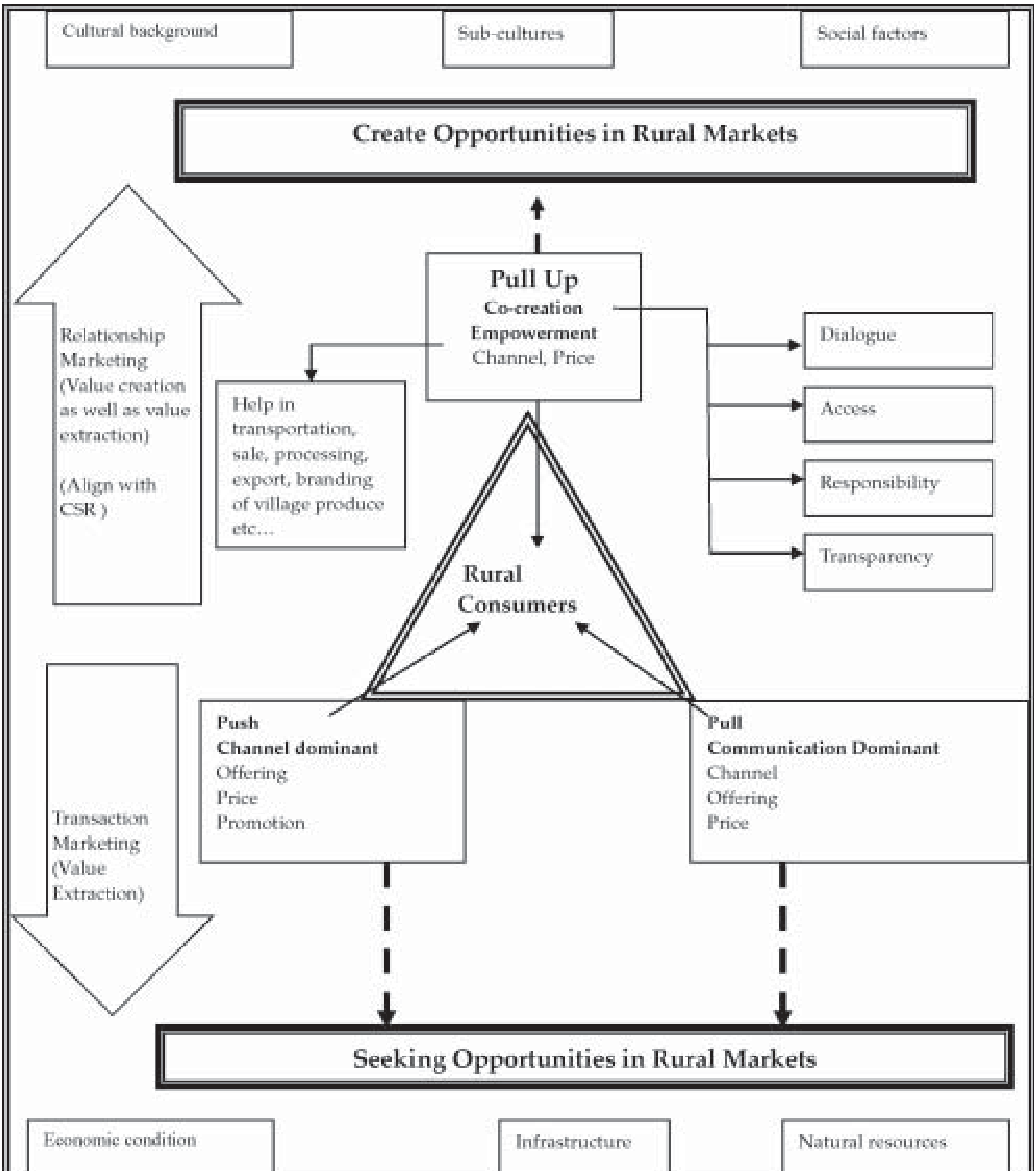
1. Bharati Airtel is adopting this method effectively. While Airtel's mobile services already cover around three lakh villages, the company plans to expand its network to 6.14 lakh villages over the next two to three years.

2. In the late 1990s, HUL realized that despite its efforts to reach to rural consumers in India, a large part of the rural market remained untapped. One of HUL's first rural initiatives was 'Project Streamline,' which was introduced in select states of the country in 1998. It aimed at doubling the rural retail outlet coverage. In mid -1998, the personal products division of HLL launched another campaign called 'Project Bharat.' It was a direct marketing exercise undertaken to address the issue of awareness, attitudes and habits of rural consumers and increase the penetration level of HLL products. It was the first and largest rural home to home operation to have ever been taken up by any company in India.

3. Eveready Industries India Ltd. (EIIL) with 46 percent of the country's battery market and 85 percent of the flashlight market claims to have the largest company–owned van distribution system in the country. EIIL have 1000 vans, more than 4000 distributors and 44 warehouses. Each van calls on 50 to 60 retail outlets per day and revisit retailers every 15 days to restock inventory.

4. ICICI Bank has formulated a comprehensive channel strategy for rural markets with multiple channels catering to all segments of the rural population. This involves setting up an ICICI Bank touch point with in ten kilometers from any customer, using a combination of branch and non-branch channels. Hybrid low cost distribution network is established by partnering with corporate, micro-finance institutions, franchisees and rural marketing agents, setting up branches at strategic locations and leveraging the distribution network of other banks. The Bank is using technology to tie- in all the channels and products to reduce costs. The number of rural internet kiosks was increased to about 4,300 in March 31,2006 from about 2,000 in March 31,2005.The total number of partner micro finance institutions / non-government organization was scaled to102 (March 2006) from 45 (March 2005). This has lead to an outreach of about 3.2 million low-income clients with an outstanding

Figure 4: The 3 P Framework for Holistic Rural Marketing in India



asset of Rs.23.5 billion. To make technology more user friendly for rural consumers and to implement inclusive banking, ICICI bank is planning to introduce biometric ATMs. Using thumbprint and voice guidance in ATMs reduces literacy requirements to a considerable extend. Thus, establishing the identity of a rural depositor through biometrics makes it possible for illiterate or barely literate consumers to become part of the banking user community.

5. Corporation Bank has taken technology to rural areas by introducing RFID/Smart Card based authentication devices that are operated by the business correspondents (BCs) at identified villages. The BCs serve as literal extension counters of the bank at these villages by providing basic banking services to people in rural areas. The bank also tied-up with a leading technology vendor for providing standardized infrastructure to banks. This helps identify the customer and to establish credit worthiness profiles. Using this information banks can take financial and non-financial products and services to the rural areas.

The next challenge is to ensure that consumers are aware of and want your brand. Large parts of rural India remain media-dark, and low literacy rates and the poor infrastructure are limiting factor. The real challenge is to communicate the right message, to engage with and understand rural consumers, their shopping and consumption behaviour, and to develop communication that connects with them - The need for Pull approach.

Message and product need not go together for rural marketing. The product and promotion can be split for those products which are purchased mainly at mandies. This is based on the finding that many products are purchased by consumers only at mandies though they are available in the village kirana shop. Due to limited reach of mass media (TV, Radio and the Press), marketers have to augment their efforts with traditional media like-melas, haats, jatras, puppetry, to create awareness in the media dark markets. The increasing mobile connectivity in rural areas will help to connect with rural consumers better and in a more cost-effective way.

The Pull Approach Initiatives

1. HUL's Lifebuoy Swastya Chetna project is a good example for the pull approach. Lifebuoy Swastya Chetna (LBSC) is a rural health and hygiene initiative which was started in 2002. LBSC was initiated in media dark villages (in UP, MP, Bihar, West Bengal, Maharashtra, Orissa) with the objective of spreading awareness about the importance of washing hands with soap.

   The need for a programme of this nature arose from the fact that diarrhoeal diseases are a major cause of death in the world today. It is estimated that diarrhoea claims the life of a child every 10 seconds and one third of these deaths are in India. According to a study done by the London School of Hygiene and Tropical Medicine, the simple practice of washing hands with soap and water can reduce diarrhoea by as much as 47 percent. However, ignorance of such basic hygiene practices leads to high mortality rates in rural India.

   Being India's leading personal wash health brand, Lifebuoy saw a role for itself in propagating the message of hygiene and health in villages. LBSC is a multi-phased activity which works towards effecting behaviour change amongst the rural population it touches. It demonstrates that "visible clean is not really clean" thereby proving the importance of washing hands with soap. It targets children as they are the harbingers of change in society and mothers since they are the custodians of health.

   As stated above, the campaign has been divided into various phases. In the initial phase, a Health Development Facilitator (HDF) and an assistant initiates contact and interacts with students and influencers of the community, i.e. village community representatives, medical practitioners, school teachers etc. A number of tools such as a pictorial story in a flip chart format, a "Glo-germ demonstration" and a quiz with attractive prizes to reinforce the message are used. The "Glo-Germ demonstration" is a unique tool to make unseen germs visible and emphasize the need to use soap to wash hands and kill germs. The first interaction with students is then replicated with the women and finally the rest of the community. The various stages reinforce the message and learnings, which is crucial in order to affect awareness and behaviour change in favour of hand wash hygiene.

The programme has touched 27000 villages and 80 mn people over the last four years. In 2006 alone LBSC contacted 10,000 villages in UP, MP, Jharkhand and Bihar. This on-going project is committed to spreading the message of health and hygiene and touching more lives in rural India

2. HUL use street performers - magicians, singers, dancers and actors-adjusting their scripts and acts based on the clientele the company wants to reach. Following a series of street performances in northeastern India, the company saw public awareness of Breeze 2-in-1, its low-priced shampoo-soap, increase from 22 to 30 percent. During a six-month period during 2005, it saw awareness of Rin Shakti, a detergent bar, jump from 28 percent to 36 percent (Anderson et. al, 2007).

The third and by far the biggest challenge in rural marketing are of influence. Across product categories, rural penetration and awareness remain low. Often, marketers need to build not just their brands but also the entire category or create a new product or category and the need is not just to reach or communicate but to actually influence - consumption (by empowering them), buying behaviour (by educating) and co-creating new products for both rural and urban markets - the need for Pull Up approach.

The Pull up Approach initiatives

Empowering the rural consumers can be done in many ways. Few examples in this context are the ITC's - E - Choupal, Project Shakti of HUL, ESAF, Rural Innovations Network (RIN) etc... to implement inclusive marketing, banks are going all out in providing a user-friendly banking experience. To boost micro financing initiatives, banks are deploying biometric solutions with ATMs.

Pull Up and Empowerment - ITC's e-Choupal initiative

The single-largest information technology-based intervention by a corporate entity in rural India. Transforming the Indian farmer into a progressive knowledge-seeking netizen. Enriching the farmer with knowledge; elevating him to a new order of empowerment. E-Choupal delivers real-time information and customized knowledge to improve the farmer's decision-making ability, thereby better aligning farm output to market demands; securing better quality, productivity and improved price discovery. The model helps aggregate demand in the nature of a virtual producer's co-operative, in the process facilitating access to higher quality farm inputs at lower costs for the farmer. The e-Choupal initiative also creates a direct marketing channel, eliminating wasteful intermediation and multiple handling, thus reducing transaction costs and making logistics efficient. The e-Choupal project is already benefiting over 3.5 million farmers. By 2012, the e-Choupal network will cover over 100,000 villages, representing 1/6th of rural India, and create more than 10 million e-farmers. Given the low levels of literacy in the rural sector, the role of the Choupal Sanchalak, the lead farmer of the village, in facilitating physical interface between the computer terminal and the farmers is central to project e-Choupal.

Pull up and Micro Enterprise - Hindustan Unilever's Project Shakti

Shakti is HUL's rural initiative, which targets small villages with population of less than 2000 people or less. It seeks to empower underprivileged rural women by providing income-generating opportunities, health and hygiene education through the Shakti Vani programme, and creating access to relevant information through the Shakti community portal.

In general, rural women in India are underprivileged and need a sustainable source of income. NGOs, governmental bodies and other institutions have been working to improve the status of rural women. Shakti is a pioneering effort in creating livelihoods for rural women, organised in Self-Help Groups (SHGs), and improving living standards in rural India. Shakti provides critically needed additional income to these women and their families, by equipping and training them to become an extended arm of the company's operation.

Started in 2001, Shakti has already been extended to about 80,000 villages in 15 states - Andhra Pradesh, Karnataka, Tamilnadu, Maharashtra, Gujarat, Madhya Pradesh, Chattisgarh, Uttar Pradesh, Rajasthan, Punjab, Haryana, West Bengal, Orissa, Bihar and Jharkhand. The respective state governments and several NGOs are actively involved in the initiative.

Shakti already has about 25,000 women entrepreneurs in its fold. A typical Shakti entrepreneur earns a sustainable income of about Rs.700-Rs.1,000 per month, which is double their average household income. Shakti is thus creating opportunities for rural women to live in improved conditions and with dignity, while improving the overall standard of living in their families. In addition, it involves health and hygiene programmes, which help to improve the standard of living of the rural community. Shakti's ambit already covers about 15 million rural populations. Plans are also being drawn up to bring in partners involved in agriculture, health, insurance and education to catalyze overall rural development.

2. Pull up and Green Products – Handicrafts from Evangelical Social Action Forum

Bringing rural consumers in the value net of the organisation will help the firm to develop innovative and green products with the help of rural consumers. Rural consumers are a store house of information and knowledge when it comes to nature produced and nature derived green products.

A good example in this context is the Prerana brand of handicrafts from ESAF. Evangelical Social Action Forum (ESAF) is a registered charitable society. It was established in 1992 under the patronage of Kerala Evangelical Graduates Fellowship. ESAF is headquartered at Mannuthy in Thrissur district of Kerala (India).

Prerana was founded with a vision to promote the diverse indigenous handicraft traditions. By finding a market for the handicraft products *Prerana* is also providing and sustaining rural employment. *Prerana* brand combine innovative designs, good craftsmanship and affordability.

It is ensured that the manufacturing process is totally eco-friendly. ESAF is continuously working towards offering quality hand crafted products, which will also create opportunities for rural artisans. *Prerana* offers products for all seasons and all reasons–office accessories, home furnishing, lifestyle accessories, jewellery, candles, greetings, bags, and much more. *Prerana* provides hope to several hopeless-physically challenged, marginalized and rural women. *Prerana* never compromises in quality. The products conform to the international standards of eco-friendliness.

Through *Prerana* many people who were once sidelined into the fringes of the society have found a new hope and confidence. Rural people who have the basic skill and inclination for handicraft production are identified. They go through rigorous skill up gradation programmes which help to sharpen their skills. ESAF work closely with the artisans providing them with various inputs including design, quality control, access to raw materials and production coordination. Once the production starts in full swing ESAF also offer them market support. ESAF have exclusive handicraft showrooms to showcase their products and a team of marketing professionals who provide the necessary marketing expertise. Constant evaluation ensures that the products blend beauty, quality and functionality.

3. Pull Up and Innovation - Rural Innovations Network (RIN)

A severe water crisis in Sadalga village, located in Karnataka's Belgaum district, drove sugarcane farmer Anna Saheb to develop a low-cost drip irrigation system. He continued to improvise and soon the design metamorphosed into the Varsha Rain Gun, a sprinkler with a capacity to irrigate one acre in 90 minutes, resulting in 50 percent saving on water and 10 percent increase in yield.

At Bathalagundu in Dindugal district, Tamil Nadu, banana farmers helplessly watched their crops being destroyed by pest attacks. One farmer approached Manoharan, an engineer with a deep interest in grassroots innovation, with the idea of developing a stem injector. Manoharan developed the compact Banana Stem Injector, which is now being used successfully across the State.

Innovators in rural India have what it takes to create products that can solve problems in areas like water, agriculture, dairy and energy as they have a sound understanding of local needs and think creatively.

Rural Innovations Network (RIN) works to tap this inventiveness of farmers and entrepreneurs, with a focus on those who lack access to technology, funding and markets. It believes that creating wealth through need-based products or services can bring prosperity into rural households. RIN involves itself in the entire cycle, from looking for innovators, conducting preliminary assessment and refining the technology to writing business models. Rural people though good at indigenous technology, are weak in marketing. RIN helps these 'informal innovators' unleash their creativity for the benefit of society.

Since its inception in 2001, RIN has identified about 2,000 inventions. Of these, 20 ideas have been worked on to create ready-to-market products; it usually takes about three to four years to get a product ready for the market. The list includes a range of products, from a burner to increase fuel efficiency in kerosene stoves and a device to trap insects in grain containers to low-cost, hygienic milking machines and products to improve soil texture.

Rural consumers face necessity of a certain kind in their geographical area and sectors of work, and therefore the trigger to develop a solution. It is crucial that the consumer is consulted. Marketing firms can facilitate interaction between the scientists and rural consumers. In keeping with its credo of engaging with the end-users, RIN hopes to fine-tune and scale up its last mile of operations through its Samruddhi retail stores.

The stores are intended to give rural people access to innovative products. Stocking products ranging from seeds, pesticides and fertilizers to farm tools and machines, each shop will cater to about 200 farmers. RIN currently has two outlets at Gobichettypalayam in Tamil Nadu; it plans 10 shops and four franchisees by 2008.Some of the innovative products on offer include Oorja stoves that reduce carbon emission, battery-operated sprayers, nutritional product for plants and low-cost sanitary napkins among others.

Currently there are no financial resources for SMEs from rural areas to create a brand of their own. Samruddhi will give them a platform to reach out. The 'Innovation to Market Programme' works with partners who have a presence in rural India to increase the reach of an innovation; the Srishti project assists innovators with inputs for design, engineering and field trials. RIN looks forward to play a crucial role to pull up the rural consumers by facilitating the flow of more creative ideas and more products and services, which, in turn, will result in more wealth trickling into rural India.

The building blocks of co-creation-The Heart of Pull up Marketing

The co-creation process has four building blocks-Dialogue, Access, Risk assessment and Transparency. As the rural consumer-marketing company interaction becomes the locus of value creation in pull up approach, we need to understand the process of co-creation through its key building blocks – the DART model of value co-creation.

Dialogue

Dialogue means interactivity, engagement, and a propensity to act – on both sides. Dialogue is more than listening to customers: it implies shared learning and communication between two equal problem solvers. It entails empathetic understanding built around experiencing what consumer's experience, and recognizing the emotional, social and cultural contexts of experiences. Dialogue creates and maintains a loyal community.

The dialogue involved in co-creation has several specific features.

1. It focuses on issues that interest both the consumer and the firm
2. It requires a forum in which dialogue can occur
3. It also requires rules of engagement (explicit or implicit) that make for an orderly, productive interaction.

Access

The traditional focus of the firm and its value chain was to create and transfer ownership of products to consumers. Increasingly, the goal of consumers is access to desirable experiences, not necessarily ownership of the product. One need not own something to access an experience.

We must uncouple the notion of access from ownership. Access begins with information and tools. Access facilitation can be a big opportunity for rural marketers.

Risk Assessment

Risk here refers to the probability of harm to the consumer. If consumers are active co-creators, should they shoulder responsibility for risks as well? They will insist that businesses inform them fully about risks, providing not just data but appropriate methodologies for assessing the personal and societal risk associated with products and services. Managers have traditionally assumed that firms can better assess and manage risk than consumers can. Therefore, when communicating with consumers, marketers have focused almost entirely on articulating benefits largely ignoring risks. Risk management offers new opportunities for firms to differentiate themselves. An active dialogue on the risks and benefits involved in using products and services can create a new level of trust between the consumer and the company. This is of vital importance in rural marketing.

Transparency

Companies have traditionally benefited from information asymmetry between the consumer and the firm. That asymmetry is rapidly disappearing. Firms can no longer assume opaqueness of prices, costs, and profit margins. And as information about products, technologies, and business systems becomes more accessible, creating new levels of transparency becomes increasingly desirable. Transparency also adds to the trust building and more frequent dialogue and there by stronger relationship.

The building blocks in combination

Combining the building blocks of transparency, risk assessment, access, and dialogue enables companies to better engage customers as collaborators. Transparency facilitates collaborative dialogue with rural consumers. Constant experimentation, coupled with access and risk assessment on both sides, can lead to new business models and functionalities designed to enable compelling co-creation experiences. When companies combine the four DART building blocks in different ways, they can create the following new and important capabilities:

1. **Access and Transparency**- Coupling access with transparency enhances the consumer's ability to make informed choices.
2. **Dialogue and Risk Assessment**- Combining dialogue with risk assessment enhances the ability to debate and co-develop public and private policy choices.
3. **Access and Dialogue**- Coupling access with dialogue enhances the ability to develop and maintain thematic communities.
4. **Transparency and Risk Assessment**- Combining transparency with risk assessment enhances the ability to co-develop trust.

Consumers want the freedom of choice to interact with the firm through a range of experience gateways .Therefore the firm must focus on the co-creation experience across multiple channels. Technological change is revolutionizing channel structures across industries. The choice of channels by both consumers and firms fundamentally shapes the co-creation experience.

Traditional Exchange Verses Co-creation Experiences

In the traditional approach (Push and Pull), the goal of the interaction is value extraction. This occurs in the exchange process, which is the primary source of contact between the firm and the customer. In the co-creation approach (Pull Up), the goal of the interaction is twofold, value creation and value extraction.

In the traditional approach, the locus of interaction is at the end of the value chain activities. In the co-creation approach, interaction can take place repeatedly, anywhere and anytime in the system. Because the product development process is transparent to customers, they can intervene more often and more intensely than usual. In the traditional approach, the notion of quality is based on what the firm has to offer. In co-creation, it is about consumers co-constructing their own experiences.

The 4As and 3Ps Framework-A comparison

A comparison with 4As Framework of marketing for emerging markets is given in table three (See Table 3).

Though the 3 P Framework of Rural Marketing is much broader, the comparison gives more clarity. When the 4 As Framework is from the consumer's perspective, the 3 P Framework gives a holistic and inclusive approach to Rural Marketing in emerging economies like India. The social responsibility dimension is an integral part of The Pull up approach of the Holistic 3 P Framework of Rural Marketing which is missing in the 4As Framework. The long-term orientation, close interaction (DART) with customers to create innovative products and the inclusive approach make 3 P Framework more holistic and strategic, thus a better framework in Indian context.

Table 3: Comparison of 3 P Framework with 4 As Framework

Elements of Framework	Key Marketing Objective Achieved	Elements of Framework	Key Marketing Objective Achieved
Affordability	Actual Demand	Pull Up	(A) Purchasing power enhancement through Microfinance, Micro enterprise, SHGs etc.(B) Co-creation 1. Ideas for New product development (Innovation) 2. Ideas for Green products 3. Sourcing of raw materials and production. (C) CSR = (A) + (B) (D) Partnership with Public Organizations, NGOs and other Private firms.
Acceptability	Purchase and Adoption of products	Pull	Educating, Motivating and Making the value proposition to rural consumers.Creating Brand loyalty
Accessibility	Reach of product	Push	Distribution and reach to rural consumer
Awareness	Knowledge about the existence of product	Pull	Communication, Word of mouthInfluence, Persuasion

Conclusion

The 3 P Frameworks of Rural Marketing has to be adopted in totality for achieving sustainable success in rural marketing. Many marketing firms are adopting just one or two components of the 3 P Frameworks, and face problems. They need to implement the missing component of the 3 P Frameworks. Firms having Urban Myopia need to quickly adopt 3 P Framework of Rural Marketing. Even domestic firms aspiring to be a MNC need to be strong in the domestic market, 2/3[rd] of which is rural in India. The adoption of 3 P Framework of Rural Marketing can strengthen the organization in the domestic market and make them a stronger contender for international markets. In an era of human centric marketing, catering only the needs of the Urban Markets is Urban Myopia which requires immediate correction for the health of marketing organization, society and nation at large.

The 3 P Framework of Rural Marketing can not only give access to the rural opportunity but has the potential to create markets, innovative products, green products and align CSR activities of the firm to its value chain. The inclusive (Urban and Rural) approach to marketing is not only more holistic (meeting the needs of all stakeholders), but more rewarding for a socially responsible marketing firm. New entrants and small firms may prefer to adopt either Push or Pull as their main approach to target rural markets. But, they need to keep in mind that only a Holistic Approach with long term commitment will give sustainable returns, strong presence and leadership in rural markets of India which are heterogeneous and difficult to access. Let the seeking and creating opportunity in rural markets go hand in hand by adopting the Holistic 3 P Framework.

References

Airtel to focus on rural markets - <http://economictimes.indiatimes.com-29-12-07>

Anderson, Jamie and Costas, Markides. "Strategic Innovation at the Base of the Pyramid." *MIT Sloan Management Review*. Cambridge: Fall 2007. Vol.49, Issue 1; (2007). 83.

Batra, A. "Marketing Responsibilities." *Pitch.* 2007.

Bijapurkar, R*. We Are Like That Only: Understanding the Logic of Consumer India.* Penguin Group, New Delhi: 2007.

Case studies on Innovations in India. ICMR, Hyderabad, Retailing and FMCG, 180-82.

ICICI Bank-Technology as a differentiator, The Indian Banker, Sept., Vol.1, No.9, (2006): 6-10.

Kalam, A.P.J.Abdul and Y.S.Rajan. *India 2020-A vision for the New Millennium* 1998.

Kashyap, Pradeep and Raut, Siddhartha. *The Rural Marketing Book-Text and Practice.* New Delhi: Biztantra, 2007.

Kashyap, Pradeep. "Selling to the Sons of the Soil." *Strategic Marketing.* August-October, (1998): 1(4).

Modi, I. "Human Values and Social Change." *Rawat Publications*. New Delhi: 2001.

Porter, M.E. and Mark, R. Kramer -"Strategy and Society." *Harvard Business Review*. Dec., 2006.

Prahalad, C.K. "The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits." *Wharton School Publishing.* 2004.

Prahalad, C.K., Venkat Ramaswamy. 'The Future of Competition: Co-creating unique value with customers." *Harvard Business School Press.* 2004.

Ramakrishnan, Ruchika. "Rural Marketing in India: Strategies and Challenges." *New Century Publications.* New Delhi: 2006.

Ramkishen,Y. "New Perspectives on Rural Marketing: Includes Agricultural Marketing." J*aico Publishing House*. Mumbai: 2002.

Sheth, J.N. et al "Does Marketing Need Reform." *M.E.Sharpe.* New York: 2006.

Velayudhan, Sanal Kumar. "Rural Marketing: Targeting the non-urban consumer, second edition, October, Response books, 2007.

<http://www.echoupal.com-20-12-08>

<http://www.hindustantimes.com/storypage/storypage.aspx?id=0fb083fa- Sourced on 29-2-08>

<http://www.hll.com/mediacentre/release.asp?fl=2002/PR_HLL_050902.htm-26-12-07>

<http://www.rinovations.org/home.htm -23-12-07>

Compatibility: Between Culture and Change

Monica Shrivastava and Sumita Dave

Abstract

Harmonizing *The present paper seeks to study the organizational culture at Bhilai Steel Plant(BSP), on the basis of identified parameters like teamwork, climate, supervision, information flow, and employee involvement, with a view to evaluating the compatibility between the existing culture and change, which is occurring due to ERP implementation. It has been found that the existing culture is conducive to the implementation process, but there is a need to increase the information flow, which can be achieved by integrating the systems and increasing employee participation or involvement by delegating responsibilities as well as welcoming employees' suggestions and innovative ideas.*

Culture is essential for both successful organizational change and maximizing the value of human resource. An important challenge for managers is to determine what the most effective culture is, for their organization and, when necessary, how to change the organizational culture effectively. ERP implementation is said to bring about both structural as well as cultural change in an organization but, at the same time, its implementation speed and flexibility is said to be affected by the culture of an organization. Literature survey shows culture of an organization has been considered as critical success factor for the successful implementation of ERP.

Mrs. Monica Shrivastava, Lecturer (Sel. Grade), Shri Shankaracharya College of Engineering and Technology, Junwani, Bhilai, Email: monica sv.03@gmail.com

Dr. Sumita Dave, Professor, Shri Shankaracharya College of Engineering and Technology, Junwani, Bhilai, Email: sumitadave@rediffmail.com

Enterprise Resource Planning

ERP – "Enterprise Resource Planning," is a totally integerated software solution for achieving breakthrough in performance by allowing seamless flow information. It was the major success story of the 1990s (Beekhuyzen et al., 2002). Enterprise systems represent one of the most important information technology categories to emerge in the last decade (Davenport 2000). ERP systems support multi-currency, multi-platforms and are multilinguistic.

ERP systems are packaged (but customisable) software applications, which manage data from various organizational activities and provide a fully integrated solution to major organizational data management problems (Rosemann 1999).

Some of the perceived benefits of ERP's are:-

- Integrated information
- Increase quality as the ERP implementation is often accompanied by the introduction of new quality management systems like ISO, IT Mark, CMMI etc
- Increase revenues and optimize costs
- Real-time statistics and analysis
- Control and monitoring of business processes
- Standardization of company standards, paper work, work style etc
- Applies globally accepted economic and financial standards
- Optimization of business processes either by redefinition or by re-engineering.

Culture

Culture is the collective soul of the organization, of a group of people. Organizational culture embraces such organizational needs as common language, shared concepts, defined organizational boundaries, methods for selecting members for the organization, methods of allocating authority, power, status, and resources, norms for handling intimacy and interpersonal relationships, criteria for rewards and punishments, and ways of coping with unpredictable and stressful events (Schein, 1985a). It is influenced by type of governance, internal rules and regulations, employee empowerment policies, recognition/ reward policies, organization structure, clarity of roles and accountability, freedom of communications etc. Deal (1985, p. 303) referred to organizational culture as "the epicenter of change."

Organizational culture impacts the way people think, perform tasks and interact with each other. Also, Organizational culture as "the way things are done in the business (Hofstede 1984). Organizational culture is the "shared perceptions, patterns of belief, symbols, rites and rituals and myths that evolve over time and function as the glue that holds the organization together" (Zamanou and Glaser, 1994). These perceptions and beliefs then effect and can be influenced by people's behaviours on things like how to solve problems, how to conduct a job and how to communicate (Bates, Amundson, Schroeder, and Morris, 1995).

Organizational culture could affect an employee's participation and involvement (Zamanou and Glaser (1994)). Literature survey shows that the concept of culture is particularly of importance when one is trying to manage organization-wide change. Literature survey points to the fact that organizational culture or changes in organizational culture can facilitate or hinder business change initiatives such as BRP, ERP and TQM (Al-Khalifa and Aspinwall, 2000; Bennett, Detert and Schroeder, 2000, Hoffman and Klepper, 2000; Kim et al., 1995; Wayne, Mooney, and Sheldon, 1999).

Organizational Culture Impact in ERP Implementation

According to Deal and Kennedy (1982, p164) "The business of change is cultural transformation" and laments most managers who "worry a lot about change, but [neglect] cultural issues of changing". Beckard and Harris (1987) stress on the fact that these environmental pressures, seeing an increasingly complex business world includes changing values in workers. A strong organizational culture can be a primary generator of real motivation and commitment (Mobley et al. (2005)). This high intensity of common beliefs makes it relatively easier to draw consensus among employees, to build a focus on important goals and objective, to reduce potential conflicts, to cultivate a learning environment, and to lower staff turnover (Mobley et al., 2005).

Organizational culture is known to be important in the success of projects involving significant organizational change (Stewart et al., 2000).

One reason for many ERP failures are that we pay insufficient attention to the culture of the organizations with which we work [Kampmeier (1998)]. Some other factors that can produce user resistance to IT implementation, when an IT conflicts with an organization's culture:

1. Implementation failure through an undermining of the analysis and design process, leading to an under-

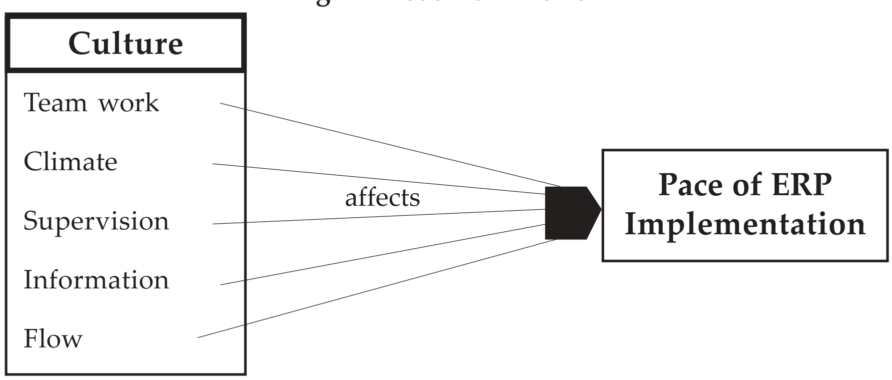
utilization of the system once implemented, or a sabotaging of the implemented system.

2. An adaptation of the IT during implementation or use so that any conflict with the existing culture is diminished [Cooper 1994].

Hall (1976) divided cultures into high and low context categories. According to him, a high context culture is more open to change rather than low context cultures.

In initial ERP implementation and ERP upgrades, the issues of organizational culture relating to risk orientation and user involvement are key ERP implementation variables(Steward et al. 2000). Organization's existing culture is therefore likely to have profound effects on the planning process, the implementation process and in the operation of the completed project [Steward et al. 2000].

Fig. 1: Research Model



Dimensions of Culture under Study

Teamwork

Teamwork is a joint action by two or more people, in which each person contributes with different skills and express his or her individual interests and opinions to the unity and efficiency of the group in order to achieve common goals [Chaudron, David (2007)]. ERP implementation generally takes place in teams and hence teamwork is an important aspect from implemetation point of view. It is "reported coordination of effort, interpersonal cooperation and/or antagonism, resentment, power struggles within sections or divisions; people talk directly and candidly about problems they have with each other" (Glaser and Zamanou, 1987). One can say that an effective teamwork exists when all the individuals involved work in harmony and work towards a common goal. Teamwork encourages cooperation and coordination, employees are willing to help each other, there by feeling less threatened by change. It results into openness, collaboration and trust amongst each other. It facilitates the implementation and adoption of change.

Climate

The climate of an organization is a reflection of the structure existing in an organization, the leadership and the policies of the organization. Organizational climate refers to the "shared perceptions of organizational policies, practices, and procedures, both formal and informal" (Reichers and Schneider, 1990, p. 22). Organizational climate influences an organization's planning and implementation processes of new technology.Organizational climate plays a crucial role in influencing employee behaviour. Climate is a dimension of cultures that helps people feel connected and open to change. Climate advocating high morale make people more self-motivated to overcome obstacles (Gist and Mitchell, 1992;Gardner and Rozell, 2000).

Supervision

Supervision is an activity carried out by supervisors to oversee the productivity and progress of employees who report directly to them. Effective managerial supervision is defined as providing expertise, support, reinforcement, direction and/or the necessary resources for subordinates to achieve their goals. Performance of an organization is more likely to rise with feedback than without, no matter if it is positive or negative (Karl, O'Leary- Kekky, and Martocchio, 1993). Positive supervision could boost people's confidence, encourage employees to try new technologies. Literature survey reveals that close supervision enhances the pace of ERP implementation process.

Information Flow

It is defined as "links, channels, contact, flow of communication to pertinent people or groups in the organization; feelings of isolation or being out of touch" (Glaser and Zamanou, 1987). Good information flow from the management can help to lay off the fear in the mind of the employees and help them to better react to change. Good information flow also promotes a feedback system. Employees could use feedback as a resource for performance monitoring and adjust their behaviour accordingly to achieve better outcomes. Seamless flow of information leads to better decision making. According to Kumar S.(2005) there is change in information quality due to implementation of an ERP system. The adoption of new beliefs and their capability to perform a task could be facilitated by the availability of accurate information about the causes of performance, as well as information about the specific tasks that the employee is undertaking (Gist and Mitchell, 1992).

Involvement

It is defined as "reported input and participation in decision making; respondents feel that their thoughts and ideas count and are encouraged by top management to offer opinions and suggestion" (Glaser and Zamanou, 1987). Implementing new systems to improve business process functions without obtaining effective user participation has previously shown to be problematic (Taylor, 1998). A comparison was made between collective to individual user participation and found that collective user participation resulted in greater acceptance and use of a discretionary accounting information retrieval system as well as higher levels of satisfaction, organizational commitment and data input quality with respect to a mandatory accounting information system (Hunton and Gibson 1998; 1999). Employee, if involved in decision making, will be less resistant to change and feel more responsible towards making it a success. In addition, involvement is another kind of affirmation of the employees' achievement from their supervisors.

Research Methodology

Objective –

To study whether the culture existing in Bhilai steel plant is conducive for ERP implementation or not.

A. Type and Method of the Research

Regarding the aim, this research is applied one. The plan of the research is descriptive – type survey. It is descriptive because that it draws a picture of current situation and is a survey because that tries to collect the data of statistical community via questionnaire.

B. Statistical Population and Sample

In this research, statistical community includes the employees of the identified departments like Marketing and SP, Product planning and control, Materials management, Research control Lab, Finance and Accounts of a manufacturing public sector of India, Bhilai Steel Plant. Therefore, the personnel of these companies are considered as statistical community.

C. Sampling Method and Sample Size

Simple random sampling was used in this research. The sample size is 178 executives respondents belonged to age group of 20-60 yrs. The Employees were picked on the basis of their personal numbers.

D. Thematic Domain of Research

Research domain is organizational behaviour studies.

E. Time Domain of Research

July 2009 to August 2009 (approximately 11/2 mths). During the implementation period.

F. Place Domain of Research

This research was done in India at Bhilai Steel Plant. Seven-time winner of Prime Minister's Trophy for best Integrated Steel Plant in the country, Bhilai Steel Plant (BSP) is India's sole producer of rails and heavy steel plates and major producer of structural. The plant is the sole supplier of the country's longest rail tracks of 260 metres. With an annual production capacity of 3.153 MT of saleable steel, the plant also specializes in other products such as wire rods and merchant products. Since BSP is accredited with ISO 9001:2000 Quality Management System Standard, all saleable products of Bhilai Steel Plant come under the ISO umbrella. IS0:14001 have been awarded for Environment Management System in the Plant, Township and Dalli Mines. It is the only steel plant to get certification in all these areas. The Plant is accredited with SA: 8000 certification for social accountability and the OHSAS-18001 certification for Occupational health and safety. These internationally recognised certifications add value to Bhilai's products and helps create a place among the best organisations in the steel industry. Among the long list of national awards it has won, Bhilai has bagged the CII-ITC Sustainability award for three consecutive years.

Table - 1

Product-Mix	Tonnes/Annum
Semis	5,33,000
Rail and Heavy Structural	7,50,000
Merchant Products(Angles, Channels, Round and TMT bars)	5,00,000
Wire Rods (TMT, Plain & Ribbed)	4,20,000
Plates (up to 3600 mm wide)	9,50,000
Total Saleable steel	31,53,000

G. Data Analysis Methods

After data collection via questionnaires, obtained data was analyzed using one-way Anova.

Table - 2

Age-Group (Years)	No. of Respondents
20-30	10
31-40	60
41-50	75
51-60	33
Total	178

Hypothesis: H_1 The present culture of the organization is not conducive for organizational transformation.

Analysis

Table 3: One Way Anova for testing Culture

Summary

Groups		Count	Sum	Average	Variance
Teamwork	X_1	174	649.6667	3.73	0.386294
Climate	X_2	174	632.6011	3.63	0.430425
Supervision	X_3	174	586	3.36	0.353332
Information Flow	X_4	174	579.2	3.32	0.60206
Involvement	X_5	174	564.5	3.24	0.547665

Chart 1: Average Value of the Parameters under Study

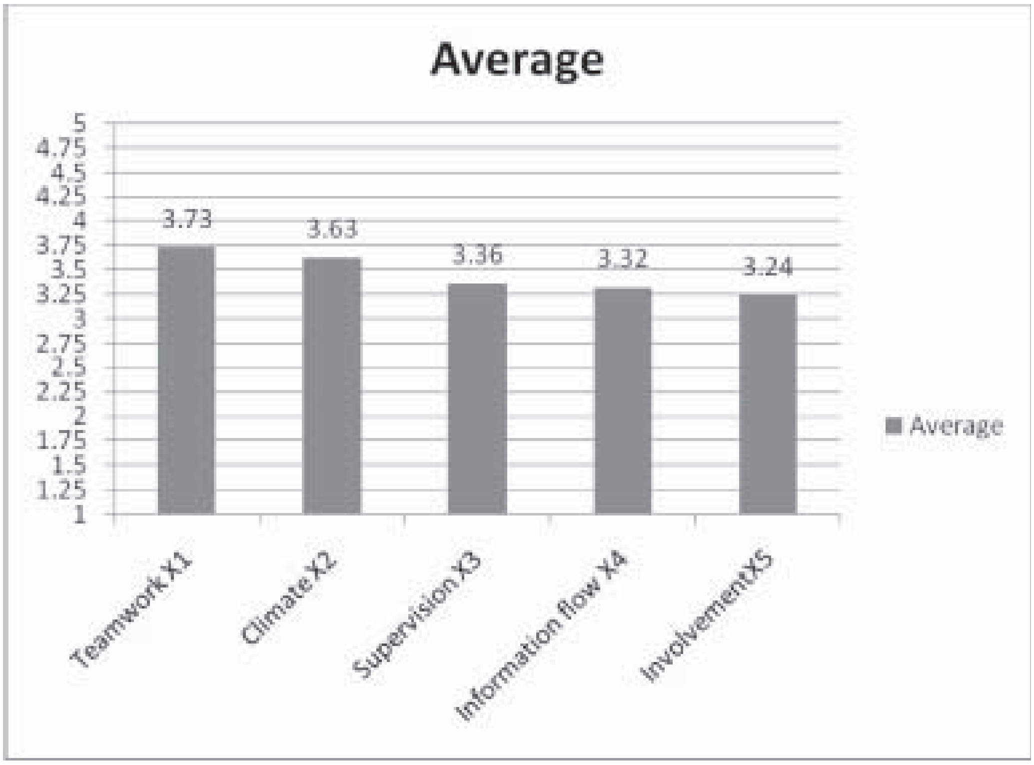


Table 4: Anova

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	30.97827	4	7.744568	16.69256	3.45 E-13	2.382223
Within Groups	401.3195	865	0.463953			
Total	432.2977	869				

Conclusion: H_1 is rejected

G. Data Analysis Methods

After data collection via questionnaires, obtained data was analyzed using one-way Anova.

Hypothesis

H_1 The present culture of the organization is not conducive for organizational transformation.

Analysis

Inference

Since, the average value of all the parameters X_1 to X_5 are above average (3), one can conclude that the identified aspects of culture, exists in the organization and hence, the culture is found to be conducive for the implementation of ERP.

Conclusion and Discussion

Teamwork exists in the organization. They function as a team, are helpful towards each other, are direct and honest, have productive working relationship, professional jealousies do not hamper the progress of work and the employees trust each other.

According to the employees, the targets and the decisions are taken by the top management and delegated to them. The job fit parameter along with consistent behaviour of the management and importance for employees suggestion is comparatively lesser than the motivation given to the employees, providing opportunities and flexibility. Overall, the climate can be considered conducive.

There is close supervision with clarity in expectations, but feedback on supervisors is comparatively less entertained. According to the employees, they are not given enough freedom to do jobs other than their own. This is positive for the implementation process as close supervision is necessary for the timely implementation of the system. Hence, this is conducive.

According to the employees, the information flow is there but, it is comparatively lesser. They feel that they are only sometimes given the right picture and proper informaton. A more seamless flow of information both horizontally as well as vertically will enable them to carry the task in a better way.

Employee involvement is also comparitively lesser than required. Human resource plays a very critical role in proper implementation process, and if their involvement is not proper there are chances that the system will not be able to reap the benefits as it should.

Overall, one can say that the important aspects of culture which are necessary for proper implementation process exists in the organization, hence the culture is conducive for bringing about change. The culture looks like high context culture which is more adaptive to change.

Suggestions

Seamless Flow of Information – Information in right amount, right time and place is very important for any business to fourish. Proper integration of all the systems existing in the organization can become an important source of information for the employees. The management should communicate the problems, challenges, achievements as well as the necessary details to the employees so that, they are in a better position to understand the reasons of change and thereby reducing resistance.

Employee Involvement – Human resource is a critical factor in any organization. To increase employee involvement the management should welcome employee's views and suggestions during implementation and change. This will create a sense of responsibility amongst employees and they will be more involved in the work and creativity and innovation will be at its best. Employee involvement will result in less resistance from them there by facilitating change. Decentralized working tends to increase the speed of work in any organization and also results into delegation of responsibility.

Keywords: Organizational culture, Enterprise Resource Planning (ERP), Teamwork, climate, supervision, information flow, involvement.

References

Al-Khalifa, K.N. and Aspinwall, E.M. "Using the Competing Values Framework to Identify the Ideal Profile for TQM: A UK Perspective." *International Manufacturing Technology and Management. 2*(1-7), (2000): 1024-1040.

Bates, K., Amundson, S., Schroeder, R., and Morris, W. "The Crucial Interrelationship between Manufacturing Strategy and Organizational Culture." *Management Science. 41*(10), (1995): 1565-1580.

Chaudron, David. "Teams and Teamwork." *Journal of Organized Change.* 2007.

Cooper, R.B. "The Inertial Impact of Culture on IT Implementation." *Information and Management.* (27:1), (1994): 17-31.

Davis, F.D. Perceived Usefulness, Perceived Ease of use and user Acceptance of Information Technology. *MIS Quarterly. 13*(3), (1989): 319-340.

Davenport, T. "Mission Critical: Realizing the Promise of Enterprise Systems." *Harvard Business School Press.* 335, 2000.

Deal, Terrence E., and Allan, A. Kennedy. "*Corporate Cultures: The Rites and Rituals of Corporate Life.*" *Reading.* MA: Addison-Wesley Publishing Co., 1982.

Gardner, W.L. III and Rozell, E.J. "Computer Efficacy: Determinants, Consequences and Malleability." *The Journal of High Technology Management Research.* 11(1), (2000): 109-136.

Gist, M.E. and Mitchell, T.R. "Self-efficacy: A Theoretical Analysis of Its Determinants and Malleability. *Academy of Management Review*, *17*(2), (1992): 183-211.

Glaser, S.R. and Zamanou, S. "Measuring and Interpreting Organizational Culture." *Management Communication Quarterly. 1*(2), (1987): 173-198.

Hofstede, G. *Cultures Consequences: International Differences in Work-Related Values.* Beverly Hills, CA: Sage Publications, 1984.

Hoffman, N. and Klepper, R. "Assimilating New Technologies: The Role of Organizational Culture." *Information System Management. 17*(3), (2000): 36-42.

Kim, P.S., Pindur, W., and Reynolds, K. "Creating a New Organizational Culture: The Key to Total Quality Management in the Public Sector." *International Journal of Public Administration.* 18(4), (1995): 67-709.

Karl, K.A., O'Leary-Kelly, A.M., and Martocchio, J.J. "The Impact of Feedback and Self-Efficacy on Performance in Training." *Journal of Organizational.* 1993.

Kumar, S. "Change in Information Characteristics Due to ERP Implementation Using AHP." *Proceedings of the POMS Conference.* Chicago, USA (April 2005).

Mobley William h., Wang Lena, Fang Kate, "Measuring and Developing IT in Your Organization." *Behaviour.* 14, (2005): 379-394.

Organizational Behaviour and Management. 8th Ed., Ivancevich, Konopaske, and Matteson).

Pettigrew, A.M. "On studying Organizational Cultures." *Administrative Science Quarterly.* 24, (1979): 570-581.

Rosemann, M. "ERP Software: Characteristics and Consequences." *7th European Conference on Information Systems.* 1999.

Schein, E.H. (1985). *Organizational Culture and Leadership: A Dynamic View.* San Francisco, CA: Jossey-Bass, 1985.

Zamanou, S. and Glaser, S.A. Moving toward Participation and Involvement. *Group and Organization Management.* 19(4), (1994): 475-501.

Stress Level: Assessment and Alleviation

Sowmya K.R.

Abstract

Monitoring

Stress has existed throughout the evolution. About four billion years ago, violent collision of rock and ice along with dust and gas, led to the formation of a new planet. The planet survives more than 100 million years of meltdown to give birth to microscopic life. Coping with events to survive, has led men to invent extraordinary technologies, beginning with a piece of sharpened stone. The potential causes of stress are numerous. Stress may be linked to outside factors such as the environment in which you live or work, or your family. The basic objective of the study is to analyze the level of stress experienced by the employees and identifying a better tool to reduce it.

In the world of modern era, there are more competitions, more expectations and more dangers and naturally, all these lead to stress. Stress can be defined as the normal physiological response of the body to any hostile situation or stimulus. Millions of trials and errors in the life process have brought men to this stage. Coping with events to survive has led men to invent extraordinary technologies, beginning with a piece of sharpened stone.

The potential causes of stress are numerous. Stress may be linked to outside factors such as the environment in which you live or work, or your family. Your stress can also come from your own irresponsible behaviour, negative attitudes and feelings, or unrealistic expectations. The basic objective of the study is to analyse the level of stress experienced by the employees and identifying a better tool to reduce it.

Ms.Sowmya K.R., Assistant Professor, Easwari Engineering College, Department of Management Studies, Bharathi Salai, Ramapuram, Chennai-600089, Email: sowmya.research@gmail.com, saumiyaa@gmail.com

Stress

Stress is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important.

Stress is not necessarily bad in and of itself. Although stress is typically discussed in a negative context, it also has a positive value. It's an opportunity when it offers potential gain. Consider, for example, the superior performance that an athlete or stage performer gives in "clutch" situations. Such individuals often use stress positively to rise to the occasion and perform at or near their maximum. Similarly, many professionals see the pressure of heavy workloads and deadlines as positive challenges that enhance the quality of their work and the satisfaction they get from their job.

More typically, stress is associated with constraints and demands. The former prevents you from doing what you desire. The latter refers to the loss of something desired. So when you take a test at school or you undergo your annual performance review at work, you feel stress because you confront opportunities, constraints, and demands. A good performance review may lead to a promotion, greater responsibilities, and a higher salary. But a poor review might even result in your being fired.

Stress has existed throughout the evolution. About 4 billion years ago, violent collision of rock and ice along with dust and gas, led to the formation of a new planet. The planet survives more than 100 million years of meltdown to give birth to microscopic life. These first organisms endured the harshest of conditions—lack of oxygen, exposure to sun's UV rays and other inhospitable elements, to hang on to their dear life. Roughly 300,000 years ago, the Neanderthals learnt to use fire in a controlled way, to survive the Glacial Age. And around 30,000 years, Homo sapiens with their dominant gene constitutions and better coping skills, won the game of survival. Each step of evolution a test of survival, and survival, a matter of coping with the stress of changing conditions. Millions of trials and errors in the life process have brought men to this stage. Coping with events to survive has led men to invent extraordinary technologies, beginning with a piece of sharpened stone.

The potential causes of stress are numerous. Stress may be linked to outside factors such as the state of the world, the environment in which you live or work, or your family. Your stress can also come from your own irresponsible behaviour, negative attitudes and feelings, or unrealistic expectations.

Consequences of Stress

Stress shows itself in a number of ways. For instance, an individual who is experiencing a high level of stress may develop high blood pressure, ulcers, irritability, difficulty in making routine decisions, loss of appetite, accident-proneness, and the like. These can be subsumed under three general categories:

i. Physiological symptoms
ii. Psychological symptoms
iii. Behavioural symptoms

(a) Physiological Symptoms

Stress can affect anyone from children to adolescents to adults. The body tries to overcome stress by certain physiological adjustments. If the body succeeds, then after sometime the physiological adjustments and the stress symptoms revert back to normal. Stress is a normal physiological response of the body to a hostile environment and symptoms of stress are manifestations of this response. The body tries to overcome stress by certain physiological adjustments. If the body succeeds, then after sometime the physiological adjustments and the stress symptoms revert back to normal. If it fails the physiological adjustments and the stress symptoms persists. It is this persistence of the response that matters. The affected person may develop physical, physiological or psychological problems. He may not be able to lead a normal life.

Stress if not relieved, may change the person's life from good to bad, bad to worse, worse to worst. If stress is in the house, it will affect the relationship with spouse and other family members. If it is in the educational institution, it will affect the studies. If it is in the work place, it will affect the performance. So stress, no matter what age group it affects, no matter where it affects, should be tackled, so that the person can lead a normal and productive life.

Symptoms of Physiological Stress

Stress' physical symptoms and signs form a long and an exhaustive list. The signs and symptoms of stress could be physical, physiological or psychological. Usually a combination of all the three occurs. It is not necessary that all the symptoms should be present in the affected individual. Moreover the severity may not be same in all the persons exposed to similar kind of stress.

The signs and symptoms of stress are manifestations of the functional adjustments that happen in the body. It varies with the type of stress whether it is acute, chronic or delayed. The functional changes are physiological changes and are the reasons for signs and stress physical symptoms to be manifested. The changes that occur are:

- Diversion of the blood from less vital to more vital organs.
- Increase in the heart rate to supply more blood quickly.
- Increase in the blood pressure to supply blood efficiently.
- Increase in the respiratory rate to get more oxygen from the atmosphere.
- Breakdown of glycogen stores in liver and muscle to get more glucose.
- Formation of more glucose from non carbohydrate substances.

The above mentioned functional changes manifest both stress physical symptoms and stress psychological symptoms.

(a) Diversion of the Blood from Less Vital to More Vital Organs
(b) Increase in the Heart Rate to Supply More Blood Quickly
(c) Increase in the Blood Pressure to Supply Blood Efficiently
(d) Increase in the Respiratory Rate to get More Oxygen from the Atmosphere

(b) Psychological Symptoms

Mental stress is associated with an increased risk for cardiovascular events, including myocardial ischemia and sudden death[1-3] possibly caused by catecholamine-induced increases in heart rate (HR) and blood pressure (BP) that result in enhanced myocardial oxygen demand.[4] However, the effect of mental stress on vasomotor tone and the implications for cardiovascular risk are less well understood. Zeiher et al[5] showed that an intact endothelium is necessary for a normal vasodilator response to sympathetic stimulation in human coronary arteries. More recently, Yeung et al[6] demonstrated significant coronary vasoconstriction with mental stress in patients with coronary atherosclerosis and presumed endothelial dysfunction.

Thus mental stress also could influence the risk for cardiovascular events through an adverse effect on coronary vasomotor tone and myocardial oxygen supply in individuals with impaired endothelial function. To further characterize the normal relation between mental stress and endothelium-dependent vasomotor tone, we used 2-D ultrasound to measure brachial artery flow-mediated vasodilatation in 21 healthy individuals without risk factors for coronary artery disease before and during mental stress provoked by a standard arithmetic challenge.

(C) Behavioural Stress

Recently identified cellular and molecular correlates of stress-induced plasticity suggest a putative link between neuronal remodeling in the amygdale and the development of anxiety-like behaviour. Rodent models of immobilization stress, applied for ten consecutive days, have been reported to enhance anxiety, and also cause dendrite elongation and spine formation in the basolateral amygdale (BLA). Paradoxically, longer exposure to stress, which is also anxiogenic, fails to affect key molecular markers of neuronal remodeling in the BLA. This has raised the possibility of homeostatic mechanisms being triggered by more prolonged stress that could potentially dampen the morphological effects of stress in the BLA.

Therefore, we examined the cellular and behavioural impact of increasing the duration of stress in rats. We find that prolonged immobilization stress (PIS), spanning 21 days, caused significant enhancement in dendritic arborization of spiny BLA neurons. Spine density was also enhanced along these elongated dendrites in response to PIS. Finally, this striking increase in synaptic connectivity was accompanied by enhanced anxiety-like behaviour in the elevated plus-maze.

Facts and Figures about Stress in the Workplace

- Northwest National Life reported in 1993 that one million absences each day in the workplace are stress-related.
- Experts estimate that it costs American employers $700 million per year to replace the 200,00 men aged 45 to 65 who die or are incapacitated by coronary artery disease.
- A study of 3,020 aircraft employees showed that employees who "hardly ever" enjoyed their job were 2.5 times more likely to report a back injury than those who reported "almost always" enjoying their job.
- A Gallup Poll of 201 U.S. corporations revealed that 60 percent of all managers felt that stress related illness was pervasive among their workers and decreased productivity at an estimated cost of 16 days of sick leave and $8,000 per person per year.

Potential Sources of Stress

There are three potential stressors:

- Environmental Factors
- Organizational Factors
- Individual Factors

Objective of the Study

Primary Objective

To study the level of physiological, psychological and behavioural stress in the work, personal and social life respectively.

Secondary Objective

- To study the association between age of the employees and the employee's physical ailments caused due to physiological stress in work life.
- To study the association between the experience of the employees and the relaxing technique preferred by the employees during the working hours.
- To study the association between the employee's age and the employee's expected job satisfaction caused due to psychological stress at work.
- To study the association between the employee's experience and the sleeping habits influenced by psychological stress in personal life.
- To study the association between the employee's age and the employee's performance management influenced due to behavioural stress in the work life.
- To study the association between the employee's age and the imbalance in their diet caused due to behavioural stress at work.
- To study the correlation between the experience of the female and male employees.
- To study the association between the employee's gender and the behavioural stress observed through Social Life.

Method

This study was based on a survey of individuals who held job in a manufacturing company. This research was conducted in the personnel and Organisational Development department which consisted of a total population of 150 employees. The researcher issued 130 questionnaires to the employees of which 20 were rejected. All together 120 questionnaires were used for this study. The samples were the top level, middle level and lower level executives of The Personnel and Organisational Development Department.

The researcher used Descriptive research design for the research. Both primary and secondary data collection methods were used for the study. The primary data was collected though a questionnaire which included questions for the study of stress levels in personal, social and work life of an employee. The secondary data was collected though the company web sites, in-house journals, previous research records etc.

The researcher used non-probability convenience sampling technique to choose the samples for the study. The data collected were analysed using the Percentage Analysis, Karl Pearson's Coefficient of Correlation, Chi Square analysis, ANNOVA methods.

Percentage Analysis

This is a unvaried analysis (i.e. considering just one factor) where the percentage of a particular factor, with different categories are calculated in order to help one get a fair idea regarding a sample and thereby that of population.

Percentage = (Number of Respondents/Total no. of Respondents)*100

The ease of simplicity of calculation, the general understanding of its purpose and the near universal application of the percentage have made it most widely used statistical tool.

Karl Pearson's Co-efficient of Correlation

It is most widely used method of measuring the degree of relationship between two variables. This coefficient assumes the following:

a) There is linear relationship between two variables.

b) The two variables are casually related which means that one of the variable is independent and the other one is dependent.

c) A large no. of independent causes are operating in both variables so as to produce a normal distribution.

Chi–Square Analysis

Chi-square is an important non-parametric test and as such no rigid assumptions are necessary in respect of the type of population. It requires only degrees of freedom. Chi square test enables us to test the goodness of fit, to verify the distribution of observed data with assumed theoretical distribution. This test is non-parametric test; the quantity describes the magnitude of the discrepancy between theory and observation

It is defined as, Chi-Square = Ó(O-E)^2 /E.
Where, O- Observed Frequency, E- Expected Frequency

Data Analysis

Hypotheses

#1. H1 To test the association between age of the employees and the employee's physical ailments caused due to physiological stress in work life.

Result

The calculated value (8.54) of chi-square is lesser than the tabulated value (16.919) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at five percent level of significance. There is no association between the age of the employees and the employee's physical ailments caused due to physiological stress in work life.

#2. To study the association between the experience of the employees and the relaxing technique preferred by the employees during the working hours.

Result

The calculated value (13.88) of chi-square is lesser than the tabulated value (16.919) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at five percent level of significance. There is no association between the experience of the employees and the relaxing technique preferred by the employees during the working hours.

#3. To study the association between the employee's age and the employee's expected job satisfaction caused due to psychological stress at work.

Result

The calculated value (13.88) of chi-square is lesser than the tabulated value (14.68) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at ten percent level of significance. There is no association between the employee's age and the employee's expected job satisfaction caused due to psychological stress at work.

#4. To study the association between the employee's experience and the sleeping habits influenced by psychological stress in personal life.

The calculated value6.28 of chi-square is greater than the tabulated value (3.325) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at 95 percent level of significance. There is association between the employee's experience and the sleeping habits influenced by psychological stress in personal life.

#5. To study the association between the employee's age and the employee's performance management influenced due to behavioural stress in the work life.

Result

The calculated value of chi-square 6.28 is lesser than the tabulated value (14.68) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at ten percent level of significance. There is no association between the employee's age and the employee's performance management influenced due to behavioural stress in the work life.

#6. To study the association between the employee's age and the imbalance in their diet caused due to behavioural stress at work.

Result

The calculated value (2.91) of chi-square is lesser than the tabulated value (3.325) of chi-square. Hence the null hypothesis is accepted and alternative hypothesis is rejected at 95 percent level of significance. There is no association between the employee's age and the imbalance in their diet caused due to behavioural stress at work.

Correlation Co-Efficient

#1. To study the correlation between the experience of the female and male employees.

Inference

There exists a positive correlation between the experience of female and male employees

ANNOVA

#1 To study the association between the employees gender and the behavioural stress observed through social life.

H_0: The level of behavioural stress is different for both the gender.
H_1: The level of behavioural stress is not different for both the gender.

Inference

(a) F_C =3.26, where the tabulated value of F at five percent level of significance and DOF (1,3) is 10.1 and hence H_0 is accepted.

(b) F_R =1.05 where the tabulated value of F at five percent level of significance and DOF (3,3) is 1.05 and hence H_0 is accepted.

The behavioural stress is same for both the gender in the social life.

Findings
General Findings

- 52.5 percent of the employees belong to 20-30 yrs age group, 22.5 percent of the employees belong to 31-40 yrs age group, 17.5 percent of the employees belong to 41 – 50 yrs age group and 7.5 percent of the employees belong to 51 yrs and above age group.

- 17.5 percent of the respondents have less than one year of experience, 22.5 percent of respondents have 1-2 years of experience, 7.5 percent of respondents have 3-5 years of experience, 10 percent of respondents have 6-10 years of experience and 42.5 percent of respondents have more than 10 years of experience.

- 65.83 percent of the employees are male and 34.17 percent of the employees are female.

- 30.83 percent of the employees' living style are joint family and 69.17 percent of the employees' living style is nuclear family.

- 20 percent of the employees often experience physiological stress, 35 percent of the employees sometimes experience physiological stress, 17.50 percent of the employees experience physiological stress, and 27.50 percent of the employees experience physiological stress.

- 27.50 percent of employees often experience psychological stress, 38.33 percent of employees sometimes experience psychological stress, 9.17 percent of employees rarely experience psychological stress and 15 percent of employees never experience psychological stress.

- 34.17 percent of the employees often experience behavioural stress, 27.50 percent of the employees sometimes experience behavioural stress, 17.50 percent of the employees rarely experience behavioural stress and 20.83 percent of the employees never experience behavioural stress.

- 14.17 percent of the employees often experience physiological stress, 29.17 percent of the employees sometimes experience physiological stress, 19.16 percent of the employees rarely experience physiological stress and 37.50 percent of the employees never experience stress in their work life.

- 12.50 percent of the employees often experience physiological stress, 27.50 percent of the employees sometimes experience physiological stress, 22.50 percent of the employees rarely experience physiological stress and 37.50 percent of the employees never experience physiological stress in work life.

- 34.17 percent of the employees often experience physiological stress, 47.50 percent of the employees sometimes experience physiological stress, 12.50 percent of the employees rarely experience physiological stress and 5.83 percent of the employees never experience physiological stress in social life.

- 29.17 percent of the employees often experience psychological stress, 38.33 percent of the employees sometimes experience psychological stress, 18.33 percent of the employees rarely experience psychological stress and 14.17 percent of the employees never experience psychological stress in social life.

- 27.50 percent of the employees often experience psychological stress, 38.33 percent of the employees sometimes experience psychological stress, 19.17 percent of the employees rarely experience psychological stress and 15 percent of the employees never experience psychological stress in personal life.

- 31.67 percent of the employees often experience psychological stress, 48.33 percent of the employees sometimes experience psychological stress, 15 percent of the employees rarely experience psychological stress and five percent of the employees never experience psychological stress in social life.

- 47.50 percent of the employees often experience behavioural stress, 31.67 percent of the employees sometimes experience behavioural stress, 13.3 percent of the employees rarely experience behavioural stress and 7.50 percent of the employees never experience behavioural stress in work life.

- 22.50 percent of employees often experience behavioural stress, 27.50 percent of employees sometimes experience behavioural stress, 20.83 percent of employees rarely experience behavioural stress and 29.17 percent of employees never experience behavioural stress in personal life.

- 7.50 percent of the employees often experience behavioural stress, 12.50 percent of employees sometimes experience behavioural stress, 22.50 percent of the employees rarely experience behavioural stress and 57.50 percent of the employees never experienced behavioural stress in social life.

Result

This study examined the stress level among the employees of the personnel and Organisational Development department. The model tested 6 hypotheses by using the chi-square test to find out the association between various factors like age, experience etc and the various types of stress factors mentioned in the study. It is found that there is no association between the age of the employees and the employee's physical ailments caused due to physiological stress in work life, there is no association between the experience of the employees and the relaxing technique preferred by the employees during the working hours, there is no association between the employee's age and the employee's expected job satisfaction caused due to psychological stress at work, there is association between the employee's experience and the sleeping habits influenced by psychological stress in personal life, there is no association between the employee's age and the employee's performance management influenced due to behavioural stress in the work life, there is no association between the employee's age and the imbalance in their diet caused due to behavioural stress at work. The Co-relation co-efficient was used and found there exists a positive correlation between the experience of female and male employees.

Suggestions

The Individual

- Can develop the right skills and behaviour to enable to perform the job best to the ability.
- Can ensure good person job-fit or make necessary adjustments.
- Learning relaxing techniques such as imaginary techniques, meditation and aroma therapies are recommended.
- Developing a good social support network, both at work and with family and friends may reduce the level of stress.

The Organization

- Can provide better training for jobs, especially for promotions,
- Can provide advice on problems (wok and/or personal) and support from a team of welfare, health and counseling staff, and
- Can provide support for responsible jobs, and adequate resources and back-up for all jobs.

Conclusion

The way we respond to stress is vital, but most of them were probably never taught how to deal with it with difficult situations or people. And if the way of dealing stress is to have another cup of coffee or switch on the television makes the problems worse. Not all stress is seen as negative. We cannot get rid of all stress and neither should we try. It can act both as an early warning signal that something is wrong and we must protect ourselves, as well as being a motivator to push us on to bigger and better things. The secret is being aware that there is a balance between too much and too little stress. Awareness about the tolerance level means that we are on the way to the winning war against stress. Hence a positive approach towards stress will be a better tool for handling stress.

Key Words: Stress, Stress Symptoms, Behavioural Stress, Organisation.

Weibull Deterioration Rate: Inventory Models

Sudhir Kumar Sahu, Manoj Kumar Meher and Gobind Chandra Panda

Abstract

Modelling

Maintenance of inventories of deteriorating items affects the supply chain of organisations. In this paper we have presented an inventory system for deteriorating items with demand rate as a ramp type function of time, deteriorating rate is a weibull function of time and without shortage. The finite production rate is proportional to the demand rate. The unit production rate is inversely proportional to the demand rate. A numerical example is given to illustrate the developed model, with sensitivity analysis.

Maintenance of inventories of deteriorating items is a problem of major concern in the supply chain of almost any business organizations. It is observed that demand of seasonal products (fruits, e.g., mango, orange, etc., sea .sh like hilsa) over the entire time horizon is three folded. At the beginning of the season it increases, in the mid of the season it becomes steady and towards the end of the season it decreases and becomes asymptotic. Many of the physical goods undergo decay or deterioration over time. Commodities such as fruits, vegetables, foodstuffs, are subject to direct spoilage while kept in store. Highly volatile liquids such as gasoline, alcohol, turpentine undergo physical depletion over time through the process of evaporation. Electronic goods, radioactive substances, photographic .lm, grain, deteriorate through a gradual loss of potential or utility with the passage of time.

Hill (1995) first considered the inventory models for increasing demand followed by a constant demand. He derived the exact solution to compare with the Silver-Meal heuristic.



Dr.Sudhir Kumar Sahu, Associate professor, N.I.F.M., Pali Road, Sector 48, Faridabad, Haryana, India

Mr.Manoj Kumar Meher, At/P.O. Malti gunderpur, Dist-Sambalpur, Orissa, Pin-768116

Mr.Gobinda Chandra Panda, Revenue Supervisor, C/o-Sri Janaki Ram Panda, At- Ramji Nagar, Po-Sonepur, Dist-Subarnapur, Pin-768017, Orissa, India

Mandal and Pal (1998) extended the inventory model with ramp type demand for deterioration items and allowing shortage. However, they only derived an approximated solution for the inventory model starting with no shortage. Even worse, they did not consider the case that the inventory cycle shorter than the period when demand is increasing linearly. Hence this is a significant questionable result in their work. Later, Wu et al. (1999) considered that the backlogging rate should be related to the waiting time to the next replenishment. With an extra condition, they construct the inventory model with ramp type demand rate such that the inventory period is longer than the linear increasing period of the demand. Yet, they did not revise the questionable results that appeared in Mandal and Pal (1998). Following the same questionable result, Wu and Ouyang (2000) extended the inventory model to include two different replenishment policies: (a) models starting with no shortage and (b) models starting with shortage. However, their models are incomplete and also their solutions are not necessarily the optimal feasible solution. We will point out their many questionable results in detail and provide a corresponding efficient method to derive the rigorous optimal feasible solution for the different models. Wu (2001) further investigated the inventory model with ramp type demand rate such that the deterioration followed the Weibull distribution. However, he did not guarantee the existence and uniqueness of his solution. Neither did he improve those questionable results in Wu and Ouyang (2000). Recently Giri et al. (2003) extended the ramp type demand inventory model with a more generalized Weibull deterioration distribution. Besides, Moreover, Deng (in press) improved the work of Wu et al. (1999) to obtain the optimal solution without the unnecessary condition used in Wu et al. (1999).

In this paper, an effort has been made to analysis an Inventory model for time-dependent deteriorating items assuming the demand rate to be a ramp type function of time and deterioration rate is a weibull function of time. Such type of the demand pattern is generally seen in the case of any new brand of consumer goods coming to the market. The demand rate for such items increases with time up to certain time and then ultimately and become constant. It is believed that such type of demand rate is quite realistic. The unit production cost is assumed to be inversely proportional to the demand rate.

This proposed model is discussed in without shortage in inventory. The procedure of solving the model is illustrated with a numerical example for increasing demand. Sensitively analysis is carried out to identify the most sensitive parameters in the system.

Assumption and Notation

This inventory mode is developed under the following assumptions and notation

(i) Lead time is zero

(ii) C1 is the inventory holding cost per unit per unit of time

(iii) C3 is the deterioration cost per unit per unit of time

(iv) C is the total cost for a production cycle

(v) R is demand rate, which is defined as R = f(t) as f(t) be a ramp type function of time $f(t) = D_0[t - (t - \mu)H(t - \mu)]$, $D_0 > 0$ where $H(t - \mu)$ is the Heaviside's function as follows:

$$H(t - \mu) = \begin{cases} 1 & If\ t \geq \mu \\ 0 & if\ t < \mu \end{cases}$$

(vi) K = Pf(t) is the production rate where P (>1) is a constant.

(vii) $\theta(t) = \alpha\beta(t-\lambda)^{\beta-1}$ ($\alpha,\beta > 0, \lambda > 0, t \geq 0$) is the deterioration rate which is a weibull function of time.

(viii) The production time (t_1) is greater then μ

(ix) $v = \alpha_1 R^{-\gamma}$ ($\alpha_1 > 0, \gamma > 0$ and $\gamma \neq 0$) is the unit production cost. Here a_1 is obviously positive and v and R are both non-negative. Also higher demands result in lower unit costs of production. This implies that v and R are inversely related and hence, γ must be positive.

Now $$\frac{dv}{dR} = -\alpha_1\gamma R^{-(\gamma-1)} < 0$$

$$\frac{d^2v}{dR^2} = -\alpha_1\gamma(\lambda+1)R^{-(\gamma-2)} > 0$$

Thus marginal unit cost of production is an increasing function of R. These results imply that, as the demand rate increases, the unit cost of production decreases at an increasing rate. For this reason, the manufacturer is encouraged to produce more at the demand for item increases. The necessity of restriction $\gamma \neq 2$ arises from the nature of solution of the problem.

Mathematical Model and Analysis

The production starts with zero stock level at time $t=0$. The production stops at time t_1 when the stock attains a level S. Due to reasons of market demand and deterioration of items , the inventory level gradually diminishes during the period $[t_1, t_2]$ and ultimately falls to zero at time $t = t_2$. After the scheduling period t_2 the cycle repeats itself. During the early stage of inventory, the intensity of deterioration is very low because t is small. However, the intensity increases with time, but $\theta(t)$ is remains bounded for $t \geq 1$ since $1 > \alpha$, $\beta > 0$, and $\lambda = 2$.

Let Q(t) be the inventory level of the system at any time t $(0 \leq t \leq t_2)$. The differential equations satisfying the instantaneous states of Q(t) in the interval $[0, t_2]$ are given by

$$\frac{dQ(t)}{dt} + \theta(t)Q(t) = K - f(t), \quad 0 \leq t \leq \mu \tag{1}$$

with condition $Q(0) = 0$

$$\frac{dQ(t)}{dt} + \theta(t)Q(t) = K - f(t), \quad \mu \leq t \leq t_1 \tag{2}$$

with condition $Q(t_1) = S$

$$\frac{dQ(t)}{dt} + \theta(t)Q(t) = -f(t), \quad t_1 \leq t \leq t_2 \tag{3}$$

with condition $Q(t_1) = S$, $Q(t_2) = 0$

Using $\theta(t) = \alpha\beta(t-\lambda)^{\beta-1}$ and ramp type function f(t) , (1) – (3) become respectively.

$$\frac{dQ(t)}{dt} + \alpha\beta(t-\lambda)^{\beta-1}Q(t) = (P-1)D_0 t, \quad 0 \leq t \leq \mu \tag{4}$$

with condition $Q(0) = 0$

$$\frac{dQ(t)}{dt} + \alpha\beta(t-\lambda)^{\beta-1}Q(t) = (P-1)D_0 \mu, \quad \mu \leq t \leq t_1 \tag{5}$$

with condition $Q(t_1) = S$

$$\frac{dQ(t)}{dt} + \alpha\beta(t-\lambda)^{\beta-1}Q(t) = D_0 \mu, \quad t_1 \leq t \leq t_2 \tag{6}$$

with condition $Q(t_1) = S$, $Q(t_2) = 0$

Following are the solutions of equation (4) – (6) respectively.

$$Q(t) = (P-1)D_0\left[\frac{t^2}{2} - \frac{\alpha}{(\beta+1)(\beta+2)}\left\{(t-\lambda)^{\beta+2} - (t-\lambda)^{2\beta+2}\right\} - \frac{\alpha^2(-\lambda)^{\beta+2}(t-\lambda)^{\beta}}{(\beta-1)(\beta+2)} \frac{\alpha}{(\beta-1)}\left\{(t-\lambda)^{\beta+2} - (t-\lambda)^{2\beta+2}\right\} + \frac{t^2\alpha(t-\lambda)^{\beta}}{2}\right] + \frac{(P-1)D_0\alpha(-\lambda)^{\beta+2}}{(\beta-1)(\beta+2)} \quad \text{if } (0 \leq t \leq \mu) \tag{7}$$

$$Q(t) = (P-1)D_0\mu\left\{t + \frac{\alpha(t-\lambda)^{\beta+1}}{\beta+1} - \alpha t(t-\lambda)^{\beta} - \frac{\alpha^2(t-\lambda)^{2\beta+1}}{\beta+1}\right\} - (P-1)D_0\mu\left\{t_1 + \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}\left\{1-\alpha(t-\lambda)^{\beta}\right\} + S\left\{1+\alpha(t_1-\lambda)^{\beta}\right\}\left\{1-\alpha(t-\lambda)^{\beta}\right\} \quad \text{if } (\mu \leq t \leq t_1) \tag{8}$$

$$Q(t) = D_0\mu\left\{t + \frac{\alpha(t-\lambda)^{\beta+1}}{\beta+1} - \alpha t(t-\lambda)^{\beta} - \frac{\alpha^2(t-\lambda)^{2\beta+1}}{\beta+1}\right\} - D_0\mu\left\{t_1 + \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}\left\{1-\alpha(t-\lambda)^{\beta}\right\} + S\left\{1+\alpha(t_1-\lambda)^{\beta}\right\}\left\{1-\alpha(t-\lambda)^{\beta}\right\} \quad \text{if } (t_1 \leq t \leq t_2) \tag{9}$$

Since $Q(t_2) = 0$, we have from (9)

$$S = \frac{D_0\mu}{1+\alpha(t_1-\lambda)^{\beta}}\left[t_1 + t_2 + \frac{\alpha}{(\beta-1)}\left\{(t_1-\lambda)^{\beta+1} - (t_2-\lambda)^{\beta+1}\right\}\right] \tag{10}$$

Total inventory in [0, t_2] is

$$TI = \int_0^{\mu} Q(t)dt + \int_{\mu}^{t_1} Q(t)dt + \int_{t_1}^{t_2} Q(t)dt$$

$$= (P-1)D_0\left[\frac{\mu^3}{6} - \frac{\alpha}{(\beta+1)(\beta+2)}\left\{\frac{(\mu-\lambda)^{\beta+3}}{\beta+3} - \frac{(\mu-\lambda)^{2\beta+3}}{2\beta+3}\right\}\right.$$

$$+\frac{\alpha}{(\beta+1)(\beta+2)}\left\{\frac{(-\lambda)^{\beta+3}}{\beta+3} - \frac{(-\lambda)^{2\beta+3}}{2\beta+3} + \frac{\alpha(-\lambda)^{2\beta+3}}{\beta+1} - \frac{(-\lambda)^{2\beta+3}}{\beta+3}\right.$$

$$\left.\left.-\frac{(\mu-\lambda)^{2\beta+3}}{\beta+3} - \mu(-\lambda)^{\beta+2} - \frac{\mu^3}{2}\right\}\right] + \frac{\alpha}{\beta+1}\left\{(P-1)D_0\right.$$

$$\left(\frac{(-\lambda)^{\beta+2}}{\beta+2} + \frac{\nu}{\beta+2} + 2\mu^2\right) \quad (13)$$

$$+S\}(\mu-\lambda)^{\beta+1} - \frac{\alpha(P-1)D_0\mu}{2(\beta+1)^2}(1-\alpha)(\mu-\lambda)^{2\beta+2} -$$

$$S\mu - \frac{(P-1)D_0\mu t_1^2}{2} + D_0\mu\alpha(P-2)\left\{\frac{(t_1-\lambda)^{\beta+2}}{(\beta+1)(\beta+2)}\right.$$

$$\left.(1-\alpha) - \frac{t_1(t_1-\lambda)^{\beta+1}}{(\beta+1)}\right\} + \frac{\alpha^2(P-2)}{2(\beta+1)^2}(t_1-\lambda)^{2\beta+2}$$

$$+\left\{\mu - \frac{\alpha(\mu-\lambda)^{\beta+1}}{\beta+1} - S\right\}\left\{t_1 + \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}$$

$$+S\left\{t_1 + \alpha(t_1-\lambda)^{\beta} - \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1} - \frac{\alpha^2(t_1-\lambda)^{2\beta+1}}{\beta+1}\right\}$$

$$-S\alpha\left\{\mu - \frac{\alpha(\mu-\lambda)^{\beta+1}}{\beta+1}\right\}(t_1-\lambda)^{\beta} + D_0\mu\left[\frac{t_2^2}{2} + \frac{t_1^2}{2} + \right.$$

$$\frac{2\alpha(t_2-\lambda)^{\beta+2}}{(\beta+1)(\beta+2)} - \frac{\alpha t_2(t_2-\lambda)^{\beta+2}}{(\beta+1)} + \frac{\alpha^2(t_2-\lambda)^{2\beta+2}}{2(\beta+1)^2}$$

$$\left.-\left\{t_1 + \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}\left\{t_2 - \frac{\alpha(t_2-\lambda)^{\beta+1}}{\beta+1}\right\}\right]$$

$$-S\alpha\left\{t_1 - \frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}(t_2-\lambda)^{\beta} \quad (11)$$

$$+S\left\{t_2 + \alpha(t_2-\lambda)^{\beta} - \frac{\alpha(t_2-\lambda)^{\beta+1}}{\beta+1} - \frac{\alpha^2(t_2-\lambda)^{2\beta+1}}{\beta+1}\right\}$$

Total number of deteriorated items in [0, t_2] is given by

Production in [0, μ] + Production in [μ, t_1] – Demand in [0, μ] – Demand in [μ, t_2]

$$TD = \beta\int_0^{\mu} D_0 t\,dt + \beta\int_{\mu}^{t_1} D_0\mu\,dt - \int_0^{\mu} D_0 t\,dt - \int_{\mu}^{t_2} D_0\mu\,dt =$$

$$\frac{D_0\beta\mu}{2}(2t_1-\mu) - \frac{D_0\mu}{2}(2t_2-\mu) \quad (12)$$

The cost of production in [u, u+du] is $Kvdu = \frac{\alpha_1\beta}{R^{\gamma-1}}du$

Hence the production cost in [0, t_1] is given by

$$TP = \int_0^{\mu}\frac{\alpha_1\beta}{R^{\gamma-1}}du + \int_{\mu}^{t_1}\frac{\alpha_1\beta}{R^{\gamma-1}}du = \frac{\alpha_1\beta D_0^{1-\gamma}}{(2-\gamma)}\left[(2-\gamma)\mu^{1-\gamma} + \right. \quad (13)$$

$$\left.(\gamma-1)\mu^{2-\gamma}\right],\ \gamma\neq 2$$

Total cost of the system is obtained by using equation(19) (11), (12) and (13) as

$$C = C_1TI + C_3TD + TP \quad (14)$$

Hence total average cost of the system

$$TAC = \frac{C}{t_2} \quad (15)$$

Optimum values of t_1 and t_2 for minimum average cost TAC are the solution of the equations

$$\frac{\partial(TAC)}{\partial t_1} = 0 \text{ and } \frac{\partial(TAC)}{\partial t_2} = 0 \quad (16)$$

Provided they satisfy the sufficient conditions

$$\frac{\partial^2(TAC)}{\partial t_1^2} > 0, \frac{\partial^2(TAC)}{\partial t_2^2} > 0 \text{ and } \frac{\partial^2(TAC)}{\partial t_1^2}\frac{\partial^2(TAC)}{\partial t_2^2} - \frac{\partial^2(TAC)}{\partial t_1\partial t_2} > 0$$

Equation (16) is equivalent to

$$\frac{\partial C}{\partial t_1} = 0 \text{ and } C - t_2\frac{\partial C}{\partial t_2} = 0 \quad (17)$$

Here we have got

$$\frac{\partial C}{\partial t_1} = C_1\left[-(P-1)D_0\mu t_1 - D_0\mu\alpha(P-2)\left\{t_1(t_1-\lambda)^{\beta}\right.\right.$$

$$\left.+\frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\} + \frac{\alpha^2(P-2)}{\beta+1}(t_1-\lambda)^{2\beta+1}$$

$$+\left\{\mu-\frac{\alpha(\mu-\lambda)^{\beta+1}}{\beta+1}-S\right\}\left\{1+\alpha(t_1-\lambda)^{\beta}\right\}$$

$$+S\left\{1+\alpha t_1\beta(t_1-\lambda)^{\beta-1}-\frac{2\beta+1}{\beta+1}-\alpha^2(t_1-\lambda)^{2\beta}\right\}$$

$$-\left\{\mu-\frac{\alpha(\mu-\lambda)^{\beta+1}}{\beta+1}\right\}S\alpha\beta(t_1-\lambda)^{\beta-1}$$

$$+D_0\mu t_1-\left\{1-\alpha(t_1-\lambda)^{\beta}\right\}\left\{t_2-\frac{\alpha(t_2-\lambda)^{\beta-1}}{\beta+1}\right.$$

$$\left.\left.+\alpha S(t_2-\lambda)^{\beta}\right\}\right]+PD_0\mu C_3+\alpha_1 PD^{1-\gamma}\mu^{1-\gamma} \tag{18}$$

$$\frac{\partial C}{\partial t_2}=C_1\left[D_0\mu\left\{t_2-\alpha t_2(t_2-\lambda)^{\beta}+\frac{\alpha(t_2-\lambda)^{\beta+1}}{\beta+1}\right.\right.$$

$$\left.+\frac{\alpha^2(t_2-\lambda)^{\beta+1}}{\beta+1}\quad-\left\{t_1-\frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}\left\{1-\alpha(t_2-\lambda)^{\beta}\right\}\right\}$$

$$+S\left\{1+\alpha t_2\beta(t_2-\lambda)^{\beta-1}-\frac{\alpha^2(2\beta+1)}{\beta+1}(t_2-\lambda)^{2\beta}\right\}$$

$$-\alpha S\beta(t_2-\lambda)^{\beta-1}\left\{t_1-\frac{\alpha(t_1-\lambda)^{\beta+1}}{\beta+1}\right\}-D_0\mu C_3 \tag{19}$$

Numerical Example

Let C_1 = Rs4 per unit per unit time, C_3 = Rs8 per unit per unit time, D_0 = 100 unit per time, μ = 12 unit of time, α = 0.1, β = 2.0, λ = 0.2, P = 4 unit per time, α_1 = 16, γ = 1.2. By applying the subroutine FindRoot in Mathematica 4.1 we obtain the optimum solution of t_1 and t_2 of equation (17) using (14),(18),(19) as t_1^* = 22.8764 and t_2^* = 26.4111, substituting t_1^* and t_2^* in (15) we obtain the optimum total average cost TAC* = 91695800. Table-1 show the effect of changes in various parameters of the inventory model on total average cost.

Sensitivity Analysis

Sensitivity analysis is performed by changing (increasing or decreasing) the parameter by 25 percent and 50 percent and taking one parameter at a time, keeping the remaining parameter at their original values. From Table – 1 following points are noted.

(i) It is seen that the percentage change in the optimal cost in almost equal for both positive and negative change of parameters C_1 and D_0.

(ii) It is observed that the model is sensitive for negative change than an equal positive change in either of parameters m, a and P.

(iii) It is observed that the model is sensitive for positive change then an equal negative change in parameter l.

(iv) The optimal cost decrease with both increase and decrease in the value of parameters l, P, a_1, g.

(v) The optimal cost increases (decrease) and decrease (increase) with increase (decrease) and decrease (increase) in the value of the parameters C_3 and a , but this trend is reversed for the parameters C_1 and D_0.

(vi) This model is highly sensitive to changes in m, a, g ,P and moderately sensitive to changes in C_1 and D_0 and almost insensitive to a_1 and l.

(vii) From above points, it is clear that much care is to be taken to estimate m, a, g and P.

Conclusion

In this paper we have presented an effective method to derive the optimal solution for inventory models with deteriorating items and ramp type demand rate, and without shortage. This procedure of solving the model is illustrated with a numerical example for increasing demand. A sensitive analysis is carried out to identify the most sensitive parameters in the system.

Keywords*: -* Ramp type demand, weibull deterioration, unit production cost, without shortage.

Reference

Deng, P.S. in press. "Improved Inventory Models with Ramp Type Demand and Weibull Deterioration." *International Journal of Information and Management Sciences.* 16 (4).

Table - 1

Change parameter	(%) Change	t_1^*	t_2^*	TAC^*	(%) change in TAC
C_1	+50	22.9133	26.4422	138418000	+50.96
	+25	22.8985	26.4297	115073000	+25.5
	-25	22.8405	26.3801	68337300	-25.48
	-50	22.7717	26.3187	44986300	-50.94
C_3	+50	22.823	26.3647	90828900	-0.95
	+25	22.8494	26.3878	90777900	-1.01
	-25	22.904	26.4344	92132100	+0.48
	-50	22.9321	26.4578	92571100	+0.96
D_0	+50	22.9479	26.4802	139418000	+52.05
	+25	22.9192	26.4525	115556000	+26.03
	-25	22.8058	26.3426	67845200	-26.02
	-50	22.6669	26.2076	44041600	-51.97
μ	+50	27.2253	27.526	48954000	-46.62
	+25	21.7248	23.9289	31482200	-65.67
	-25	5.5692	7.08789	3219420	-96.49
	-50	2.97398	4.72702	196404	-99.79
a	+50	19.6168	20.9142	53507300	-41.65
	+25	21.2827	22.9628	64386700	-29.79
	-25	11.2857	24.7543	108376000	+18.2
	-50	16.1696	63.9956	209661000	+128.65
I	+50	19.1575	19.5778	13644	-99.99
	+25	19.0701	19.5177	166852	-99.82
	-25	23.5506	26.2267	19892800	-78.31
	-50	23.5716	25.4704	16514100	-82
P	+50	10.5121	25.4941	62746200	-31.58
	+25	17.5304	18.1926	3871080	-95.78
	-25	19.3897	20.8191	3807650	-95.85
	-50	14.9978	14.9994	1027960	-98.88

a_1	+50	22.8764	26.411	91693700	-0.01
	+25	22.8764	26.411	91693700	-0.01
	-25	22.8764	26.4111	91695800	0
	-50	22.8765	26.4111	91695700	-0.01
g	+50	22.8765	26.4111	91695600	-0.01
	+25	22.8765	26.4111	91695600	-0.01
	-25	22.8761	26.4108	91690200	-0.01
	-50	22.8733	26.4084	91645500	-0.06

Giri, B.C., Jalan, A.K., and Chaudhuri, K.S. "Economic Order Quantity Model with Weibull Deterioration Distribution, Shortage and Ramp-Type Demand." *International Journal of Systems Science.* 34, (2003): 237–243.

Hill, R.M. "Inventory Model for Increasing Demand Followed by Level Demand." *Journal of the Operational Research Society.* 46, (1995): 1250–1259.

Mana, S.K., Chaudhuri, K.S. "An EOQ model with Ramp Type Demand Rate, Time Dependent Deterioration Rate, Unit Production Cost And Shortages." *European Journal of Operational Research.* 171, (2006): 557-566.

Mandal, B., Pal, A.K. "Order Level Inventory System with Ramp Type Demand Rate for Deteriorating Items." *Journal of Interdisciplinary Mathematics.*1, (1998): 49–66.

Wu, J.W., Lin, C., Tan, B., Lee, W.C. "An EOQ Model with Ramp Type Demand Rate for Items With Weibull Deterioration." *International Journal of Information and Management Sciences.* 10, (1999): 41–51.

Wu, K.S. "An EOQ Inventory Model for Items with Weibull Distribution Deterioration, Ramp Type Demand Rate and Partial Backlogging." *Production Planning and Control.* 12, (2001): 787–793.

Wu, K.S., Ouyang, L.Y., "A Replenishment Policy for Deteriorating Items with Ramp Type Demand Rate (Short Communication)." *Proceedings of National Science Council ROC.* (A) 24, (2000): 279–286.

Socio-Economic Impact: Microfinancing of Self Help Groups

Jothi V.N.

Abstract

Propping *This paper presents an overview of evolution of microfinance support for socio-economic development. The members of the self-help group agree to use a common fund and such other funds that they may receive as a group through a common management. The programme of linking SHGs with NABARD has been observed. The present study is an attempt to study socio-economic impact of micro finance covering the sample of 90 selected members in Kanchipuram town of Tamil Nadu state. The SHGs and micro finance have made critical impact on socio economic status of members.*

The rural India is the real India; therefore, rural development is pre-requisite for economic development of our country. The problems of poverty in rural and urban areas, more particularly amongst the backward classes, are due to lack of access for the poor to the basic services like education, health, sanitation, etc. The main reasons for the same are economic dependence, rapid increase in population after independence, disempowerment and lack of access to credit. Generally, the credit facilities were not available to such poor sections of the society until the country attained independence except through the village moneylenders. After independence, the co-operatives were expected to help these classes and the Government also launched several subsidized wage and self-employment programmes for the benefit of the poor.

Mr.Jothi V.N., Research Scholar, Department of Commerce, Pachaiyappa's College for Men, Kanchipuram–631501 e-mail: jothi672003@yahoo.co.in

Microfinance is being viewed as a very powerful tool for uplifting the economic conditions of the asset less poor through group approach that ensures active participation and involvement of the beneficiaries in effective implementation of the programme. In India, micro-finance programme has a crucial role to play in uplifting more than 30 crore people living below poverty line (NABARD, 2005). Poverty means denial of access to the basic necessities i.e. food, shelter, health, and education of human existence. Poverty is characterized by lower standard of living. As per the poverty line defined by the HDR i.e. earning of a person below $1 a day, the percentage of BPL population in India comes around 34.9 percent and if it is extended to $2 a day, the percentage of BPL in India comes to 79.9 percent (*Human Development Report,* 2004).

Microfinance has emerged as a needful programme to cater to the needs of the most underprivileged people i.e. tribal, dalits, and women. The major concern today is ever increasing poverty and there is urgent need of empowering, enabling the most neglected sections of the society through organized support to all poverty alleviation programmes. Considering the paucity of funds with poor people, the need of the hour is to provide adequate credit to the needy people to enable them to undertake entrepreneurial activity, however small, with the help of NGOs and GOs. Micro finance is expected to play a pivotal role in poverty eradication and employment generation.

Microfinancing is a new method to meet the credit requirement in rural areas. Since the bank borrowing requires collateral and the deprived class does not have any type such collaterals, the success of Bangladesh Grameen Banks attracted the attention of Indian policy makers towards the microfinance and microcredit, which are the new entrants in realm of present rural financing. Microcredit is based on 20 self help groups, which will be technically supported by NGOs and sponsor bank. In other words self help group is a small, economically homogeneous and cohesive group of rural poor voluntarily coming together to save small amount regularly, agree mutually to contribute to a common fund and have a collective decision making for providing collateral free loans on terms and conditions decided by the group. The group will make a project, which will be supervised and assisted by banks and NGO. After evaluating the viability of the groups, the banks further provide sufficient community participation in the development process.

A Self Help Group (SHG) is a group of rural poor who have volunteered to organise themselves into a group for eradication of poverty of the members. They agree to save regularly and convert their savings into a Common Fund known as the Group corpus. The members of the group agree to use this common fund and such other funds that they may receive as a group through a common management. The group formation will keep in view the following broad guidelines: Generally a self-help group may consist of 10 to 20 persons. However, in difficult areas like deserts, hills and areas with scattered and sparse population and in case of minor irrigation and disabled persons, this number may be from 5 to 20.

Objectives of the Study

The principal objectives of the study are as under:

- To study the impact of SHGs-Bank Linkage programme on socio-economic status of the group members in Kanchipuram region.
- To analyse the social and economic characteristics of the SHG members in Kancheepuram district.

Research Methodology

The study is based on both types of data i.e. primary and secondary data. Primary data were collected with the help of a questionnaire and partly interviews while for collection of secondary data, the sources tapped were books, journals and reports related to the research topic.

The study is based on a random sample survey of one hundred SHG members conducted in the town of Kanchipuram. Out of these 100 samples, only 90 members were given full detail in the questionnaire. A well structured questionnaire was constructed for collection of required data. 90 members were selected as a final respondent for this study. For analyzing the data, tools, like percentages simple average, have been used.

The Need for Microfinance

Patrick Kilby of the National Center for Development Studies, Australian National University puts microfinance in the following way: “Microfinance aims at assisting communities of the economically excluded to achieve greater levels of asset creation and income security at the household and community level.”

Like everyone else, people living in poverty need access to a diverse range of financial services, including loans, savings services, insurance, and money transfers. Access to financial services enables the poor increase income and smooth consumption flows, thus expanding their asset base and reducing the vulnerability to the external shocks that plague their daily existence. The availability of financial services acts as a buffer against sudden emergencies, business risks and seasonal slumps that can push a family into destitution. More and better financial services specifically geared towards low-income groups can help poor households to move from mere subsistence for daily survival to planning for the future and investing in better nutrition, improved living conditions, and children's health and education.

NABARD and Its Operation

A pilot project for linking SHGs with banks was launched by NABARD in 1992. The RBI persuaded commercial banks, regional rural banks and cooperative banks to actively participate in the linkage programme. Under the RBI's rules and regulation, banks were given permission to open saving bank account in the name of SHGs and relaxation of security requirements. Thus, an informal credit system was evolved with assistance from formal financial institutions. The agencies involved in the schemes were NABARD, banks, NGOs and SHGs members. The main objectives were to provide the following:

- Supplementary credit to SHGs.
- Reduction in transactions cost for both banks as well as SHGs by reducing paper work.
- Mobilization of small savings among poor rural women.
- Building mutual trust and confidence between banks, NGOs and rural poor.
- Creating healthy relations between SHGs members and the linking agencies.
- Constant supervision and monitoring by banks through NGOs

Indicators of SHG-NABARD Bank Linkage

Details of outreach of the SHG-bank linkage programme are given in Table 1.

Table - 1: Indicators of SHG-NABARD Bank Linkage

Indicators	2000	2001	2002	2003	2004	2005
No. of Groups	114,775	263,825	461,478	717,360	1,071,091	5,39,385
Coverage (no.of families) (million)	1.9	4.5	7.8	11.6	16.00	24.25
% of women's groups	85	90	90	90	90	90
Cumulative bank loans (Rs.Crores)	192.98	480.87	1,026.30	2,054.50	3,534,50	6,776.10
Refinance (Rs.Crores)	150.13	400.74	796.00	1,120.00	2,120.00	2,450.00
No. of NGO partners	718	1030	2,155	2800	2800	3000
Repayment rate	95	95	95	95	95	95
Average loan per SHG (Rs.)	16,814	18,227	22,240	28,560	36,182	125,626
Average loan per family (Rs.)	1,016	1,072	1,316	1766	2440	2794

Source: NABARD.

While the SHG-bank linkage programme was slow to take off, in recent years it has expanded exponentially. By the end of March 2005, its coverage had more than doubled over the previous year to 24.25 million families in nearly 5,39,385 lakh SHGs, with 90 percent women members. These SHGs had availed of Rs. 6,776.10 crores in cumulative bank loans. The average loan per SHG was Rs.125,626 and per family Rs. 2794. On-time repayment by SHGs was reported to be over 95 percent.

The SHG Model of micro finance is the most popular in India. Their number has grown to a staggering 1,276,035, as on December 30, 2004. State-owned institutions like NABARD have also been acting as microfinance wholesalers to provide credit to the SHGs. Broadly speaking; three different models of SHG-credit linkages have been functional in the Indian context. The following table explains the degree of achievement of forming the number of SHGs in Tamil Nadu during the year 2006-07.

Table–2: Spread of SHGs in Tamil Nadu, 2006-07

Sl. No.	District	No. of New Groups to be formed	No. of New Groups formed	% of Achievement
1	Kancheepuram	600	1297	216
2	Thiruvallur	325	804	247
3	Vellore	550	384	70
4	Thiruvannamalai	250	260	104
5	Dharmapuri	250	341	136
6	Krishnagiri	175	174	99
7	Salem	825	889	108
8	Namakkal	475	585	123
9	Erode	1325	2032	153
10	Coimbatore	1300	1599	123
11	The Nilgiris	275	536	195
12	Cuddalore	400	605	151
13	Villupuram	375	704	188
14	Thanjavur	550	966	176
15	Nagapattinam	200	522	261
16	Thiruvarur	175	409	234
17	Thiruchirapalli	425	418	98
18	Perambalur	150	180	120
19	Pudukkottai	200	175	88
20	Dindugal	600	1318	220
21	Karur	275	364	132
22	Madurai	300	172	57

23	Theni	550	316	57
24	Ramanathapuram	175	92	53
25	Virudhunagar	225	257	114
26	Sivaganga	300	136	45
27	Tirunelveli	900	1340	149
28	Tuticorin	475	1230	259
29	Kanyakumari	1400	3349	239
Total	14025	21454	153	

Source: SHG Report, National Bank for Agriculture and Rural Development, 2007

Table–3: Training through Self Help Groups in Tamil Nadu

Name of District	SHGs Trained					Nature of Training
	No. of SHGs	No. of Persons Trained				
		Total	SC	ST	Women	
Kancheepuram	15	169	99	7	136	Catering, Motor winding
Tiruvallur	20	268	148	0	203	Tailoring,catering, fashion, driving
Vellore	82	146	33	71	115	Computer,Electrician ,Fitter
Tiruvannamalai	24	60	20	35	90	Computer,Tailoring, Driving
Dharmapuri	52	115		115	174	Tailoring, Rexine leather
Krishnagiri	41	90		90	170	Tailoring,Rexine leather
Salem	120	359	0	359	359	Tailoring,Beautician,Rexine,
Namakkal	62	135	0	135	135	Tailoring,Beautician, Rexine,
Erode	75	225	82	174	62	Tailoring,Comput,Mat
Coimbatore	84	170	65	170	129	Tailoring, Man.of Bags,tailoring,Baking,Beautician
Nilgiris	56	127	70	62	65	Computer,Tailoring,
Cuddalore	35	501	66	20	140	Candle, appalam, seaweed /Crab culture, Book binding, Horticulture, Coir making, Herbal Products, Palm products and Masonry
Villupuram	20	257	50	10	85	Appalam, Jam, seaweed /Crab culture, Vermi culture
Thanjavur	158	585	87	45	283	Computer,Tailoring,
Nagapattinam	2	231	37	18	44	Lather products
Tiruvarur	54	150	15	12	28	Computer,Tailoring,
Trichy	52	130	25	1	122	Terracotta,Greeting card, Ready made,Home appliance

Perambalur	47	101	31	1	36	Driving
Pudukottai	34	87	43	0	82	Screen Print,Home App,Note making, Table mat making
Dindigul	18	74	27	12	41	Tailoring
Karur	11	37	21	8	21	Tailoring
Madurai	14	59	4	0	30	Computer,Tailoring, Toys
Theni	87	196	45	0	124	Computer,Tailoring, Toys
Ramanad	19	49	5	10	39	Computer
Virudhunagar	25	46	31	0	27	Computer
Sivagangai	24	55	9	0	54	Tailoring
Tirunelveli	132	314	9	27	259	Computer,Coir, Fisheries,Honey
Tuticorin	114	148	4	0	141	Computer,Coir, Seashore sippies, Panai
Total	1589	5132	1026	1382	3363	

Source: SHG Report, National Bank for Agriculture and Rural Development, 2007.

Provision of economic independence comes from independent earning capacity. If adequate self-employment can be generated for women not at the expense of their roles in housekeeping, it will help increase their economic, social and physical well-being. Undoubtedly necessary vehicle for the purpose is supplied by institutions of SHGs which will help improve economic status of women, protecting their significance in the society and above all, effectively implementing the employment policies of the government for women.

Socio-Economic Characteristics of Samples

Many SHGs function in Kancheepuram, which take poor and backward women population as their members. From these SHGs, the sample members are drawn to study the impact of these SHGs on the level of poverty. The collected primary data are analysed in this chapter. To begin with, the socio-economic characteristics of these sample members are analysed in this section.

Age of Selected SHGs

Age of a self-group is one of the significant factors for understanding its progress. After six months of the formation of group, the group is allowed to open savings account with the bank and if the bank is satisfied the group becomes eligible for getting the credit facility from the bank. The study disclosed that of the 24 SHGs, 42 percent had the age between 3-5 years and 29 percent SHGs were between 1-3 years old. 3 SHGs had completed 5 years while 4 SHGs had age less than one year (Table – 4).

Table–4: Age of the SHG

Variables	SHGs	%
< 1 year	4	17
1 - 3 years	7	29
3 - 5 years	10	42
> 5 years	3	12
Total	24	100

Literacy Level

Education is the most important factor required for all round development of human being. In spite of concerted efforts by the government and NGOs, the literacy level in India is not up to the mark. The incidence of illiteracy in poor communities, particularly in remote rural areas is a matter of serious concern. As far as literacy level of the respondents under study is concerned, 72 percent of the aggregate 90 respondents were literates while 28 percent were illiterates. Out of 90 respondents, 37 percent were SSLC, 15 percent had passed HSC while six percent had completed their graduation (Table–5). No respondents had completed post graduation. One of the graduate members had started functional literacy class for illiterate members.

Table–5: Literacy Levels of the Respondents

Literacy level	Respondents	%
Illiterate	25	28
Up to 8^{th}	13	14
SSLC	33	37
HSC	14	15
Graduation	5	6
Post graduation	Nil	Nil
Total	90	100

Caste-wise Classification of Respondents

Caste system in our country, particularly in rural areas is very strong. Majority of the respondents belonged to backward classes i.e. 44 percent followed by the open category being 26 percent of the aggregate 90 respondents under study (table-6). The respondents from SC and ST category constituted 20 percent while MBC respondents accounted 10 percent. It is a matter of great satisfaction that poor people, irrespective of their castes and religions, are coming together for self-help and mutual help by way of SHGs.

Occupational Background of Respondents

The occupational background of the respondents given in table–7 indicates that 30 percent respondents had weaver as their occupation while 27 percent were labourers. Of the 90 respondents 22 (24 percent) were engaged in small traditional occupation such as, toys making, design work, tailoring etc. and 14 percent were engaged in services like school peons, anganwadi workers, health workers etc., four respondents were engaged in non-traditional activities.

Monthly Family Income

As far as monthly family income of the respondents under study is concerned, majority of them were earning meagre income. Of 90 respondents, 46 percent were earning merely Rs.500 per month while 23 percent were earning between Rs.501-1001 p.m. Only nine percent respondents had monthly income more than Rs.2001 (table – 8). Around 26 percent population of India is living below poverty line. SHGs can be panacea for poverty alleviation provided the programme is implemented effectively. Majority of the respondents i.e. 86 percent were below poverty line (table–9) as per the norms of the state government of Tamil Nadu. In order to bring poorest of the poor above poverty line, microfinance initiative must be extended on a large scale.

Motivating Factors

SHG is an effective tool for thrift, investment, asset and job creation. It can be seen from table 10 that NGOs and Voluntary organisations motivated 30 (33 percent) respondents to join the SHGs while Government

Table–6: Caste Category-wise Classifications of Respondents

Caste	Respondents	%
SC	13	14
ST	5	6
MBC	9	10
BC	40	44
Open	23	26
Total	90	100

Table–7: Occupational Backgrounds of Respondents

Occupation	Respondents	%
Weaver	27	30
Labour	24	27
Tiny business activities	22	24
Services	13	14
Other	4	5
Total	90	100

Table–8: Family Income wise Distributions of Respondents

Income	Respondents	%
Below – 500	41	46
501 – 1000	21	23
1001 – 1500	11	12
1501 – 2000	9	10
2001 and above	8	9
Total	90	100

Table–9: Economic Statuses of the Respondents/ Members

Economic Status	Respondents	%
Below Poverty level	77	86
Above Poverty level	13	14
Total	90	100

organisation encouraged five (six percent) respondents to join SHGs. The Tamil Nadu Corporation for Development of Women (TNCDW), a special corporation for welfare of women in Tamil Nadu, had encouraged 26 (29 percent) respondents to join the SHGs. A sizeable number of the respondents i.e. 15 percent were induced by banks, 13 percent were motivated by relatives and friends, and others such as, village administrative officers, school teachers and anganwadi workers encouraged four percent respondents join self-help groups.

Loan Assistance to Members

The members of SHGs require funds for meeting emergency needs like expenditure on medicine, festival, education fees etc. They also need funds for running small economical activities of their livelihood. After satisfactory gradation of the SHG, it becomes eligible for getting credit from the bank. The funds so obtained from microfinancial institutions. The responses regarding the credit assistance from self help groups to the members are given in table-11. The data analysis disclosed that highest number of the members i.e. 24 percent (22) availed loan assistance between Rs.5000-10000 from their respective SHGs, followed by 22 percent members who obtained loan assistance between Rs.2500-5000 and Rs.10000-15000 from their respective SHGs. Only six percent respondents had borrowed less than Rs.1000. It is to be noticed that loan assistance by the SHGs depends mostly on the gradation, performance and financial discipline shown by the group.

Use of Loaned Funds

Under SHGs-bank linkage programme, the members are assisted with microcredit facilities for their microenterprises individually or in combination with an aim of creating productive assets and income generation. The response given in table–12 indicates that for which purpose the borrowed funds were used on priority basis. The highest number of the respondent's i.e. 52 percent had priority to use borrowed amounts for business/trade purposes. The preferences of the respondents are as: education (six percent respondents), medical treatment (seven percent respondents), food grains (four percent respondents), religious purpose (four percent respondents), celebration of festival (four percent respondents) and marriages (four

Table–10: Motivators / Promoters Responsible for joining SHG

Institutions	Respondents	%
NGOs / VOs	30	33
TNCDW	26	29
Banks	14	15
Govt. Organisation	5	6
Relatives / friends	12	13
Others	3	4
Total	90	100

Table-11: Loan Assistance by SHGs to Members

Loan	Respondents	%
Up to 1000	5	6
1000 – 2500	17	19
2500 – 5000	20	22
5000 – 10000	22	24
10000 – 15000	20	22
Above 15000	6	7
Total	90	100

Table-12: Use of Loaned Amounts by the Respondents

Reasons for Uses	Respondents	%
Medical treatment	6	7
Education	5	6
Food grains	4	4
Marriage	4	4
Festivals	5	6
Household needs	5	6
Religious purpose	4	4
Natural calamities	6	7
Business / trade	47	52
Miscellaneous	4	4
Total	90	100

Table–13: Position of Loan Repayment

Repayment of Loan	Respondents	%
Repaying loan before time	3	3
Repaying loan in time	71	79
Delaying loan repayment	16	18
Total	90	100

percent respondents), natural calamities (seven percent respondents) and house-hold needs six percent could use borrowed funds for non-productive purposes in case of 48 percent respondents.

Loan Repayment

Repayment of loan amount with in a stipulated time is the soul of any financial system. Microfinancing through self-help groups also emphasizes on timely repayment of the loan amount taken by the members. The responses regarding loan repayment by the respondents under study are given in table–13. With regard to loan refund by the respondents, it was disclosed that out of 90 respondents, 3 (3 percent) had repaid their loans before maturity date while 71 (79 percent) respondents repaid their loan amount in stipulated period. In all, 82 percent repaid their loan amounts in time. However, 18 percent respondents were found irregular in repaying the loan amount and they had to pay penalty @ 2-3.5 percent p.m. on the due amount delayed by them. The study also disclosed that there were over dues in case of 11 percent loan accounts of the aggregate loan accounts of the SHGs. In percentage terms, loan recovery (on an average) was 89 percent.

Banks, Small Industries Development Bank of India (SIDBI) and Non Government Organisations (NGOs) have been assisting rural poor by creating awareness among staff and villagers for better utilization of credit, by participatory financing for the education, health, sanitation, better living conditions, etc. and by mobilizing small savings and generating rural employment.

Findings

Microfinance for microenterprises can be one of the most effective poverty reducing instruments. Large loans taken by small number of borrowers minimize administration costs. Expansion of microfinance markets world over has shown that small finances to small enterprises can be instrumental in reducing poverty. The need of the house is to promote more and more microfinance institutions and strengthen them so that they are in a position to create financial resources and provide more services to the needy poor people. It should be noted that tiny business activities can be started anywhere, as they need small space, small quantity of capital and indigenous technology and skills, which are inherited by the artisans/craftsmen. These activities are mostly based on local resources. In order to give impetus to micro entrepreneurial activities by poor people in rural as well urban areas, microfinance institutions should be promoted to provide adequate, regular micro credit to the needy entrepreneurs.

Microfinance programme is the most promising strategic weapon for attacking poverty by way of providing development funds to so far neglected target groups. If poor people are given opportunities to undertake entrepreneurial activities supported by proper access to credit, it will certainly enable to them to come out of poverty trap. Development of micro finance strengthens not only rural sector but also the financial system of the country as a whole. There is increased potential for profitability in the rural areas for banks and financial institutions (FIs) through higher deposit mobilization and credit off take.

- The study disclosed that of the 24 SHGs, 42 percent had the age between 3-5 years.
- Out of 90 respondents, 37 percent were SSLC, 15 percent had passed HSC while six percent had completed their graduation.
- Majority of the respondents belonged to backward classes i.e. 44 percent followed by the open category being 26 percent of the aggregate 90 respondents under study.
- The occupational background of the respondents 30 percent respondents had weaver as their occupation while 27 percent were labourers.
- Of 90 respondents, 46 percent were earning merely Rs.500 per month while 23 percent were earning between Rs.501-10001 p.m.
- Majority of the respondents i.e. 86 percent were below poverty line.
- NGOs and Voluntary organisations motivated 30 (33 percent) respondents to join the SHGs while government organisation encouraged five (six percent) respondents to join SHGs.
- The data analysis disclosed that highest number of the members i.e. 24 percent (22) availed loan assistance between Rs.5000-10000 from their respective SHGs, followed by 22 percent members who obtained loan assistance between Rs.2500-5000.
- The highest number of the respondent's i.e. 52 percent had priority to use borrowed amounts for business/trade purposes.
- It was disclosed that out of 90 respondents, three (three percent) had repaid their loans before maturity date while 71 (79 percent) respondents repaid their loan amount in stipulated period.
- Nearly 52 percent people are quite aware with the campaign of micro finance.
- The source of information about micro finance covers up to 66 percent of respondents.
- The future plan for microfinance is concerned 84 percent respondents have been ready to use the facilities of microfinance and more then 68 percent respondent were satisfied with consultation facilities provided for microfinance.

Thus, there has been a significant growth and development of microfinance activities. SHGs formed by NGOs and financed by banks represent an impotent element of this development process in India. However, few states have got slow momentum due to many reasons that must be sorted out with the help of different agencies of SHGs and government machinery. The Government of India and State Governments can play vital role in encouraging SHGs. They should formulate and redefine their policies. There is a need to stress on extensive awareness campaign, skill development and training programmes, coordination between banks and SHGs, effective flow of credit, need for strong follow up in those states where it is yet at nascent stage.

In order to solve the problems relating to marketing of SHGs, the state level organizations and NGOs should come forward and extend facilities especially in empowering women entrepreneurs by providing education, motivation, training, financial help and so on. It is also important to develop a proper regulatory structure for microfinance institutions for healthy growth of the sector along with supportive refinance, legal framework and capacity building measures.

Conclusion

The analysis made in this study with the help of primary data has brought out many salient features about the changes in the social and economic aspects of the sample respondents who are the members in SHG. It is clear that the SHG plays a pivotal role in enhancing the both social and economic lives of the members, bring them more respect both domestically and socially. The sample respondents who were either unemployed or engaged in petty activities during their pre-member period, have become very active by becoming full employed in varied activities and thereby earning more. This has been proved even scientifically with the help of analysis. Hence, it can be concluded that the self help groups contribute substantially in pushing the conditions of the female population up and through that chip in poverty eradication as well.

Reference

B. Jayaraman. "Micro Finance: Retrospect and Prospects." *Occasional Paper. 20*. 2001.

B.R.Bhattacharjee and Stefan Staschen. *Emerging Scenarios for Microfinance Regulation in India.* 2004.

Bibhudutt, Padhi. "Mainstreaming Microfinance bridging the NGO-banker divide." November, *NABARD.* 2003.

Can Commercial Banks do Microfinance? "Lessons from the Commercial Banks of Zimbabwe and the Co-operative Bank of Kenya." Published in *Small Enterprise Development Journal. (SED).*Vol.13 (4), December, 2002.

Centre for Micro Finance Research. "Microfinance in India Current Trends and Challenges." October, 2006.

Centre for Micro Finance Research. "Reaching the other 100 million poor in India."

Dadhich, S. "Micro-Finance- A Panacea for Poverty Alleviation: A Case Study of Oriental Gramin Project In India." *Indian Journal of Agriculture Economics.* Vol.56, July, 2001.

Hans Dellien, Lill Burnett, Anna Gincherman and Elizabeth, Lynch. "Product Diversification in Microfinance: Introducing Individual Lending." *Women's World Banking.* 2005.

Human Development Report. 2004.

Khandker. *Indian Journal of Agriculture Economics*. July, (2001): 374.

Kropp, Ethward W. and Suran, B.S. (Nabard) 1989, *Study linking banks and SHGs in India.* <www. Nabard.org/roles/mcid>.

M.P.Vasimalai, Executive Director. DHAN Foundation. "Micro-Financing to enable Rural Communities May." India: 2006.

M.B.N.Rao, Chairman and Managing Director, Indian Bank. "Micro-Finance Retailers: Issues faced by Commercial Banks." April. Presented at *Microfinance India Conference.* April 12, 2005.

Madheswaran, S. and Dharmadhikary, A. "Empowering Rural Women through Nanda Y.S., Significance of establishing linkages with Self-Help Groups and Banks." <http://www.Nabard.org>

NABARD. "Training Programme on formation and nurturing of SHGs for CEOs of Small and Upcoming NGOs." U.P. Regional Office, Lucknow: 2004.

NABARD. *Progress of SHG-Bank Linkage in India*: 2004-05.

Piyush Tiwari and S.M.Fahad. Concept paper: *Microfinance Institutions in India*. HDFC Bank.

Prabhu, Ghate. "Micro finance in India: A state of the sector Report, with Assistance from CARE, SDC and the Ford Foundation." 2006.

Priya, Basu. "Scaling up Access to Finance for India's Rural Poor." World Bank and Pradeep Srivastava, *NCAER*. April, 2004.

Puhazendhi, V. and Satyashi, K.J.S. "Economic and Social Empowerment of Rural Poor through Self-Help Groups." *Indian Journal of Agricultural Economics.* July-Sept., 2001.

Rajarshi, Ghosh. "Microfinance in India: A Critique." *Social Science Research Network*. May, 2005.

Report of State Level Review Committee on SHGs-Bank Linkage Programme, NABARD. 2006-2007 *Saving Grace, Convergence for Micro-finance News,* September, 2002.

S.Mohan. "Micro Credit and Empowerment of Women-Role of NGOs." *Yojana*. February, 2000.

Sa-Dhan. *Quick Report 2007: A snapshot of Micro Finance Institutions in India,* 2007.

Sanjay, Sinha. "The Role of Central Banks in Microfinance in Asia and the Pacific, M.phil. of Oxford University." Volume 2, Country Studies, *Asian Development Bank.* 2000.

Sriram M.S. Rajesh and S.Upadhyayula. The Transformation of Microfinance sector in India. Paper presented at the SIDBI workshop on "Key Dimensions in Transformation: From NGOs Formal Institutions." at the *Indian School of Business Hyderabad*, December (2002): 12-14.

T.S.Anand Kumar, V.Praseeda Sanu and Jeyanth K. Newport. *Institutional Challenges in Micro Finance Industry.*

Vijay, Mahajan and G.Nagasri. "Building sustainable Micro-finance Institutions in India." March, *BASIX.* 1999.

Y.S.P.Thorat. "Microfinance in India: Sectoral Issues and Challenges." Managing Director, *NABARD*. 2005.

Y.V.Reddy. "Micro-Finance: Reserve Bank's Approach 2005 Governor, RBI at the Micro-Finance Conference organized by the Centre for Analytical Finance." Hyderabad on September 14, 2005.

FII Flows to India:

Economic Indicators

Rajkumar and Hariom Gupta

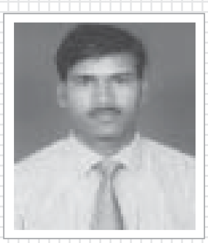
Abstract

Signalling

Since initiation of the economic reforms, the foreign institutional investors (FIIs) have gained dominant position in the Indian market and they are often blamed for market crash. It would be worthwhile to know the driving forces of their investment. The present study focuses on their investment pattern in the Indian stock market. It examines the factors expected to affect the investment decisions of FIIs. The study also covers the period of 12 years spread over 1995-96 to 2006-07. All the data have been collected from various publications of SEBI and RBI. Percentage, standard deviation, correlation and regression have been used for result. The study concludes that the FIIs are affecting the market for their own interest and the return at the Indian stock market and the risk at the international market have emerged as major drivers of FII inflows to India.

Foreign Institutional Investor (FII) means an entity established or incorporated outside India which proposes to invest its proprietary funds or on behalf of "broad based" funds or of foreign corporate and individuals and belongs to pension funds, mutual funds, investment trusts, asset management companies, nominee companies etc. FIIs were allowed to invest in Indian securities market on September 14, 1992 with some restrictions. In order to trade in the Indian market, they need to register as FIIs with the SEBI.

FIIs' investments are beneficial for the development of the economy in many ways. FIIs' investments are considered as a big source of fund in the Indian capital markets. A huge investment of FIIs results in increasing of stock prices, reduction of required rate of return for equity and stimulating Indian firms to invest in the country. FIIs bring in the recipient country new technologies, ideas etc., which in turn promote the innovative activities. In this way they make market more competitive and help the financial system of the host country to come in the line international standard. Their existency in the market leads to incorporate not only best corporate governance practices but they



Dr.Rajkumar, Professor, Faculty of Management Studies, Banaras Hindu University, Varanasi-5, Uttar Praedesh, email: rajkumar_bhu@rediffmail.com, rajkumar@bhu.ac.in

Mr.Hariom Gupta, Lecturer, Jhunjhunwala Business School Faizabad, U.P. 224001, E-mail: guptahariom @rediffmail.com

enhance shareholder value. Their investments are much safer in comparison to debt flows to finance the current account deficit.

In opposed to the various benefits of FIIs investment, they also bear some serious drawbacks. It has been observed that they often involve in making a large number of buying and selling activities (so called herding) without having sound information. They also do the same in case of positive and negative returns in the market. They withdraw their money if they feel any trouble in the economy. Although they are portfolio investors, occasionally they seek control over the company in which they have substantial shareholding.

FIIs have gradually made their position stronger in the Indian market and since 2003-04; they are aggressively participating in the trading at stock exchanges. At the end of March 2007, their net cumulative investment was Rs.2,17,722 crore which constitutes about seven percent of the market capitalization of each BSE and NSE. They have also emerged as the biggest custodian in the market. They are often blamed that they make market volatile. Hence, their importance in the Indian stock market can not be overlooked. A close look on their investment pattern and the probable factors affecting their investment decisions is expected to be helpful for the policy makers and domestic investors.

This study has been divided into five sections. The next section reviews the existing literatures on the study. The third section focuses on the investment pattern of FIIs in India, the fourth section analyses the various factors affecting them and the fifth section concludes the study.

Review of Literatures

Pasricha, J. and U. Singh (2001) have analyzed the impact of FII's investment on the Indian capital market. The study found that FIIs have remained net investors in the country except during 1998-99 and their investment has been steadily growing since their entry in the Indian markets. They are here to stay and have become the integral part of the Indian capital market. Although their investment in relation to market capitalization is quite low, they have emerged as market movers. They have also found that the market has been moving, in consonance with their investment behaviour. However their entry has led to greater institutionalization of the market and their activities have provided depth to it. They have also contributed towards making Indian markets modern comparable with the international standards. This has brought transparency in the market operations and simplified the procedures.

Chakrabarti, R. (2001) concluded his study with a number of findings such as:- a) FII flows are correlated with contemporaneous returns in the Indian markets; b) this high correlation is not necessarily evidence of FII flows causing 'price pressure – if anything, the causality is likely to be the other way around; c) a collection of domestic and international variables likely to affect both flows and returns fails to diminish the importance of contemporaneous returns in explaining FII flows; d) since the US and world returns are not significant in explaining the FII flows, there is no evidence of any informational disadvantage of FIIs in comparison with domestic investors in India; e)changes in country risk ratings for India do not appear to affect the FII flows; f) the beta of the Indian market with respect to the S&P 500 index (but not the beta with respect to the MSCI world index) seems to affect the FII flows inversely but the effect disappears in the post Asian crisis period; g) there appears to be significant differences in the nature of FII flows before and after the Asian crisis. In the post Asian crisis period it seems that the returns on the BSE National Index have become the sole driving force behind FII flows.

Mukherjee, P. et al (2002) examined the various probable determinants of FII and concluded (1) FII flows, to and from the Indian markets tend to be caused by return in the domestic equity market and not the other way round; (2) returns in the Indian equity market is indeed an important (and perhaps the single most important) factor that influences FII flows into the country; (3) while FII sale and FII net inflow are significantly affected by the performance of the Indian equity market, FII purchase is not responsive to this market performance; (4) FII investors do not seem to use Indian equity market for the purpose of diversification of their investment; (5) return from exchange rate variation and fundamentals of the Indian economy may have influence on FII decisions, but such influence does not seem to be strong, and; finally, (6) daily FII flows are highly auto-correlated and this auto-correlation could not be accounted for by the all or some of the covariates.

Batra, A. (2004) has analyzed the trading behaviour of FIIs and the impact of their trading biases upon stock market stability. Author found that there is strong evidence that FIIs have been positive feedback investors and trend chasers at the aggregate level on a daily basis. But there is no evidence of positive feedback trading on a monthly basis. The results also indicate that foreign investors have a tendency to herd together in their trading activity in India. The trading behaviour and biases of the FIIs do not appear to have a destabilizing impact on the equity market.

Pal, P. (2004) found that FIIs are the dominant players in the Indian stock market and their impact on the domestic market is growing. Trading activity of FIIs and domestic stock market turnover suggest that FII's are becoming more important at the margin as an increasingly higher share of stock market turnover is accounted for by FII trading. They have emerged as the most dominant investor group in the domestic stock market in India. The study also shows that the FIIs are the most dominant non-promoter shareholder in most of the sensex companies and they also control more tradable shares of sensex companies than any other investor groups. He also found that even sharp changes in sensex do not necessarily indicate a significant alteration of actual shareholding pattern of different investor groups even in the sensex companies. As far as the real economy is concerned, the stock market has a very limited role to play.

Rai, K. and N. Bhanumurthy (2004) examined the role of return, risk and inflation as determinants of foreign institutional investors in the context of India. They found that FII inflow depends on stock market returns, inflation rates (both domestic and foreign) and ex-ante risk. In terms of magnitude, the impact of market returns and the ex-ante risk turned out to be the major determinants of FII inflow. They have also found that there is any causative link running from FII inflow to stock returns. And in the last, they have suggested that the stabilizing the stock market volatility and minimizing the ex-ante risk would help to attract more FII, an inflow of which have a positive impact on the real economy.

Mohan, T.T. (2005) concludes that the crossover funds in the emerging markets are only a small component of global portfolios and hence they are less vulnerable to fluctuations to returns arising from changes in economic conditions in emerging markets. He also found that, in India, over the past decade FIIs have displaced domestic mutual funds in importance in the equity market. Their shareholding in the sensex companies is large enough for them to be able to move the market. The volatility in portfolio inflows to India has been modest compared to other emerging markets. The real problem caused by variations in FII inflows from year to year is not stock market volatility but difficulties posed in management of money supply and the exchange rate.

FIIs' Investment

The changes in the foreign investment policy in 1991 opened the door for the foreign investors to enter into the Indian market which enabled the Indian industries to access to the foreign capital, advanced technology and expertise. As a result, it helped in the integration of the domestic economy with the global one. At the initial stage of liberalization, portfolio inflows to India were at minimum level. The great intensity of the portfolio investors to invest in the developing countries has been seen from the year 2003 in which their net investment reached to US $ 24.3 billion from US $5.8 billion in 2002. Now the figure is increasing year after year very fast. It was US$ 94.1 billion in 2006. India's share in net portfolio flows to developing countries has not been increased in proportion to the increase in this flow to developing countries. The average annual portfolio investment in developing countries has been around 36 percent and corresponding figure for India was 6 percent. The highest portfolio investment in India was during 2005 which was US $12.2 billion that constitute around 18 percent of the total portfolio investment in the developing countries. India's share in total portfolio flows to developing countries was highest in 2001 with 51.79 percent followed by 33.74 and 22.81 percent in 2003 and 2004 respectively. This share was minimum in 2006 which can be attributed to the uncertainty related to the global crude oil prices and high interest rates. On an average, India's share has been 24.33 percent. The exhibit 1 shows portfolio investments in the developing countries and the share of India in that.

Exhibit 1: Net Portfolio Equity Flows to Developing Countries

Year	Developing Countries (US $ Bn)	India (US $ Bn)	%age Share
2000	13.4	2.3	17.16
2001	5.6	2.9	51.79
2002	5.8	1	17.24
2003	24.3	8.2	33.74
2004	39.9	9.1	22.81
2005	66.7	12.2	18.29
2006	94.1	8.7	9.25
Average	35.69	6.34	24.33

Source: World Development Finance, 2007 Note: data of 2006 are estimated

Exhibit 2: Share of other Developing Countries in Net Portfolio Flows to Developing Countries

Year	China ($ bn)	% to total	Thailand ($ bn)	% to total	Brazil ($ bn)	% to total	Mexico ($ bn)	% to total	South Africa ($ bn)	% to total
2000	6.9	51.49	0.9	6.72	3.1	23.13	0.4	2.99	4.2	31.34
2001	0.8	14.29	0.4	7.14	2.5	44.64	0.2	3.57	-1	-17.86
2002	2.2	37.93	0.5	8.62	2	34.48	-0.1	-1.72	-0.4	-6.90
2003	7.7	31.69	1.8	7.41	3	12.35	-0.1	-0.41	0.7	2.88
2004	10.9	27.32	1.3	3.26	2.1	5.26	-2.5	-6.27	6.7	16.79
2005	20.3	30.43	5.7	8.55	6.5	9.75	3.4	5.10	6.9	10.34
2006e	32	34.01	5.4	5.74	7.7	8.18	3.9	4.14	12.4	13.18
Average	11.54	32.45	2.29	6.78	3.84	19.69	0.74	1.06	4.21	7.11

Source: World Development Finance, 2007.

China tops the list in regard to net portfolio equity investment. The average investment in China has been 32.45 percent of the total portfolio investments in the developing countries. The highest investment was during 2000 with US $6.9 billion which was about 51 percent of the total investment. It is also clear from the exhibit that average portfolio investment in China is near to double compared to that of India. After China and India, other developing countries like South Africa, Brazil, Thailand and Mexico are in the order of countries receiving highest portfolio investment with US $4.21, 3.84, 2.29 and 0.74 billion respectively.

FIIs investments constitute major part of the portfolio investment in India. FIIs were permitted to invest in India on September 14, 1992 but first time they registered with SEBI in January 1993. FIIs consider India as a better destination for investment which is evident from rapid increase in their number during the recent years. During 1993-94 there were only 3 FIIs registered with SEBI. The exhibit 3 shows the number of FIIs registered with SEBI during the year and at end of the year.

The exhibit shows that FIIs have steady grown from 353 in 1995-96 to 997 in 2006-07 which is evident of highest

Exhibit 3: FIIs Registered with SEBI

Year	During the Year	At End of the Year
1995-96	197	353
1996-97	99	439
1997-98	59	496
1998-99	59	450
1999-00	56	506
2000-01	84	528
2001-02	48	490
2002-03	51	502
2003-04	83	540
2004-05	145	685
2005-06	224	882
2006-07	115	997

Source: BSE website www.bseindia.com

Exhibit 4: Country-wise FIIs registered with SEBI

Source Country	No. of FIIs	% to Total
USA	342	38.78
UK	148	16.78
Luxembourg	64	7.26
Singapore	47	5.33
Hong Kong	30	3.40
Canada	26	2.95
Australia	23	2.61
Ireland	23	2.61
Netherlands	23	2.61
Others	156	17.69

Source: SEBI Annual Report 2005-06

number of FIIs registered with SEBI since their entry in Indian market. This may be attributed to the positive development of economy as well as corporate fonts during the same year. During 2005-06, 224 new FIIs were registered with SEBI which is a highest figure of FII registration in a year while during 2006-07, 115 new FIIs were registered. As a result, at the end of the year, the number of FIIs registered with SEBI stood at 997 compared to the 882 FIIs at the end of the year 2005-06.

These FIIs come from many countries. The FIIs registered during 2006-07 were from Slovenia, Brussels, Guernsey, Cyprus, Oman, Sweden and Japan. Since, the exact number of FIIs from these countries is not available. The exhibit 4 depicts the number of FIIs from different countries registered with SEBI and there percent to total whereas figure 1 depicts country-wise FIIs registered with SEBI as on March 31, 2006.

The figure 1 shows that USA is at top from where 342 FIIs had registered with SEBI followed by UK with 148 FIIs which constitute 38.78 percent and 16.78 percent of the total number of FIIs registered with SEBI. As on March 31, 2006, SEBI had registered FIIs from 37 countries from across the

Figure 1: Country-wise FIIs registered with SEBI

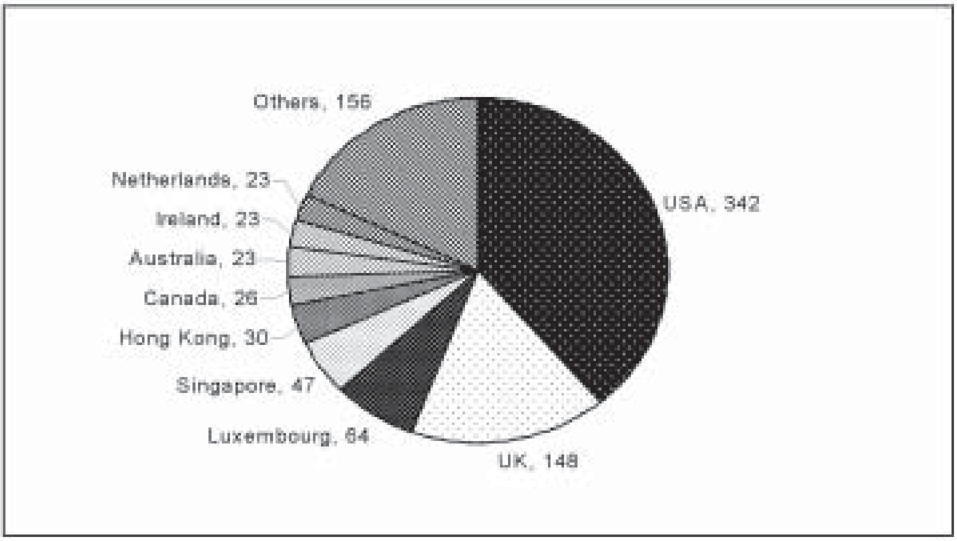


Exhibit 5: FIIs Investment in India

Year	Gross Purchase (Rs.Crore)	Gross Sale (Rs. Crore)	Total (Rs.Crore)	%age Growth	Net Investment (Rs.Crore)	%age Growth
1995-96	9,694	2,752	12,446		6,942	
1996-97	15,554	6,979	22,533	81.05	8,574	23.51
1997-98	18,695	12,737	31,432	39.49	5,957	-30.52
1998-99	16,115	17,699	33,814	7.58	-1,584	-126.59
1999-00	56,856	46,734	1,03,590	206.35	10,122	739.02
2000-01	74,051	64,116	1,38,167	33.38	9,934	-1.86
2001-02	49,920	41,165	91,085	-34.08	8,755	-11.87
2002-03	47,061	44,373	91,434	0.38	2,689	-69.29
2003-04	1,44,858	99,094	2,43,952	166.81	45,765	1601.93
2004-05	2,16,953	1,71,072	3,88,025	59.06	45,881	0.25
2005-06	3,46,978	3,05,512	6,52,490	68.16	41,467	-9.62
2006-07	5,20,508	4,89,667	10,10,175	54.82	30,840	-25.63
Average Growth Rate			62.09		189.94	

Source: SEBI, Annual Report 2006-07

world and only top 13 countries captured 90 percent of the total number of FIIs registered with SEBI.

After initiation of the reform processes, FIIs made a modest beginning in January 1993 and invested Rs.13.4 crore during 1992-93 that rose to Rs.5,124 crore during 1993-94. With passage of time, their investments in the Indian capital markets have also increased but there were sharp increase in their investments during 2003-04 which was about 16 times more than that of the previous year. Since entry of the FIIs in the Indian capital markets, their investments were positive every year except one year i.e. 1998-99 in which their net investments were negative i.e. Rs. -1,584 crore. The exhibit 5 shows the year-wise trading and net investment by FIIs along with its percentage growth in Indian capital markets. Figure 2 shows net investments by FIIs in the Indian market.

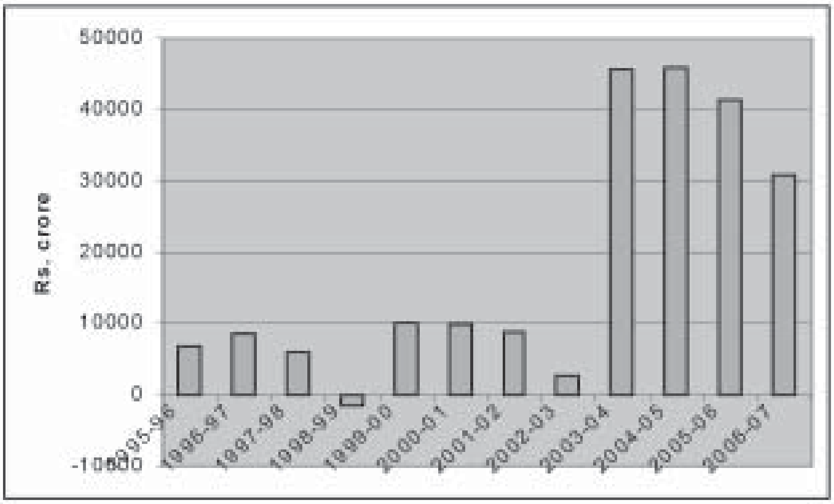
Gross purchase and gross sale during 1995-96 were Rs.9694 crore and Rs.2752 crore respectively which increased rapidly and settled at Rs.520508 crore and Rs. 489667 crore respectively during 2006-07. The figure of total trading was also increased from Rs.12446 crore to Rs.1010175 crore in the same period. Except the year 2001-02, the trading figure of FIIs has registered fast growth every year with annual average of 62.09 percent. On the other hand, although net investment by FIIs has always been positive except one year, but percentage growth rate has often been negative. Net investment by FIIs has registered an annual average growth of 189.94 percent which is due to the tremendous growth rate in 1999-00 and 2003-04. If we neglect these two years, the annual average growth rate has been negative i.e. -27.96 percent. It is, thus, clear that the FIIs are trading aggressively in the Indian market but their net investment has often registered negative growth rate over the years.

Although FIIs invested less in comparison to their total trading in the Indian capital market, yet they invested huge amount in comparison to other market players. As a result they have become dominant players in the Indian capital market from the past four years and they are called as market movers now. Most domestic investors follow the investment behaviour of FIIs.

FIIs invest their funds in equities and debts, but it has been observed that they utmost invest in equities. Their average investment in equities has been 95.37 percent of the total investment while in case of debt securities it has been only 4.62 percent since 2000-01. The highest investment in equities was during 2005-06 when it was Rs. 48542 crore followed by Rs. 44123 crore in 2004-05. The highest share of equity investment in the total investment was during 2005-06 followed by 2000-01. During these years the share was more than 100 percent as investments in debt securities were negative. 2001-02, 2002-03 and 2006-07 were the years of negative growth rate in equity investment. FIIs investments in equity registered sharpest decline in 2002-03 by 67.42 percent. In the next year it accounted tremendous growth which was 1420 percent while remaining positive growth rate in the consecutive two years was nominal. The exhibit 6 shows the FIIs investment in equities and debts separately during the last seven years.

During the last seven years, their investment in debt securities has been fluctuating in nature and much less in comparison to the investments in equity. Their investment in debt securities was highest during 2003-04 i.e. Rs.5,805 crore whereas their net investment in equities was Rs.39,959 crore in the same year. FIIs made big investment in equities

Figure 2: FIIs Investment in India



Source: SEBI, Annual Report 2006-07

during 2005-06 of Rs.48,542 crore but in the same year their net investment in debt securities was negative of Rs. -7,065 crore which was sharpest decline over these periods. In 2006-07, the share of debt securities in the investment was ever highest i.e. 18.17 percent followed by 12.68 percent in 2003-04. Investments in debt securities increased by 9575 percent in 2003-04 over the corresponding figure of its previous year which was highest followed by 1589.13 percent in 2001-02.

Although there has been steady growth in the FIIs' investment in India over the years, yet percentage of FII's cumulative investment with market capitalization of securities traded in the Indian capital market is too low to enjoy dominating position in the Indian markets. The exhibit 7 clearly depicts that cumulative investment of FIIs in India as a percentage with all India market capitalization has remained below even five percent since their entry into India except the year 2002-03 when it was 5.40 percent. The exhibit shows the cumulative equity investments of FIIs and its percentage share in market capitalization of BSE, NSE and all stock exchanges of India.

The cumulative investments of FIIs have increased steadily over the years and stood at Rs.217722 crore in 2006-07 from Rs.16946 crore in 1995-96. The percentage share of FIIs' cumulative investment to the market capitalization of BSE has often been more than six percent and it was highest during 2002-03 with 10.47 percent. The percentage share of FIIs' cumulative investment to the market capitalization of NSE has often been high compared to the corresponding figure in case of BSE. The average percentage share has been 6.81, 7.13 and 3.47 percent in case of BSE, NSE and all India respectively. It should be noted that the highest share of cumulative investment in all cases has been during 2002-03 which was not due to the high investment by the FIIs rather it was basically due to the market fall down.

In fact it has been proved by various authors that FIIs have dominating position in the Indian capital market and this dominance has increased significantly since 2003-04 in which their net equity investment was more than Rs.44,000 crore against Rs.2,668.9 crore investment in 2002-03. If we look at total FIIs equity turnover in India and its relationship with stock market turnover, it becomes clear that how much dominance they have in the Indian stock markets. Exhibit 8 shows the FIIs equity turnover (gross purchases + gross sales) in the in the Indian stock market as a percentage of total turnover of BSE and NSE.

The exhibit shows that dominance of FIIs in the Indian stock market is on steady increase. Since last three years, the percentage of FIIs turnover in the total turnover of stock exchanges has been in double digit which shows the growing power of FIIs in the Indian stock market. In 2006-07, share of FII's turnover in stock market turnover is more than 17 percent and it is increasing year after year.

In regard to the two major stock exchanges of India i.e. NSE and BSE, the percentage share of FIIs' turnover to the turnover at both BSE and NSE experienced sharp hike in 2003-04 and since then it is increasing rapidly. This can be understood by the fact that in 2006-07, the percentage share was 52.82 and 25.96 percent in case of BSE and NSE respectively which was 24.27 and 11.09 percent in 2003-04. The average percentage share during the study period was 19.40, 10.31 and 6.07 percent in case of BSE, NSE and the turnover of all stock exchanges.

It should be noted that FIIs' turnover has been calculated by adding their gross purchases and gross sales of equities in the Indian stock markets. It means each trade by FIIs have been counted twice while in case of stock market turnover, each trade has been counted once even though there is one buyer and one seller. Therefore, FIIs' equity turnover has been divided by twice of the reported turnover of the stock market when computing share of FIIs' equity turnover in turnover of stock market.

Determinants of Foreign Institutional Investment

FIIs have been important players in the Indian equity market since allowing them to invest in India but since 2003-04 they are taking much interest in the Indian equity market and investing more except the year 2006-07 when their investment drastically came down in comparison to the corresponding figure in its preceding year. Yet their importance in the Indian equity market can not be overlooked.

Exhibit 6: FIIs Investment in Equity and Debts

Year	Equity (Rs. crore)	%age Growth	% to total	Debt (Rs. crore)	%age Growth	% to total
2000-01	10124		101.91	-46		-0.46
2001-02	8,067	-20.32	92.14	685	1589.13	7.82
2002-03	2,628	-67.42	97.73	60	-91.24	2.23
2003-04	39,959	1420.51	87.31	5,805	9575.00	12.68
2004-05	44,123	10.42	96.17	1,759	-69.70	3.83
2005-06	48,542	10.02	117.06	-7,065	-501.65	-17.04
2006-07	25,236	-48.01	81.83	5,605	179.33	18.17
Average	28,092.5		95.37	1,141.5		4.62

Source: RBI Annual Report 2006-07

Exhibit 7: Proportion of FIIs Cumulative Investment to Market Capitalization of BSE, NSE and at All India

Year	FIIs Cumulative Investment (Rs. crore)	BSE (%)	NSE (%)	All India (%)
1995-96	16946	3.22	4.22	1.83
1996-97	24333	5.25	5.80	2.75
1997-98	30241	5.40	6.28	2.90
1998-99	29512	5.41	6.01	2.85
1999-00	39277	4.30	3.85	2.03
2000-01	48960	8.57	7.44	3.98
2001-02	57,232	9.35	8.99	4.58
2002-03	59,901	10.47	11.15	5.40
2003-04	1,03,901	8.65	9.27	4.47
2004-05	1,45,318	8.56	9.16	4.43
2005-06	1,93,968	6.42	6.89	3.32
2006-07	2,17,722	6.14	6.47	3.15
Average		6.81	7.13	3.47

Source: RBI, Hand Book of Statistics on Indian Economy

FIIs have often been blamed for their pull back of money at the little hint of trouble in the recipient country and they not only destabilize the market but also exert bad effect on the economy. Their sudden withdrawal of money from the market had often led to the crisis situations in the past especially Mexican crisis and Asian crisis.

In the cases when their cumulative investment as a percentage of market capitalization of Indian stock market is more than three percent, they have emerged as the biggest custodian and their share in the total turnover of stock exchanges in India has reached to 17.41 percent, it becomes crucial for the policy makers to have a close

Exhibit 8: Proportion of FIIs Turnover in Stock Market Turnover (Percent)

Year	BSE	NSE	All India
1995-96	12.43	9.13	2.74
1996-97	9.07	3.83	1.74
1997-98	7.58	4.25	1.73
1998-99	5.42	4.08	1.65
1999-00	7.56	6.17	2.51
2000-01	6.91	5.16	2.40
2001-02	14.82	8.87	5.08
2002-03	14.56	7.40	4.72
2003-04	24.27	11.09	7.53
2004-05	37.40	17.02	11.64
2005-06	39.98	20.79	13.65
2006-07	52.82	25.96	17.40
Average	19.40	10.31	6.07

Source: SEBI, Annual Reports

look on those elements who drive the FII inflows significantly to ensure market stability. The present study is an attempt to understand the factors determining their flows.

Research Methodology

The objective of this section is to examine the determinants of FIIs investment in India. The investment by FIIs is affected by both the situations prevailed in the domestic as well as developed market specially USA. Hence, in the present study two variables viz return and risk at S&P 500 index of USA have been taken to analyze its impact on investment. Five other variables are from India viz., return and risk at Nifty, inflation, interest and exchange rate. Return is percentage value of log variation, standard deviation of return has been taken as a proxy of the risk, inflation is percentage variation in the whole sale price index; call money rate is as a proxy of interest rate while exchange rate is the exchange rate between rupee and dollar. These variables have been taken in the study as it is expected that these variables influence the investment decisions of FIIs. All data represent the annual figure except return and risk. Annual daily return and risk have been derived by using daily closing value of the concerned index. Since Nifty commenced from November 1994, all the variables cover the period from 1996-97 to 2006-07. This is the period when the Indian stock market was experiencing liberalization, enjoyed boom and became one of the preferred markets for the FIIs. The rationale of taking Nifty is that this is the index of top 50 most traded companies and it covers about 21 sector of the economy. Another point is, in terms of turnover, NSE beats BSE and covers more than 65 percent of the total turnover at the Indian stock market.

The daily data on Nifty have been taken from the website of NSE, other data relating to India have been taken from RBI website while econstats.com has been used to gather data on daily index value of S&P 500.

In this section we have used mean, standard deviation, correlation and regression analysis to obtain fruitful results.

Relation of Probable Determinants with FII Inflows

All the variables selected for the study are expected to have some effect on the behaviour of FIIs in India. A brief description of these variables is given below:

- *Return:* The high return in the domestic market and low return in the international market will attract more foreign investors in the host country. On the contrary, the low return in the domestic market and high return in the international market will result in the outflow of funds from the domestic market. The amount of Foreign Institutional Investment is expected to increase with increase in the domestic market return and to decrease with increase in the return of the international market. There should, therefore, be positive/negative correlation between domestic market return/international market return and FIIs investment in the host country.

- *Risk:* Volatility has been taken to represent the risk in the market which has been obtained by calculating standard deviation of daily return. More risk means more chances to lose money. As a result, investors will hesitate to invest and will try to sale their holdings which may lead to the market crash. The higher the risk, the lower will be FIIs investment in the market. The high level of risk in the domestic market and low level of risk in the international market will prevent FIIs to invest in the domestic market. The risk, therefore, in the domestic market/international market is expected to have negative/positive relationship with FIIs investment in the domestic market.

- *Inflation:* The high level of inflation rate causes increase in the price of the product and services and decreases purchasing power of the people which ultimately discourages investment. As a result, growth rate of the economy is badly affected. In this situation no one investor will take interest to invest in the country. This variable, therefore, is expected to have negative correlation with the FIIs investment.

- *Interest Rate:* Call money rate has been taken as a proxy of the interest rate. The high level of interest rate increases the cost of capital in the host country which ultimately decreases the profitability of the investors. In this situation the FIIs will not be interest to invest. There should be negative correlation between interest rate and FIIs investment.

- *Exchange Rate:* Exchange rate is the indicator of investment climate in the country. High exchange rate decreases the profitability of the investors and economy of the host country leads to distortions. It is, therefore, expected negative relationship between the exchange rate and the flow of foreign investments.

Empirical Analysis

The exhibit 9 gives the descriptive statistics of the variables used in the study. It shows that the volatility in the variables has been below two percent except the two variables viz.

Exhibit 9: Descriptive Statistics of Variables

	Mean	Minimum	Maximum	Std. Dev.
FII	18252.32	-729.11	48650.04	18089.93
NSE_Ret	0.05	-0.11	0.23	0.11
NSE_Risk	1.57	0.99	1.98	0.33
SP_Ret	0.03	-0.12	0.15	0.08
SP_Risk	1.06	0.63	1.71	0.36
Inflation	4.92	3.27	7.16	1.28
CMR	7.05	4.62	9.15	1.64
Ex_Rate	43.66	35.5	48.4	4.05

Exhibit 10: Correlation Matrix among the Variables

Variables	FIIs	NSE_Ret	NSE_Risk	SP_Ret	SP_Risk	Inflation	CMR	Ex_Rate
FII	1							
NSE_Ret	0.72	1						
NSE_Risk	-0.32	-0.26	1					
SP_Ret	0.23	0.65	0.16	1				
SP_Risk	-0.75	-0.59	-0.03	-0.53	1			
Inflation	0.25	-0.22	0.49	-0.09	-0.22	1		
CMR	-0.75	-0.45	0.62	0.01	0.40	-0.06	1	
Ex_Rate	0.25	-0.02	-0.32	-0.61	0.28	0.01	-0.44	1

Exhibit 11: Regression Result

Independent Variable	Coefficient	t-value
Constant	16692.79	0.53
NSE_Ret	112126.6	3.91*
NSE_Risk	-12597.61	-1.54
SP_Ret	-70296.49	-1.74
SP_Risk	-23215.96	-3.58*
Inflation	5312.45	3.19*
CMR	-555.47	-0.30
Ex_Rate	467.56	0.70

* Significant at 5 per cent level of significance. F = 23.07, R-squared = 0.98, Adj. R-squared = 0.94

FII and exchange rate which were 18089.93 and 4.05 percent respectively.

If we put various variables simultaneously in an equation, there will be chance of multi-co-linearity. A correlation matrix has been calculated for all the probable determinants and FIIs investment to examine if any variable may not be included in the equation simultaneously. Exhibit 10 shows correlation matrix between FIIs investments and other explanatory variables. It is clear that no one explanatory variable is too highly correlated to remove from the regression equation.

Risk at S&P 500, interest rate and return at Nifty are highly correlated to the FIIs investments which are -0.75, -0.75 and 0.72 percent respectively. The direction of correlation between risk at Nifty and FIIs investment is like it was expected but it is not highly correlated. Return at S&P 500, inflation and exchange rate should have negative correlation with FIIs investment but they have positive sign. Though, it can be ignored as they have low correlation with FIIs investment.

Using linear equation, all the explanatory variables have been regressed and the regression results have been presented in the exhibit 11 indicating coefficient and t-value at the five percent level of significance.

The present set of explanatory variables explains the variation in the FIIs investment by as high as 98 percent which means this is the proper equation to analyze the variations in the investment by FIIs. The return at Nifty and the risk at S&P 500 are statistically significant and have proper sign. The coefficient of return at Nifty is positive and highly significant in explaining the variation in FII inflows. One percent change Nifty return results into 112126.6 percent change in FII inflows. The coefficient of risk at S&P 500 is negative and statistically significant. One percent change in risk causes 23215.96 percent reverse change in the FII inflows. Inflation is also statistically significant but its coefficient has positive sign which should be negative. It may be due the data error. Other variables like risk at NSE return at S&P 500, interest rate and exchange rate do not have significant t-value and do not significantly affect to the FII inflows in India. Thus, the result shows that the return at Nifty play dominant role in the investment decision of FIIs. The measures to maintain and improve the return in the Indian stock market are essential to ascertain huge FII inflows in the Indian market.

Conclusion and Suggestions

The importance of FIIs in Indian capital market has grown significantly since the past three years. They have remained net investors in the Indian markets except during 1998-99 and their investments have been steadily growing since their entry in the Indian markets. They are also contributing towards making Indian market modern comparable with the international standards. The presence of FIIs helps in establishing sound corporate governance practices and minimizing current account deficits. The study concludes that the trading by the FIIs in the Indian stock market is registering sharp hike every year but their net investment is often registering negative growth rate. It can be said here that they are much interested in making short-term profit by trading in the market. Their investment is equity oriented which accounts around 95 percent of the total investment. It has also been found that share of FIIs cumulative investment in the total market capitalization is below five percent and share of trading by FIIs in the total stock market turnover is around 17 percent. The FIIs have emerged as the big custodian in the Indian capital market.

So far as the driving forces of FII inflows are concerned, return at Nifty, risk at S&P 500 and interest rate are highly correlated to the FII inflows. Return at Nifty has significant influence on the FII inflows followed by risk at S&P 500. Although interest rate is highly correlated to FII inflows but it is not statistically significant for the investment decision of FIIs which may be attributed to the reason that FIIs have a number of alternative sources at the international level to raise funds for the investment in India. Inflation rate has also been found significant to the FIIs inflows but it has positive sign which should be negative. It may be due to chance or data error. Other variables selected for the analysis have not been found statistically significant.

Key Words: Turnover, Market Capitalization, Determinants.

Reference

Batra, A. (2004), "Stock Return Volatility Patterns in India." <http://www.icrier.org/pdf/wp124.pdf>

Chakrabarti, R. "FII Flows to India: Nature and Causes." *Money and Finance.* Oct.-Dec., 2001.

Mukherjee, P. et al. "Foreign Institutional Investment in the Indian Equity Market- An Analysis of Daily Flows during January 1999 to May 2002." *Money and Finance.* April-Sept., 2002.

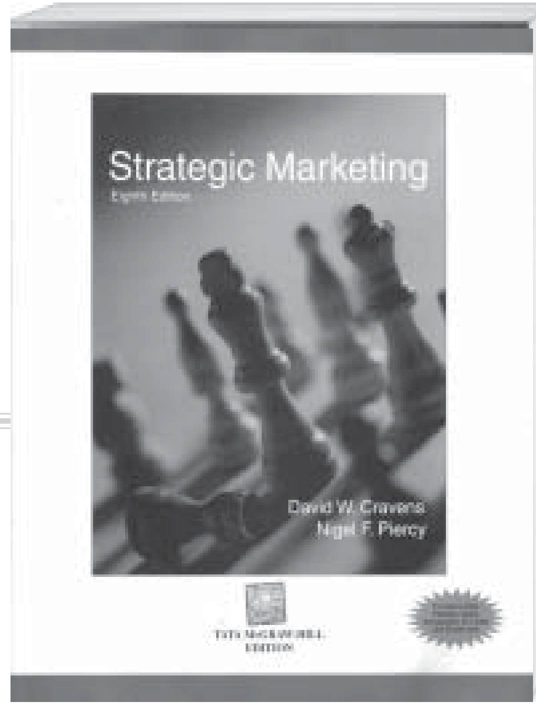
Pal, P. "Recent Volatility in Stock Markets in India and Foreign Institutional Investors." 2004, <http://www.networkideas.org/featart/nov2004/Volatility_Stock_Markets.pdf>

Pasricha, J.S. and Umesh C. Singh. "Foreign Institutional Investors and Stock Market Volatility." *The Indian Journal of Commerce.* Vol.54, No.3, July-September, 2001.

Rai, K. et al. "Determinants of Foreign Institutional Investment in India: The Role of Return, Risk, and Inflation." *The Developing Economies.* XLII-4, Dec., 2004.

T.T. Ram Mohan. "Taking Stock of Foreign Institutional Investors." *Economic and Political Weekly.* June 11, 2005. <www.rbi.ord.in>, <www.sebi.gov.in>

Skimming and Scanning



Book Title : *Strategic Marketing*

Authors : **David W. Cravens & Nigel F. Piercy**

Edition : **Eighth**

ISBN-13 : **978-0-07-068260-3**

Pages : **726**

Publisher : **Tata McGraw-Hills Publg. Co. Ltd., New Delhi.**

Customers in the twenty first century demands for superior value from the goods and services they purchase. Business strategies and markets are interrelated. Effective market sensing is essential for companies to succeed. However, in defining the marketing strategy the organisation must have a well defined methodology for the day-to-day process of implementing it. It is of little value to have a strategy if the organisation lacks either the resources or the expertise to implement it.

Strategic Marketing by Cravens and Piercy is a text and casebook that discusses the concepts and processes for gaining the competitive advantage in the marketplace. This book is suitable for students of both undergraduate and postgraduate courses in marketing, since it examines the key aspects of traditional marketing strategy and presents an assessment and synthesis of recent thinking. It combines theory and practice which are built around a unique conceptual framework. It is content-rich and valuable to executives that are striving to become market-leaders. Further, it is designed around the marketing strategy process with a clear emphasis on analysis, planning, and implementation. It reviews recent thinking in marketing and a number of marketing tools and techniques. It has given strong emphasis on questions, and summaries in each chapter to reinforce key points. There are 44 cases included in the book and many of them are those of well-known companies. The book consists of fifteen chapters divided into five parts.

Part I examines an overview of market-driven strategy and business marketing strategies. Then it

Reviewed by Ms. Marianne Simon, Lecturer-Retail, SCMS-COCHIN Prathap Nagar, Aluva-683106, Cochin, Email: marianne@scmsgroup.org

looks into the importance and process of becoming market-oriented and examines the capabilities of market-driven organisations, followed by a discussion of creating value for customers. Finally, it looks at the nature and scope of corporate strategy and steps in preparing the strategic marketing plan.

Part II considers market segments, and customer value. It begins with a discussion of how markets and strategies are interrelated, followed by an approach for determining product-market scope and structure. Next, it looks how to estimate market size and forecasting techniques. It goes on to discuss market segmentation, its role, methods, and issues. Finally, it examines how continuous learning about markets improves competitive advantage.

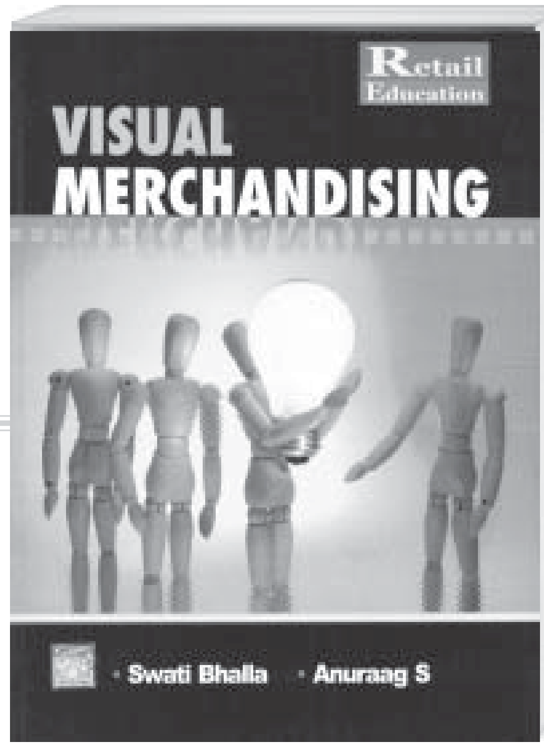
Part III discusses designing market-driven strategies. It examines market targeting strategy and discusses how targets are selected. Next it looks at what is involved in developing a positioning strategy for each market target. Discussions are followed by considering inter-organisational relationships. Finally, it examines the steps in introducing new product.

Part IV considers market-driven programme development. It examines brand building; challenges and managing the brand system. The author goes on to discuss the role of distribution channels in marketing strategy and discusses several channel strategy issues. Finally it examines the role of price and promotion in marketing strategy.

Part V examines implementing and managing market-driven strategies. First it studies organisational design and several global aspects of organisations. Finally, it looks at strategic marketing audit, selecting performance criteria and measures, determining information needs and analysis, and evaluating performance.

Of the two authors, David W. Cravens holds the Eunice and James L. Wear Chair of American Enterprise Studies and is Professor of Marketing in the M.J. Neeley School of Business at Texas Christian University. He received the Lifetime Achievement Award from the American Marketing Association in 2002 and was selected as the 1996 Outstanding Marketing Educator by the Academy of Marketing Science. Co-author Nigel Piercy, is Professor of Marketing at Warwick Business School, in the University of Warwick, United Kingdom. He has been awarded the distinction of a higher doctorate (Doctor of Letters) from Heriot-Watt University, for his published research work.

Skimming and Scanning



Book Title : *Visual Merchandising*

Authors : **Swati Bhalla and Anurag S.**

Edition : **First**

Price : **375/-**

ISBN 13 : **978-0-07-015321-9**

Pages : **264**

Publisher : **Tata McGraw – Hill Education Pvt. Ltd., New Delhi.**

Visual Merchandising refers to anything that can be seen by the customers (inside and outside the store). These images should elicit a positive image of the store within customers, get their attention, and make them buy. Visual merchandising includes how merchandise is presented together with the store's total atmosphere. A modest attempt bas been made by Ms.Swati Bhalla and Mr. Anurag S. in this book to approach visual merchandising in a simple and lucid manner. Chapters are not only devoted for academic purpose but also advisers' intentions of the professionals as for instance the chapter 6 gives the design basics, colour blocking concepts etc.

Reviewed by Mr.Vilas Nair, Lecturer-Marketing (Retail), SCMS School of Technology and Management (SSTM), Prathap Nagar, Muttom, Aluva-683106, Cochin, Email: vilasnair@scms group .org

The book is divided into five major areas; each area is strengthened by exercise and a case study. Part 1 explains the world of Visual merchandising, Retail store – Site and design. Part 2 throws light on store exterior and interior. Part 3 and 4 discuss in detail the store planning and fixtures for merchandise presentation and window displays. Last section focuses on experimental retail, the new scenario.

One of the striking features of the book is that the author has followed a highly structured format. Each aspect is addressed and reinforced by necessary photographs and diagrams .Each chapter has a learning objective supported by various photographs of different store displays. It also gives the guide lines for using various feature fixtures. Each chapter is provided with summary and the best part of this book is the interview with the Visual Merchandiser at different stores in India. This explores the practical value of the book.

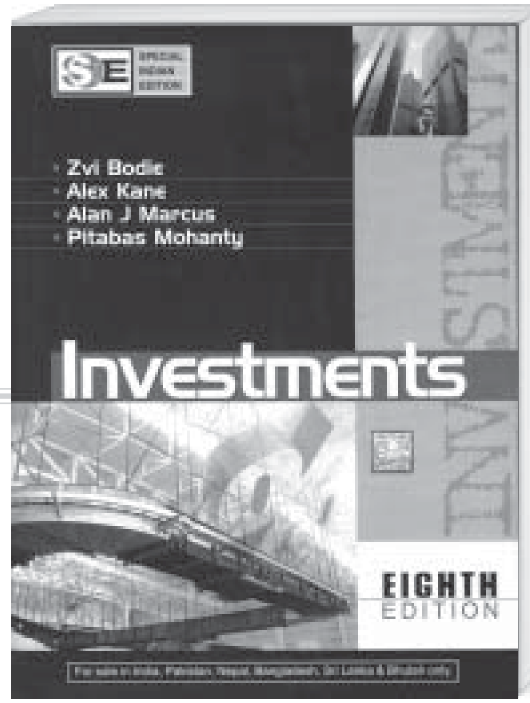
The book deals with most of the things related to visual merchandising including Planograms. The various tips to improve the categories in merchandise presentation are specifically dealt with.

The book, in short, explains the practical impact of displays, the uses of fixtures, and terms used in visual merchandising. A wide array of both Indian and foreign prospectives have been covered and cited as examples. This book, which contains key points in most of the merchandising presentation, is very useful for professionals as well as students.

The book is an outcome of the author's long experience in this field and could prove an ideal associate for the student as well as for the professional. The book is also sure to be an ideal companion for those lecturers and professors to enrich their knowledge on Visual Merchandising in business schools. In all respects the book is rich and imprinted with exceptional examples and information, and can be treasured for all desired references in this field.

Of the two authors, Ms.Swati Bhalla is the guest faculty for many institutes. She is also associated with retail industry like Pantaloon Shoppers Stop. Rohit Bal, Uni Style Image. She is also Consultant and Adviser of showrooms and malls all over India. The co-author Anurag S. has over 15 years of rich experience in Design, Retail, Visual Merchandising and Store Design and has recently won the merit award for the Best Visual Merchandising for Axiom Telecom at In-store Asia, VHRD Design Awards 2009 held in Bangaluru.

Skimming and Scanning



Book Title	:	*Investments*
Author	:	**Zvi Bodie, Alex Kane, Alan J. Marcus and Pitabas Mohanty**
Edition	:	**Eighth**
Price	:	**Rs.510/-**
ISBN-13	:	**978-0-07-015157-4**
Pages	:	**1083**
Publisher	:	**Tata McGraw-Hills Publg. Co. Ltd., New Delhi.**

All successful long-term investors look for ways of focusing on the big picture and cutting out the daily noise. While dealing with this scenario, investors and practitioners have to face challenges in their professional life and the topics covered in this book provide a great extent of support to confront new ideas and challenges faced in the professional life. The capital assets pricing model, the arbitrage pricing model, the efficient market hypothesis, the option-pricing model and the other center-pieces of modern financial tools are well explained by the authors to satisfy the subjects of scientific inquiry as they are of immense practical importance for the sophisticated investor. Efforts are taken to link the theory to practise with the backup of real world problems and the simulated situations.

The main dilemma of a "SMART" (specific, measurable, achievable, realistic, timely). Investor is to identify the optimum trade off between risk and return. The authors followed consistent efforts to abridge these issues through the chapters of "Capital Allocation" to "Risk Assets" and "Optimal Risky Portfolios." Financial Markets are volatile in nature and efforts taken to help the finance professionals in facing the market unpredictability

Reviewed by Ms.Mini Kuzhuvelil, Assistant Professor-Finance, SCMS-COCHIN, Prathap Nagar, Muttom, Aluva-683 106, Cochin, Email: miniramnath@yahoo.co.in, mini@scmsgroup.org

by referring the modern approach to finance. Authors' attention stretched to the areas of "Efficient Diversification and Modern Portfolio Theory" provides basic concepts in the field of measurement great of risk and risk return relationship to a great extent. Practical aspects of portfolio managements are unravelled to the readers with the support of index model in Part II.

The students will get a chance to feel the practical barriers faced by the finance industry by imparting the knowledge about Equilibrium in Capital Market and introduction of fixed income securities. Risky assets classes such as stock and bonds are explained in detail to support the asset allocation decision of the professionals. To be conversant in curtail and integral finance market, the most innovative ideas are introduced to the students in Part V "Options, Futures and Other Derivatives." In the first re-print in the form of Special Indian Edition (2009) authors have taken efforts to incorporate the substantial additions and changes in chapters "How securities are traded," "Optimal Risky Portfolios," "Bond Prices Yields" to withstand the ongoing transformation in the financial industry, maintain the current level in content and coverage. The recent financial crisis is incorporated to provide an insight to the challenges emerge from the financial marketplace.

Chapters on "Behavioural Finance," "Multifactor Models of Risk and Return," and "International Diversification" have been rewritten to meet changes in today's transformed market. Most of the topics emphasize asset allocation while presenting the practical applications of investment theory. It is recognized as the best blend of practical and theoretical coverage, while maintaining an appropriate rigour and clear writing style. Market efficiency survives the challenge from the literature on long-term return anomalies. Most important, consistent with the market efficiency prediction, those apparent anomalies can be due to methodology, most long-term return anomalies tend to disappear with reasonable changes in technique. The modern investment techniques explained in this book bridge these gaps to some extent. The capital asset pricing model describes the relationship between risk and expected return, and it serves as a model for the pricing of risky securities. Conventional financial theory ignores the concept, how real people make decisions and that people make a difference. The topics introduced in this book like "Behavioural Finance" will extend solutions to irrationalities that seem to characterise individuals making complicated decisions.

The article chosen from the business periodicals to substantiate the real world situations empowers the students in gaining more realistic informations and, no doubt, in stating that, this is an added strength to this book. The websites' links provided in the text will enhance the student's practical experience in the field of managing bond portfolios and Industry Analysis.

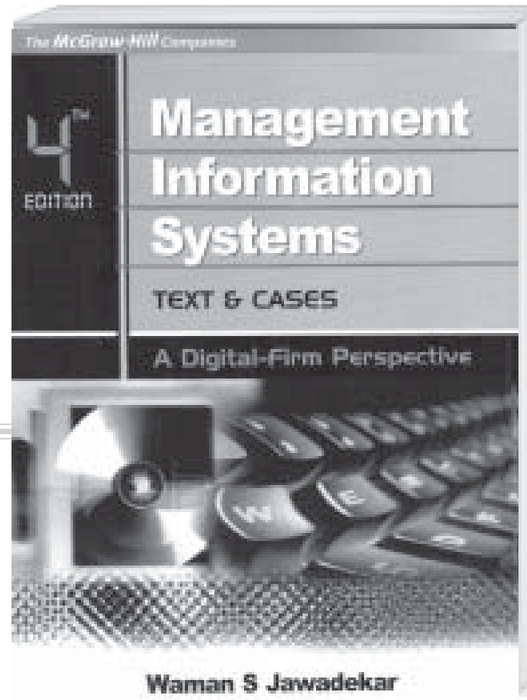
Overall the book is useful for reference except for the requirement of a few improvements noted:-

1. Visualization of the book would have been improved with changes in the presentation style and fonts.
2. The coverge of the topics is too vast and that may baffle the students at the first impression.
3. Lack of solved numerical examples, which helps the students to practise the theoretical applications with a self-attempt, may be a felt absence.

In general, the authors offer this book as a very supportive guide to the investors who are struggling to take decision in the irrational financial market. To great extent the topics covered help the investors and finance professionals to perform their role as a portfolio manager.

Zvi Bodie is Professor of Finance at Boston University School of Management. He holds a Ph.D. from the Massachusetts Institute of Technology. **Alex Kane** is professor of Finance and Economics at the Graduate School of International Relations and Pacific Studies at the University of California, San Diego. **Alan Marcus** is Professor of Finance in the Wallace E. Carroll School of Management at Boston College. He received his Ph.D. in Economics from MIT. **Pitabas Mohanthy** is a Fellow of the Indian Institute of Management, Bangalore. He is a Chartered Financial Analyst and a Cost Accountant.

Skimming and Scanning



Book Title : *Management Information Systems*
Author : **Waman S.Jawadekar**
Edition : **Fourth - First Re-print 2009**
Price : **395/-**
ISBN-13 : **978-0-07-014662-4**
Pages : **833**
Publisher : **Tata McGraw-Hills Publg. Co. Ltd., New Delhi.**

Information technology helps to optimize the use of scarce resource through intelligent information support for decision making. In the technology driven world, information systems play a vital role in all organizations. The book *Management Information Systems* by Waman S. Jawadekar provides an in-depth idea of the use of information systems in today's business organizations. The author has made this possible with apt case studies in each chapter thus providing a door to the implementation of theoretical concepts to practical scenes.

The first part of the book introduces the concept of information systems and its role in the current business scenario. The author has made a detailed description of the e-business strategies and how e-commerce today covers an entire commercial scope online. The chapters give an idea of the different managerial functions and how information systems are of use for the efficient implementation of these functions. Though information systems have become a predominant part of organizations, the move of business organizations to E-enterprise mode has raised certain issues in the areas of privacy, destruction and threat of information. The author has detailed the disaster recovery systems and the steps to be taken to secure information and its authenticity

Reviewed by Ms. Praveena K., Lecturer-SCMS School of Technology and Management (SSTM), Prathap Nagar, Muttom, Aluva-683106, Cochin, Email: praveena@scmsgroup.org

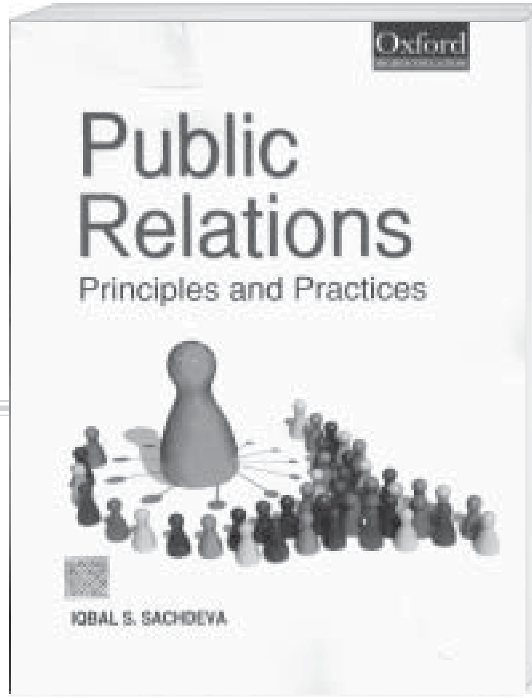
The second part has six chapters focusing on the decision making process and MIS development methodology with tools. The decision making process requires creativity, imagination and a deep understanding of human behaviour. While designing an MIS, the relevance of decision making concepts should be addressed. The chapter on systems engineering explains in detail the analysis and design of information systems. The importance of using case method for modeling the requirement of the user is explained substantially with cases and readings. The different approaches of developing an information system like the prototype model, the life cycle approach etc are compared and the features that contribute to the successful implementation of MIS are detailed with help of good case studies. The restructuring and redesigning of processes in an organization, namely the BPR has been covered explicitly with emphasis on the relevance of information technology for the process of BPR.

Any theoretical explanation is incomplete without a practical application. The author has thus given the applications of MIS to e-business in part three. The applications in manufacturing sector and service sector are detailed with good examples. The analytical information from these systems provides support for decision making in the Decision support systems. The book gives a clear idea of the varied capabilities of the information systems in performing different functions in the manufacturing sector like dealing with transactions, report generation etc. A product is tangible, but a service is not. MIS applications play a vital role in the service sector. The different applications in Aviation industry, hotels, hospitals, banking and insurance etc are detailed. A detailed description of the knowledge management systems and enterprise management systems give the readers a broad knowledge of the integration of information systems in business organizations.

The part four of the book covers the infrastructure of information systems. The technologies needed for analyzing the information like OLAP, ensuring quality using different TQM methods and the evaluation of the technologies are explained in a simple and precise manner. Any isolated system cannot be expected to perform well and hence, the concept of networking is unavoidable in present day information systems. The book provides good information on the technical aspects of networking and the recent trends in networking. The details of database management systems, the necessity of a data warehouse and its architecture are explained well that any non technical person gets a clear idea of these technologies. The end of the part four gives a detailed explanation of the e-business technology. The web applications, the security measures for e- business etc are well explained. The book ends with five comprehensive case studies on management information systems that cover the entire concepts talked in the book so far, thus giving the readers a whole idea of the information system.

Organizations need MIS that would give them a competitive strength. The book provides valuable information on the need for information systems in today's business organizations. The readers will be able to gain good knowledge of the concepts of information system and the underlying technologies.

Skimming and Scanning



Book Title	:	***Public Relations*** **Principles and Practices**
Author	:	**Iqbal S.Sachdeva**
Edition	:	**2009**
ISBN-13	:	**978-0-19-569918-0**
Price	:	**Rs.295/-**
Pages	:	**568**
Publisher	:	**Oxford University Press, New Delhi.**

Public relations is a management discipline which is yet to get its due recognition among the management practitioners. Good public relations is synonymous with good management. Then why the profession has not gained adequate appreciation it deserves in our country? It may be because of the ignorance among the top managers and academicians on the vast potential of the discipline. It may also be because of the shortage of really competent and experienced professionals who can present quantifiable results to their managements. The pity is that many top managements in our country still believe that public relations can be anybody's job.

However, there is also a silver lining to be noticed. The corporate sector is now seriously concerned about the problems arising out of the rapid pace of changes taking place around and is eager to negotiate the changes smoothly or with the least possible friction. Consequently, the climate is quite conducive for the discipline of public relations to come to the rescue of the management and to claim its well deserved predominant position in corporate management. In this conflict-ridden world never before in the history of human societies had the need for good public relations skills was felt so much.

Reviewed by Prof.Unnikrishnan B., Faculty and Head - Communications, SCMS-COCHIN, Prathap Nagar, Muttom, Aluva-683106, Cochin, Email: bunnikrishnan@scmsgroup.org

The book *Public Relations: Principles and Practices* written by Iqbal S. Sachdeva is the latest effort of its kind made by an Indian author to bring out a comprehensive volume on the subject. All those interested in promoting public relations were looking forward to a book of this nature written in the Indian context.

It is one of the best books out on the subject in our country for anyone who wishes to learn or teach public relations as an academic programme. So far we didn't have an updated single book that could be prescribed to the students as a text book for the professional programmes in public relations or mass communication. The book is also beneficial to practising managers who wish to understand the dynamics of the profession.

Every chapter has been designed to meet the pedagogical requirements by adding chapter outlines, illustrations, recent examples, exhibits to explain concepts, explanation of key terms, summary, review questions, exercises, and references.

The book has been divided into five parts, namely, Fundamentals and Emergence, Process and Practice, Skills, Applications, and Support Service.

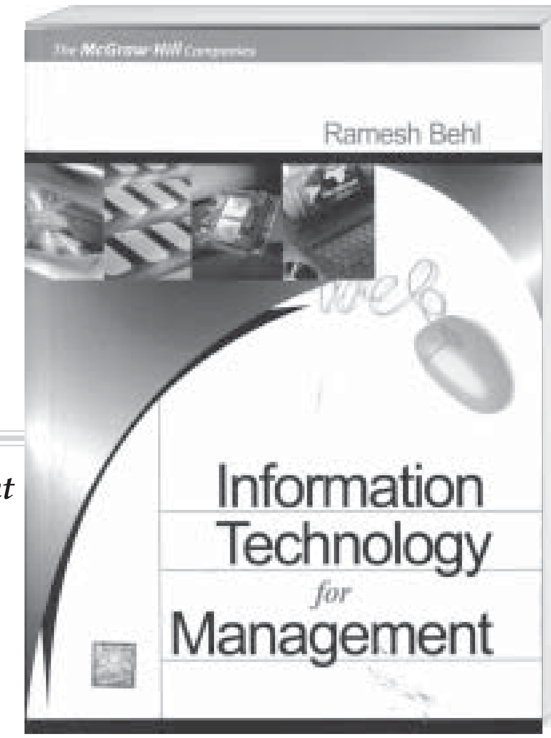
The first part deals with the PR fundamentals and the emergence of the profession across the world and in India. The second part discusses the process of developing a successful PR programme including the communication plan, implementation and evaluation of its impact.

The third part focuses on the key communication skills to be developed by professionals. The fourth part looks into the relationships to be developed with the various specific publics of the organization like customers, dealers, vendors, employees, investors, media, community, government, etc. and the tools and techniques that could be made use of. This part further discusses the critical areas like corporate image management, crisis management, corporate social responsibility and ethics of PR. The last part presents the roles and goals of PR agencies and the process of selecting and evaluating an agency.

Another noteworthy feature of the book is the inclusion of case studies, especially in the Indian context, in most of the chapters. Since there is a dearth for well-documented case studies in the field of public relations, the effort taken by the author is worthy of praise. I wish there could have been some more communication oriented case studies that would really illustrate the power of the profession of PR.

Iqbal S.Sachdeva has been actively involved in the public relations movement in our country. After three decades of his industry experience he is also engaged in teaching. His book *Public Relations: Principles and Practices* will certainly be a good guide to the next generation of public relations practitioners in our country.

Skimming and Scanning



Book Title : *Information Technology for Management*
Author : **Ramesh Behl**
Edition : **First**
Price : **275/-**
ISBN-13 : **978-0-07-014492-7**
Pages : **559**
Publisher : **Tata McGraw-Hills Publg. Co. Ltd., New Delhi.**

The Book explains the application of information technology in management and the process of collecting and turning the data/information in to Business Value. The strength of the book is that, it covers the emerging technologies and potential applications in the context of today's business environment.

The Book is divided into six section and twelve chapters and provides with a wealth of basic and introduction to information technology. The section I cover the role of information technology in the business organization and cover the different strategic information models and their competitive advantage by implementing them in business environment. Evolution and approval of information system investments based on a business case and cost of managing and maintaining technology investments are covered in the section.

Reviewed by Mr. Kumar Chandar S., Faculty-Systems and Operations, SCMS-COCHIN, Prathap Nagar, Aluva-683106, Cochin, Email: skumar@scmsgroup.org

The section II discusses the technology infrastructure which includes Information technology and Networks and Telecommunication system. It covers the present and future forms of computer hardware, software, networks and related items used for business data processing and office automation. It does not include device with embedded technology and its applications. It provides a common set of core services that supports efficient implementation, operation and management of application in a distributed and collaborative computing environment.

The section III introduces the application of Information Technology for Business Decision making. It discusses the different decision making models/problems using business application software by applying common software tools like Excel and Access. The section also covers the concept of Goal seeking analysis, Sensitivity Analysis, Net Present Value, Pivot table analysis, Entity Relationship and Reports for business decisions.

The section IV explains the system of integrated management process, strategies and technologies like ERP, CRM, SCM and M-Commerce in Business that enables the enterprise to manage its IT Assets throughout the business life cycle. It includes Information Technology standards, securing the business on internet with the infrastructure security consideration (security threats, security mechanisms, firewalls and data security), developing cost-effective and acquisition strategies for supporting and managing the technology environment.

The section V focuses the role of intelligent techniques for Business applications and discusses various decision models and decision support strategies used by various organizations. It describes the unprecedented growth and various aspects of Knowledge Management, Data Warehousing, Data Mining and explains the Growth and Success in Business Applications. It describes role of Artificial Intelligence / Business Intelligence techniques for defining and operating agents to evaluate the product offerings and suggestion in the Internet.

The section VI starts with the importance of information system planning and different methodologies of software engineering methodologies and software quality issues (Capability Maturity Model). It discusses the application of Information Technology in various domains and roles and responsibilities for IT Management. This section exposes the readers to a taxonomic survey of the various business applications.

The Author discusses a list of leading technologies related to Information Technology for management and business applications with the implementations of case lets / case studies from Indian business context. The Illustrated book comes with lot of diagrammatic representation and practical applications in the real world. This book is useful for the students, academicians and professionals who practise in the field of Information Sciences.

CERTIFICATE OF REGISTRATION

Title of Newspaper	:	*SCMS JOURNAL OF INDIAN MANAGEMENT*
Language (in which it is to be published)	:	English
Registration Number of the Newspaper	:	
Periodicity of the publication and the day on which it is published	:	Quarterly 1 January, 1 April, 1 July, and 1 October
Retailing Selling price of the Newspaper	:	Rs.1000/- (One Year Subscription)
Publisher's Name	:	Dr.D.Radhakrishnan Nair
Nationality	:	Indian
Address	:	25/74, Ambady, Kothamangalam-686 691, Ernakulam.
Place of publication (with complete Postal address)	:	Prathap Nagar, Muttom, Aluva-683 106, Ernakulam District, Kerala.
Printer's Name	:	Dr.D.Radhakrishnan Nair
Nationality	:	Indian
Address	:	25/74, Ambady, Kothamangalam-686 691, Ernakulam.
Name of the Printing Press (with complete address where printing is to be conducted)	:	Maptho Printings, Kalamassery, Cochin-683104
Editor's Name	:	Dr.D.Radhakrishnan Nair
Nationality	:	Indian
Address	:	25/74, Ambady, Kothamangalam-686 691, Ernakulam.
Owner's Name	:	SCMS-COCHIN
Place	:	Prathap Nagar, Muttom.

SCMS Journal of Indian Management

Subscription / Advertisement Form

Name :
Address :

City :
Zip Code :
Country :
E-mail :
Phone :
Draft Number :

(in favour of "SCMS Journal of Indian Management, Cochin")

Subscription Rates	1 year	2 years	Per issue
Companies/Academic Institutes :	1000 ($60)	1800 ($100)	250 ($15)
Individual :	800	1500	200

Advertisement Rate

Outside back cover	:	Rs.30,000 in color, Rs.15,000 in black and white
Inside front cover	:	Rs.17,500 in color, Rs.10,000 in black and white
Inside back cover	:	Rs.15,000 in color, Rs.6,000 in black and white
Inner full-page	:	Rs.7500 in color, Rs.4,000 in black and white
Inner half-page	:	Rs.5000 in color, Rs.3,000 in black and white

For all communications contact:

Editor, SCMS Journal of Indian Management, SCMS New Campus, Prathap Nagar, Muttom, Aluva - 683106, Kochi, Kerala, India.
Phone: 91-484-262 3803 / 262 3804 / 262 3885 / 262 3887 Fax: 91-484-262 3855
Website: www.scmsgroup.org E-mail: editor@scmsgroup.org / scmseditorcochin@yahoo.com